WEST 526 LOWCOUNTRY CORRIDOR

ALTERNATIVES DEVELOPMENT TRAFFIC ANALYSIS REPORT

APPENDICES

Project Limits: I-526 between Paul Cantrell Boulevard and Virginia Avenue and I-26 between Montague Avenue and Aviation Avenue

Prepared for the South Carolina Department of Transportation and the Federal Highway Administration

SCDOT South Carolina Department of Transportation

FHWA

Prepared by Stantec Consulting Services Inc.

Stantec

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SCDOT can provide auxiliary aids under the Americans with Disabilities Act for disabled persons who wish to review the Alternatives Development Traffic Analysis Appendices which includes modeling output data for the traffic capacity analysis. Anyone requiring special services should contact Joy Riley, SCDOT Project Manager, at rileyj@scdot.org so that arrangements can be made.

2.0 Existing Conditions

2.1 Mainline 48-Hour Vehicular Traffic Volumes

2.1.1 I-26 South of I-526

I-26 South of I-526 (Eastbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	119	5	3	401
5/6/2015	12:15 AM	115	0	1	330
5/6/2015	12:30 AM	73	1	2	257
5/6/2015	12:45 AM	77	1	4	228
5/6/2015	01:00 AM	52	0	4	201
5/6/2015	01:15 AM	41	2	0	198
5/6/2015	01:30 AM	41	3	3	193
5/6/2015	01:45 AM	49	1	5	177
5/6/2015	02:00 AM	50	0	3	160
5/6/2015	02:15 AM	34	3	1	151
5/6/2015	02:30 AM	31	0	0	151
5/6/2015	02:45 AM	31	1	6	181
5/6/2015	03:00 AM	39	4	1	198
5/6/2015	03:15 AM	26	3	9	206
5/6/2015	03:30 AM	52	5	4	254
5/6/2015	03:45 AM	47	4	4	317
5/6/2015	04:00 AM	46	2	4	430
5/6/2015	04:15 AM	76	5	5	572
5/6/2015	04:30 AM	118	3	3	781
5/6/2015	04:45 AM	161	1	6	1127
5/6/2015	05:00 AM	178	9	7	1570
5/6/2015	05:15 AM	282	5	8	2192
5/6/2015	05:30 AM	448	13	9	3099
5/6/2015	05:45 AM	586	12	13	4011
5/6/2015	06:00 AM	774	25	17	4908
5/6/2015	06:15 AM	1158	25	19	5551
5/6/2015	06:30 AM	1339	23	20	5985
5/6/2015	06:45 AM	1456	32	20	6245
5/6/2015	07:00 AM	1410	27	22	6201
5/6/2015	07:15 AM	1570	38	28	6166
5/6/2015	07:30 AM	1597	24	21	5919
5/6/2015	07:45 AM	1426	21	17	5474
5/6/2015	08:00 AM	1352	45	27	5056
5/6/2015	08:15 AM	1316	36	37	4516
5/6/2015	08:30 AM	1107	55	35	4064
5/6/2015	08:45 AM	976	45	25	3776
5/6/2015	09:00 AM	816	42	26	3591
5/6/2015	09:15 AM	844	45	48	3491
5/6/2015	09:30 AM	848	35	26	3410
5/6/2015	09:45 AM	804	26	31	3312
5/6/2015	10:00 AM	729	29	26	3251
5/6/2015	10:15 AM	798	27	31	3294
5/6/2015	10:30 AM	744	32	35	3276
5/6/2015	10:45 AM	751	21	28	3333
5/6/2015	11:00 AM	761	35	31	3399
5/6/2015	11:15 AM	773	28	37	3311
5/6/2015	11:30 AM	807	25	36	3407
5/6/2015	11:45 AM	797	23	46	3291
5/6/2015	12:00 PM	688	20	31	3224
5/6/2015	12:15 PM	878	15	41	3237
5/6/2015	12:30 PM	704	20	28	3002
5/6/2015	12:45 PM	748	15	36	3022
5/6/2015	01:00 PM	695	22	35	3015
5/6/2015	01:15 PM	650	20	29	3028
5/6/2015	01:30 PM	721	24	27	3157
5/6/2015	01:45 PM	722	26	44	3230
5/6/2015	02:00 PM	718	16	31	3243
5/6/2015	02:15 PM	772	32	24	3304
5/6/2015	02:30 PM	794	21	30	3332
5/6/2015	02:45 PM	754	25	26	3362
5/6/2015	03:00 PM	752	35	39	3354
5/6/2015	03:15 PM	795	30	31	3448

5/6/2015	03:30 PM	828	24	23	3534
5/6/2015	03:45 PM	753	10	34	3672
5/6/2015	04:00 PM	861	30	29	3860
5/6/2015	04:15 PM	901	21	20	4051
5/6/2015	04:30 PM	960	31	22	4209
5/6/2015	04:45 PM	941	26	18	4171
5/6/2015	05:00 PM	1065	26	20	4033
5/6/2015	05:15 PM	1069	14	17	3747
5/6/2015	05:30 PM	953	11	11	3468
5/6/2015	05:45 PM	827	11	9	3214
5/6/2015	06:00 PM	804	11	10	2980
5/6/2015	06:15 PM	811	7	3	2685
5/6/2015	06:30 PM	699	12	10	2342
5/6/2015	06:45 PM	603	2	8	2105
5/6/2015	07:00 PM	517	5	8	1929
5/6/2015	07:15 PM	468	5	5	1776
5/6/2015	07:30 PM	469	7	8	1665
5/6/2015	07:45 PM	427	5	5	1552
5/6/2015	08:00 PM	370	6	1	1484
5/6/2015	08:15 PM	361	4	2	1398
5/6/2015	08:30 PM	363	4	4	1327
5/6/2015	08:45 PM	358	7	4	1228
5/6/2015	09:00 PM	285	2	4	1149
5/6/2015	09:15 PM	286	0	10	1093
5/6/2015	09:30 PM	266	2	4	1028
5/6/2015	09:45 PM	285	4	1	990
5/6/2015	10:00 PM	231	2	2	913
5/6/2015	10:15 PM	227	3	1	842
5/6/2015	10:30 PM	229	2	3	780
5/6/2015	10:45 PM	208	1	4	693
5/6/2015	11:00 PM	162	1	1	602
5/6/2015	11:15 PM	165	2	2	
5/6/2015	11:30 PM	141	2	4	
5/6/2015	11:45 PM	118	2	2	
5/7/2015	12:00 AM	113	3	7	376
5/7/2015	12:15 AM	105	1	2	298
5/7/2015	12:30 AM	87	1	1	231
5/7/2015	12:45 AM	51	1	4	185
5/7/2015	01:00 AM	40	3	2	181
5/7/2015	01:15 AM	36	0	5	183
5/7/2015	01:30 AM	42	0	1	185
5/7/2015	01:45 AM	47	1	4	170
5/7/2015	02:00 AM	46	0	1	172
5/7/2015	02:15 AM	40	1	2	170
5/7/2015	02:30 AM	24	2	2	174
5/7/2015	02:45 AM	44	5	5	206
5/7/2015	03:00 AM	39	3	3	224
5/7/2015	03:15 AM	42	0	5	232
5/7/2015	03:30 AM	45	3	12	271
5/7/2015	03:45 AM	60	4	8	334
5/7/2015	04:00 AM	42	7	4	434
5/7/2015	04:15 AM	69	9	8	589
5/7/2015	04:30 AM	114	6	3	808
5/7/2015	04:45 AM	155	8	9	1134
5/7/2015	05:00 AM	187	8	13	1555
5/7/2015	05:15 AM	288	11	6	2082
5/7/2015	05:30 AM	428	10	11	3003
5/7/2015	05:45 AM	571	10	12	4040
5/7/2015	06:00 AM	705	15	15	4874
5/7/2015	06:15 AM	1188	26	12	5617
5/7/2015	06:30 AM	1439	24	23	6028
5/7/2015	06:45 AM	1381	23	23	6127
5/7/2015	07:00 AM	1428	31	19	6213
5/7/2015	07:15 AM	1589	28	20	6084
5/7/2015	07:30 AM	1539	25	21	5861

5/7/2015	07:45 AM	1460	26	27	5554
5/7/2015	08:00 AM	1300	24	25	5308
5/7/2015	08:15 AM	1367	19	28	4947
5/7/2015	08:30 AM	1194	35	49	4427
5/7/2015	08:45 AM	1182	42	43	4099
5/7/2015	09:00 AM	891	41	56	3702
5/7/2015	09:15 AM	821	35	38	3515
5/7/2015	09:30 AM	880	34	36	3422
5/7/2015	09:45 AM	800	30	40	3321
5/7/2015	10:00 AM	727	39	35	3312
5/7/2015	10:15 AM	729	33	39	3308
5/7/2015	10:30 AM	797	21	31	3354
5/7/2015	10:45 AM	802	32	27	3371
5/7/2015	11:00 AM	736	22	39	3424
5/7/2015	11:15 AM	791	27	29	3455
5/7/2015	11:30 AM	803	19	44	3399
5/7/2015	11:45 AM	849	28	37	3281
5/7/2015	12:00 PM	766	22	40	3162
5/7/2015	12:15 PM	736	21	34	3141
5/7/2015	12:30 PM	694	21	33	3173
5/7/2015	12:45 PM	751	16	28	3266
5/7/2015	01:00 PM	739	23	45	3262
5/7/2015	01:15 PM	772	23	28	3194
5/7/2015	01:30 PM	782	24	35	3220
5/7/2015	01:45 PM	732	27	32	3253
5/7/2015	02:00 PM	690	24	25	3344
5/7/2015	02:15 PM	787	24	38	3376
5/7/2015	02:30 PM	800	37	37	3346
5/7/2015	02:45 PM	822	28	32	3357
5/7/2015	03:00 PM	719	25	27	3293
5/7/2015	03:15 PM	763	31	25	3365
5/7/2015	03:30 PM	828	21	36	3499
5/7/2015	03:45 PM	777	15	26	3607
5/7/2015	04:00 PM	791	32	20	3692
5/7/2015	04:15 PM	911	25	17	3859
5/7/2015	04:30 PM	936	28	29	3952
5/7/2015	04:45 PM	856	31	16	4115
5/7/2015	05:00 PM	979	24	7	4258
5/7/2015	05:15 PM	1009	18	19	4153
5/7/2015	05:30 PM	1116	20	20	3952
5/7/2015	05:45 PM	1019	16	11	3577
5/7/2015	06:00 PM	883	12	10	3170
5/7/2015	06:15 PM	832	7	6	2827
5/7/2015	06:30 PM	772	5	4	2534
5/7/2015	06:45 PM	628	5	6	2263
5/7/2015	07:00 PM	552	5	5	2107
5/7/2015	07:15 PM	541	9	2	1928
5/7/2015	07:30 PM	502	5	3	1750
5/7/2015	07:45 PM	465	7	11	1574
5/7/2015	08:00 PM	375	5	3	1436
5/7/2015	08:15 PM	365	6	3	1376
5/7/2015	08:30 PM	328	3	3	1314
5/7/2015	08:45 PM	338	0	7	1218
5/7/2015	09:00 PM	320	1	2	1194
5/7/2015	09:15 PM	303	2	7	1115
5/7/2015	09:30 PM	232	3	3	1035
5/7/2015	09:45 PM	313	6	2	1075
5/7/2015	10:00 PM	238	2	4	972
5/7/2015	10:15 PM	226	5	1	887
5/7/2015	10:30 PM	268	4	6	829
5/7/2015	10:45 PM	212	4	2	706
5/7/2015	11:00 PM	157	1	1	608
5/7/2015	11:15 PM	170	1	3	
5/7/2015	11:30 PM	152	1	2	
5/7/2015	11:45 PM	112	5	3	

I-26 South of I-526 (Westbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	207	3	1	596
5/6/2015	12:15 AM	161	1	8	505
5/6/2015	12:30 AM	130	0	0	422
5/6/2015	12:45 AM	80	0	5	383
5/6/2015	01:00 AM	112	3	5	377
5/6/2015	01:15 AM	77	2	8	316
5/6/2015	01:30 AM	90	0	1	299
5/6/2015	01:45 AM	79	0	0	281
5/6/2015	02:00 AM	56	0	3	255
5/6/2015	02:15 AM	64	3	3	248
5/6/2015	02:30 AM	62	5	6	223
5/6/2015	02:45 AM	41	3	9	196
5/6/2015	03:00 AM	46	2	4	182
5/6/2015	03:15 AM	37	5	3	187
5/6/2015	03:30 AM	37	3	6	222
5/6/2015	03:45 AM	32	1	6	261
5/6/2015	04:00 AM	47	2	8	330
5/6/2015	04:15 AM	69	7	4	381
5/6/2015	04:30 AM	75	4	6	448
5/6/2015	04:45 AM	96	3	9	546
5/6/2015	05:00 AM	93	5	10	683
5/6/2015	05:15 AM	129	13	5	869
5/6/2015	05:30 AM	159	15	9	1138
5/6/2015	05:45 AM	222	15	8	1514
5/6/2015	06:00 AM	275	10	9	1821
5/6/2015	06:15 AM	389	20	7	2140
5/6/2015	06:30 AM	521	21	17	2443
5/6/2015	06:45 AM	505	25	22	2648
5/6/2015	07:00 AM	553	34	26	2909
5/6/2015	07:15 AM	657	23	39	3081
5/6/2015	07:30 AM	706	24	34	3183
5/6/2015	07:45 AM	754	23	36	3276
5/6/2015	08:00 AM	733	24	28	3136
5/6/2015	08:15 AM	770	23	28	3018
5/6/2015	08:30 AM	800	25	32	2903
5/6/2015	08:45 AM	619	24	30	2752
5/6/2015	09:00 AM	601	25	41	2713
5/6/2015	09:15 AM	635	48	23	2700
5/6/2015	09:30 AM	657	24	25	2667
5/6/2015	09:45 AM	582	24	28	2664
5/6/2015	10:00 AM	590	24	40	2748
5/6/2015	10:15 AM	619	27	27	2694
5/6/2015	10:30 AM	638	30	35	2678
5/6/2015	10:45 AM	669	26	23	2655
5/6/2015	11:00 AM	526	34	40	2604
5/6/2015	11:15 AM	595	20	42	2712
5/6/2015	11:30 AM	625	17	38	2788
5/6/2015	11:45 AM	616	22	29	2823
5/6/2015	12:00 PM	636	36	36	2868
5/6/2015	12:15 PM	672	22	39	2879
5/6/2015	12:30 PM	651	28	36	2944
5/6/2015	12:45 PM	650	30	32	3009
5/6/2015	01:00 PM	656	28	35	3104
5/6/2015	01:15 PM	739	24	35	3177
5/6/2015	01:30 PM	723	20	37	3257
5/6/2015	01:45 PM	733	39	35	3328
5/6/2015	02:00 PM	741	25	26	3410
5/6/2015	02:15 PM	819	22	37	3609
5/6/2015	02:30 PM	792	33	26	3892
5/6/2015	02:45 PM	808	38	43	4344
5/6/2015	03:00 PM	935	28	28	4713
5/6/2015	03:15 PM	1091	35	35	5015

5/6/2015	03:30 PM	1243	31	29	5189
5/6/2015	03:45 PM	1197	31	30	5097
5/6/2015	04:00 PM	1245	27	21	5082
5/6/2015	04:15 PM	1290	18	27	5043
5/6/2015	04:30 PM	1159	25	27	4945
5/6/2015	04:45 PM	1199	25	19	4897
5/6/2015	05:00 PM	1217	24	13	4860
5/6/2015	05:15 PM	1210	17	10	4757
5/6/2015	05:30 PM	1136	15	12	4461
5/6/2015	05:45 PM	1189	10	7	4105
5/6/2015	06:00 PM	1129	16	6	3653
5/6/2015	06:15 PM	920	12	9	3191
5/6/2015	06:30 PM	789	7	11	2943
5/6/2015	06:45 PM	740	9	5	2762
5/6/2015	07:00 PM	672	10	7	2586
5/6/2015	07:15 PM	680	8	5	2460
5/6/2015	07:30 PM	613	10	3	2357
5/6/2015	07:45 PM	567	7	4	2246
5/6/2015	08:00 PM	555	4	4	2140
5/6/2015	08:15 PM	580	10	0	2073
5/6/2015	08:30 PM	508	5	2	1905
5/6/2015	08:45 PM	467	2	3	1876
5/6/2015	09:00 PM	492	4	0	1797
5/6/2015	09:15 PM	415	4	3	1621
5/6/2015	09:30 PM	478	4	4	1523
5/6/2015	09:45 PM	386	3	4	1292
5/6/2015	10:00 PM	313	6	1	1133
5/6/2015	10:15 PM	318	5	1	1094
5/6/2015	10:30 PM	250	4	1	1082
5/6/2015	10:45 PM	228	5	1	1083
5/6/2015	11:00 PM	276	2	3	1071
5/6/2015	11:15 PM	309	2	1	
5/6/2015	11:30 PM	254	1	1	
5/6/2015	11:45 PM	218	0	4	
5/7/2015	12:00 AM	229	0	5	642
5/7/2015	12:15 AM	188	0	1	542
5/7/2015	12:30 AM	126	0	2	439
5/7/2015	12:45 AM	89	1	1	436
5/7/2015	01:00 AM	130	1	3	419
5/7/2015	01:15 AM	80	3	3	353
5/7/2015	01:30 AM	119	2	4	346
5/7/2015	01:45 AM	73	0	1	298
5/7/2015	02:00 AM	60	2	6	279
5/7/2015	02:15 AM	77	0	2	271
5/7/2015	02:30 AM	70	2	5	233
5/7/2015	02:45 AM	51	0	4	199
5/7/2015	03:00 AM	54	0	6	194
5/7/2015	03:15 AM	32	2	7	193
5/7/2015	03:30 AM	33	5	5	218
5/7/2015	03:45 AM	39	4	7	260
5/7/2015	04:00 AM	45	4	10	305
5/7/2015	04:15 AM	55	6	5	353
5/7/2015	04:30 AM	70	6	9	445
5/7/2015	04:45 AM	78	9	8	557
5/7/2015	05:00 AM	91	7	9	680
5/7/2015	05:15 AM	142	10	6	885
5/7/2015	05:30 AM	176	12	9	1148
5/7/2015	05:45 AM	196	9	13	1478
5/7/2015	06:00 AM	283	14	15	1755
5/7/2015	06:15 AM	386	26	9	2007
5/7/2015	06:30 AM	495	21	11	2281
5/7/2015	06:45 AM	453	14	28	2517
5/7/2015	07:00 AM	510	20	34	2854
5/7/2015	07:15 AM	634	38	23	3122
5/7/2015	07:30 AM	711	39	13	3187

5/7/2015	07:45 AM	772	36	24	3141
5/7/2015	08:00 AM	775	27	30	3038
5/7/2015	08:15 AM	715	21	24	2823
5/7/2015	08:30 AM	671	22	24	2649
5/7/2015	08:45 AM	672	28	29	2501
5/7/2015	09:00 AM	547	26	44	2390
5/7/2015	09:15 AM	532	20	34	2387
5/7/2015	09:30 AM	519	13	37	2405
5/7/2015	09:45 AM	558	18	42	2471
5/7/2015	10:00 AM	558	23	33	2503
5/7/2015	10:15 AM	526	24	54	2558
5/7/2015	10:30 AM	560	29	46	2643
5/7/2015	10:45 AM	578	25	47	2738
5/7/2015	11:00 AM	599	20	50	2735
5/7/2015	11:15 AM	624	28	37	2778
5/7/2015	11:30 AM	661	25	44	2810
5/7/2015	11:45 AM	592	16	39	2816
5/7/2015	12:00 PM	661	18	33	2957
5/7/2015	12:15 PM	660	25	36	3014
5/7/2015	12:30 PM	682	17	37	3099
5/7/2015	12:45 PM	717	31	40	3170
5/7/2015	01:00 PM	721	17	31	3216
5/7/2015	01:15 PM	746	27	33	3246
5/7/2015	01:30 PM	737	40	30	3344
5/7/2015	01:45 PM	770	37	27	3417
5/7/2015	02:00 PM	746	25	28	3556
5/7/2015	02:15 PM	828	46	30	3715
5/7/2015	02:30 PM	827	32	21	3933
5/7/2015	02:45 PM	904	43	26	4357
5/7/2015	03:00 PM	883	51	24	4626
5/7/2015	03:15 PM	1061	24	37	5006
5/7/2015	03:30 PM	1240	29	35	5285
5/7/2015	03:45 PM	1176	33	33	5325
5/7/2015	04:00 PM	1270	30	38	5318
5/7/2015	04:15 PM	1346	21	34	5321
5/7/2015	04:30 PM	1307	19	18	5125
5/7/2015	04:45 PM	1190	19	26	5152
5/7/2015	05:00 PM	1302	18	21	5002
5/7/2015	05:15 PM	1184	12	9	4794
5/7/2015	05:30 PM	1349	13	9	4621
5/7/2015	05:45 PM	1058	15	12	4096
5/7/2015	06:00 PM	1106	20	7	3745
5/7/2015	06:15 PM	999	21	12	3351
5/7/2015	06:30 PM	831	10	5	2991
5/7/2015	06:45 PM	718	10	6	2798
5/7/2015	07:00 PM	716	15	8	2678
5/7/2015	07:15 PM	664	5	3	2513
5/7/2015	07:30 PM	643	6	4	2466
5/7/2015	07:45 PM	611	2	1	2426
5/7/2015	08:00 PM	567	5	2	2351
5/7/2015	08:15 PM	613	7	5	2286
5/7/2015	08:30 PM	601	6	6	2089
5/7/2015	08:45 PM	532	3	4	1880
5/7/2015	09:00 PM	500	4	5	1730
5/7/2015	09:15 PM	421	5	2	1533
5/7/2015	09:30 PM	390	8	6	1383
5/7/2015	09:45 PM	378	5	6	1277
5/7/2015	10:00 PM	309	2	1	1163
5/7/2015	10:15 PM	275	1	2	1096
5/7/2015	10:30 PM	296	2	0	1094
5/7/2015	10:45 PM	271	3	1	1038
5/7/2015	11:00 PM	239	5	1	1018
5/7/2015	11:15 PM	274	1	1	
5/7/2015	11:30 PM	241	0	1	
5/7/2015	11:45 PM	255	0	0	

2.1.2 I-26 North of I-526

I-26 North of I-526 (Eastbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	145	5	10	546
5/6/2015	12:15 AM	136	0	6	474
5/6/2015	12:30 AM	104	4	10	406
5/6/2015	12:45 AM	113	3	10	370
5/6/2015	01:00 AM	77	1	10	335
5/6/2015	01:15 AM	65	3	6	329
5/6/2015	01:30 AM	65	5	12	314
5/6/2015	01:45 AM	72	3	16	289
5/6/2015	02:00 AM	70	2	10	274
5/6/2015	02:15 AM	52	1	6	271
5/6/2015	02:30 AM	48	0	9	301
5/6/2015	02:45 AM	57	5	14	381
5/6/2015	03:00 AM	66	5	8	459
5/6/2015	03:15 AM	64	3	22	545
5/6/2015	03:30 AM	110	8	19	641
5/6/2015	03:45 AM	120	7	27	793
5/6/2015	04:00 AM	134	7	24	977
5/6/2015	04:15 AM	155	8	22	1185
5/6/2015	04:30 AM	263	9	17	1590
5/6/2015	04:45 AM	312	8	18	2224
5/6/2015	05:00 AM	342	11	20	2997
5/6/2015	05:15 AM	538	19	33	3952
5/6/2015	05:30 AM	866	28	29	5081
5/6/2015	05:45 AM	1035	23	53	6067
5/6/2015	06:00 AM	1216	55	57	7017
5/6/2015	06:15 AM	1604	56	59	7820
5/6/2015	06:30 AM	1830	39	40	8283
5/6/2015	06:45 AM	1974	44	43	8439
5/6/2015	07:00 AM	2022	53	56	8079
5/6/2015	07:15 AM	2057	70	55	7687
5/6/2015	07:30 AM	1975	38	52	7259
5/6/2015	07:45 AM	1635	31	35	6806
5/6/2015	08:00 AM	1643	45	51	6578
5/6/2015	08:15 AM	1624	64	66	6123
5/6/2015	08:30 AM	1479	57	76	5700
5/6/2015	08:45 AM	1364	55	54	5398
5/6/2015	09:00 AM	1169	54	61	5206
5/6/2015	09:15 AM	1196	61	74	5077
5/6/2015	09:30 AM	1195	55	60	4999
5/6/2015	09:45 AM	1182	43	56	4932
5/6/2015	10:00 AM	1046	40	69	4798
5/6/2015	10:15 AM	1132	42	79	4856
5/6/2015	10:30 AM	1129	46	68	4802
5/6/2015	10:45 AM	1042	31	74	4801
5/6/2015	11:00 AM	1111	32	70	4921
5/6/2015	11:15 AM	1099	34	66	4699
5/6/2015	11:30 AM	1133	42	67	4903
5/6/2015	11:45 AM	1139	35	93	4853
5/6/2015	12:00 PM	907	31	53	4782
5/6/2015	12:15 PM	1264	33	106	4952
5/6/2015	12:30 PM	1097	36	59	4647
5/6/2015	12:45 PM	1073	34	89	4653
5/6/2015	01:00 PM	1042	43	76	4691
5/6/2015	01:15 PM	1011	27	60	4768
5/6/2015	01:30 PM	1090	36	72	4978
5/6/2015	01:45 PM	1117	36	81	5048
5/6/2015	02:00 PM	1133	30	75	5077
5/6/2015	02:15 PM	1197	50	61	5092
5/6/2015	02:30 PM	1164	25	79	5051
5/6/2015	02:45 PM	1150	39	74	5094
5/6/2015	03:00 PM	1151	39	63	5093
5/6/2015	03:15 PM	1175	38	54	5189

5/6/2015	03:30 PM	1236	32	43	5205
5/6/2015	03:45 PM	1182	26	54	5332
5/6/2015	04:00 PM	1270	33	46	5476
5/6/2015	04:15 PM	1221	21	41	5572
5/6/2015	04:30 PM	1379	36	23	5752
5/6/2015	04:45 PM	1347	29	30	5635
5/6/2015	05:00 PM	1397	28	20	5472
5/6/2015	05:15 PM	1422	17	24	5235
5/6/2015	05:30 PM	1291	11	19	4997
5/6/2015	05:45 PM	1207	16	20	4695
5/6/2015	06:00 PM	1172	17	19	4402
5/6/2015	06:15 PM	1194	13	18	4012
5/6/2015	06:30 PM	989	11	19	3533
5/6/2015	06:45 PM	923	8	19	3264
5/6/2015	07:00 PM	787	8	23	2976
5/6/2015	07:15 PM	721	10	15	2796
5/6/2015	07:30 PM	723	7	20	2623
5/6/2015	07:45 PM	637	7	18	2432
5/6/2015	08:00 PM	616	8	14	2335
5/6/2015	08:15 PM	554	7	12	2229
5/6/2015	08:30 PM	538	6	15	2163
5/6/2015	08:45 PM	539	12	14	2073
5/6/2015	09:00 PM	506	7	19	1960
5/6/2015	09:15 PM	489	3	15	1808
5/6/2015	09:30 PM	459	3	7	1653
5/6/2015	09:45 PM	442	2	8	1525
5/6/2015	10:00 PM	371	5	4	1396
5/6/2015	10:15 PM	341	3	8	1249
5/6/2015	10:30 PM	325	6	10	1126
5/6/2015	10:45 PM	309	2	12	997
5/6/2015	11:00 PM	215	2	16	868
5/6/2015	11:15 PM	215	4	10	
5/6/2015	11:30 PM	191	5	16	
5/6/2015	11:45 PM	184	2	8	
5/7/2015	12:00 AM	151	4	15	506
5/7/2015	12:15 AM	132	2	8	414
5/7/2015	12:30 AM	113	0	6	351
5/7/2015	12:45 AM	66	3	6	299
5/7/2015	01:00 AM	68	1	9	318
5/7/2015	01:15 AM	65	1	13	319
5/7/2015	01:30 AM	52	4	11	316
5/7/2015	01:45 AM	83	3	8	310
5/7/2015	02:00 AM	64	3	12	302
5/7/2015	02:15 AM	65	2	9	293
5/7/2015	02:30 AM	50	9	2	318
5/7/2015	02:45 AM	66	10	10	379
5/7/2015	03:00 AM	51	5	14	452
5/7/2015	03:15 AM	80	2	19	504
5/7/2015	03:30 AM	94	8	20	588
5/7/2015	03:45 AM	128	8	23	744
5/7/2015	04:00 AM	89	11	22	929
5/7/2015	04:15 AM	157	12	16	1203
5/7/2015	04:30 AM	257	10	11	1605
5/7/2015	04:45 AM	310	10	24	2157
5/7/2015	05:00 AM	351	11	34	2902
5/7/2015	05:15 AM	543	16	28	3753
5/7/2015	05:30 AM	783	21	26	5061
5/7/2015	05:45 AM	996	33	60	6382
5/7/2015	06:00 AM	1146	49	52	7348
5/7/2015	06:15 AM	1789	59	47	8205
5/7/2015	06:30 AM	2058	55	38	8550
5/7/2015	06:45 AM	1958	41	56	8456
5/7/2015	07:00 AM	2005	51	48	8123
5/7/2015	07:15 AM	2169	38	33	7592
5/7/2015	07:30 AM	1983	29	45	6930
5/7/2015	07:45 AM	1651	33	38	6407

5/7/2015	08:00 AM	1496	39	38	6195
5/7/2015	08:15 AM	1492	46	40	5950
5/7/2015	08:30 AM	1425	54	55	5661
5/7/2015	08:45 AM	1377	70	63	5536
5/7/2015	09:00 AM	1200	68	60	5368
5/7/2015	09:15 AM	1177	50	62	5248
5/7/2015	09:30 AM	1318	38	53	5188
5/7/2015	09:45 AM	1235	36	71	5042
5/7/2015	10:00 AM	1084	58	66	4972
5/7/2015	10:15 AM	1125	40	64	4876
5/7/2015	10:30 AM	1153	42	68	4939
5/7/2015	10:45 AM	1161	43	68	4950
5/7/2015	11:00 AM	1018	26	68	4924
5/7/2015	11:15 AM	1169	48	75	4988
5/7/2015	11:30 AM	1172	41	61	4849
5/7/2015	11:45 AM	1143	35	68	4635
5/7/2015	12:00 PM	1077	28	71	4557
5/7/2015	12:15 PM	1069	29	55	4632
5/7/2015	12:30 PM	987	27	46	4719
5/7/2015	12:45 PM	1043	47	78	4938
5/7/2015	01:00 PM	1115	47	89	4935
5/7/2015	01:15 PM	1107	47	86	4850
5/7/2015	01:30 PM	1185	31	63	4945
5/7/2015	01:45 PM	1058	31	76	4916
5/7/2015	02:00 PM	1060	36	70	5102
5/7/2015	02:15 PM	1229	48	58	5175
5/7/2015	02:30 PM	1154	34	62	5060
5/7/2015	02:45 PM	1240	35	76	5163
5/7/2015	03:00 PM	1147	35	57	5040
5/7/2015	03:15 PM	1159	20	41	5088
5/7/2015	03:30 PM	1263	28	62	5250
5/7/2015	03:45 PM	1174	23	31	5325
5/7/2015	04:00 PM	1210	36	41	5494
5/7/2015	04:15 PM	1322	26	34	5639
5/7/2015	04:30 PM	1365	36	27	5616
5/7/2015	04:45 PM	1332	36	29	5575
5/7/2015	05:00 PM	1383	23	26	5405
5/7/2015	05:15 PM	1307	25	27	5194
5/7/2015	05:30 PM	1340	22	25	5031
5/7/2015	05:45 PM	1190	15	22	4800
5/7/2015	06:00 PM	1181	12	28	4545
5/7/2015	06:15 PM	1161	13	22	4164
5/7/2015	06:30 PM	1135	7	14	3713
5/7/2015	06:45 PM	946	9	17	3288
5/7/2015	07:00 PM	817	3	20	3002
5/7/2015	07:15 PM	735	3	7	2756
5/7/2015	07:30 PM	706	8	17	2627
5/7/2015	07:45 PM	657	12	17	2441
5/7/2015	08:00 PM	570	8	16	2303
5/7/2015	08:15 PM	600	6	10	2201
5/7/2015	08:30 PM	528	6	11	2093
5/7/2015	08:45 PM	537	1	10	1992
5/7/2015	09:00 PM	481	2	9	1924
5/7/2015	09:15 PM	478	7	23	1808
5/7/2015	09:30 PM	427	3	14	1681
5/7/2015	09:45 PM	470	5	5	1648
5/7/2015	10:00 PM	361	1	14	1524
5/7/2015	10:15 PM	363	5	13	1373
5/7/2015	10:30 PM	393	5	13	1238
5/7/2015	10:45 PM	339	6	11	1041
5/7/2015	11:00 PM	216	3	6	865
5/7/2015	11:15 PM	231	4	11	
5/7/2015	11:30 PM	202	3	9	
5/7/2015	11:45 PM	163	7	10	

I-26 North of I-526 (Westbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	333	5	8	1029
5/6/2015	12:15 AM	278	2	14	875
5/6/2015	12:30 AM	218	4	4	719
5/6/2015	12:45 AM	148	3	12	628
5/6/2015	01:00 AM	177	4	11	604
5/6/2015	01:15 AM	120	0	18	519
5/6/2015	01:30 AM	121	4	10	493
5/6/2015	01:45 AM	125	3	11	459
5/6/2015	02:00 AM	102	0	5	395
5/6/2015	02:15 AM	93	5	14	367
5/6/2015	02:30 AM	82	6	13	342
5/6/2015	02:45 AM	58	1	16	325
5/6/2015	03:00 AM	60	4	15	332
5/6/2015	03:15 AM	63	5	19	344
5/6/2015	03:30 AM	57	6	21	357
5/6/2015	03:45 AM	57	4	21	405
5/6/2015	04:00 AM	66	3	22	472
5/6/2015	04:15 AM	75	7	18	548
5/6/2015	04:30 AM	99	6	27	689
5/6/2015	04:45 AM	116	13	20	870
5/6/2015	05:00 AM	129	9	29	1136
5/6/2015	05:15 AM	200	13	28	1559
5/6/2015	05:30 AM	272	16	25	2077
5/6/2015	05:45 AM	368	18	29	2798
5/6/2015	06:00 AM	544	19	27	3409
5/6/2015	06:15 AM	701	34	24	3906
5/6/2015	06:30 AM	966	32	36	4389
5/6/2015	06:45 AM	953	32	41	4656
5/6/2015	07:00 AM	1015	37	35	4990
5/6/2015	07:15 AM	1184	24	34	5187
5/6/2015	07:30 AM	1210	24	67	5224
5/6/2015	07:45 AM	1265	34	61	5247
5/6/2015	08:00 AM	1198	40	46	5009
5/6/2015	08:15 AM	1193	24	62	4791
5/6/2015	08:30 AM	1230	40	54	4621
5/6/2015	08:45 AM	1025	37	60	4397
5/6/2015	09:00 AM	970	29	67	4364
5/6/2015	09:15 AM	997	47	65	4348
5/6/2015	09:30 AM	1006	40	54	4353
5/6/2015	09:45 AM	976	38	75	4425
5/6/2015	10:00 AM	945	33	72	4506
5/6/2015	10:15 AM	995	54	65	4501
5/6/2015	10:30 AM	1068	47	57	4509
5/6/2015	10:45 AM	1065	48	57	4437
5/6/2015	11:00 AM	925	42	78	4417
5/6/2015	11:15 AM	994	48	80	4525
5/6/2015	11:30 AM	985	42	73	4558
5/6/2015	11:45 AM	1040	47	63	4639
5/6/2015	12:00 PM	1040	48	65	4668
5/6/2015	12:15 PM	1049	44	62	4736
5/6/2015	12:30 PM	1080	38	63	4875
5/6/2015	12:45 PM	1070	36	73	4944
5/6/2015	01:00 PM	1114	44	63	5119
5/6/2015	01:15 PM	1177	45	72	5242
5/6/2015	01:30 PM	1153	38	59	5373
5/6/2015	01:45 PM	1231	49	74	5574
5/6/2015	02:00 PM	1247	44	53	5748
5/6/2015	02:15 PM	1298	47	80	6025
5/6/2015	02:30 PM	1334	47	70	6354
5/6/2015	02:45 PM	1393	60	75	6769
5/6/2015	03:00 PM	1483	58	80	6976
5/6/2015	03:15 PM	1636	51	67	7212

5/6/2015	03:30 PM	1749	58	59	7316
5/6/2015	03:45 PM	1633	47	55	7126
5/6/2015	04:00 PM	1748	41	68	7139
5/6/2015	04:15 PM	1766	36	56	7056
5/6/2015	04:30 PM	1569	43	64	6835
5/6/2015	04:45 PM	1645	40	63	6730
5/6/2015	05:00 PM	1685	44	45	6663
5/6/2015	05:15 PM	1571	29	37	6711
5/6/2015	05:30 PM	1507	25	39	6733
5/6/2015	05:45 PM	1614	27	40	6542
5/6/2015	06:00 PM	1741	26	55	6102
5/6/2015	06:15 PM	1597	20	42	5442
5/6/2015	06:30 PM	1338	17	25	4941
5/6/2015	06:45 PM	1189	18	34	4614
5/6/2015	07:00 PM	1114	24	24	4389
5/6/2015	07:15 PM	1134	12	12	4269
5/6/2015	07:30 PM	1020	13	20	4059
5/6/2015	07:45 PM	997	6	13	3899
5/6/2015	08:00 PM	1012	13	17	3665
5/6/2015	08:15 PM	921	12	15	3444
5/6/2015	08:30 PM	871	6	16	3233
5/6/2015	08:45 PM	764	3	15	3226
5/6/2015	09:00 PM	806	6	9	3126
5/6/2015	09:15 PM	715	5	17	2888
5/6/2015	09:30 PM	863	5	18	2675
5/6/2015	09:45 PM	664	5	13	2267
5/6/2015	10:00 PM	556	9	18	1998
5/6/2015	10:15 PM	511	4	9	1860
5/6/2015	10:30 PM	462	4	12	1828
5/6/2015	10:45 PM	402	6	5	1763
5/6/2015	11:00 PM	434	4	7	1686
5/6/2015	11:15 PM	479	3	10	
5/6/2015	11:30 PM	400	4	9	
5/6/2015	11:45 PM	317	4	15	
5/7/2015	12:00 AM	359	0	12	1082
5/7/2015	12:15 AM	321	0	18	901
5/7/2015	12:30 AM	196	2	7	718
5/7/2015	12:45 AM	155	3	9	701
5/7/2015	01:00 AM	174	6	10	664
5/7/2015	01:15 AM	142	4	10	597
5/7/2015	01:30 AM	179	3	6	570
5/7/2015	01:45 AM	122	2	6	489
5/7/2015	02:00 AM	98	9	16	455
5/7/2015	02:15 AM	116	6	7	414
5/7/2015	02:30 AM	90	3	14	361
5/7/2015	02:45 AM	80	1	15	343
5/7/2015	03:00 AM	67	4	11	321
5/7/2015	03:15 AM	57	1	18	332
5/7/2015	03:30 AM	56	7	26	369
5/7/2015	03:45 AM	54	4	16	409
5/7/2015	04:00 AM	71	9	13	459
5/7/2015	04:15 AM	85	10	18	533
5/7/2015	04:30 AM	101	4	24	662
5/7/2015	04:45 AM	85	11	28	889
5/7/2015	05:00 AM	135	14	18	1181
5/7/2015	05:15 AM	206	14	22	1592
5/7/2015	05:30 AM	314	13	29	2108
5/7/2015	05:45 AM	379	15	22	2755
5/7/2015	06:00 AM	523	25	30	3336
5/7/2015	06:15 AM	713	25	20	3795
5/7/2015	06:30 AM	943	34	26	4175
5/7/2015	06:45 AM	933	24	40	4490
5/7/2015	07:00 AM	962	26	49	4855
5/7/2015	07:15 AM	1065	29	44	5099
5/7/2015	07:30 AM	1237	28	53	5186
5/7/2015	07:45 AM	1269	31	62	5039

5/7/2015	08:00 AM	1179	43	59	4841
5/7/2015	08:15 AM	1146	30	49	4587
5/7/2015	08:30 AM	1079	43	49	4388
5/7/2015	08:45 AM	1047	61	56	4214
5/7/2015	09:00 AM	923	37	67	4099
5/7/2015	09:15 AM	933	34	59	4113
5/7/2015	09:30 AM	884	41	72	4143
5/7/2015	09:45 AM	934	52	63	4216
5/7/2015	10:00 AM	933	47	61	4242
5/7/2015	10:15 AM	946	46	64	4297
5/7/2015	10:30 AM	966	45	59	4358
5/7/2015	10:45 AM	960	45	70	4487
5/7/2015	11:00 AM	973	36	87	4593
5/7/2015	11:15 AM	1009	51	57	4668
5/7/2015	11:30 AM	1086	43	70	4786
5/7/2015	11:45 AM	1094	29	58	4833
5/7/2015	12:00 PM	1074	38	59	4939
5/7/2015	12:15 PM	1133	35	67	5088
5/7/2015	12:30 PM	1143	37	66	5199
5/7/2015	12:45 PM	1176	49	62	5262
5/7/2015	01:00 PM	1220	33	67	5304
5/7/2015	01:15 PM	1235	45	66	5338
5/7/2015	01:30 PM	1196	54	59	5520
5/7/2015	01:45 PM	1202	66	61	5695
5/7/2015	02:00 PM	1241	46	67	5990
5/7/2015	02:15 PM	1418	50	60	6271
5/7/2015	02:30 PM	1368	39	77	6577
5/7/2015	02:45 PM	1512	51	61	7072
5/7/2015	03:00 PM	1528	47	60	7347
5/7/2015	03:15 PM	1717	31	86	7604
5/7/2015	03:30 PM	1873	45	61	7646
5/7/2015	03:45 PM	1795	42	62	7576
5/7/2015	04:00 PM	1785	40	67	7466
5/7/2015	04:15 PM	1777	37	62	7482
5/7/2015	04:30 PM	1817	62	30	7411
5/7/2015	04:45 PM	1695	52	42	6928
5/7/2015	05:00 PM	1818	57	33	6482
5/7/2015	05:15 PM	1744	32	29	6057
5/7/2015	05:30 PM	1365	23	38	5868
5/7/2015	05:45 PM	1286	19	38	5830
5/7/2015	06:00 PM	1424	22	37	5734
5/7/2015	06:15 PM	1543	29	44	5486
5/7/2015	06:30 PM	1350	14	24	4963
5/7/2015	06:45 PM	1219	9	19	4664
5/7/2015	07:00 PM	1192	11	32	4457
5/7/2015	07:15 PM	1060	9	24	4173
5/7/2015	07:30 PM	1063	11	15	4063
5/7/2015	07:45 PM	1013	9	18	3952
5/7/2015	08:00 PM	927	12	12	3804
5/7/2015	08:15 PM	958	7	18	3684
5/7/2015	08:30 PM	951	8	19	3482
5/7/2015	08:45 PM	875	5	12	3232
5/7/2015	09:00 PM	800	7	24	2979
5/7/2015	09:15 PM	754	11	16	2741
5/7/2015	09:30 PM	702	11	15	2469
5/7/2015	09:45 PM	611	10	18	2309
5/7/2015	10:00 PM	580	7	6	2124
5/7/2015	10:15 PM	495	3	11	1929
5/7/2015	10:30 PM	550	4	14	1886
5/7/2015	10:45 PM	441	5	8	1761
5/7/2015	11:00 PM	385	6	7	1743
5/7/2015	11:15 PM	452	2	12	
5/7/2015	11:30 PM	436	2	5	
5/7/2015	11:45 PM	423	2	11	

2.1.3 I-526 East of I-26

I-526 East of I-26 (Eastbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	94	0	6	335
5/6/2015	12:15 AM	90	0	5	290
5/6/2015	12:30 AM	70	1	6	240
5/6/2015	12:45 AM	56	0	7	203
5/6/2015	01:00 AM	45	1	9	197
5/6/2015	01:15 AM	35	1	9	189
5/6/2015	01:30 AM	27	6	7	188
5/6/2015	01:45 AM	40	7	10	185
5/6/2015	02:00 AM	38	4	5	166
5/6/2015	02:15 AM	34	2	8	159
5/6/2015	02:30 AM	27	2	8	161
5/6/2015	02:45 AM	26	3	9	182
5/6/2015	03:00 AM	30	4	6	204
5/6/2015	03:15 AM	30	6	10	237
5/6/2015	03:30 AM	43	4	11	289
5/6/2015	03:45 AM	30	5	25	364
5/6/2015	04:00 AM	51	0	22	458
5/6/2015	04:15 AM	71	4	23	553
5/6/2015	04:30 AM	114	6	13	749
5/6/2015	04:45 AM	127	9	18	1052
5/6/2015	05:00 AM	146	5	17	1347
5/6/2015	05:15 AM	264	7	23	1746
5/6/2015	05:30 AM	386	17	33	2122
5/6/2015	05:45 AM	390	16	43	2457
5/6/2015	06:00 AM	492	18	57	2821
5/6/2015	06:15 AM	597	31	42	3094
5/6/2015	06:30 AM	687	33	51	3243
5/6/2015	06:45 AM	741	31	41	3138
5/6/2015	07:00 AM	762	24	54	2902
5/6/2015	07:15 AM	723	40	56	2710
5/6/2015	07:30 AM	586	35	45	2502
5/6/2015	07:45 AM	496	32	49	2523
5/6/2015	08:00 AM	560	38	50	2628
5/6/2015	08:15 AM	518	32	61	2591
5/6/2015	08:30 AM	586	33	68	2587
5/6/2015	08:45 AM	584	47	51	2536
5/6/2015	09:00 AM	514	31	66	2468
5/6/2015	09:15 AM	500	49	58	2385
5/6/2015	09:30 AM	533	36	67	2383
5/6/2015	09:45 AM	503	41	70	2308
5/6/2015	10:00 AM	397	48	83	2233
5/6/2015	10:15 AM	480	34	91	2278
5/6/2015	10:30 AM	453	33	75	2242
5/6/2015	10:45 AM	440	28	71	2310
5/6/2015	11:00 AM	506	24	43	2416
5/6/2015	11:15 AM	464	36	69	2429
5/6/2015	11:30 AM	519	43	67	2499
5/6/2015	11:45 AM	531	34	80	2539
5/6/2015	12:00 PM	479	36	71	2570
5/6/2015	12:15 PM	510	39	90	2625
5/6/2015	12:30 PM	558	35	76	2587
5/6/2015	12:45 PM	536	49	91	2548
5/6/2015	01:00 PM	521	32	88	2549
5/6/2015	01:15 PM	495	26	80	2548
5/6/2015	01:30 PM	503	44	83	2628
5/6/2015	01:45 PM	573	30	74	2681
5/6/2015	02:00 PM	522	38	80	2674
5/6/2015	02:15 PM	596	21	64	2683
5/6/2015	02:30 PM	576	34	73	2732
5/6/2015	02:45 PM	558	29	83	2822
5/6/2015	03:00 PM	558	30	61	2932
5/6/2015	03:15 PM	639	36	55	3049
5/6/2015	03:30 PM	668	38	67	3109

5/6/2015	03:45 PM	689	30	61	3167
5/6/2015	04:00 PM	695	27	44	3192
5/6/2015	04:15 PM	732	13	45	3180
5/6/2015	04:30 PM	769	36	26	3166
5/6/2015	04:45 PM	772	7	26	3233
5/6/2015	05:00 PM	721	15	18	3162
5/6/2015	05:15 PM	748	11	17	3086
5/6/2015	05:30 PM	862	8	28	2921
5/6/2015	05:45 PM	706	12	16	2525
5/6/2015	06:00 PM	646	14	18	2250
5/6/2015	06:15 PM	585	10	16	2023
5/6/2015	06:30 PM	474	14	14	1820
5/6/2015	06:45 PM	431	7	21	1698
5/6/2015	07:00 PM	423	9	19	1581
5/6/2015	07:15 PM	383	11	14	1465
5/6/2015	07:30 PM	365	5	10	1360
5/6/2015	07:45 PM	323	7	12	1230
5/6/2015	08:00 PM	319	5	11	1155
5/6/2015	08:15 PM	287	5	11	1086
5/6/2015	08:30 PM	239	2	9	1014
5/6/2015	08:45 PM	250	4	13	1054
5/6/2015	09:00 PM	249	4	13	1000
5/6/2015	09:15 PM	223	0	8	932
5/6/2015	09:30 PM	284	0	6	879
5/6/2015	09:45 PM	203	1	9	763
5/6/2015	10:00 PM	193	3	2	703
5/6/2015	10:15 PM	166	4	8	654
5/6/2015	10:30 PM	170	0	4	690
5/6/2015	10:45 PM	144	2	7	643
5/6/2015	11:00 PM	130	3	16	592
5/6/2015	11:15 PM	202	3	9	
5/6/2015	11:30 PM	109	5	13	
5/6/2015	11:45 PM	85	6	11	
5/7/2015	12:00 AM	70	8	8	282
5/7/2015	12:15 AM	79	0	9	251
5/7/2015	12:30 AM	55	2	5	215
5/7/2015	12:45 AM	41	2	3	206
5/7/2015	01:00 AM	46	2	7	190
5/7/2015	01:15 AM	41	1	10	192
5/7/2015	01:30 AM	40	2	11	182
5/7/2015	01:45 AM	24	3	3	163
5/7/2015	02:00 AM	44	2	11	165
5/7/2015	02:15 AM	31	2	9	156
5/7/2015	02:30 AM	22	3	9	154
5/7/2015	02:45 AM	24	1	7	175
5/7/2015	03:00 AM	34	0	14	219
5/7/2015	03:15 AM	29	1	10	231
5/7/2015	03:30 AM	35	2	18	258
5/7/2015	03:45 AM	56	7	13	323
5/7/2015	04:00 AM	37	4	19	389
5/7/2015	04:15 AM	56	6	5	523
5/7/2015	04:30 AM	104	3	13	734
5/7/2015	04:45 AM	114	10	18	1011
5/7/2015	05:00 AM	170	3	21	1348
5/7/2015	05:15 AM	240	11	27	1726
5/7/2015	05:30 AM	346	17	34	2245
5/7/2015	05:45 AM	418	16	45	2655
5/7/2015	06:00 AM	502	28	42	2991
5/7/2015	06:15 AM	710	38	49	3291
5/7/2015	06:30 AM	740	25	42	3376
5/7/2015	06:45 AM	734	34	47	3139
5/7/2015	07:00 AM	772	50	50	2788
5/7/2015	07:15 AM	794	45	43	2427
5/7/2015	07:30 AM	503	29	38	2092
5/7/2015	07:45 AM	408	24	32	2092
5/7/2015	08:00 AM	433	29	49	2177

5/7/2015	08:15 AM	479	27	41	2154
5/7/2015	08:30 AM	501	37	32	2261
5/7/2015	08:45 AM	493	25	31	2304
5/7/2015	09:00 AM	406	31	51	2398
5/7/2015	09:15 AM	542	41	71	2496
5/7/2015	09:30 AM	524	35	54	2438
5/7/2015	09:45 AM	526	42	75	2413
5/7/2015	10:00 AM	454	47	85	2407
5/7/2015	10:15 AM	482	46	68	2413
5/7/2015	10:30 AM	445	46	97	2429
5/7/2015	10:45 AM	504	47	86	2518
5/7/2015	11:00 AM	474	34	84	2549
5/7/2015	11:15 AM	487	38	87	2576
5/7/2015	11:30 AM	561	33	83	2619
5/7/2015	11:45 AM	536	32	100	2627
5/7/2015	12:00 PM	505	30	84	2602
5/7/2015	12:15 PM	547	40	68	2689
5/7/2015	12:30 PM	571	34	80	2786
5/7/2015	12:45 PM	509	51	83	2772
5/7/2015	01:00 PM	564	39	103	2741
5/7/2015	01:15 PM	620	37	95	2766
5/7/2015	01:30 PM	561	29	81	2723
5/7/2015	01:45 PM	493	22	97	2656
5/7/2015	02:00 PM	601	38	92	2765
5/7/2015	02:15 PM	586	37	86	2783
5/7/2015	02:30 PM	514	41	49	2800
5/7/2015	02:45 PM	595	39	87	2979
5/7/2015	03:00 PM	633	37	79	3050
5/7/2015	03:15 PM	644	26	56	3078
5/7/2015	03:30 PM	683	29	71	3073
5/7/2015	03:45 PM	726	25	41	3208
5/7/2015	04:00 PM	697	29	51	3300
5/7/2015	04:15 PM	656	22	43	3133
5/7/2015	04:30 PM	874	16	28	3090
5/7/2015	04:45 PM	845	11	28	2871
5/7/2015	05:00 PM	576	14	20	2692
5/7/2015	05:15 PM	652	7	19	2795
5/7/2015	05:30 PM	680	10	9	2840
5/7/2015	05:45 PM	674	10	21	2620
5/7/2015	06:00 PM	674	15	24	2406
5/7/2015	06:15 PM	675	20	28	2154
5/7/2015	06:30 PM	453	10	16	1863
5/7/2015	06:45 PM	459	15	17	1783
5/7/2015	07:00 PM	435	7	19	1641
5/7/2015	07:15 PM	417	4	11	1526
5/7/2015	07:30 PM	376	8	15	1432
5/7/2015	07:45 PM	335	5	9	1338
5/7/2015	08:00 PM	330	4	12	1266
5/7/2015	08:15 PM	323	6	9	1173
5/7/2015	08:30 PM	296	1	8	1073
5/7/2015	08:45 PM	262	5	10	1002
5/7/2015	09:00 PM	244	2	7	953
5/7/2015	09:15 PM	220	1	17	904
5/7/2015	09:30 PM	226	4	4	833
5/7/2015	09:45 PM	219	2	7	742
5/7/2015	10:00 PM	194	1	9	660
5/7/2015	10:15 PM	158	1	8	583
5/7/2015	10:30 PM	135	0	8	574
5/7/2015	10:45 PM	136	4	6	558
5/7/2015	11:00 PM	113	3	11	529
5/7/2015	11:15 PM	146	1	11	
5/7/2015	11:30 PM	119	2	6	
5/7/2015	11:45 PM	110	1	6	

I-526 East of I-26 (Eastbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	94	0	6	335
5/6/2015	12:15 AM	90	0	5	290
5/6/2015	12:30 AM	70	1	6	240
5/6/2015	12:45 AM	56	0	7	203
5/6/2015	01:00 AM	45	1	9	197
5/6/2015	01:15 AM	35	1	9	189
5/6/2015	01:30 AM	27	6	7	188
5/6/2015	01:45 AM	40	7	10	185
5/6/2015	02:00 AM	38	4	5	166
5/6/2015	02:15 AM	34	2	8	159
5/6/2015	02:30 AM	27	2	8	161
5/6/2015	02:45 AM	26	3	9	182
5/6/2015	03:00 AM	30	4	6	204
5/6/2015	03:15 AM	30	6	10	237
5/6/2015	03:30 AM	43	4	11	289
5/6/2015	03:45 AM	30	5	25	364
5/6/2015	04:00 AM	51	0	22	458
5/6/2015	04:15 AM	71	4	23	553
5/6/2015	04:30 AM	114	6	13	749
5/6/2015	04:45 AM	127	9	18	1052
5/6/2015	05:00 AM	146	5	17	1347
5/6/2015	05:15 AM	264	7	23	1746
5/6/2015	05:30 AM	386	17	33	2122
5/6/2015	05:45 AM	390	16	43	2457
5/6/2015	06:00 AM	492	18	57	2821
5/6/2015	06:15 AM	597	31	42	3094
5/6/2015	06:30 AM	687	33	51	3243
5/6/2015	06:45 AM	741	31	41	3138
5/6/2015	07:00 AM	762	24	54	2902
5/6/2015	07:15 AM	723	40	56	2710
5/6/2015	07:30 AM	586	35	45	2502
5/6/2015	07:45 AM	496	32	49	2523
5/6/2015	08:00 AM	560	38	50	2628
5/6/2015	08:15 AM	518	32	61	2591
5/6/2015	08:30 AM	586	33	68	2587
5/6/2015	08:45 AM	584	47	51	2536
5/6/2015	09:00 AM	514	31	66	2468
5/6/2015	09:15 AM	500	49	58	2385
5/6/2015	09:30 AM	533	36	67	2383
5/6/2015	09:45 AM	503	41	70	2308
5/6/2015	10:00 AM	397	48	83	2233
5/6/2015	10:15 AM	480	34	91	2278
5/6/2015	10:30 AM	453	33	75	2242
5/6/2015	10:45 AM	440	28	71	2310
5/6/2015	11:00 AM	506	24	43	2416
5/6/2015	11:15 AM	464	36	69	2429
5/6/2015	11:30 AM	519	43	67	2499
5/6/2015	11:45 AM	531	34	80	2539
5/6/2015	12:00 PM	479	36	71	2570
5/6/2015	12:15 PM	510	39	90	2625
5/6/2015	12:30 PM	558	35	76	2587
5/6/2015	12:45 PM	536	49	91	2548
5/6/2015	01:00 PM	521	32	88	2549
5/6/2015	01:15 PM	495	26	80	2548
5/6/2015	01:30 PM	503	44	83	2628
5/6/2015	01:45 PM	573	30	74	2681
5/6/2015	02:00 PM	522	38	80	2674
5/6/2015	02:15 PM	596	21	64	2683
5/6/2015	02:30 PM	576	34	73	2732
5/6/2015	02:45 PM	558	29	83	2822
5/6/2015	03:00 PM	558	30	61	2932
5/6/2015	03:15 PM	639	36	55	3049
5/6/2015	03:30 PM	668	38	67	3109

5/6/2015	03:45 PM	689	30	61	3167
5/6/2015	04:00 PM	695	27	44	3192
5/6/2015	04:15 PM	732	13	45	3180
5/6/2015	04:30 PM	769	36	26	3166
5/6/2015	04:45 PM	772	7	26	3233
5/6/2015	05:00 PM	721	15	18	3162
5/6/2015	05:15 PM	748	11	17	3086
5/6/2015	05:30 PM	862	8	28	2921
5/6/2015	05:45 PM	706	12	16	2525
5/6/2015	06:00 PM	646	14	18	2250
5/6/2015	06:15 PM	585	10	16	2023
5/6/2015	06:30 PM	474	14	14	1820
5/6/2015	06:45 PM	431	7	21	1698
5/6/2015	07:00 PM	423	9	19	1581
5/6/2015	07:15 PM	383	11	14	1465
5/6/2015	07:30 PM	365	5	10	1360
5/6/2015	07:45 PM	323	7	12	1230
5/6/2015	08:00 PM	319	5	11	1155
5/6/2015	08:15 PM	287	5	11	1086
5/6/2015	08:30 PM	239	2	9	1014
5/6/2015	08:45 PM	250	4	13	1054
5/6/2015	09:00 PM	249	4	13	1000
5/6/2015	09:15 PM	223	0	8	932
5/6/2015	09:30 PM	284	0	6	879
5/6/2015	09:45 PM	203	1	9	763
5/6/2015	10:00 PM	193	3	2	703
5/6/2015	10:15 PM	166	4	8	654
5/6/2015	10:30 PM	170	0	4	690
5/6/2015	10:45 PM	144	2	7	643
5/6/2015	11:00 PM	130	3	16	592
5/6/2015	11:15 PM	202	3	9	
5/6/2015	11:30 PM	109	5	13	
5/6/2015	11:45 PM	85	6	11	
5/7/2015	12:00 AM	70	8	8	282
5/7/2015	12:15 AM	79	0	9	251
5/7/2015	12:30 AM	55	2	5	215
5/7/2015	12:45 AM	41	2	3	206
5/7/2015	01:00 AM	46	2	7	190
5/7/2015	01:15 AM	41	1	10	192
5/7/2015	01:30 AM	40	2	11	182
5/7/2015	01:45 AM	24	3	3	163
5/7/2015	02:00 AM	44	2	11	165
5/7/2015	02:15 AM	31	2	9	156
5/7/2015	02:30 AM	22	3	9	154
5/7/2015	02:45 AM	24	1	7	175
5/7/2015	03:00 AM	34	0	14	219
5/7/2015	03:15 AM	29	1	10	231
5/7/2015	03:30 AM	35	2	18	258
5/7/2015	03:45 AM	56	7	13	323
5/7/2015	04:00 AM	37	4	19	389
5/7/2015	04:15 AM	56	6	5	523
5/7/2015	04:30 AM	104	3	13	734
5/7/2015	04:45 AM	114	10	18	1011
5/7/2015	05:00 AM	170	3	21	1348
5/7/2015	05:15 AM	240	11	27	1726
5/7/2015	05:30 AM	346	17	34	2245
5/7/2015	05:45 AM	418	16	45	2655
5/7/2015	06:00 AM	502	28	42	2991
5/7/2015	06:15 AM	710	38	49	3291
5/7/2015	06:30 AM	740	25	42	3376
5/7/2015	06:45 AM	734	34	47	3139
5/7/2015	07:00 AM	772	50	50	2788
5/7/2015	07:15 AM	794	45	43	2427
5/7/2015	07:30 AM	503	29	38	2092
5/7/2015	07:45 AM	408	24	32	2092
5/7/2015	08:00 AM	433	29	49	2177

5/7/2015	08:15 AM	479	27	41	2154
5/7/2015	08:30 AM	501	37	32	2261
5/7/2015	08:45 AM	493	25	31	2304
5/7/2015	09:00 AM	406	31	51	2398
5/7/2015	09:15 AM	542	41	71	2496
5/7/2015	09:30 AM	524	35	54	2438
5/7/2015	09:45 AM	526	42	75	2413
5/7/2015	10:00 AM	454	47	85	2407
5/7/2015	10:15 AM	482	46	68	2413
5/7/2015	10:30 AM	445	46	97	2429
5/7/2015	10:45 AM	504	47	86	2518
5/7/2015	11:00 AM	474	34	84	2549
5/7/2015	11:15 AM	487	38	87	2576
5/7/2015	11:30 AM	561	33	83	2619
5/7/2015	11:45 AM	536	32	100	2627
5/7/2015	12:00 PM	505	30	84	2602
5/7/2015	12:15 PM	547	40	68	2689
5/7/2015	12:30 PM	571	34	80	2786
5/7/2015	12:45 PM	509	51	83	2772
5/7/2015	01:00 PM	564	39	103	2741
5/7/2015	01:15 PM	620	37	95	2766
5/7/2015	01:30 PM	561	29	81	2723
5/7/2015	01:45 PM	493	22	97	2656
5/7/2015	02:00 PM	601	38	92	2765
5/7/2015	02:15 PM	586	37	86	2783
5/7/2015	02:30 PM	514	41	49	2800
5/7/2015	02:45 PM	595	39	87	2979
5/7/2015	03:00 PM	633	37	79	3050
5/7/2015	03:15 PM	644	26	56	3078
5/7/2015	03:30 PM	683	29	71	3073
5/7/2015	03:45 PM	726	25	41	3208
5/7/2015	04:00 PM	697	29	51	3300
5/7/2015	04:15 PM	656	22	43	3133
5/7/2015	04:30 PM	874	16	28	3090
5/7/2015	04:45 PM	845	11	28	2871
5/7/2015	05:00 PM	576	14	20	2692
5/7/2015	05:15 PM	652	7	19	2795
5/7/2015	05:30 PM	680	10	9	2840
5/7/2015	05:45 PM	674	10	21	2620
5/7/2015	06:00 PM	674	15	24	2406
5/7/2015	06:15 PM	675	20	28	2154
5/7/2015	06:30 PM	453	10	16	1863
5/7/2015	06:45 PM	459	15	17	1783
5/7/2015	07:00 PM	435	7	19	1641
5/7/2015	07:15 PM	417	4	11	1526
5/7/2015	07:30 PM	376	8	15	1432
5/7/2015	07:45 PM	335	5	9	1338
5/7/2015	08:00 PM	330	4	12	1266
5/7/2015	08:15 PM	323	6	9	1173
5/7/2015	08:30 PM	296	1	8	1073
5/7/2015	08:45 PM	262	5	10	1002
5/7/2015	09:00 PM	244	2	7	953
5/7/2015	09:15 PM	220	1	17	904
5/7/2015	09:30 PM	226	4	4	833
5/7/2015	09:45 PM	219	2	7	742
5/7/2015	10:00 PM	194	1	9	660
5/7/2015	10:15 PM	158	1	8	583
5/7/2015	10:30 PM	135	0	8	574
5/7/2015	10:45 PM	136	4	6	558
5/7/2015	11:00 PM	113	3	11	529
5/7/2015	11:15 PM	146	1	11	
5/7/2015	11:30 PM	119	2	6	
5/7/2015	11:45 PM	110	1	6	

2.1.4 I-526 West of I-26

I-526 West of I-26 (Eastbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	104	1	2	362
5/6/2015	12:15 AM	95	1	3	307
5/6/2015	12:30 AM	80	0	0	259
5/6/2015	12:45 AM	71	1	4	217
5/6/2015	01:00 AM	52	0	0	180
5/6/2015	01:15 AM	46	2	3	176
5/6/2015	01:30 AM	35	1	2	153
5/6/2015	01:45 AM	38	0	1	154
5/6/2015	02:00 AM	45	0	3	146
5/6/2015	02:15 AM	27	0	1	138
5/6/2015	02:30 AM	37	0	2	164
5/6/2015	02:45 AM	28	0	3	199
5/6/2015	03:00 AM	39	0	1	260
5/6/2015	03:15 AM	52	0	2	329
5/6/2015	03:30 AM	66	3	5	402
5/6/2015	03:45 AM	87	1	4	538
5/6/2015	04:00 AM	97	6	6	674
5/6/2015	04:15 AM	115	3	9	772
5/6/2015	04:30 AM	197	6	7	935
5/6/2015	04:45 AM	220	1	7	1140
5/6/2015	05:00 AM	198	6	3	1420
5/6/2015	05:15 AM	277	8	5	1660
5/6/2015	05:30 AM	401	4	10	1952
5/6/2015	05:45 AM	497	6	5	2330
5/6/2015	06:00 AM	420	13	14	2782
5/6/2015	06:15 AM	540	33	9	3268
5/6/2015	06:30 AM	747	27	19	3721
5/6/2015	06:45 AM	915	32	13	3916
5/6/2015	07:00 AM	888	36	9	3987
5/6/2015	07:15 AM	976	47	12	3944
5/6/2015	07:30 AM	950	22	16	3894
5/6/2015	07:45 AM	1000	18	13	3829
5/6/2015	08:00 AM	856	20	14	3656
5/6/2015	08:15 AM	929	43	13	3475
5/6/2015	08:30 AM	853	50	20	3239
5/6/2015	08:45 AM	788	51	19	3034
5/6/2015	09:00 AM	642	41	26	2880
5/6/2015	09:15 AM	697	32	20	2841
5/6/2015	09:30 AM	656	44	18	2803
5/6/2015	09:45 AM	661	28	15	2790
5/6/2015	10:00 AM	621	27	22	2849
5/6/2015	10:15 AM	649	37	25	2858
5/6/2015	10:30 AM	628	47	30	2883
5/6/2015	10:45 AM	696	37	30	2939
5/6/2015	11:00 AM	631	25	23	2908
5/6/2015	11:15 AM	688	22	26	2926
5/6/2015	11:30 AM	693	43	25	2909
5/6/2015	11:45 AM	668	31	33	2895
5/6/2015	12:00 PM	648	29	20	2918
5/6/2015	12:15 PM	655	44	20	2928
5/6/2015	12:30 PM	691	32	24	2946
5/6/2015	12:45 PM	713	23	19	2965
5/6/2015	01:00 PM	655	31	21	2959
5/6/2015	01:15 PM	678	37	22	2974
5/6/2015	01:30 PM	715	29	22	3033
5/6/2015	01:45 PM	686	33	30	3040
5/6/2015	02:00 PM	671	28	23	3068
5/6/2015	02:15 PM	734	29	33	3250
5/6/2015	02:30 PM	719	26	28	3359
5/6/2015	02:45 PM	726	24	27	3452
5/6/2015	03:00 PM	841	45	18	3518
5/6/2015	03:15 PM	849	34	22	3459

5/6/2015	03:30 PM	813	26	27	3371
5/6/2015	03:45 PM	798	21	24	3391
5/6/2015	04:00 PM	783	35	27	3335
5/6/2015	04:15 PM	779	19	19	3281
5/6/2015	04:30 PM	847	17	22	3292
5/6/2015	04:45 PM	760	11	16	3150
5/6/2015	05:00 PM	752	22	17	3118
5/6/2015	05:15 PM	782	24	22	3097
5/6/2015	05:30 PM	714	12	18	3079
5/6/2015	05:45 PM	737	10	8	3006
5/6/2015	06:00 PM	746	8	16	2901
5/6/2015	06:15 PM	784	18	8	2704
5/6/2015	06:30 PM	655	9	7	2441
5/6/2015	06:45 PM	640	6	4	2248
5/6/2015	07:00 PM	566	4	3	2090
5/6/2015	07:15 PM	538	5	4	1979
5/6/2015	07:30 PM	471	2	5	1859
5/6/2015	07:45 PM	482	3	7	1778
5/6/2015	08:00 PM	451	4	7	1645
5/6/2015	08:15 PM	412	7	8	1548
5/6/2015	08:30 PM	389	5	3	1472
5/6/2015	08:45 PM	351	1	7	1426
5/6/2015	09:00 PM	355	3	7	1381
5/6/2015	09:15 PM	348	2	1	1277
5/6/2015	09:30 PM	349	1	1	1140
5/6/2015	09:45 PM	309	1	4	998
5/6/2015	10:00 PM	256	2	3	921
5/6/2015	10:15 PM	210	2	2	815
5/6/2015	10:30 PM	200	2	7	785
5/6/2015	10:45 PM	230	1	6	696
5/6/2015	11:00 PM	147	2	6	597
5/6/2015	11:15 PM	180	1	3	
5/6/2015	11:30 PM	117	0	3	
5/6/2015	11:45 PM	138	0	0	
5/7/2015	12:00 AM	102	0	3	345
5/7/2015	12:15 AM	109	1	1	299
5/7/2015	12:30 AM	65	2	3	237
5/7/2015	12:45 AM	57	1	1	212
5/7/2015	01:00 AM	56	3	0	203
5/7/2015	01:15 AM	47	1	1	193
5/7/2015	01:30 AM	45	0	0	188
5/7/2015	01:45 AM	46	0	4	178
5/7/2015	02:00 AM	47	0	2	165
5/7/2015	02:15 AM	41	2	1	152
5/7/2015	02:30 AM	33	2	0	144
5/7/2015	02:45 AM	33	4	0	168
5/7/2015	03:00 AM	32	3	1	212
5/7/2015	03:15 AM	33	0	3	254
5/7/2015	03:30 AM	56	2	1	344
5/7/2015	03:45 AM	76	1	4	475
5/7/2015	04:00 AM	67	4	7	642
5/7/2015	04:15 AM	120	3	3	740
5/7/2015	04:30 AM	183	2	5	892
5/7/2015	04:45 AM	238	0	10	1105
5/7/2015	05:00 AM	163	2	11	1340
5/7/2015	05:15 AM	271	4	3	1651
5/7/2015	05:30 AM	389	7	7	2065
5/7/2015	05:45 AM	457	19	7	2545
5/7/2015	06:00 AM	453	24	10	3011
5/7/2015	06:15 AM	648	35	9	3472
5/7/2015	06:30 AM	830	39	14	3859
5/7/2015	06:45 AM	905	31	13	4028
5/7/2015	07:00 AM	900	29	19	3972
5/7/2015	07:15 AM	1036	30	13	3844
5/7/2015	07:30 AM	1011	23	18	3642
5/7/2015	07:45 AM	866	23	4	3402

5/7/2015	08:00 AM	785	22	13	3368
5/7/2015	08:15 AM	827	29	21	3321
5/7/2015	08:30 AM	759	37	16	3231
5/7/2015	08:45 AM	787	50	22	3134
5/7/2015	09:00 AM	709	51	13	3025
5/7/2015	09:15 AM	721	37	29	2940
5/7/2015	09:30 AM	662	29	24	2799
5/7/2015	09:45 AM	695	30	25	2803
5/7/2015	10:00 AM	632	27	29	2726
5/7/2015	10:15 AM	592	30	24	2730
5/7/2015	10:30 AM	665	36	18	2866
5/7/2015	10:45 AM	611	36	26	2923
5/7/2015	11:00 AM	627	36	29	3036
5/7/2015	11:15 AM	732	23	27	3108
5/7/2015	11:30 AM	713	34	29	3073
5/7/2015	11:45 AM	720	40	26	2958
5/7/2015	12:00 PM	705	39	20	2876
5/7/2015	12:15 PM	699	23	25	2815
5/7/2015	12:30 PM	621	22	18	2812
5/7/2015	12:45 PM	657	25	22	2963
5/7/2015	01:00 PM	654	28	21	3047
5/7/2015	01:15 PM	669	43	32	3058
5/7/2015	01:30 PM	748	41	23	3153
5/7/2015	01:45 PM	732	33	23	3167
5/7/2015	02:00 PM	665	31	18	3188
5/7/2015	02:15 PM	782	31	26	3302
5/7/2015	02:30 PM	780	24	22	3374
5/7/2015	02:45 PM	743	37	29	3434
5/7/2015	03:00 PM	781	31	16	3398
5/7/2015	03:15 PM	860	33	18	3405
5/7/2015	03:30 PM	832	27	27	3320
5/7/2015	03:45 PM	730	29	14	3261
5/7/2015	04:00 PM	785	31	19	3257
5/7/2015	04:15 PM	781	26	19	3276
5/7/2015	04:30 PM	786	28	13	3206
5/7/2015	04:45 PM	733	24	12	3112
5/7/2015	05:00 PM	822	14	18	3102
5/7/2015	05:15 PM	730	12	14	2979
5/7/2015	05:30 PM	707	16	10	3028
5/7/2015	05:45 PM	734	13	12	3017
5/7/2015	06:00 PM	713	11	7	2877
5/7/2015	06:15 PM	787	11	7	2740
5/7/2015	06:30 PM	702	9	11	2437
5/7/2015	06:45 PM	602	9	8	2204
5/7/2015	07:00 PM	578	9	7	1979
5/7/2015	07:15 PM	490	3	9	1794
5/7/2015	07:30 PM	477	3	9	1683
5/7/2015	07:45 PM	381	8	5	1567
5/7/2015	08:00 PM	402	4	3	1562
5/7/2015	08:15 PM	383	4	4	1512
5/7/2015	08:30 PM	364	3	6	1461
5/7/2015	08:45 PM	386	0	3	1414
5/7/2015	09:00 PM	357	0	2	1331
5/7/2015	09:15 PM	331	4	5	1202
5/7/2015	09:30 PM	320	1	5	1098
5/7/2015	09:45 PM	301	1	4	1006
5/7/2015	10:00 PM	226	1	3	897
5/7/2015	10:15 PM	233	1	2	838
5/7/2015	10:30 PM	232	0	2	749
5/7/2015	10:45 PM	194	1	2	662
5/7/2015	11:00 PM	167	2	2	610
5/7/2015	11:15 PM	143	3	1	
5/7/2015	11:30 PM	143	2	2	
5/7/2015	11:45 PM	143	0	2	

I-526 West of I-26 (Westbound)

Date	Time	Small	Med	Large	Peak Hour Sums
5/6/2015	12:00 AM	216	2	3	634
5/6/2015	12:15 AM	179	1	0	498
5/6/2015	12:30 AM	138	1	0	386
5/6/2015	12:45 AM	91	2	1	313
5/6/2015	01:00 AM	80	1	4	298
5/6/2015	01:15 AM	62	2	4	281
5/6/2015	01:30 AM	61	2	3	265
5/6/2015	01:45 AM	72	5	2	238
5/6/2015	02:00 AM	67	1	0	189
5/6/2015	02:15 AM	47	3	2	167
5/6/2015	02:30 AM	35	4	0	157
5/6/2015	02:45 AM	27	3	0	171
5/6/2015	03:00 AM	39	5	2	189
5/6/2015	03:15 AM	39	3	0	196
5/6/2015	03:30 AM	50	0	3	221
5/6/2015	03:45 AM	39	6	3	265
5/6/2015	04:00 AM	48	4	1	325
5/6/2015	04:15 AM	65	1	1	415
5/6/2015	04:30 AM	90	5	2	563
5/6/2015	04:45 AM	99	6	3	764
5/6/2015	05:00 AM	129	9	5	995
5/6/2015	05:15 AM	206	6	3	1362
5/6/2015	05:30 AM	281	5	12	1729
5/6/2015	05:45 AM	315	12	12	2228
5/6/2015	06:00 AM	480	14	16	2674
5/6/2015	06:15 AM	538	28	16	2986
5/6/2015	06:30 AM	746	28	23	3256
5/6/2015	06:45 AM	746	24	15	3386
5/6/2015	07:00 AM	781	32	9	3486
5/6/2015	07:15 AM	811	26	15	3452
5/6/2015	07:30 AM	879	36	12	3372
5/6/2015	07:45 AM	845	19	21	3201
5/6/2015	08:00 AM	736	32	20	3082
5/6/2015	08:15 AM	713	35	24	2981
5/6/2015	08:30 AM	711	29	16	2916
5/6/2015	08:45 AM	715	38	13	2873
5/6/2015	09:00 AM	629	30	28	2858
5/6/2015	09:15 AM	632	48	27	2774
5/6/2015	09:30 AM	661	25	27	2775
5/6/2015	09:45 AM	670	47	34	2762
5/6/2015	10:00 AM	538	43	22	2729
5/6/2015	10:15 AM	638	38	32	2801
5/6/2015	10:30 AM	648	24	28	2791
5/6/2015	10:45 AM	673	28	17	2834
5/6/2015	11:00 AM	615	36	24	2906
5/6/2015	11:15 AM	646	36	16	2995
5/6/2015	11:30 AM	685	39	19	3085
5/6/2015	11:45 AM	725	36	29	3157
5/6/2015	12:00 PM	710	30	24	3159
5/6/2015	12:15 PM	725	38	25	3278
5/6/2015	12:30 PM	772	20	23	3323
5/6/2015	12:45 PM	728	35	29	3335
5/6/2015	01:00 PM	822	40	21	3376
5/6/2015	01:15 PM	762	40	31	3344
5/6/2015	01:30 PM	757	43	27	3372
5/6/2015	01:45 PM	774	38	21	3409
5/6/2015	02:00 PM	784	41	26	3474
5/6/2015	02:15 PM	813	25	23	3544
5/6/2015	02:30 PM	811	36	17	3616
5/6/2015	02:45 PM	838	36	24	3758
5/6/2015	03:00 PM	865	28	28	3722
5/6/2015	03:15 PM	869	42	22	3817

5/6/2015	03:30 PM	950	37	19	3870
5/6/2015	03:45 PM	812	28	22	3856
5/6/2015	04:00 PM	958	36	22	3991
5/6/2015	04:15 PM	950	19	17	3902
5/6/2015	04:30 PM	960	24	8	3862
5/6/2015	04:45 PM	965	23	9	3754
5/6/2015	05:00 PM	906	13	8	3528
5/6/2015	05:15 PM	918	16	12	3501
5/6/2015	05:30 PM	865	7	12	3330
5/6/2015	05:45 PM	756	12	3	3187
5/6/2015	06:00 PM	881	12	7	3081
5/6/2015	06:15 PM	756	8	11	2884
5/6/2015	06:30 PM	723	10	8	2756
5/6/2015	06:45 PM	645	6	14	2652
5/6/2015	07:00 PM	684	13	6	2598
5/6/2015	07:15 PM	638	6	3	2450
5/6/2015	07:30 PM	623	5	9	2326
5/6/2015	07:45 PM	604	3	4	2173
5/6/2015	08:00 PM	546	5	4	2002
5/6/2015	08:15 PM	516	4	3	1893
5/6/2015	08:30 PM	481	3	0	1794
5/6/2015	08:45 PM	435	1	4	1860
5/6/2015	09:00 PM	442	3	1	1793
5/6/2015	09:15 PM	420	1	3	1712
5/6/2015	09:30 PM	541	4	5	1585
5/6/2015	09:45 PM	366	4	3	1335
5/6/2015	10:00 PM	360	0	5	1194
5/6/2015	10:15 PM	289	2	6	1072
5/6/2015	10:30 PM	299	1	0	1121
5/6/2015	10:45 PM	227	1	4	1051
5/6/2015	11:00 PM	237	2	4	971
5/6/2015	11:15 PM	341	2	3	
5/6/2015	11:30 PM	222	2	6	
5/6/2015	11:45 PM	148	1	3	
5/7/2015	12:00 AM	189	1	2	551
5/7/2015	12:15 AM	172	2	2	443
5/7/2015	12:30 AM	101	0	3	342
5/7/2015	12:45 AM	77	1	1	317
5/7/2015	01:00 AM	81	1	2	295
5/7/2015	01:15 AM	74	0	1	281
5/7/2015	01:30 AM	75	1	3	254
5/7/2015	01:45 AM	56	1	0	203
5/7/2015	02:00 AM	64	3	3	186
5/7/2015	02:15 AM	42	4	2	154
5/7/2015	02:30 AM	22	1	5	145
5/7/2015	02:45 AM	38	0	2	160
5/7/2015	03:00 AM	32	3	3	169
5/7/2015	03:15 AM	35	1	3	184
5/7/2015	03:30 AM	31	2	10	205
5/7/2015	03:45 AM	45	0	4	261
5/7/2015	04:00 AM	49	4	0	309
5/7/2015	04:15 AM	56	1	3	405
5/7/2015	04:30 AM	98	1	0	511
5/7/2015	04:45 AM	95	1	1	726
5/7/2015	05:00 AM	146	3	0	994
5/7/2015	05:15 AM	160	4	2	1334
5/7/2015	05:30 AM	293	8	13	1810
5/7/2015	05:45 AM	351	9	5	2305
5/7/2015	06:00 AM	454	23	12	2748
5/7/2015	06:15 AM	600	26	16	3073
5/7/2015	06:30 AM	762	32	15	3322
5/7/2015	06:45 AM	764	33	11	3349
5/7/2015	07:00 AM	766	41	7	3421
5/7/2015	07:15 AM	841	34	16	3467
5/7/2015	07:30 AM	797	22	17	3348
5/7/2015	07:45 AM	822	32	26	3263

5/7/2015	08:00 AM	793	41	26	3090
5/7/2015	08:15 AM	720	31	21	2887
5/7/2015	08:30 AM	696	37	18	2790
5/7/2015	08:45 AM	631	63	13	2730
5/7/2015	09:00 AM	605	36	16	2741
5/7/2015	09:15 AM	615	45	15	2783
5/7/2015	09:30 AM	638	33	20	2828
5/7/2015	09:45 AM	664	39	15	2853
5/7/2015	10:00 AM	628	38	33	2865
5/7/2015	10:15 AM	657	40	23	2902
5/7/2015	10:30 AM	645	39	32	2873
5/7/2015	10:45 AM	663	41	26	2954
5/7/2015	11:00 AM	674	40	22	3006
5/7/2015	11:15 AM	629	35	27	3057
5/7/2015	11:30 AM	744	30	23	3219
5/7/2015	11:45 AM	730	26	26	3330
5/7/2015	12:00 PM	738	29	20	3413
5/7/2015	12:15 PM	796	39	18	3517
5/7/2015	12:30 PM	844	36	28	3523
5/7/2015	12:45 PM	802	44	19	3421
5/7/2015	01:00 PM	831	38	22	3327
5/7/2015	01:15 PM	812	28	19	3325
5/7/2015	01:30 PM	758	32	16	3371
5/7/2015	01:45 PM	722	24	25	3421
5/7/2015	02:00 PM	823	42	24	3537
5/7/2015	02:15 PM	835	46	24	3653
5/7/2015	02:30 PM	805	30	21	3737
5/7/2015	02:45 PM	833	33	21	3852
5/7/2015	03:00 PM	942	40	23	3875
5/7/2015	03:15 PM	942	31	16	3880
5/7/2015	03:30 PM	926	23	22	3875
5/7/2015	03:45 PM	877	24	9	3981
5/7/2015	04:00 PM	972	25	13	4050
5/7/2015	04:15 PM	939	33	12	4102
5/7/2015	04:30 PM	1044	23	10	4210
5/7/2015	04:45 PM	949	18	12	4003
5/7/2015	05:00 PM	1044	11	7	3845
5/7/2015	05:15 PM	1080	7	5	3679
5/7/2015	05:30 PM	848	14	8	3451
5/7/2015	05:45 PM	807	7	7	3301
5/7/2015	06:00 PM	879	11	6	3167
5/7/2015	06:15 PM	836	15	13	2979
5/7/2015	06:30 PM	707	7	6	2794
5/7/2015	06:45 PM	663	11	13	2682
5/7/2015	07:00 PM	695	5	8	2558
5/7/2015	07:15 PM	662	8	9	2345
5/7/2015	07:30 PM	598	5	5	2205
5/7/2015	07:45 PM	557	2	4	2131
5/7/2015	08:00 PM	480	8	7	2003
5/7/2015	08:15 PM	536	1	2	1961
5/7/2015	08:30 PM	521	6	7	1847
5/7/2015	08:45 PM	431	2	2	1716
5/7/2015	09:00 PM	445	3	5	1653
5/7/2015	09:15 PM	419	4	2	1578
5/7/2015	09:30 PM	394	5	4	1431
5/7/2015	09:45 PM	362	5	5	1333
5/7/2015	10:00 PM	374	4	0	1174
5/7/2015	10:15 PM	273	2	3	1015
5/7/2015	10:30 PM	302	1	2	1014
5/7/2015	10:45 PM	210	1	2	1004
5/7/2015	11:00 PM	214	2	3	1041
5/7/2015	11:15 PM	276	0	1	
5/7/2015	11:30 PM	292	0	3	
5/7/2015	11:45 PM	247	2	1	

2.2 RAMP 48-HOUR VEHICULAR TRAFFIC VOLUMES

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 WB OFF RAMP NORTH OF
SAM RITTENBURG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		50	389		
12:15		46	334		
12:30		44	414		
12:45		35	356	175	1493
01:00		26	353		
01:15		23	349		
01:30		24	386		
01:45		18	321	91	1409
02:00		22	346		
02:15		24	378		
02:30		20	394		
02:45		18	381	84	1499
03:00		24	366		
03:15		22	378		
03:30		29	375		
03:45		25	332	100	1451
04:00		22	384		
04:15		27	324		
04:30		24	330		
04:45		40	358	113	1396
05:00		50	377		
05:15		85	340		
05:30		85	348		
05:45		119	325	339	1390
06:00		200	326		
06:15		295	303		
06:30		289	337		
06:45		358	304	1142	1270
07:00		364	252		
07:15		348	268		
07:30		384	238		
07:45		429	192	1525	950
08:00		440	183		
08:15		444	158		
08:30		460	163		
08:45		444	162	1788	666
09:00		384	155		
09:15		448	148		
09:30		400	145		
09:45		425	133	1657	581
10:00		365	105		
10:15		372	118		
10:30		367	105		
10:45		368	97	1472	425
11:00		348	92		
11:15		418	76		
11:30		406	62		
11:45		389	52	1561	282
Total		10047	12812		
Percent		44.0%	56.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 WB OFF RAMP NORTH OF
SAM RITTENBURG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		48	355		
12:15		59	381		
12:30		32	372		
12:45		20	367	159	1475
01:00		32	358		
01:15		34	356		
01:30		26	386		
01:45		20	364	112	1464
02:00		14	370		
02:15		16	349		
02:30		16	388		
02:45		18	378	64	1485
03:00		22	408		
03:15		11	413		
03:30		35	362		
03:45		18	369	86	1552
04:00		31	374		
04:15		38	350		
04:30		40	390		
04:45		49	376	158	1490
05:00		52	332		
05:15		85	346		
05:30		90	332		
05:45		130	342	357	1352
06:00		173	355		
06:15		258	286		
06:30		268	262		
06:45		305	282	1004	1185
07:00		355	220		
07:15		370	201		
07:30		415	200		
07:45		411	224	1551	845
08:00		424	183		
08:15		428	194		
08:30		394	164		
08:45		422	139	1668	680
09:00		442	169		
09:15		408	125		
09:30		404	147		
09:45		343	116	1597	557
10:00		388	112		
10:15		366	102		
10:30		416	78		
10:45		424	96	1594	388
11:00		362	80		
11:15		355	72		
11:30		423	58		
11:45		377	72	1517	282
Total		9867	12755		
Percent		43.6%	56.4%		
Grand Total		19914	25567		
Percent		43.8%	56.2%		
ADT		ADT 22,740		AADT 22,740	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB ON RAMP NORTH OF
SAM RITTENBERG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	106		
12:15		10	105		
12:30		4	112		
12:45		4	124	21	447
01:00		3	117		
01:15		1	106		
01:30		2	104		
01:45		4	102	10	429
02:00		1	96		
02:15		4	90		
02:30		1	93		
02:45		7	112	13	391
03:00		6	105		
03:15		3	122		
03:30		3	103		
03:45		4	116	16	446
04:00		4	147		
04:15		4	110		
04:30		4	146		
04:45		1	134	13	537
05:00		6	198		
05:15		7	132		
05:30		10	134		
05:45		16	109	39	573
06:00		18	134		
06:15		11	107		
06:30		32	88		
06:45		34	80	95	409
07:00		39	94		
07:15		31	66		
07:30		41	54		
07:45		53	60	164	274
08:00		59	62		
08:15		42	52		
08:30		52	49		
08:45		48	37	201	200
09:00		50	47		
09:15		60	39		
09:30		65	42		
09:45		57	25	232	153
10:00		54	30		
10:15		64	17		
10:30		63	22		
10:45		72	17	253	86
11:00		70	14		
11:15		79	13		
11:30		102	10		
11:45		82	8	333	45
Total		1390	3990		
Percent		25.8%	74.2%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB ON RAMP NORTH OF
SAM RITTENBERG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	105		
12:15		5	118		
12:30		2	132		
12:45		9	108	24	463
01:00		4	122		
01:15		4	138		
01:30		4	120		
01:45		6	122	18	502
02:00		5	114		
02:15		5	95		
02:30		2	106		
02:45		1	91	13	406
03:00		0	127		
03:15		4	128		
03:30		2	130		
03:45		3	132	9	517
04:00		6	144		
04:15		2	104		
04:30		4	153		
04:45		6	132	18	533
05:00		2	198		
05:15		8	146		
05:30		10	150		
05:45		16	122	36	616
06:00		18	115		
06:15		22	113		
06:30		33	93		
06:45		32	99	105	420
07:00		35	90		
07:15		34	55		
07:30		52	69		
07:45		59	75	180	289
08:00		47	81		
08:15		57	57		
08:30		42	63		
08:45		62	46	208	247
09:00		52	54		
09:15		52	41		
09:30		62	42		
09:45		58	22	224	159
10:00		74	21		
10:15		76	15		
10:30		73	23		
10:45		76	16	299	75
11:00		88	14		
11:15		74	8		
11:30		55	8		
11:45		95	6	312	36
Total		1446	4263		
Percent		25.3%	74.7%		
Grand Total		2836	8253		
Percent		25.6%	74.4%		
ADT		ADT 5,544		AADT 5,544	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
US17 SB ON RAMP TO I-526

Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	220		
12:15		7	212		
12:30		14	216		
12:45		12	180	51	828
01:00		9	220		
01:15		12	212		
01:30		24	238		
01:45		16	228	61	898
02:00		12	215		
02:15		14	252		
02:30		27	202		
02:45		30	211	83	880
03:00		34	216		
03:15		48	226		
03:30		54	230		
03:45		56	204	192	876
04:00		58	186		
04:15		96	246		
04:30		149	255		
04:45		164	157	467	844
05:00		212	208		
05:15		237	180		
05:30		337	184		
05:45		334	157	1120	729
06:00		281	138		
06:15		322	136		
06:30		291	131		
06:45		298	110	1192	515
07:00		274	126		
07:15		268	136		
07:30		300	92		
07:45		276	102	1118	456
08:00		246	72		
08:15		230	51		
08:30		264	75		
08:45		174	52	914	250
09:00		237	56		
09:15		248	58		
09:30		208	47		
09:45		248	42	941	203
10:00		198	38		
10:15		177	29		
10:30		257	39		
10:45		232	19	864	125
11:00		208	18		
11:15		178	22		
11:30		211	24		
11:45		215	11	812	75
Total		7815	6679		
Percent		53.9%	46.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
US17 SB ON RAMP TO I-526

Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	209		
12:15		9	188		
12:30		24	227		
12:45		16	231	67	855
01:00		8	186		
01:15		17	193		
01:30		16	210		
01:45		8	202	49	791
02:00		20	226		
02:15		34	200		
02:30		23	244		
02:45		16	222	93	892
03:00		32	227		
03:15		49	192		
03:30		60	214		
03:45		54	230	195	863
04:00		71	224		
04:15		91	212		
04:30		144	232		
04:45		148	209	454	877
05:00		215	222		
05:15		224	201		
05:30		318	159		
05:45		343	168	1100	750
06:00		285	176		
06:15		308	108		
06:30		295	124		
06:45		266	107	1154	515
07:00		272	118		
07:15		295	101		
07:30		286	96		
07:45		244	74	1097	389
08:00		221	76		
08:15		202	72		
08:30		235	72		
08:45		234	56	892	276
09:00		226	62		
09:15		206	48		
09:30		250	53		
09:45		222	40	904	203
10:00		244	39		
10:15		210	42		
10:30		220	16		
10:45		234	25	908	122
11:00		214	27		
11:15		194	28		
11:30		202	10		
11:45		222	19	832	84
Total		7745	6617		
Percent		53.9%	46.1%		
Grand Total		15560	13296		
Percent		53.9%	46.1%		
ADT		ADT 14,428		AADT 14,428	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
US17 NB ON RAMP TO I-526 NORTH OF US 17

Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	130		
12:15		14	126		
12:30		10	120		
12:45		9	154	57	530
01:00		7	146		
01:15		10	152		
01:30		7	131		
01:45		4	134	28	563
02:00		6	142		
02:15		5	130		
02:30		6	138		
02:45		4	120	21	530
03:00		5	150		
03:15		4	129		
03:30		4	154		
03:45		11	136	24	569
04:00		6	148		
04:15		10	144		
04:30		8	158		
04:45		18	143	42	593
05:00		16	197		
05:15		11	168		
05:30		39	150		
05:45		40	134	106	649
06:00		44	180		
06:15		68	164		
06:30		114	131		
06:45		92	138	318	613
07:00		82	135		
07:15		123	116		
07:30		162	82		
07:45		146	94	513	427
08:00		138	130		
08:15		138	108		
08:30		147	93		
08:45		114	86	537	417
09:00		109	82		
09:15		108	68		
09:30		90	58		
09:45		144	50	451	258
10:00		122	40		
10:15		118	40		
10:30		127	30		
10:45		115	36	482	146
11:00		124	28		
11:15		124	32		
11:30		122	23		
11:45		139	13	509	96
Total		3088	5391		
Percent		36.4%	63.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
US17 NB ON RAMP TO I-526 NORTH OF US 17

Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	127		
12:15		12	130		
12:30		14	145		
12:45		15	126	53	528
01:00		6	150		
01:15		10	132		
01:30		6	138		
01:45		4	136	26	556
02:00		6	112		
02:15		5	112		
02:30		6	142		
02:45		7	119	24	485
03:00		3	126		
03:15		7	120		
03:30		6	164		
03:45		12	139	28	549
04:00		1	160		
04:15		11	146		
04:30		12	146		
04:45		9	164	33	616
05:00		16	172		
05:15		23	173		
05:30		28	144		
05:45		40	145	107	634
06:00		50	152		
06:15		70	154		
06:30		92	149		
06:45		94	124	306	579
07:00		88	144		
07:15		110	111		
07:30		152	94		
07:45		175	106	525	455
08:00		148	117		
08:15		145	84		
08:30		124	65		
08:45		95	74	512	340
09:00		104	83		
09:15		102	67		
09:30		132	65		
09:45		108	41	446	256
10:00		109	40		
10:15		122	34		
10:30		131	38		
10:45		98	36	460	148
11:00		114	28		
11:15		120	28		
11:30		172	24		
11:45		132	20	538	100
Total		3058	5246		
Percent		36.8%	63.2%		
Grand Total		6146	10637		
Percent		36.6%	63.4%		
ADT		ADT 8,392		AADT 8,392	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 EB OFF RAMP TO PAUL CANTRELL EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	8		
12:15		1	6		
12:30		1	10		
12:45		0	7	4	31
01:00		0	7		
01:15		0	4		
01:30		0	6		
01:45		0	16	0	33
02:00		0	9		
02:15		0	11		
02:30		0	12		
02:45		0	11	0	43
03:00		0	19		
03:15		0	7		
03:30		0	11		
03:45		0	13	0	50
04:00		0	9		
04:15		0	12		
04:30		0	6		
04:45		0	6	0	33
05:00		0	7		
05:15		1	7		
05:30		0	7		
05:45		1	10	2	31
06:00		1	4		
06:15		0	4		
06:30		1	11		
06:45		3	4	5	23
07:00		4	5		
07:15		4	6		
07:30		6	7		
07:45		4	6	18	24
08:00		5	5		
08:15		2	4		
08:30		3	2		
08:45		5	1	15	12
09:00		7	2		
09:15		6	2		
09:30		5	2		
09:45		4	2	22	8
10:00		6	2		
10:15		15	1		
10:30		5	2		
10:45		7	2	33	7
11:00		6	2		
11:15		5	1		
11:30		7	0		
11:45		17	2	35	5
Total		134	300		
Percent		30.9%	69.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 EB OFF RAMP TO PAUL CANTRELL EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	5		
12:15		1	10		
12:30		2	8		
12:45		0	6	4	29
01:00		0	10		
01:15		0	9		
01:30		0	5		
01:45		0	4	0	28
02:00		0	10		
02:15		0	6		
02:30		0	8		
02:45		0	12	0	36
03:00		0	8		
03:15		0	10		
03:30		2	6		
03:45		0	10	2	34
04:00		0	11		
04:15		0	12		
04:30		0	3		
04:45		0	7	0	33
05:00		0	5		
05:15		1	11		
05:30		0	6		
05:45		2	10	3	32
06:00		1	9		
06:15		1	6		
06:30		1	5		
06:45		5	9	8	29
07:00		8	4		
07:15		5	4		
07:30		7	6		
07:45		6	7	26	21
08:00		5	1		
08:15		6	2		
08:30		4	6		
08:45		8	1	23	10
09:00		3	2		
09:15		9	3		
09:30		9	2		
09:45		9	5	30	12
10:00		6	0		
10:15		8	3		
10:30		3	2		
10:45		4	1	21	6
11:00		7	2		
11:15		9	4		
11:30		7	0		
11:45		8	0	31	6
Total		148	276		
Percent		34.9%	65.1%		
Grand Total		282	576		
Percent		32.9%	67.1%		
ADT		ADT 429		AADT 429	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 WB OFF RAMP NORTH OF
SAM RITTENBURG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		50	389		
12:15		46	334		
12:30		44	414		
12:45		35	356	175	1493
01:00		26	353		
01:15		23	349		
01:30		24	386		
01:45		18	321	91	1409
02:00		22	346		
02:15		24	378		
02:30		20	394		
02:45		18	381	84	1499
03:00		24	366		
03:15		22	378		
03:30		29	375		
03:45		25	332	100	1451
04:00		22	384		
04:15		27	324		
04:30		24	330		
04:45		40	358	113	1396
05:00		50	377		
05:15		85	340		
05:30		85	348		
05:45		119	325	339	1390
06:00		200	326		
06:15		295	303		
06:30		289	337		
06:45		358	304	1142	1270
07:00		364	252		
07:15		348	268		
07:30		384	238		
07:45		429	192	1525	950
08:00		440	183		
08:15		444	158		
08:30		460	163		
08:45		444	162	1788	666
09:00		384	155		
09:15		448	148		
09:30		400	145		
09:45		425	133	1657	581
10:00		365	105		
10:15		372	118		
10:30		367	105		
10:45		368	97	1472	425
11:00		348	92		
11:15		418	76		
11:30		406	62		
11:45		389	52	1561	282
Total		10047	12812		
Percent		44.0%	56.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 1
Station ID: 1
I-526 WB OFF RAMP NORTH OF
SAM RITTENBURG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		48	355		
12:15		59	381		
12:30		32	372		
12:45		20	367	159	1475
01:00		32	358		
01:15		34	356		
01:30		26	386		
01:45		20	364	112	1464
02:00		14	370		
02:15		16	349		
02:30		16	388		
02:45		18	378	64	1485
03:00		22	408		
03:15		11	413		
03:30		35	362		
03:45		18	369	86	1552
04:00		31	374		
04:15		38	350		
04:30		40	390		
04:45		49	376	158	1490
05:00		52	332		
05:15		85	346		
05:30		90	332		
05:45		130	342	357	1352
06:00		173	355		
06:15		258	286		
06:30		268	262		
06:45		305	282	1004	1185
07:00		355	220		
07:15		370	201		
07:30		415	200		
07:45		411	224	1551	845
08:00		424	183		
08:15		428	194		
08:30		394	164		
08:45		422	139	1668	680
09:00		442	169		
09:15		408	125		
09:30		404	147		
09:45		343	116	1597	557
10:00		388	112		
10:15		366	102		
10:30		416	78		
10:45		424	96	1594	388
11:00		362	80		
11:15		355	72		
11:30		423	58		
11:45		377	72	1517	282
Total		9867	12755		
Percent		43.6%	56.4%		
Grand Total		19914	25567		
Percent		43.8%	56.2%		
ADT		ADT 22,740		AADT 22,740	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB OFF RAMP LOOP TO PAUL CANTRELL

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	68		
12:15		5	58		
12:30		6	60		
12:45		4	74	23	260
01:00		2	72		
01:15		3	76		
01:30		2	88		
01:45		3	66	10	302
02:00		5	62		
02:15		1	66		
02:30		2	72		
02:45		2	78	10	278
03:00		3	65		
03:15		1	73		
03:30		2	92		
03:45		2	90	8	320
04:00		0	90		
04:15		2	94		
04:30		1	94		
04:45		1	84	4	362
05:00		1	128		
05:15		4	134		
05:30		3	118		
05:45		4	102	12	482
06:00		8	104		
06:15		14	88		
06:30		20	94		
06:45		42	75	84	361
07:00		31	68		
07:15		22	60		
07:30		36	70		
07:45		47	45	136	243
08:00		23	64		
08:15		44	64		
08:30		48	42		
08:45		30	52	145	222
09:00		32	45		
09:15		32	30		
09:30		28	44		
09:45		38	24	130	143
10:00		42	27		
10:15		34	35		
10:30		46	17		
10:45		49	22	171	101
11:00		56	14		
11:15		58	11		
11:30		60	14		
11:45		56	11	230	50
Total		963	3124		
Percent		23.6%	76.4%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB OFF RAMP LOOP TO PAUL CANTRELL

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	72		
12:15		6	67		
12:30		7	78		
12:45		8	78	34	295
01:00		5	67		
01:15		2	62		
01:30		9	63		
01:45		3	60	19	252
02:00		0	82		
02:15		0	55		
02:30		1	82		
02:45		6	74	7	293
03:00		0	58		
03:15		2	62		
03:30		0	75		
03:45		0	64	2	259
04:00		1	93		
04:15		6	89		
04:30		0	98		
04:45		2	106	9	386
05:00		0	134		
05:15		4	106		
05:30		4	110		
05:45		3	130	11	480
06:00		5	104		
06:15		12	93		
06:30		21	98		
06:45		45	65	83	360
07:00		30	72		
07:15		26	65		
07:30		42	70		
07:45		45	54	143	261
08:00		38	68		
08:15		30	60		
08:30		39	74		
08:45		44	50	151	252
09:00		21	40		
09:15		50	37		
09:30		34	36		
09:45		35	20	140	133
10:00		32	33		
10:15		42	22		
10:30		62	27		
10:45		49	14	185	96
11:00		54	10		
11:15		58	12		
11:30		61	15		
11:45		51	6	224	43
Total		1008	3110		
Percent		24.5%	75.5%		
Grand Total		1971	6234		
Percent		24.0%	76.0%		
ADT		ADT 4,102		AADT 4,102	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB ON RAMP NORTH OF
SAM RITTENBERG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	106		
12:15		10	105		
12:30		4	112		
12:45		4	124	21	447
01:00		3	117		
01:15		1	106		
01:30		2	104		
01:45		4	102	10	429
02:00		1	96		
02:15		4	90		
02:30		1	93		
02:45		7	112	13	391
03:00		6	105		
03:15		3	122		
03:30		3	103		
03:45		4	116	16	446
04:00		4	147		
04:15		4	110		
04:30		4	146		
04:45		1	134	13	537
05:00		6	198		
05:15		7	132		
05:30		10	134		
05:45		16	109	39	573
06:00		18	134		
06:15		11	107		
06:30		32	88		
06:45		34	80	95	409
07:00		39	94		
07:15		31	66		
07:30		41	54		
07:45		53	60	164	274
08:00		59	62		
08:15		42	52		
08:30		52	49		
08:45		48	37	201	200
09:00		50	47		
09:15		60	39		
09:30		65	42		
09:45		57	25	232	153
10:00		54	30		
10:15		64	17		
10:30		63	22		
10:45		72	17	253	86
11:00		70	14		
11:15		79	13		
11:30		102	10		
11:45		82	8	333	45
Total		1390	3990		
Percent		25.8%	74.2%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 2
Station ID: 2
I-526 EB ON RAMP NORTH OF
SAM RITTENBERG BLVD
Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	105		
12:15		5	118		
12:30		2	132		
12:45		9	108	24	463
01:00		4	122		
01:15		4	138		
01:30		4	120		
01:45		6	122	18	502
02:00		5	114		
02:15		5	95		
02:30		2	106		
02:45		1	91	13	406
03:00		0	127		
03:15		4	128		
03:30		2	130		
03:45		3	132	9	517
04:00		6	144		
04:15		2	104		
04:30		4	153		
04:45		6	132	18	533
05:00		2	198		
05:15		8	146		
05:30		10	150		
05:45		16	122	36	616
06:00		18	115		
06:15		22	113		
06:30		33	93		
06:45		32	99	105	420
07:00		35	90		
07:15		34	55		
07:30		52	69		
07:45		59	75	180	289
08:00		47	81		
08:15		57	57		
08:30		42	63		
08:45		62	46	208	247
09:00		52	54		
09:15		52	41		
09:30		62	42		
09:45		58	22	224	159
10:00		74	21		
10:15		76	15		
10:30		73	23		
10:45		76	16	299	75
11:00		88	14		
11:15		74	8		
11:30		55	8		
11:45		95	6	312	36
Total		1446	4263		
Percent		25.3%	74.7%		
Grand Total		2836	8253		
Percent		25.6%	74.4%		
ADT		ADT 5,544		AADT 5,544	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
PAUL CANTRELL BLVD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		35	348		
12:15		26	372		
12:30		25	334		
12:45		21	389	107	1443
01:00		20	369		
01:15		19	381		
01:30		18	385		
01:45		22	339	79	1474
02:00		20	383		
02:15		9	328		
02:30		12	412		
02:45		12	376	53	1499
03:00		8	400		
03:15		16	408		
03:30		24	434		
03:45		22	386	70	1628
04:00		32	436		
04:15		38	398		
04:30		69	395		
04:45		58	370	197	1599
05:00		80	452		
05:15		116	391		
05:30		207	349		
05:45		202	323	605	1515
06:00		268	325		
06:15		365	308		
06:30		472	306		
06:45		528	274	1633	1213
07:00		543	264		
07:15		578	252		
07:30		646	238		
07:45		550	181	2317	935
08:00		520	228		
08:15		549	218		
08:30		462	177		
08:45		370	191	1901	814
09:00		332	124		
09:15		317	124		
09:30		329	130		
09:45		345	130	1323	508
10:00		349	80		
10:15		290	110		
10:30		313	90		
10:45		317	63	1269	343
11:00		336	82		
11:15		311	79		
11:30		372	77		
11:45		386	48	1405	286
Total		10959	13257		
Percent		45.3%	54.7%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
PAUL CANTRELL BLVD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		49	309		
12:15		40	468		
12:30		18	362		
12:45		20	378	127	1517
01:00		22	390		
01:15		22	375		
01:30		26	360		
01:45		21	351	91	1476
02:00		17	395		
02:15		12	366		
02:30		17	468		
02:45		14	382	60	1611
03:00		9	420		
03:15		8	354		
03:30		31	436		
03:45		20	426	68	1636
04:00		30	396		
04:15		32	378		
04:30		68	391		
04:45		69	406	199	1571
05:00		89	444		
05:15		113	420		
05:30		202	366		
05:45		226	300	630	1530
06:00		274	334		
06:15		342	297		
06:30		491	300		
06:45		516	278	1623	1209
07:00		552	240		
07:15		592	239		
07:30		643	197		
07:45		578	212	2365	888
08:00		561	216		
08:15		495	180		
08:30		446	173		
08:45		394	180	1896	749
09:00		314	190		
09:15		353	149		
09:30		348	132		
09:45		332	114	1347	585
10:00		342	108		
10:15		340	119		
10:30		352	96		
10:45		328	68	1362	391
11:00		341	86		
11:15		318	48		
11:30		340	72		
11:45		346	44	1345	250
Total		11113	13413		
Percent		45.3%	54.7%		
Grand Total		22072	26670		
Percent		45.3%	54.7%		
ADT		ADT 24,371		AADT 24,371	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
US17 SB ON RAMP TO I-526

Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	220		
12:15		7	212		
12:30		14	216		
12:45		12	180	51	828
01:00		9	220		
01:15		12	212		
01:30		24	238		
01:45		16	228	61	898
02:00		12	215		
02:15		14	252		
02:30		27	202		
02:45		30	211	83	880
03:00		34	216		
03:15		48	226		
03:30		54	230		
03:45		56	204	192	876
04:00		58	186		
04:15		96	246		
04:30		149	255		
04:45		164	157	467	844
05:00		212	208		
05:15		237	180		
05:30		337	184		
05:45		334	157	1120	729
06:00		281	138		
06:15		322	136		
06:30		291	131		
06:45		298	110	1192	515
07:00		274	126		
07:15		268	136		
07:30		300	92		
07:45		276	102	1118	456
08:00		246	72		
08:15		230	51		
08:30		264	75		
08:45		174	52	914	250
09:00		237	56		
09:15		248	58		
09:30		208	47		
09:45		248	42	941	203
10:00		198	38		
10:15		177	29		
10:30		257	39		
10:45		232	19	864	125
11:00		208	18		
11:15		178	22		
11:30		211	24		
11:45		215	11	812	75
Total		7815	6679		
Percent		53.9%	46.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 3
Station ID: 3
US17 SB ON RAMP TO I-526

Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	209		
12:15		9	188		
12:30		24	227		
12:45		16	231	67	855
01:00		8	186		
01:15		17	193		
01:30		16	210		
01:45		8	202	49	791
02:00		20	226		
02:15		34	200		
02:30		23	244		
02:45		16	222	93	892
03:00		32	227		
03:15		49	192		
03:30		60	214		
03:45		54	230	195	863
04:00		71	224		
04:15		91	212		
04:30		144	232		
04:45		148	209	454	877
05:00		215	222		
05:15		224	201		
05:30		318	159		
05:45		343	168	1100	750
06:00		285	176		
06:15		308	108		
06:30		295	124		
06:45		266	107	1154	515
07:00		272	118		
07:15		295	101		
07:30		286	96		
07:45		244	74	1097	389
08:00		221	76		
08:15		202	72		
08:30		235	72		
08:45		234	56	892	276
09:00		226	62		
09:15		206	48		
09:30		250	53		
09:45		222	40	904	203
10:00		244	39		
10:15		210	42		
10:30		220	16		
10:45		234	25	908	122
11:00		214	27		
11:15		194	28		
11:30		202	10		
11:45		222	19	832	84
Total		7745	6617		
Percent		53.9%	46.1%		
Grand Total		15560	13296		
Percent		53.9%	46.1%		
ADT		ADT 14,428		AADT 14,428	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
I-526 WB OFF RAMP TO PAUL CANTRELL WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		30	252		
12:15		33	258		
12:30		35	266		
12:45		18	270	116	1046
01:00		20	274		
01:15		18	265		
01:30		17	246		
01:45		18	256	73	1041
02:00		6	280		
02:15		7	296		
02:30		8	304		
02:45		14	314	35	1194
03:00		8	393		
03:15		12	391		
03:30		12	409		
03:45		12	380	44	1573
04:00		7	408		
04:15		14	439		
04:30		26	460		
04:45		32	454	79	1761
05:00		24	436		
05:15		40	430		
05:30		55	440		
05:45		82	426	201	1732
06:00		132	338		
06:15		162	342		
06:30		206	274		
06:45		194	244	694	1198
07:00		168	223		
07:15		205	194		
07:30		216	175		
07:45		222	158	811	750
08:00		200	180		
08:15		214	183		
08:30		224	153		
08:45		228	142	866	658
09:00		202	142		
09:15		252	141		
09:30		266	154		
09:45		250	114	970	551
10:00		236	122		
10:15		222	104		
10:30		245	73		
10:45		239	76	942	375
11:00		244	90		
11:15		226	98		
11:30		246	48		
11:45		255	52	971	288
Total		5802	12167		
Percent		32.3%	67.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
I-526 WB OFF RAMP TO PAUL CANTRELL WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		51	291		
12:15		46	253		
12:30		39	272		
12:45		26	256	162	1072
01:00		22	266		
01:15		23	258		
01:30		21	276		
01:45		9	286	75	1086
02:00		15	295		
02:15		17	240		
02:30		8	302		
02:45		10	334	50	1171
03:00		10	374		
03:15		12	410		
03:30		16	410		
03:45		13	372	51	1566
04:00		20	410		
04:15		19	396		
04:30		19	418		
04:45		38	438	96	1662
05:00		24	436		
05:15		36	420		
05:30		53	420		
05:45		82	408	195	1684
06:00		102	338		
06:15		158	350		
06:30		212	260		
06:45		241	220	713	1168
07:00		230	216		
07:15		250	210		
07:30		278	206		
07:45		266	179	1024	811
08:00		235	180		
08:15		236	186		
08:30		243	176		
08:45		264	181	978	723
09:00		263	166		
09:15		244	134		
09:30		228	97		
09:45		279	106	1014	503
10:00		243	105		
10:15		214	95		
10:30		251	115		
10:45		238	73	946	388
11:00		195	62		
11:15		252	80		
11:30		262	90		
11:45		212	82	921	314
Total		6225	12148		
Percent		33.9%	66.1%		
Grand Total		12027	24315		
Percent		33.1%	66.9%		
ADT		ADT 18,171		AADT 18,171	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
US17 NB ON RAMP TO I-526 NORTH OF US 17

Latitude: 0' 0.0000 Undefined

Start Time	06-Apr-16 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	130		
12:15		14	126		
12:30		10	120		
12:45		9	154	57	530
01:00		7	146		
01:15		10	152		
01:30		7	131		
01:45		4	134	28	563
02:00		6	142		
02:15		5	130		
02:30		6	138		
02:45		4	120	21	530
03:00		5	150		
03:15		4	129		
03:30		4	154		
03:45		11	136	24	569
04:00		6	148		
04:15		10	144		
04:30		8	158		
04:45		18	143	42	593
05:00		16	197		
05:15		11	168		
05:30		39	150		
05:45		40	134	106	649
06:00		44	180		
06:15		68	164		
06:30		114	131		
06:45		92	138	318	613
07:00		82	135		
07:15		123	116		
07:30		162	82		
07:45		146	94	513	427
08:00		138	130		
08:15		138	108		
08:30		147	93		
08:45		114	86	537	417
09:00		109	82		
09:15		108	68		
09:30		90	58		
09:45		144	50	451	258
10:00		122	40		
10:15		118	40		
10:30		127	30		
10:45		115	36	482	146
11:00		124	28		
11:15		124	32		
11:30		122	23		
11:45		139	13	509	96
Total		3088	5391		
Percent		36.4%	63.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 4
Station ID: 4
US17 NB ON RAMP TO I-526 NORTH OF US 17

Latitude: 0' 0.0000 Undefined

Start Time	07-Apr-16 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	127		
12:15		12	130		
12:30		14	145		
12:45		15	126	53	528
01:00		6	150		
01:15		10	132		
01:30		6	138		
01:45		4	136	26	556
02:00		6	112		
02:15		5	112		
02:30		6	142		
02:45		7	119	24	485
03:00		3	126		
03:15		7	120		
03:30		6	164		
03:45		12	139	28	549
04:00		1	160		
04:15		11	146		
04:30		12	146		
04:45		9	164	33	616
05:00		16	172		
05:15		23	173		
05:30		28	144		
05:45		40	145	107	634
06:00		50	152		
06:15		70	154		
06:30		92	149		
06:45		94	124	306	579
07:00		88	144		
07:15		110	111		
07:30		152	94		
07:45		175	106	525	455
08:00		148	117		
08:15		145	84		
08:30		124	65		
08:45		95	74	512	340
09:00		104	83		
09:15		102	67		
09:30		132	65		
09:45		108	41	446	256
10:00		109	40		
10:15		122	34		
10:30		131	38		
10:45		98	36	460	148
11:00		114	28		
11:15		120	28		
11:30		172	24		
11:45		132	20	538	100
Total		3058	5246		
Percent		36.8%	63.2%		
Grand Total		6146	10637		
Percent		36.6%	63.4%		
ADT		ADT 8,392		AADT 8,392	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 5
Station ID: 5
I-526 WB OFF RAMP LOOP TO PAUL CANTRELL

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		19	126		
12:15		8	104		
12:30		13	118		
12:45		10	131	50	479
01:00		9	114		
01:15		13	130		
01:30		11	118		
01:45		3	126	36	488
02:00		6	128		
02:15		7	129		
02:30		8	130		
02:45		4	140	25	527
03:00		4	142		
03:15		3	155		
03:30		4	162		
03:45		7	145	18	604
04:00		6	146		
04:15		5	164		
04:30		11	165		
04:45		8	142	30	617
05:00		8	164		
05:15		21	143		
05:30		13	160		
05:45		34	148	76	615
06:00		39	130		
06:15		65	124		
06:30		68	98		
06:45		78	88	250	440
07:00		72	75		
07:15		98	80		
07:30		84	66		
07:45		118	67	372	288
08:00		100	70		
08:15		122	51		
08:30		130	52		
08:45		125	62	477	235
09:00		122	58		
09:15		131	50		
09:30		162	49		
09:45		168	33	583	190
10:00		106	45		
10:15		124	40		
10:30		122	36		
10:45		117	36	469	157
11:00		100	22		
11:15		114	36		
11:30		134	31		
11:45		130	14	478	103
Total		2864	4743		
Percent		37.6%	62.4%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 5
Station ID: 5
I-526 WB OFF RAMP LOOP TO PAUL CANTRELL

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		19	120		
12:15		18	120		
12:30		8	128		
12:45		8	102	53	470
01:00		7	116		
01:15		11	114		
01:30		7	124		
01:45		9	118	34	472
02:00		5	118		
02:15		3	126		
02:30		3	128		
02:45		6	132	17	504
03:00		8	110		
03:15		3	144		
03:30		6	159		
03:45		10	150	27	563
04:00		5	164		
04:15		7	171		
04:30		12	136		
04:45		12	163	36	634
05:00		14	160		
05:15		21	154		
05:30		22	148		
05:45		26	142	83	604
06:00		43	125		
06:15		68	118		
06:30		80	94		
06:45		104	82	295	419
07:00		82	100		
07:15		120	82		
07:30		122	84		
07:45		122	45	446	311
08:00		136	44		
08:15		144	61		
08:30		112	60		
08:45		148	57	540	222
09:00		138	60		
09:15		116	49		
09:30		108	49		
09:45		109	28	471	186
10:00		98	39		
10:15		103	39		
10:30		98	38		
10:45		110	22	409	138
11:00		110	24		
11:15		96	19		
11:30		112	18		
11:45		134	19	452	80
Total		2863	4603		
Percent		38.3%	61.7%		
Grand Total		5727	9346		
Percent		38.0%	62.0%		
ADT		ADT 7,536		AADT 7,536	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 6
Station ID: 6
PAUL CANTREL BLVD EB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	49		
12:15		1	48		
12:30		3	47		
12:45		2	47	8	191
01:00		0	66		
01:15		1	58		
01:30		2	47		
01:45		1	47	4	218
02:00		1	52		
02:15		2	59		
02:30		1	66		
02:45		0	41	4	218
03:00		0	53		
03:15		0	56		
03:30		2	51		
03:45		2	41	4	201
04:00		0	46		
04:15		2	59		
04:30		0	48		
04:45		3	38	5	191
05:00		2	37		
05:15		4	26		
05:30		3	37		
05:45		10	39	19	139
06:00		8	38		
06:15		17	31		
06:30		34	42		
06:45		47	26	106	137
07:00		51	31		
07:15		56	22		
07:30		48	34		
07:45		46	30	201	117
08:00		60	18		
08:15		47	19		
08:30		88	23		
08:45		78	20	273	80
09:00		57	11		
09:15		56	20		
09:30		56	10		
09:45		51	5	220	46
10:00		46	11		
10:15		55	6		
10:30		56	11		
10:45		44	5	201	33
11:00		54	7		
11:15		58	3		
11:30		66	2		
11:45		55	5	233	17
Total		1278	1588		
Percent		44.6%	55.4%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 6
Station ID: 6
PAUL CANTREL BLVD EB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	56		
12:15		3	58		
12:30		4	44		
12:45		3	56	12	214
01:00		2	36		
01:15		3	56		
01:30		3	54		
01:45		1	52	9	198
02:00		2	42		
02:15		1	47		
02:30		0	62		
02:45		0	39	3	190
03:00		1	48		
03:15		2	49		
03:30		0	43		
03:45		1	45	4	185
04:00		1	45		
04:15		1	34		
04:30		2	59		
04:45		5	37	9	175
05:00		2	36		
05:15		5	50		
05:30		4	52		
05:45		11	36	22	174
06:00		8	49		
06:15		19	42		
06:30		40	29		
06:45		60	28	127	148
07:00		50	27		
07:15		67	26		
07:30		50	24		
07:45		58	30	225	107
08:00		52	21		
08:15		51	18		
08:30		54	20		
08:45		64	20	221	79
09:00		41	14		
09:15		58	14		
09:30		53	10		
09:45		50	8	202	46
10:00		49	7		
10:15		46	6		
10:30		43	3		
10:45		52	5	190	21
11:00		42	6		
11:15		50	5		
11:30		58	5		
11:45		55	6	205	22
Total		1229	1559		
Percent		44.1%	55.9%		
Grand Total		2507	3147		
Percent		44.3%	55.7%		
ADT		ADT 2,827		AADT 2,827	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 7
Station ID: 7
I-526 EB OFF RAMP TO LEEDS AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		11	96		
12:15		6	90		
12:30		7	130		
12:45		8	158	32	474
01:00		2	144		
01:15		4	146		
01:30		4	140		
01:45		4	134	14	564
02:00		1	114		
02:15		1	109		
02:30		4	110		
02:45		1	120	7	453
03:00		4	94		
03:15		2	90		
03:30		4	94		
03:45		0	90	10	368
04:00		4	102		
04:15		3	78		
04:30		7	76		
04:45		9	82	23	338
05:00		18	88		
05:15		23	70		
05:30		48	65		
05:45		56	48	145	271
06:00		37	37		
06:15		73	58		
06:30		94	48		
06:45		147	42	351	185
07:00		158	34		
07:15		121	36		
07:30		184	40		
07:45		220	26	683	136
08:00		236	21		
08:15		205	23		
08:30		205	34		
08:45		151	18	797	96
09:00		122	22		
09:15		120	26		
09:30		98	26		
09:45		103	24	443	98
10:00		88	20		
10:15		87	14		
10:30		70	20		
10:45		76	12	321	66
11:00		74	10		
11:15		66	20		
11:30		104	10		
11:45		86	11	330	51
Total		3156	3100		
Percent		50.4%	49.6%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 7
Station ID: 7
I-526 EB OFF RAMP TO LEEDS AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	92		
12:15		13	109		
12:30		5	127		
12:45		3	136	31	464
01:00		4	152		
01:15		2	133		
01:30		7	116		
01:45		6	132	19	533
02:00		2	134		
02:15		4	122		
02:30		3	121		
02:45		4	96	13	473
03:00		3	104		
03:15		1	96		
03:30		4	88		
03:45		4	80	12	368
04:00		3	80		
04:15		2	67		
04:30		6	74		
04:45		11	76	22	297
05:00		22	100		
05:15		26	66		
05:30		40	68		
05:45		67	54	155	288
06:00		52	56		
06:15		64	49		
06:30		102	54		
06:45		153	56	371	215
07:00		123	40		
07:15		136	36		
07:30		194	34		
07:45		254	34	707	144
08:00		230	28		
08:15		226	28		
08:30		180	35		
08:45		178	28	814	119
09:00		96	34		
09:15		108	25		
09:30		94	28		
09:45		72	28	370	115
10:00		74	22		
10:15		86	16		
10:30		104	20		
10:45		94	10	358	68
11:00		70	16		
11:15		74	11		
11:30		87	11		
11:45		90	10	321	48
Total		3193	3132		
Percent		50.5%	49.5%		
Grand Total		6349	6232		
Percent		50.5%	49.5%		
ADT		ADT 6,290		AADT 6,290	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 8
Station ID: 8
LEEDS AVENUEON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	119		
12:15		5	115		
12:30		6	106		
12:45		2	94	27	434
01:00		8	100		
01:15		6	82		
01:30		5	104		
01:45		4	96	23	382
02:00		6	130		
02:15		1	92		
02:30		5	145		
02:45		0	102	12	469
03:00		4	120		
03:15		2	90		
03:30		1	170		
03:45		2	101	9	481
04:00		2	188		
04:15		0	156		
04:30		4	214		
04:45		8	196	14	754
05:00		6	276		
05:15		0	159		
05:30		7	156		
05:45		13	116	26	707
06:00		73	122		
06:15		29	68		
06:30		56	76		
06:45		30	50	188	316
07:00		17	72		
07:15		31	52		
07:30		32	31		
07:45		18	28	98	183
08:00		35	44		
08:15		32	42		
08:30		40	30		
08:45		36	37	143	153
09:00		46	54		
09:15		52	18		
09:30		66	18		
09:45		52	17	216	107
10:00		74	67		
10:15		67	26		
10:30		70	51		
10:45		64	15	275	159
11:00		88	10		
11:15		97	7		
11:30		104	12		
11:45		98	4	387	33
Total		1418	4178		
Percent		25.3%	74.7%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 8
Station ID: 8
LEEDS AVENUEON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	140		
12:15		5	102		
12:30		7	100		
12:45		3	64	27	406
01:00		3	84		
01:15		3	67		
01:30		6	70		
01:45		4	96	16	317
02:00		5	122		
02:15		5	84		
02:30		2	122		
02:45		1	104	13	432
03:00		4	140		
03:15		4	94		
03:30		2	158		
03:45		5	108	15	500
04:00		1	186		
04:15		1	156		
04:30		1	232		
04:45		3	187	6	761
05:00		12	256		
05:15		3	184		
05:30		6	155		
05:45		13	116	34	711
06:00		60	127		
06:15		26	94		
06:30		50	53		
06:45		26	50	162	324
07:00		26	82		
07:15		24	34		
07:30		35	37		
07:45		29	26	114	179
08:00		43	30		
08:15		40	36		
08:30		45	28		
08:45		44	21	172	115
09:00		72	34		
09:15		68	22		
09:30		65	25		
09:45		72	22	277	103
10:00		78	76		
10:15		80	22		
10:30		92	59		
10:45		56	18	306	175
11:00		85	11		
11:15		98	7		
11:30		105	7		
11:45		124	13	412	38
Total		1554	4061		
Percent		27.7%	72.3%		
Grand Total		2972	8239		
Percent		26.5%	73.5%		
ADT		ADT 5,606		AADT 5,606	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 9
Station ID: 9
I-526 WB OFF RAMP TO LEEDS AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	86		
12:15		3	96		
12:30		4	112		
12:45		6	150	14	444
01:00		2	154		
01:15		1	138		
01:30		5	117		
01:45		2	126	10	535
02:00		0	92		
02:15		2	90		
02:30		0	84		
02:45		4	88	6	354
03:00		2	90		
03:15		3	84		
03:30		6	51		
03:45		10	58	21	283
04:00		3	65		
04:15		6	64		
04:30		8	50		
04:45		12	58	29	237
05:00		25	56		
05:15		50	78		
05:30		92	70		
05:45		108	46	275	250
06:00		40	30		
06:15		86	29		
06:30		95	24		
06:45		101	31	322	114
07:00		102	26		
07:15		153	20		
07:30		156	16		
07:45		181	18	592	80
08:00		172	30		
08:15		202	10		
08:30		186	17		
08:45		172	16	732	73
09:00		173	16		
09:15		170	27		
09:30		192	39		
09:45		134	66	669	148
10:00		100	11		
10:15		114	8		
10:30		86	6		
10:45		86	6	386	31
11:00		74	9		
11:15		86	3		
11:30		90	8		
11:45		90	6	340	26
Total		3396	2575		
Percent		56.9%	43.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 9
Station ID: 9
I-526 WB OFF RAMP TO LEEDS AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	89		
12:15		6	90		
12:30		10	104		
12:45		6	120	25	403
01:00		1	106		
01:15		2	116		
01:30		2	133		
01:45		3	139	8	494
02:00		4	64		
02:15		2	99		
02:30		2	88		
02:45		0	92	8	343
03:00		5	60		
03:15		2	85		
03:30		6	61		
03:45		5	44	18	250
04:00		3	56		
04:15		3	48		
04:30		10	44		
04:45		11	38	27	186
05:00		27	42		
05:15		43	84		
05:30		92	80		
05:45		114	54	276	260
06:00		52	30		
06:15		94	19		
06:30		105	21		
06:45		202	30	453	100
07:00		181	22		
07:15		210	28		
07:30		237	9		
07:45		264	19	892	78
08:00		250	19		
08:15		252	18		
08:30		186	19		
08:45		163	11	851	67
09:00		116	12		
09:15		94	30		
09:30		110	46		
09:45		125	57	445	145
10:00		66	16		
10:15		89	9		
10:30		62	4		
10:45		84	7	301	36
11:00		60	6		
11:15		88	5		
11:30		94	6		
11:45		88	7	330	24
Total		3634	2386		
Percent		60.4%	39.6%		
Grand Total		7030	4961		
Percent		58.6%	41.4%		
ADT		ADT 5,996		AADT 5,996	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 10
Station ID: 10
LEEDS AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	119		
12:15		5	107		
12:30		9	111		
12:45		9	107	31	444
01:00		6	124		
01:15		3	105		
01:30		7	88		
01:45		2	97	18	414
02:00		0	111		
02:15		6	108		
02:30		2	108		
02:45		2	100	10	427
03:00		6	124		
03:15		0	108		
03:30		1	142		
03:45		1	105	8	479
04:00		2	144		
04:15		2	130		
04:30		2	186		
04:45		3	161	9	621
05:00		5	234		
05:15		7	241		
05:30		10	174		
05:45		16	142	38	791
06:00		42	122		
06:15		33	76		
06:30		40	81		
06:45		40	58	155	337
07:00		34	72		
07:15		52	48		
07:30		41	44		
07:45		58	35	185	199
08:00		52	37		
08:15		64	40		
08:30		55	28		
08:45		64	28	235	133
09:00		63	37		
09:15		68	19		
09:30		76	18		
09:45		59	13	266	87
10:00		84	31		
10:15		62	19		
10:30		90	24		
10:45		82	20	318	94
11:00		88	13		
11:15		97	17		
11:30		112	10		
11:45		132	5	429	45
Total		1702	4071		
Percent		29.5%	70.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 10
Station ID: 10
LEEDS AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	128		
12:15		11	142		
12:30		6	100		
12:45		8	116	35	486
01:00		6	104		
01:15		6	100		
01:30		7	96		
01:45		4	94	23	394
02:00		0	122		
02:15		2	78		
02:30		3	104		
02:45		5	107	10	411
03:00		4	120		
03:15		2	129		
03:30		2	139		
03:45		4	120	12	508
04:00		4	146		
04:15		4	144		
04:30		4	178		
04:45		6	180	18	648
05:00		3	234		
05:15		6	264		
05:30		14	175		
05:45		22	134	45	807
06:00		38	108		
06:15		45	90		
06:30		38	60		
06:45		50	47	171	305
07:00		40	60		
07:15		48	38		
07:30		50	47		
07:45		56	42	194	187
08:00		64	40		
08:15		88	46		
08:30		64	46		
08:45		69	42	285	174
09:00		70	37		
09:15		60	25		
09:30		64	32		
09:45		79	13	273	107
10:00		83	26		
10:15		64	20		
10:30		73	17		
10:45		67	8	287	71
11:00		77	16		
11:15		100	10		
11:30		104	11		
11:45		108	9	389	46
Total		1742	4144		
Percent		29.6%	70.4%		
Grand Total		3444	8215		
Percent		29.5%	70.5%		
ADT		ADT 5,830		AADT 5,830	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 12
Station ID: 12
I-526 EB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	102		
12:15		13	98		
12:30		4	96		
12:45		4	98	29	394
01:00		9	116		
01:15		8	130		
01:30		10	102		
01:45		4	100	31	448
02:00		10	110		
02:15		1	117		
02:30		6	124		
02:45		2	104	19	455
03:00		2	107		
03:15		2	142		
03:30		8	125		
03:45		6	138	18	512
04:00		6	182		
04:15		2	140		
04:30		13	179		
04:45		12	148	33	649
05:00		14	230		
05:15		18	196		
05:30		24	148		
05:45		40	140	96	714
06:00		41	126		
06:15		68	109		
06:30		72	104		
06:45		88	78	269	417
07:00		86	76		
07:15		80	79		
07:30		85	72		
07:45		90	74	341	301
08:00		88	74		
08:15		82	54		
08:30		80	56		
08:45		60	52	310	236
09:00		64	54		
09:15		72	49		
09:30		72	54		
09:45		84	38	292	195
10:00		82	39		
10:15		78	22		
10:30		80	34		
10:45		64	17	304	112
11:00		76	28		
11:15		109	22		
11:30		101	21		
11:45		88	16	374	87
Total		2116	4520		
Percent		31.9%	68.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 12
Station ID: 12
I-526 EB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		11	142		
12:15		9	136		
12:30		9	117		
12:45		4	92	33	487
01:00		12	96		
01:15		8	104		
01:30		6	88		
01:45		5	104	31	392
02:00		6	103		
02:15		7	110		
02:30		1	138		
02:45		4	114	18	465
03:00		1	124		
03:15		0	108		
03:30		4	130		
03:45		6	132	11	494
04:00		6	145		
04:15		2	122		
04:30		10	176		
04:45		10	146	28	589
05:00		12	216		
05:15		9	198		
05:30		32	147		
05:45		44	107	97	668
06:00		43	123		
06:15		58	106		
06:30		94	78		
06:45		74	86	269	393
07:00		84	70		
07:15		96	73		
07:30		94	74		
07:45		86	56	360	273
08:00		86	72		
08:15		83	59		
08:30		80	62		
08:45		68	54	317	247
09:00		73	61		
09:15		90	45		
09:30		91	51		
09:45		79	41	333	198
10:00		78	42		
10:15		82	40		
10:30		76	24		
10:45		84	22	320	128
11:00		90	23		
11:15		104	13		
11:30		98	11		
11:45		89	11	381	58
Total		2198	4392		
Percent		33.4%	66.6%		
Grand Total		4314	8912		
Percent		32.6%	67.4%		
ADT		ADT 6,613		AADT 6,613	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 13
Station ID: 13
DORCHESTER ROAD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		20	208		
12:15		18	192		
12:30		12	162		
12:45		9	198	59	760
01:00		11	216		
01:15		7	195		
01:30		14	187		
01:45		12	172	44	770
02:00		20	174		
02:15		6	176		
02:30		10	186		
02:45		6	195	42	731
03:00		8	190		
03:15		6	204		
03:30		16	194		
03:45		14	185	44	773
04:00		9	226		
04:15		15	204		
04:30		16	239		
04:45		27	210	67	879
05:00		16	260		
05:15		37	242		
05:30		56	226		
05:45		70	153	179	881
06:00		84	181		
06:15		78	136		
06:30		116	132		
06:45		116	122	394	571
07:00		106	118		
07:15		126	82		
07:30		130	83		
07:45		130	125	492	408
08:00		115	93		
08:15		142	91		
08:30		151	75		
08:45		133	68	541	327
09:00		149	65		
09:15		137	54		
09:30		130	46		
09:45		144	41	560	206
10:00		162	34		
10:15		172	30		
10:30		182	32		
10:45		168	28	684	124
11:00		157	30		
11:15		155	36		
11:30		175	20		
11:45		184	28	671	114
Total		3777	6544		
Percent		36.6%	63.4%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 13
Station ID: 13
DORCHESTER ROAD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		15	188		
12:15		20	206		
12:30		20	206		
12:45		10	155	65	755
01:00		15	186		
01:15		10	177		
01:30		14	146		
01:45		13	161	52	670
02:00		10	176		
02:15		10	172		
02:30		4	163		
02:45		6	166	30	677
03:00		8	168		
03:15		8	216		
03:30		15	208		
03:45		11	169	42	761
04:00		12	190		
04:15		10	186		
04:30		32	214		
04:45		14	190	68	780
05:00		29	269		
05:15		42	228		
05:30		64	180		
05:45		48	164	183	841
06:00		78	162		
06:15		86	150		
06:30		104	120		
06:45		112	114	380	546
07:00		131	110		
07:15		153	105		
07:30		124	74		
07:45		160	95	568	384
08:00		158	91		
08:15		124	81		
08:30		137	80		
08:45		134	60	553	312
09:00		142	59		
09:15		127	49		
09:30		160	44		
09:45		116	56	545	208
10:00		144	45		
10:15		149	37		
10:30		168	24		
10:45		151	28	612	134
11:00		162	34		
11:15		171	32		
11:30		182	23		
11:45		181	15	696	104
Total		3794	6172		
Percent		38.1%	61.9%		
Grand Total		7571	12716		
Percent		37.3%	62.7%		
ADT		ADT 10,144		AADT 10,144	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 14
Station ID: 14
I-526 WB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	135		
12:15		11	139		
12:30		8	164		
12:45		15	138	47	576
01:00		9	124		
01:15		8	156		
01:30		8	145		
01:45		8	141	33	566
02:00		8	138		
02:15		5	146		
02:30		6	124		
02:45		7	132	26	540
03:00		10	152		
03:15		6	144		
03:30		6	134		
03:45		8	126	30	556
04:00		10	114		
04:15		13	110		
04:30		18	96		
04:45		18	102	59	422
05:00		25	94		
05:15		38	144		
05:30		28	116		
05:45		50	102	141	456
06:00		64	102		
06:15		95	106		
06:30		114	96		
06:45		118	70	391	374
07:00		110	57		
07:15		136	91		
07:30		143	59		
07:45		126	54	515	261
08:00		154	51		
08:15		140	70		
08:30		130	54		
08:45		115	50	539	225
09:00		128	41		
09:15		141	39		
09:30		155	43		
09:45		154	32	578	155
10:00		144	44		
10:15		122	35		
10:30		132	28		
10:45		107	32	505	139
11:00		111	26		
11:15		110	23		
11:30		112	20		
11:45		150	15	483	84
Total		3347	4354		
Percent		43.5%	56.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 14
Station ID: 14
I-526 WB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	150		
12:15		14	125		
12:30		14	145		
12:45		12	146	54	566
01:00		13	121		
01:15		8	130		
01:30		8	131		
01:45		10	142	39	524
02:00		10	131		
02:15		10	116		
02:30		8	156		
02:45		2	137	30	540
03:00		6	154		
03:15		6	150		
03:30		8	138		
03:45		4	109	24	551
04:00		14	103		
04:15		12	110		
04:30		14	118		
04:45		14	104	54	435
05:00		23	95		
05:15		34	140		
05:30		36	147		
05:45		62	102	155	484
06:00		64	106		
06:15		108	96		
06:30		118	78		
06:45		126	78	416	358
07:00		154	79		
07:15		195	77		
07:30		192	59		
07:45		150	68	691	283
08:00		151	62		
08:15		157	60		
08:30		129	47		
08:45		157	44	594	213
09:00		124	45		
09:15		126	50		
09:30		115	38		
09:45		121	39	486	172
10:00		122	35		
10:15		98	37		
10:30		128	34		
10:45		106	31	454	137
11:00		122	24		
11:15		116	25		
11:30		115	20		
11:45		134	18	487	87
Total		3484	4350		
Percent		44.5%	55.5%		
Grand Total		6831	8704		
Percent		44.0%	56.0%		
ADT		ADT 7,768		AADT 7,768	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 15
Station ID: 15
DORCHESTER ROAD ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	146		
12:15		13	132		
12:30		11	136		
12:45		10	178	43	592
01:00		16	148		
01:15		16	186		
01:30		10	146		
01:45		6	130	48	610
02:00		5	123		
02:15		4	126		
02:30		14	156		
02:45		7	142	30	547
03:00		12	186		
03:15		6	164		
03:30		8	154		
03:45		14	161	40	665
04:00		4	151		
04:15		10	189		
04:30		13	184		
04:45		23	164	50	688
05:00		20	174		
05:15		36	201		
05:30		60	152		
05:45		57	142	173	669
06:00		54	136		
06:15		119	121		
06:30		160	118		
06:45		146	100	479	475
07:00		137	89		
07:15		136	88		
07:30		174	102		
07:45		216	84	663	363
08:00		206	68		
08:15		230	66		
08:30		218	60		
08:45		214	57	868	251
09:00		176	66		
09:15		228	59		
09:30		176	60		
09:45		154	55	734	240
10:00		171	43		
10:15		176	50		
10:30		152	43		
10:45		126	26	625	162
11:00		120	36		
11:15		140	26		
11:30		124	20		
11:45		134	14	518	96
Total		4271	5358		
Percent		44.4%	55.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 15
Station ID: 15
DORCHESTER ROAD ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		19	153		
12:15		13	118		
12:30		14	150		
12:45		18	144	64	565
01:00		12	114		
01:15		16	150		
01:30		12	142		
01:45		7	143	47	549
02:00		12	132		
02:15		8	139		
02:30		8	141		
02:45		1	154	29	566
03:00		8	130		
03:15		8	151		
03:30		11	137		
03:45		15	130	42	548
04:00		6	158		
04:15		7	146		
04:30		14	170		
04:45		24	176	51	650
05:00		22	170		
05:15		35	221		
05:30		54	152		
05:45		73	113	184	656
06:00		60	120		
06:15		118	120		
06:30		168	106		
06:45		152	98	498	444
07:00		125	98		
07:15		178	86		
07:30		188	84		
07:45		234	80	725	348
08:00		221	82		
08:15		215	62		
08:30		200	76		
08:45		199	65	835	285
09:00		158	58		
09:15		160	68		
09:30		144	52		
09:45		150	53	612	231
10:00		122	40		
10:15		118	52		
10:30		122	45		
10:45		118	38	480	175
11:00		128	30		
11:15		108	27		
11:30		130	17		
11:45		137	18	503	92
Total		4070	5109		
Percent		44.3%	55.7%		
Grand Total		8341	10467		
Percent		44.3%	55.7%		
ADT		ADT 9,404		AADT 9,404	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 16
Station ID: 16
PARAMOUNT DRIVE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	118		
12:15		13	104		
12:30		9	106		
12:45		5	141	33	469
01:00		10	124		
01:15		16	138		
01:30		5	106		
01:45		12	118	43	486
02:00		3	104		
02:15		3	107		
02:30		11	115		
02:45		6	127	23	453
03:00		10	147		
03:15		5	155		
03:30		8	130		
03:45		12	117	35	549
04:00		6	146		
04:15		6	168		
04:30		14	154		
04:45		22	158	48	626
05:00		16	162		
05:15		30	161		
05:30		52	117		
05:45		45	106	143	546
06:00		44	97		
06:15		86	99		
06:30		138	88		
06:45		138	95	406	379
07:00		124	64		
07:15		119	60		
07:30		120	62		
07:45		157	61	520	247
08:00		182	62		
08:15		176	48		
08:30		168	40		
08:45		161	41	687	191
09:00		126	64		
09:15		160	43		
09:30		140	53		
09:45		121	41	547	201
10:00		144	32		
10:15		153	41		
10:30		127	34		
10:45		116	17	540	124
11:00		104	30		
11:15		125	24		
11:30		118	20		
11:45		108	9	455	83
Total		3480	4354		
Percent		44.4%	55.6%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
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Site Code: 16
Station ID: 16
PARAMOUNT DRIVE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	124		
12:15		13	92		
12:30		9	112		
12:45		12	104	47	432
01:00		12	99		
01:15		12	124		
01:30		8	130		
01:45		6	114	38	467
02:00		9	110		
02:15		6	110		
02:30		9	109		
02:45		1	118	25	447
03:00		6	106		
03:15		8	113		
03:30		8	120		
03:45		13	122	35	461
04:00		8	142		
04:15		5	123		
04:30		13	157		
04:45		20	152	46	574
05:00		18	167		
05:15		31	172		
05:30		48	136		
05:45		64	93	161	568
06:00		46	82		
06:15		101	104		
06:30		136	88		
06:45		136	74	419	348
07:00		123	71		
07:15		128	59		
07:30		126	55		
07:45		174	61	551	246
08:00		163	71		
08:15		144	36		
08:30		163	64		
08:45		151	46	621	217
09:00		117	34		
09:15		133	48		
09:30		118	42		
09:45		124	39	492	163
10:00		99	35		
10:15		104	46		
10:30		108	39		
10:45		94	27	405	147
11:00		104	22		
11:15		101	24		
11:30		98	8		
11:45		110	15	413	69
Total		3253	4139		
Percent		44.0%	56.0%		
Grand Total		6733	8493		
Percent		44.2%	55.8%		
ADT		ADT 7,613		AADT 7,613	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
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Site Code: 17
Station ID: 17
I-526 EB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	216		
12:15		7	208		
12:30		6	178		
12:45		8	166	33	768
01:00		6	188		
01:15		8	160		
01:30		6	153		
01:45		12	165	32	666
02:00		10	142		
02:15		5	128		
02:30		2	176		
02:45		2	148	19	594
03:00		8	184		
03:15		3	130		
03:30		5	158		
03:45		3	129	19	601
04:00		5	180		
04:15		10	162		
04:30		13	172		
04:45		15	201	43	715
05:00		20	221		
05:15		32	241		
05:30		21	212		
05:45		38	173	111	847
06:00		55	174		
06:15		74	167		
06:30		100	136		
06:45		110	157	339	634
07:00		132	122		
07:15		162	104		
07:30		183	110		
07:45		178	100	655	436
08:00		150	102		
08:15		148	100		
08:30		141	80		
08:45		125	60	564	342
09:00		111	51		
09:15		126	49		
09:30		118	38		
09:45		124	28	479	166
10:00		118	33		
10:15		120	20		
10:30		129	23		
10:45		162	18	529	94
11:00		138	16		
11:15		168	28		
11:30		188	22		
11:45		182	13	676	79
Total		3499	5942		
Percent		37.1%	62.9%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
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Site Code: 17
Station ID: 17
I-526 EB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		15	188		
12:15		12	192		
12:30		12	184		
12:45		3	160	42	724
01:00		3	160		
01:15		5	162		
01:30		4	146		
01:45		2	160	14	628
02:00		5	144		
02:15		2	154		
02:30		8	150		
02:45		1	152	16	600
03:00		2	141		
03:15		3	151		
03:30		8	166		
03:45		2	156	15	614
04:00		8	156		
04:15		10	180		
04:30		13	179		
04:45		9	190	40	705
05:00		29	216		
05:15		24	273		
05:30		24	194		
05:45		36	175	113	858
06:00		50	192		
06:15		64	168		
06:30		110	158		
06:45		102	124	326	642
07:00		135	116		
07:15		175	109		
07:30		186	85		
07:45		183	79	679	389
08:00		144	81		
08:15		150	53		
08:30		148	54		
08:45		131	44	573	232
09:00		96	47		
09:15		119	44		
09:30		134	35		
09:45		109	29	458	155
10:00		110	34		
10:15		118	28		
10:30		138	20		
10:45		156	33	522	115
11:00		152	20		
11:15		174	29		
11:30		170	15		
11:45		200	11	696	75
Total		3494	5737		
Percent		37.9%	62.1%		
Grand Total		6993	11679		
Percent		37.5%	62.5%		
ADT		ADT 9,336		AADT 9,336	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
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Site Code: 18
Station ID: 18
MONTAGUE AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	137		
12:15		11	141		
12:30		14	127		
12:45		10	126	49	531
01:00		12	126		
01:15		10	99		
01:30		4	103		
01:45		12	116	38	444
02:00		5	99		
02:15		4	109		
02:30		3	122		
02:45		4	121	16	451
03:00		4	114		
03:15		5	100		
03:30		5	106		
03:45		2	110	16	430
04:00		8	120		
04:15		10	112		
04:30		10	108		
04:45		21	158	49	498
05:00		14	122		
05:15		18	164		
05:30		24	138		
05:45		26	111	82	535
06:00		42	130		
06:15		49	110		
06:30		58	91		
06:45		62	95	211	426
07:00		76	92		
07:15		80	82		
07:30		73	86		
07:45		64	75	293	335
08:00		80	88		
08:15		76	80		
08:30		76	61		
08:45		76	40	308	269
09:00		70	46		
09:15		84	63		
09:30		84	86		
09:45		86	34	324	229
10:00		106	36		
10:15		104	30		
10:30		112	30		
10:45		112	27	434	123
11:00		96	30		
11:15		120	59		
11:30		138	20		
11:45		133	17	487	126
Total		2307	4397		
Percent		34.4%	65.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
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Site Code: 18
Station ID: 18
MONTAGUE AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	140		
12:15		11	129		
12:30		8	152		
12:45		7	114	35	535
01:00		9	122		
01:15		10	120		
01:30		6	116		
01:45		4	123	29	481
02:00		5	98		
02:15		4	134		
02:30		6	101		
02:45		4	104	19	437
03:00		6	110		
03:15		3	94		
03:30		2	103		
03:45		6	96	17	403
04:00		4	100		
04:15		14	126		
04:30		12	119		
04:45		15	120	45	465
05:00		18	122		
05:15		16	120		
05:30		18	114		
05:45		22	100	74	456
06:00		30	124		
06:15		48	116		
06:30		69	100		
06:45		72	75	219	415
07:00		69	87		
07:15		71	90		
07:30		91	76		
07:45		85	69	316	322
08:00		71	64		
08:15		74	49		
08:30		81	54		
08:45		76	54	302	221
09:00		83	59		
09:15		90	51		
09:30		98	46		
09:45		86	33	357	189
10:00		84	36		
10:15		92	40		
10:30		90	30		
10:45		113	22	379	128
11:00		111	21		
11:15		143	39		
11:30		105	56		
11:45		131	38	490	154
Total		2282	4206		
Percent		35.2%	64.8%		
Grand Total		4589	8603		
Percent		34.8%	65.2%		
ADT		ADT 6,596		AADT 6,596	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 19
Station ID: 19
I-526 EB off-ramp loop to International Blvd.
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	72		
12:15		7	55		
12:30		7	52		
12:45		5	66	22	245
01:00		5	74		
01:15		5	60		
01:30		1	70		
01:45		4	49	15	253
02:00		4	74		
02:15		4	82		
02:30		0	78		
02:45		2	64	10	298
03:00		1	80		
03:15		4	67		
03:30		12	82		
03:45		8	82	25	311
04:00		16	92		
04:15		29	87		
04:30		56	121		
04:45		61	122	162	422
05:00		40	156		
05:15		54	154		
05:30		84	126		
05:45		91	100	269	536
06:00		79	82		
06:15		120	64		
06:30		150	66		
06:45		116	56	465	268
07:00		106	61		
07:15		99	60		
07:30		96	42		
07:45		80	44	381	207
08:00		75	33		
08:15		80	32		
08:30		82	30		
08:45		72	31	309	126
09:00		52	44		
09:15		63	36		
09:30		50	33		
09:45		64	41	229	154
10:00		38	30		
10:15		34	26		
10:30		54	30		
10:45		58	22	184	108
11:00		66	22		
11:15		65	16		
11:30		70	17		
11:45		67	15	268	70
Total		2339	2998		
Percent		43.8%	56.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 19
Station ID: 19
I-526 EB off-ramp loop to International Blvd.
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	56		
12:15		8	60		
12:30		8	50		
12:45		4	50	30	216
01:00		4	63		
01:15		8	62		
01:30		3	70		
01:45		1	74	16	269
02:00		3	67		
02:15		4	82		
02:30		2	78		
02:45		3	76	12	303
03:00		1	82		
03:15		2	78		
03:30		11	72		
03:45		16	74	30	306
04:00		12	81		
04:15		24	89		
04:30		55	106		
04:45		54	111	145	387
05:00		44	149		
05:15		64	162		
05:30		90	148		
05:45		95	130	293	589
06:00		76	86		
06:15		98	88		
06:30		142	62		
06:45		126	63	442	299
07:00		92	57		
07:15		96	55		
07:30		104	37		
07:45		108	34	400	183
08:00		75	41		
08:15		61	60		
08:30		65	35		
08:45		63	53	264	189
09:00		54	37		
09:15		56	35		
09:30		65	46		
09:45		56	29	231	147
10:00		62	20		
10:15		55	29		
10:30		52	23		
10:45		61	19	230	91
11:00		41	20		
11:15		57	21		
11:30		48	13		
11:45		49	19	195	73
Total		2288	3052		
Percent		42.8%	57.2%		
Grand Total		4627	6050		
Percent		43.3%	56.7%		
ADT		ADT 5,338		AADT 5,338	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 20
Station ID: 20
INTERNATIONAL BLVD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		142	282		
12:15		94	314		
12:30		88	338		
12:45		54	350	378	1284
01:00		52	334		
01:15		23	316		
01:30		32	308		
01:45		20	320	127	1278
02:00		33	340		
02:15		24	332		
02:30		18	332		
02:45		20	330	95	1334
03:00		14	355		
03:15		12	352		
03:30		17	332		
03:45		18	330	61	1369
04:00		18	342		
04:15		28	332		
04:30		40	320		
04:45		50	302	136	1296
05:00		72	316		
05:15		66	265		
05:30		128	286		
05:45		111	290	377	1157
06:00		147	285		
06:15		188	270		
06:30		265	240		
06:45		236	234	836	1029
07:00		254	248		
07:15		249	253		
07:30		260	285		
07:45		250	268	1013	1054
08:00		237	230		
08:15		222	247		
08:30		240	210		
08:45		195	171	894	858
09:00		226	178		
09:15		249	218		
09:30		252	359		
09:45		278	174	1005	929
10:00		268	179		
10:15		294	130		
10:30		269	144		
10:45		221	116	1052	569
11:00		244	140		
11:15		260	248		
11:30		294	123		
11:45		293	76	1091	587
Total		7065	12744		
Percent		35.7%	64.3%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 20
Station ID: 20
INTERNATIONAL BLVD ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		129	311		
12:15		106	337		
12:30		63	369		
12:45		46	342	344	1359
01:00		43	389		
01:15		50	349		
01:30		38	330		
01:45		25	302	156	1370
02:00		34	338		
02:15		24	338		
02:30		9	298		
02:45		17	340	84	1314
03:00		23	356		
03:15		16	349		
03:30		14	314		
03:45		21	307	74	1326
04:00		16	324		
04:15		34	346		
04:30		43	335		
04:45		42	321	135	1326
05:00		72	291		
05:15		70	286		
05:30		100	269		
05:45		113	252	355	1098
06:00		143	327		
06:15		212	293		
06:30		260	256		
06:45		258	232	873	1108
07:00		246	260		
07:15		272	290		
07:30		302	277		
07:45		232	224	1052	1051
08:00		208	177		
08:15		220	202		
08:30		226	248		
08:45		243	182	897	809
09:00		240	184		
09:15		245	195		
09:30		240	180		
09:45		258	174	983	733
10:00		252	179		
10:15		231	116		
10:30		236	158		
10:45		276	83	995	536
11:00		271	102		
11:15		238	176		
11:30		278	214		
11:45		279	170	1066	662
Total		7014	12692		
Percent		35.6%	64.4%		
Grand Total		14079	25436		
Percent		35.6%	64.4%		
ADT		ADT 19,758		AADT 19,758	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 21
Station ID: 21
I-526 WB OFF RAMP TO INTERNATIONAL BLVD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		52	276		
12:15		38	261		
12:30		48	272		
12:45		35	252	173	1061
01:00		20	256		
01:15		21	286		
01:30		12	277		
01:45		12	280	65	1099
02:00		24	279		
02:15		18	337		
02:30		18	308		
02:45		14	316	74	1240
03:00		23	316		
03:15		22	356		
03:30		25	324		
03:45		58	326	128	1322
04:00		48	298		
04:15		89	310		
04:30		152	350		
04:45		164	296	453	1254
05:00		122	283		
05:15		145	278		
05:30		211	275		
05:45		243	264	721	1100
06:00		202	287		
06:15		244	306		
06:30		216	269		
06:45		240	286	902	1148
07:00		218	258		
07:15		254	236		
07:30		228	223		
07:45		183	221	883	938
08:00		204	199		
08:15		218	170		
08:30		186	166		
08:45		194	146	802	681
09:00		200	130		
09:15		200	168		
09:30		250	160		
09:45		260	130	910	588
10:00		267	92		
10:15		248	92		
10:30		235	89		
10:45		236	93	986	366
11:00		233	57		
11:15		291	88		
11:30		292	68		
11:45		279	60	1095	273
Total		7192	11070		
Percent		39.4%	60.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 21
Station ID: 21
I-526 WB OFF RAMP TO INTERNATIONAL BLVD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		50	264		
12:15		57	286		
12:30		27	246		
12:45		22	260	156	1056
01:00		26	257		
01:15		23	290		
01:30		19	323		
01:45		19	310	87	1180
02:00		11	289		
02:15		20	324		
02:30		17	308		
02:45		18	304	66	1225
03:00		16	316		
03:15		17	310		
03:30		28	297		
03:45		45	323	106	1246
04:00		44	279		
04:15		78	304		
04:30		130	328		
04:45		170	266	422	1177
05:00		102	278		
05:15		122	272		
05:30		193	253		
05:45		220	272	637	1075
06:00		190	302		
06:15		224	340		
06:30		258	296		
06:45		280	278	952	1216
07:00		298	270		
07:15		270	191		
07:30		236	178		
07:45		210	154	1014	793
08:00		197	126		
08:15		234	149		
08:30		246	150		
08:45		224	159	901	584
09:00		262	136		
09:15		286	136		
09:30		200	151		
09:45		221	126	969	549
10:00		226	96		
10:15		232	88		
10:30		240	101		
10:45		210	78	908	363
11:00		264	78		
11:15		278	64		
11:30		271	65		
11:45		320	83	1133	290
Total		7351	10754		
Percent		40.6%	59.4%		
Grand Total		14543	21824		
Percent		40.0%	60.0%		
ADT		ADT 18,184		AADT 18,184	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 22
Station ID: 22
INTERNATIONAL BLVD. ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		32	110		
12:15		17	123		
12:30		22	137		
12:45		13	140	84	510
01:00		18	138		
01:15		11	132		
01:30		12	128		
01:45		4	118	45	516
02:00		6	127		
02:15		8	127		
02:30		6	156		
02:45		8	142	28	552
03:00		5	156		
03:15		3	152		
03:30		7	147		
03:45		6	132	21	587
04:00		4	139		
04:15		5	130		
04:30		12	158		
04:45		9	120	30	547
05:00		19	122		
05:15		18	136		
05:30		16	98		
05:45		24	110	77	466
06:00		38	85		
06:15		59	88		
06:30		102	67		
06:45		86	70	285	310
07:00		84	68		
07:15		162	88		
07:30		156	92		
07:45		174	73	576	321
08:00		145	59		
08:15		138	65		
08:30		156	55		
08:45		149	42	588	221
09:00		148	47		
09:15		150	51		
09:30		139	64		
09:45		138	42	575	204
10:00		100	52		
10:15		104	45		
10:30		88	34		
10:45		100	31	392	162
11:00		100	47		
11:15		100	68		
11:30		100	38		
11:45		86	29	386	182
Total		3087	4578		
Percent		40.3%	59.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 22
Station ID: 22
INTERNATIONAL BLVD. ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		34	104		
12:15		32	110		
12:30		29	137		
12:45		11	132	106	483
01:00		12	147		
01:15		11	112		
01:30		13	134		
01:45		7	137	43	530
02:00		4	106		
02:15		5	110		
02:30		5	154		
02:45		4	138	18	508
03:00		4	160		
03:15		6	156		
03:30		2	144		
03:45		5	130	17	590
04:00		8	147		
04:15		12	144		
04:30		8	127		
04:45		8	140	36	558
05:00		20	119		
05:15		11	104		
05:30		31	118		
05:45		26	104	88	445
06:00		28	121		
06:15		44	110		
06:30		80	76		
06:45		74	59	226	366
07:00		75	98		
07:15		100	83		
07:30		136	77		
07:45		140	64	451	322
08:00		124	60		
08:15		118	72		
08:30		106	72		
08:45		132	63	480	267
09:00		94	56		
09:15		112	44		
09:30		62	52		
09:45		90	42	358	194
10:00		93	57		
10:15		98	47		
10:30		88	59		
10:45		70	21	349	184
11:00		99	43		
11:15		98	34		
11:30		103	40		
11:45		93	48	393	165
Total		2565	4612		
Percent		35.7%	64.3%		
Grand Total		5652	9190		
Percent		38.1%	61.9%		
ADT		ADT 7,421		AADT 7,421	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 23
Station ID: 23
I-526 WB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	69		
12:15		13	76		
12:30		14	52		
12:45		18	54	58	251
01:00		6	64		
01:15		11	66		
01:30		6	79		
01:45		6	62	29	271
02:00		8	63		
02:15		6	92		
02:30		3	72		
02:45		4	77	21	304
03:00		7	81		
03:15		3	102		
03:30		3	90		
03:45		6	88	19	361
04:00		6	78		
04:15		5	100		
04:30		8	96		
04:45		7	70	26	344
05:00		12	92		
05:15		19	108		
05:30		19	94		
05:45		14	72	64	366
06:00		19	60		
06:15		36	72		
06:30		32	61		
06:45		30	48	117	241
07:00		41	74		
07:15		48	52		
07:30		34	57		
07:45		49	64	172	247
08:00		54	47		
08:15		72	56		
08:30		42	50		
08:45		58	42	226	195
09:00		46	53		
09:15		44	45		
09:30		60	33		
09:45		76	39	226	170
10:00		64	29		
10:15		78	33		
10:30		66	22		
10:45		62	32	270	116
11:00		78	22		
11:15		58	26		
11:30		82	16		
11:45		69	15	287	79
Total		1515	2945		
Percent		34.0%	66.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 23
Station ID: 23
I-526 WB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	57		
12:15		12	84		
12:30		9	70		
12:45		9	68	36	279
01:00		9	48		
01:15		5	53		
01:30		12	90		
01:45		1	80	27	271
02:00		5	82		
02:15		10	62		
02:30		7	77		
02:45		4	86	26	307
03:00		5	70		
03:15		2	86		
03:30		1	73		
03:45		4	98	12	327
04:00		4	82		
04:15		8	96		
04:30		4	86		
04:45		16	81	32	345
05:00		15	86		
05:15		9	83		
05:30		11	70		
05:45		16	69	51	308
06:00		19	64		
06:15		42	80		
06:30		30	77		
06:45		54	55	145	276
07:00		70	74		
07:15		60	60		
07:30		50	51		
07:45		43	49	223	234
08:00		56	39		
08:15		60	45		
08:30		49	46		
08:45		42	50	207	180
09:00		54	36		
09:15		60	49		
09:30		38	46		
09:45		72	27	224	158
10:00		52	33		
10:15		66	22		
10:30		63	22		
10:45		66	20	247	97
11:00		60	20		
11:15		60	23		
11:30		67	24		
11:45		79	23	266	90
Total		1496	2872		
Percent		34.2%	65.8%		
Grand Total		3011	5817		
Percent		34.1%	65.9%		
ADT		ADT 4,414		AADT 4,414	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 24
Station ID: 24
MONTAGUE AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		7	66		
12:15		8	68		
12:30		5	76		
12:45		4	101	24	311
01:00		3	80		
01:15		1	80		
01:30		2	66		
01:45		3	86	9	312
02:00		3	64		
02:15		2	88		
02:30		2	67		
02:45		0	84	7	303
03:00		0	76		
03:15		4	98		
03:30		3	114		
03:45		6	95	13	383
04:00		1	96		
04:15		8	84		
04:30		6	88		
04:45		3	70	18	338
05:00		7	116		
05:15		9	108		
05:30		20	74		
05:45		22	84	58	382
06:00		18	70		
06:15		24	70		
06:30		45	51		
06:45		42	34	129	225
07:00		42	46		
07:15		60	43		
07:30		63	51		
07:45		68	42	233	182
08:00		64	42		
08:15		72	50		
08:30		56	41		
08:45		60	50	252	183
09:00		60	34		
09:15		60	49		
09:30		64	99		
09:45		61	48	245	230
10:00		52	26		
10:15		57	27		
10:30		68	14		
10:45		56	20	233	87
11:00		62	68		
11:15		56	52		
11:30		70	22		
11:45		68	12	256	154
Total		1477	3090		
Percent		32.3%	67.7%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 24
Station ID: 24
MONTAGUE AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	71		
12:15		18	68		
12:30		12	74		
12:45		8	70	46	283
01:00		4	74		
01:15		2	72		
01:30		4	86		
01:45		3	82	13	314
02:00		0	61		
02:15		5	64		
02:30		3	68		
02:45		2	80	10	273
03:00		2	72		
03:15		3	92		
03:30		3	122		
03:45		3	91	11	377
04:00		8	86		
04:15		5	79		
04:30		6	90		
04:45		5	84	24	339
05:00		10	106		
05:15		10	86		
05:30		10	92		
05:45		14	84	44	368
06:00		18	68		
06:15		19	75		
06:30		35	59		
06:45		38	46	110	248
07:00		57	40		
07:15		60	43		
07:30		77	36		
07:45		98	35	292	154
08:00		106	32		
08:15		105	50		
08:30		85	47		
08:45		90	71	386	200
09:00		72	47		
09:15		50	40		
09:30		42	23		
09:45		54	28	218	138
10:00		44	34		
10:15		50	31		
10:30		51	32		
10:45		59	11	204	108
11:00		64	18		
11:15		66	34		
11:30		64	60		
11:45		60	48	254	160
Total		1612	2962		
Percent		35.2%	64.8%		
Grand Total		3089	6052		
Percent		33.8%	66.2%		
ADT		ADT 4,570		AADT 4,570	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 25
Station ID: 25
I-526 EB OFF RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		37	96		
12:15		14	63		
12:30		18	88		
12:45		7	82	76	329
01:00		8	80		
01:15		3	84		
01:30		6	76		
01:45		3	86	20	326
02:00		5	76		
02:15		4	80		
02:30		6	78		
02:45		4	77	19	311
03:00		2	88		
03:15		3	93		
03:30		1	87		
03:45		2	82	8	350
04:00		1	93		
04:15		5	102		
04:30		8	100		
04:45		6	86	20	381
05:00		6	98		
05:15		15	96		
05:30		25	104		
05:45		20	90	66	388
06:00		32	97		
06:15		43	61		
06:30		53	68		
06:45		63	50	191	276
07:00		72	48		
07:15		90	47		
07:30		88	63		
07:45		87	49	337	207
08:00		94	40		
08:15		86	37		
08:30		78	44		
08:45		74	36	332	157
09:00		65	37		
09:15		70	32		
09:30		92	26		
09:45		78	32	305	127
10:00		94	35		
10:15		97	36		
10:30		76	28		
10:45		94	34	361	133
11:00		66	22		
11:15		79	43		
11:30		68	22		
11:45		84	14	297	101
Total		2032	3086		
Percent		39.7%	60.3%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 25
Station ID: 25
I-526 EB OFF RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		28	84		
12:15		24	92		
12:30		18	69		
12:45		8	98	78	343
01:00		4	90		
01:15		0	94		
01:30		4	66		
01:45		4	77	12	327
02:00		4	74		
02:15		4	72		
02:30		1	74		
02:45		4	82	13	302
03:00		6	76		
03:15		0	104		
03:30		4	95		
03:45		3	78	13	353
04:00		3	75		
04:15		8	104		
04:30		11	108		
04:45		7	89	29	376
05:00		20	114		
05:15		16	117		
05:30		19	114		
05:45		22	125	77	470
06:00		29	76		
06:15		37	82		
06:30		60	62		
06:45		68	46	194	266
07:00		80	49		
07:15		88	68		
07:30		86	70		
07:45		114	44	368	231
08:00		134	27		
08:15		126	30		
08:30		75	33		
08:45		78	34	413	124
09:00		77	33		
09:15		76	34		
09:30		82	18		
09:45		102	46	337	131
10:00		104	28		
10:15		72	26		
10:30		95	32		
10:45		96	26	367	112
11:00		71	17		
11:15		65	29		
11:30		74	18		
11:45		84	32	294	96
Total		2195	3131		
Percent		41.2%	58.8%		
Grand Total		4227	6217		
Percent		40.5%	59.5%		
ADT		ADT 5,222		AADT 5,222	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 26
Station ID: 26
I-526 EB OFF RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		99	412		
12:15		91	398		
12:30		72	428		
12:45		57	403	319	1641
01:00		60	448		
01:15		42	474		
01:30		36	400		
01:45		34	452	172	1774
02:00		45	476		
02:15		26	454		
02:30		32	472		
02:45		29	480	132	1882
03:00		21	500		
03:15		14	478		
03:30		30	451		
03:45		35	382	100	1811
04:00		30	412		
04:15		47	392		
04:30		36	334		
04:45		56	354	169	1492
05:00		58	344		
05:15		92	332		
05:30		120	334		
05:45		184	326	454	1336
06:00		244	412		
06:15		272	493		
06:30		380	408		
06:45		380	364	1276	1677
07:00		342	412		
07:15		382	407		
07:30		400	378		
07:45		401	367	1525	1564
08:00		368	364		
08:15		400	349		
08:30		372	312		
08:45		313	283	1453	1308
09:00		260	262		
09:15		304	259		
09:30		284	358		
09:45		328	254	1176	1133
10:00		336	235		
10:15		381	178		
10:30		404	179		
10:45		384	145	1505	737
11:00		389	134		
11:15		407	164		
11:30		390	142		
11:45		392	95	1578	535
Total		9859	16890		
Percent		36.9%	63.1%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 26
Station ID: 26
I-526 EB OFF RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		122	422		
12:15		90	424		
12:30		64	491		
12:45		56	440	332	1777
01:00		52	470		
01:15		48	440		
01:30		54	420		
01:45		38	414	192	1744
02:00		48	458		
02:15		40	492		
02:30		21	480		
02:45		26	448	135	1878
03:00		30	512		
03:15		20	482		
03:30		34	462		
03:45		20	388	104	1844
04:00		33	444		
04:15		36	390		
04:30		50	379		
04:45		41	349	160	1562
05:00		64	410		
05:15		76	338		
05:30		135	324		
05:45		166	426	441	1498
06:00		228	448		
06:15		278	446		
06:30		379	408		
06:45		373	412	1258	1714
07:00		347	409		
07:15		370	372		
07:30		401	321		
07:45		468	336	1586	1438
08:00		438	304		
08:15		412	315		
08:30		394	337		
08:45		378	247	1622	1203
09:00		330	235		
09:15		345	241		
09:30		376	224		
09:45		370	183	1421	883
10:00		362	199		
10:15		394	156		
10:30		384	170		
10:45		364	152	1504	677
11:00		384	112		
11:15		368	86		
11:30		412	90		
11:45		412	81	1576	369
Total		10331	16587		
Percent		38.4%	61.6%		
Grand Total		20190	33477		
Percent		37.6%	62.4%		
ADT		ADT 26,834		AADT 26,834	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 27
Station ID: 27
I-26 WB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	127		
12:15		14	133		
12:30		8	124		
12:45		9	120	45	504
01:00		10	130		
01:15		7	114		
01:30		7	108		
01:45		5	111	29	463
02:00		8	109		
02:15		6	117		
02:30		5	102		
02:45		2	124	21	452
03:00		6	121		
03:15		4	110		
03:30		4	114		
03:45		4	124	18	469
04:00		8	132		
04:15		2	125		
04:30		14	104		
04:45		12	87	36	448
05:00		16	95		
05:15		18	94		
05:30		44	99		
05:45		54	98	132	386
06:00		53	100		
06:15		83	70		
06:30		102	65		
06:45		109	56	347	291
07:00		99	55		
07:15		86	45		
07:30		110	52		
07:45		108	45	403	197
08:00		138	36		
08:15		158	50		
08:30		137	44		
08:45		124	32	557	162
09:00		104	28		
09:15		110	51		
09:30		136	30		
09:45		95	23	445	132
10:00		118	24		
10:15		111	34		
10:30		119	28		
10:45		130	18	478	104
11:00		116	37		
11:15		108	19		
11:30		99	20		
11:45		120	9	443	85
Total		2954	3693		
Percent		44.4%	55.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 27
Station ID: 27
I-26 WB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		7	118		
12:15		14	120		
12:30		7	128		
12:45		13	117	41	483
01:00		13	109		
01:15		8	124		
01:30		6	116		
01:45		8	110	35	459
02:00		6	116		
02:15		12	132		
02:30		10	97		
02:45		10	124	38	469
03:00		12	102		
03:15		8	122		
03:30		8	129		
03:45		2	122	30	475
04:00		8	118		
04:15		12	139		
04:30		12	120		
04:45		22	96	54	473
05:00		16	108		
05:15		26	109		
05:30		40	212		
05:45		32	176	114	605
06:00		43	134		
06:15		58	78		
06:30		94	58		
06:45		108	60	303	330
07:00		122	50		
07:15		142	58		
07:30		134	74		
07:45		134	54	532	236
08:00		114	47		
08:15		132	52		
08:30		136	41		
08:45		118	31	500	171
09:00		94	36		
09:15		85	26		
09:30		96	33		
09:45		112	47	387	142
10:00		119	30		
10:15		108	25		
10:30		112	22		
10:45		92	18	431	95
11:00		86	22		
11:15		96	22		
11:30		106	18		
11:45		131	20	419	82
Total		2884	4020		
Percent		41.8%	58.2%		
Grand Total		5838	7713		
Percent		43.1%	56.9%		
ADT		ADT 6,776		AADT 6,776	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 28
Station ID: 28
I-26 EB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	126		
12:15		11	146		
12:30		11	124		
12:45		7	142	38	538
01:00		10	128		
01:15		7	123		
01:30		12	106		
01:45		8	142	37	499
02:00		6	120		
02:15		5	138		
02:30		6	141		
02:45		6	122	23	521
03:00		2	177		
03:15		3	174		
03:30		3	146		
03:45		5	158	13	655
04:00		5	178		
04:15		12	156		
04:30		11	154		
04:45		15	160	43	648
05:00		14	131		
05:15		21	129		
05:30		36	118		
05:45		41	94	112	472
06:00		63	88		
06:15		90	121		
06:30		152	102		
06:45		170	84	475	395
07:00		210	67		
07:15		191	61		
07:30		166	54		
07:45		160	58	727	240
08:00		195	34		
08:15		205	52		
08:30		194	58		
08:45		180	45	774	189
09:00		190	25		
09:15		164	24		
09:30		167	38		
09:45		166	32	687	119
10:00		136	24		
10:15		154	14		
10:30		135	29		
10:45		138	27	563	94
11:00		164	22		
11:15		163	16		
11:30		166	15		
11:45		166	16	659	69
Total		4151	4439		
Percent		48.3%	51.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 28
Station ID: 28
I-26 EB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	144		
12:15		10	146		
12:30		7	151		
12:45		10	134	36	575
01:00		8	158		
01:15		5	116		
01:30		8	142		
01:45		8	130	29	546
02:00		6	108		
02:15		1	144		
02:30		1	170		
02:45		12	163	20	585
03:00		12	122		
03:15		6	160		
03:30		12	140		
03:45		6	146	36	568
04:00		5	138		
04:15		8	148		
04:30		14	140		
04:45		17	109	44	535
05:00		12	144		
05:15		22	126		
05:30		38	129		
05:45		44	113	116	512
06:00		58	84		
06:15		91	109		
06:30		116	74		
06:45		174	84	439	351
07:00		158	70		
07:15		172	80		
07:30		167	57		
07:45		152	69	649	276
08:00		137	52		
08:15		137	39		
08:30		164	34		
08:45		156	51	594	176
09:00		181	32		
09:15		138	42		
09:30		112	23		
09:45		132	40	563	137
10:00		122	24		
10:15		134	22		
10:30		130	34		
10:45		141	15	527	95
11:00		162	13		
11:15		151	20		
11:30		152	16		
11:45		168	6	633	55
Total		3686	4411		
Percent		45.5%	54.5%		
Grand Total		7837	8850		
Percent		47.0%	53.0%		
ADT		ADT 8,344		AADT 8,344	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 29
Station ID: 29
I-526 WB OFF RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		42	386		
12:15		34	476		
12:30		44	454		
12:45		36	496	156	1812
01:00		38	428		
01:15		24	433		
01:30		44	398		
01:45		40	481	146	1740
02:00		24	431		
02:15		26	446		
02:30		26	504		
02:45		44	473	120	1854
03:00		41	500		
03:15		60	480		
03:30		53	477		
03:45		46	518	200	1975
04:00		74	506		
04:15		90	396		
04:30		110	414		
04:45		136	411	410	1727
05:00		153	362		
05:15		228	362		
05:30		338	396		
05:45		389	364	1108	1484
06:00		417	333		
06:15		506	378		
06:30		354	300		
06:45		285	257	1562	1268
07:00		296	237		
07:15		288	218		
07:30		262	196		
07:45		262	182	1108	833
08:00		284	178		
08:15		308	155		
08:30		326	157		
08:45		296	148	1214	638
09:00		344	140		
09:15		438	115		
09:30		473	120		
09:45		540	131	1795	506
10:00		561	98		
10:15		496	92		
10:30		352	86		
10:45		442	108	1851	384
11:00		498	85		
11:15		444	66		
11:30		474	76		
11:45		504	69	1920	296
Total		11590	14517		
Percent		44.4%	55.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 29
Station ID: 29
I-526 WB OFF RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		51	368		
12:15		44	410		
12:30		33	504		
12:45		28	440	156	1722
01:00		33	468		
01:15		38	418		
01:30		36	446		
01:45		31	484	138	1816
02:00		50	462		
02:15		34	467		
02:30		24	464		
02:45		40	544	148	1937
03:00		50	474		
03:15		44	457		
03:30		70	468		
03:45		70	460	234	1859
04:00		60	448		
04:15		68	431		
04:30		99	462		
04:45		112	462	339	1803
05:00		129	339		
05:15		223	308		
05:30		324	270		
05:45		376	255	1052	1172
06:00		452	286		
06:15		462	366		
06:30		499	266		
06:45		516	281	1929	1199
07:00		536	256		
07:15		534	226		
07:30		408	192		
07:45		318	196	1796	870
08:00		352	180		
08:15		369	155		
08:30		487	146		
08:45		482	162	1690	643
09:00		469	118		
09:15		466	157		
09:30		455	102		
09:45		428	125	1818	502
10:00		410	122		
10:15		451	92		
10:30		442	90		
10:45		416	86	1719	390
11:00		402	58		
11:15		402	72		
11:30		424	72		
11:45		420	44	1648	246
Total		12667	14159		
Percent		47.2%	52.8%		
Grand Total		24257	28676		
Percent		45.8%	54.2%		
ADT		ADT 26,466		AADT 26,466	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 30
Station ID: 30
I-26 EB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		30	213		
12:15		27	440		
12:30		30	298		
12:45		24	356	111	1307
01:00		29	346		
01:15		24	283		
01:30		31	342		
01:45		26	372	110	1343
02:00		18	276		
02:15		22	364		
02:30		30	370		
02:45		32	364	102	1374
03:00		50	320		
03:15		52	340		
03:30		53	322		
03:45		44	389	199	1371
04:00		72	290		
04:15		88	307		
04:30		114	284		
04:45		110	254	384	1135
05:00		166	226		
05:15		238	237		
05:30		322	300		
05:45		371	278	1097	1041
06:00		379	262		
06:15		420	222		
06:30		118	195		
06:45		98	180	1015	859
07:00		82	160		
07:15		105	154		
07:30		110	137		
07:45		86	134	383	585
08:00		106	134		
08:15		124	112		
08:30		112	96		
08:45		132	96	474	438
09:00		169	122		
09:15		313	87		
09:30		346	88		
09:45		430	87	1258	384
10:00		423	81		
10:15		348	59		
10:30		233	75		
10:45		416	66	1420	281
11:00		324	71		
11:15		275	54		
11:30		356	56		
11:45		357	44	1312	225
Total		7865	10343		
Percent		43.2%	56.8%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 30
Station ID: 30
I-26 EB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		42	280		
12:15		36	290		
12:30		19	334		
12:45		16	358	113	1262
01:00		30	314		
01:15		34	384		
01:30		32	384		
01:45		30	416	126	1498
02:00		42	398		
02:15		22	322		
02:30		22	342		
02:45		38	392	124	1454
03:00		50	362		
03:15		67	314		
03:30		66	343		
03:45		75	324	258	1343
04:00		80	320		
04:15		76	332		
04:30		108	333		
04:45		103	334	367	1319
05:00		139	236		
05:15		220	275		
05:30		320	184		
05:45		360	246	1039	941
06:00		398	334		
06:15		368	238		
06:30		381	214		
06:45		378	189	1525	975
07:00		413	184		
07:15		369	142		
07:30		278	138		
07:45		277	132	1337	596
08:00		318	120		
08:15		346	126		
08:30		404	110		
08:45		323	102	1391	458
09:00		333	90		
09:15		330	114		
09:30		333	90		
09:45		294	84	1290	378
10:00		302	83		
10:15		362	66		
10:30		314	76		
10:45		302	56	1280	281
11:00		246	46		
11:15		271	52		
11:30		284	44		
11:45		296	34	1097	176
Total		9947	10681		
Percent		48.2%	51.8%		
Grand Total		17812	21024		
Percent		45.9%	54.1%		
ADT		ADT 19,418		AADT 19,418	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 31
Station ID: 31
I-526 WB OFF RAMP TO I-26 EB C-D RAMP

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	154		
12:15		14	210		
12:30		12	152		
12:45		9	192	45	708
01:00		14	172		
01:15		6	134		
01:30		12	128		
01:45		13	165	45	599
02:00		5	158		
02:15		5	150		
02:30		7	166		
02:45		8	156	25	630
03:00		3	210		
03:15		2	209		
03:30		4	174		
03:45		6	202	15	795
04:00		6	226		
04:15		14	160		
04:30		14	195		
04:45		18	174	52	755
05:00		19	160		
05:15		28	145		
05:30		36	133		
05:45		48	93	131	531
06:00		80	99		
06:15		118	120		
06:30		199	121		
06:45		216	82	613	422
07:00		262	77		
07:15		232	58		
07:30		222	54		
07:45		191	56	907	245
08:00		254	36		
08:15		262	58		
08:30		247	65		
08:45		227	47	990	206
09:00		250	25		
09:15		231	26		
09:30		242	41		
09:45		232	34	955	126
10:00		184	28		
10:15		154	14		
10:30		182	32		
10:45		172	34	692	108
11:00		231	18		
11:15		230	18		
11:30		209	18		
11:45		226	16	896	70
Total		5366	5195		
Percent		50.8%	49.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 31
Station ID: 31
I-526 WB OFF RAMP TO I-26 EB C-D RAMP

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	184		
12:15		11	173		
12:30		8	194		
12:45		12	178	43	729
01:00		8	216		
01:15		4	137		
01:30		8	184		
01:45		8	149	28	686
02:00		6	130		
02:15		2	189		
02:30		1	222		
02:45		13	188	22	729
03:00		10	144		
03:15		4	184		
03:30		14	175		
03:45		7	166	35	669
04:00		6	156		
04:15		10	158		
04:30		18	160		
04:45		19	116	53	590
05:00		12	116		
05:15		25	142		
05:30		42	153		
05:45		50	126	129	537
06:00		71	98		
06:15		114	95		
06:30		154	78		
06:45		226	86	565	357
07:00		202	72		
07:15		234	86		
07:30		218	46		
07:45		204	72	858	276
08:00		208	53		
08:15		190	40		
08:30		246	33		
08:45		231	58	875	184
09:00		233	32		
09:15		188	44		
09:30		172	30		
09:45		170	44	763	150
10:00		159	28		
10:15		164	26		
10:30		164	38		
10:45		200	14	687	106
11:00		228	11		
11:15		200	24		
11:30		182	16		
11:45		227	9	837	60
Total		4895	5073		
Percent		49.1%	50.9%		
Grand Total		10261	10268		
Percent		50.0%	50.0%		
ADT		ADT 10,264		AADT 10,264	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 32
Station ID: 32
I-26 WB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		26	220		
12:15		30	388		
12:30		26	324		
12:45		30	357	112	1289
01:00		26	317		
01:15		26	300		
01:30		31	304		
01:45		25	352	108	1273
02:00		20	312		
02:15		21	326		
02:30		20	373		
02:45		41	348	102	1359
03:00		38	338		
03:15		65	332		
03:30		48	308		
03:45		38	386	189	1364
04:00		75	330		
04:15		80	248		
04:30		112	276		
04:45		108	267	375	1121
05:00		148	220		
05:15		224	218		
05:30		310	280		
05:45		349	278	1031	996
06:00		374	256		
06:15		420	248		
06:30		179	194		
06:45		109	182	1082	880
07:00		86	170		
07:15		100	152		
07:30		106	154		
07:45		94	132	386	608
08:00		92	140		
08:15		119	108		
08:30		132	100		
08:45		116	100	459	448
09:00		170	119		
09:15		270	90		
09:30		319	94		
09:45		396	92	1155	395
10:00		436	69		
10:15		348	72		
10:30		202	63		
10:45		342	78	1328	282
11:00		334	60		
11:15		296	54		
11:30		327	64		
11:45		338	44	1295	222
Total		7622	10237		
Percent		42.7%	57.3%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 32
Station ID: 32
I-26 WB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		46	263		
12:15		26	266		
12:30		28	303		
12:45		16	312	116	1144
01:00		29	346		
01:15		32	292		
01:30		36	343		
01:45		20	364	117	1345
02:00		46	360		
02:15		28	325		
02:30		24	322		
02:45		31	390	129	1397
03:00		43	312		
03:15		48	312		
03:30		60	339		
03:45		60	314	211	1277
04:00		52	314		
04:15		68	324		
04:30		86	332		
04:45		95	347	301	1317
05:00		122	230		
05:15		220	195		
05:30		288	152		
05:45		348	160	978	737
06:00		388	201		
06:15		374	267		
06:30		374	195		
06:45		374	212	1510	875
07:00		408	175		
07:15		374	153		
07:30		241	146		
07:45		170	136	1193	610
08:00		235	116		
08:15		236	132		
08:30		370	113		
08:45		350	106	1191	467
09:00		330	86		
09:15		333	112		
09:30		325	88		
09:45		314	88	1302	374
10:00		292	86		
10:15		342	72		
10:30		304	56		
10:45		306	76	1244	290
11:00		263	42		
11:15		256	54		
11:30		286	49		
11:45		297	36	1102	181
Total		9394	10014		
Percent		48.4%	51.6%		
Grand Total		17016	20251		
Percent		45.7%	54.3%		
ADT		ADT 18,634		AADT 18,634	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 33
Station ID: 33
I-26 EB ON RAMP TO I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		44	296		
12:15		34	390		
12:30		42	406		
12:45		34	368	154	1460
01:00		27	384		
01:15		28	352		
01:30		26	410		
01:45		19	379	100	1525
02:00		17	352		
02:15		28	386		
02:30		26	376		
02:45		24	408	95	1522
03:00		29	408		
03:15		26	396		
03:30		40	400		
03:45		62	354	157	1558
04:00		42	408		
04:15		78	366		
04:30		118	435		
04:45		121	378	359	1587
05:00		116	359		
05:15		160	394		
05:30		250	366		
05:45		263	342	789	1461
06:00		318	336		
06:15		410	340		
06:30		422	310		
06:45		505	318	1655	1304
07:00		508	257		
07:15		516	231		
07:30		478	230		
07:45		382	234	1884	952
08:00		416	204		
08:15		444	198		
08:30		440	196		
08:45		408	198	1708	796
09:00		337	200		
09:15		434	184		
09:30		504	176		
09:45		405	158	1680	718
10:00		453	140		
10:15		399	117		
10:30		376	106		
10:45		336	105	1564	468
11:00		341	69		
11:15		356	78		
11:30		368	52		
11:45		382	62	1447	261
Total		11592	13612		
Percent		46.0%	54.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 33
Station ID: 33
I-26 EB ON RAMP TO I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		50	370		
12:15		40	385		
12:30		38	304		
12:45		21	367	149	1426
01:00		25	365		
01:15		24	363		
01:30		18	394		
01:45		37	372	104	1494
02:00		16	365		
02:15		18	414		
02:30		22	390		
02:45		26	388	82	1557
03:00		24	400		
03:15		32	394		
03:30		44	435		
03:45		54	358	154	1587
04:00		50	384		
04:15		68	387		
04:30		112	375		
04:45		134	352	364	1498
05:00		114	424		
05:15		168	318		
05:30		232	347		
05:45		277	302	791	1391
06:00		319	314		
06:15		410	355		
06:30		502	348		
06:45		536	300	1767	1317
07:00		478	260		
07:15		532	218		
07:30		472	221		
07:45		380	193	1862	892
08:00		372	194		
08:15		342	197		
08:30		372	197		
08:45		356	184	1442	772
09:00		334	164		
09:15		418	188		
09:30		378	176		
09:45		415	166	1545	694
10:00		360	112		
10:15		345	133		
10:30		368	112		
10:45		374	96	1447	453
11:00		330	70		
11:15		392	84		
11:30		385	62		
11:45		368	60	1475	276
Total		11182	13357		
Percent		45.6%	54.4%		
Grand Total		22774	26969		
Percent		45.8%	54.2%		
ADT		ADT 24,872		AADT 24,872	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 34
Station ID: 34
I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	69		
12:15		21	81		
12:30		12	67		
12:45		6	80	48	297
01:00		8	68		
01:15		4	97		
01:30		8	76		
01:45		6	73	26	314
02:00		3	74		
02:15		4	81		
02:30		2	72		
02:45		3	92	12	319
03:00		2	88		
03:15		5	94		
03:30		5	108		
03:45		10	112	22	402
04:00		12	112		
04:15		17	96		
04:30		22	94		
04:45		20	70	71	372
05:00		19	64		
05:15		30	48		
05:30		46	58		
05:45		48	54	143	224
06:00		52	86		
06:15		35	58		
06:30		42	68		
06:45		58	61	187	273
07:00		56	48		
07:15		72	55		
07:30		72	59		
07:45		63	64	263	226
08:00		57	48		
08:15		67	46		
08:30		75	45		
08:45		61	38	260	177
09:00		62	36		
09:15		64	38		
09:30		68	36		
09:45		72	30	266	140
10:00		60	31		
10:15		51	32		
10:30		58	22		
10:45		64	28	233	113
11:00		66	24		
11:15		87	28		
11:30		70	20		
11:45		60	26	283	98
Total		1814	2955		
Percent		38.0%	62.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 34
Station ID: 34
I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		16	82		
12:15		16	67		
12:30		12	74		
12:45		10	80	54	303
01:00		10	78		
01:15		7	86		
01:30		6	83		
01:45		4	76	27	323
02:00		3	62		
02:15		3	82		
02:30		7	70		
02:45		3	85	16	299
03:00		2	89		
03:15		5	102		
03:30		3	95		
03:45		8	112	18	398
04:00		8	116		
04:15		10	91		
04:30		19	94		
04:45		24	75	61	376
05:00		26	69		
05:15		30	60		
05:30		38	45		
05:45		49	65	143	239
06:00		51	76		
06:15		54	92		
06:30		58	68		
06:45		54	66	217	302
07:00		68	72		
07:15		60	52		
07:30		54	36		
07:45		80	30	262	190
08:00		71	37		
08:15		80	38		
08:30		80	36		
08:45		66	38	297	149
09:00		67	40		
09:15		71	32		
09:30		71	34		
09:45		61	30	270	136
10:00		61	32		
10:15		61	30		
10:30		68	32		
10:45		52	25	242	119
11:00		66	23		
11:15		74	22		
11:30		73	22		
11:45		71	27	284	94
Total		1891	2928		
Percent		39.2%	60.8%		
Grand Total		3705	5883		
Percent		38.6%	61.4%		
ADT		ADT 4,794		AADT 4,794	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 35
Station ID: 35
I-26 EB C-D RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		46	307		
12:15		66	305		
12:30		54	333		
12:45		34	354	200	1299
01:00		33	316		
01:15		48	362		
01:30		34	324		
01:45		24	364	139	1366
02:00		37	302		
02:15		40	417		
02:30		26	404		
02:45		27	427	130	1550
03:00		30	448		
03:15		38	449		
03:30		44	458		
03:45		42	420	154	1775
04:00		58	438		
04:15		62	452		
04:30		68	416		
04:45		76	394	264	1700
05:00		62	398		
05:15		112	393		
05:30		126	380		
05:45		166	380	466	1551
06:00		178	442		
06:15		232	403		
06:30		282	325		
06:45		339	300	1031	1470
07:00		327	268		
07:15		402	262		
07:30		386	225		
07:45		350	214	1465	969
08:00		326	184		
08:15		373	200		
08:30		304	176		
08:45		216	134	1219	694
09:00		252	150		
09:15		276	166		
09:30		243	132		
09:45		240	124	1011	572
10:00		246	124		
10:15		288	87		
10:30		315	112		
10:45		264	87	1113	410
11:00		290	88		
11:15		332	88		
11:30		295	63		
11:45		278	82	1195	321
Total		8387	13677		
Percent		38.0%	62.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 35
Station ID: 35
I-26 EB C-D RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		62	320		
12:15		95	350		
12:30		40	338		
12:45		52	311	249	1319
01:00		44	388		
01:15		46	398		
01:30		27	356		
01:45		46	362	163	1504
02:00		50	364		
02:15		37	372		
02:30		40	416		
02:45		40	408	167	1560
03:00		26	437		
03:15		32	440		
03:30		52	452		
03:45		32	410	142	1739
04:00		40	381		
04:15		48	384		
04:30		56	433		
04:45		69	416	213	1614
05:00		58	426		
05:15		86	396		
05:30		136	379		
05:45		142	396	422	1597
06:00		162	401		
06:15		221	394		
06:30		295	306		
06:45		300	248	978	1349
07:00		372	271		
07:15		362	240		
07:30		377	242		
07:45		338	216	1449	969
08:00		311	170		
08:15		308	167		
08:30		306	157		
08:45		295	182	1220	676
09:00		356	170		
09:15		328	168		
09:30		289	122		
09:45		319	114	1292	574
10:00		303	114		
10:15		307	113		
10:30		275	126		
10:45		302	98	1187	451
11:00		296	78		
11:15		318	99		
11:30		310	66		
11:45		326	70	1250	313
Total		8732	13665		
Percent		39.0%	61.0%		
Grand Total		17119	27342		
Percent		38.5%	61.5%		
ADT		ADT 22,230		AADT 22,230	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 36
Station ID: 36
I-526 EB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	46		
12:15		10	46		
12:30		5	46		
12:45		9	50	34	188
01:00		3	61		
01:15		4	34		
01:30		10	39		
01:45		4	64	21	198
02:00		6	52		
02:15		5	46		
02:30		4	44		
02:45		3	49	18	191
03:00		8	46		
03:15		1	56		
03:30		4	44		
03:45		8	42	21	188
04:00		14	67		
04:15		14	72		
04:30		4	68		
04:45		6	53	38	260
05:00		9	58		
05:15		8	29		
05:30		13	61		
05:45		20	34	50	182
06:00		20	40		
06:15		19	38		
06:30		32	51		
06:45		33	38	104	167
07:00		30	33		
07:15		27	38		
07:30		33	29		
07:45		18	26	108	126
08:00		41	30		
08:15		41	20		
08:30		40	24		
08:45		32	24	154	98
09:00		28	18		
09:15		18	17		
09:30		45	13		
09:45		41	14	132	62
10:00		68	16		
10:15		44	14		
10:30		30	10		
10:45		48	15	190	55
11:00		44	16		
11:15		50	10		
11:30		46	18		
11:45		56	11	196	55
Total		1066	1770		
Percent		37.6%	62.4%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 36
Station ID: 36
I-526 EB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	52		
12:15		6	48		
12:30		7	50		
12:45		6	44	27	194
01:00		2	52		
01:15		10	54		
01:30		6	54		
01:45		4	55	22	215
02:00		14	46		
02:15		5	51		
02:30		1	49		
02:45		4	51	24	197
03:00		2	45		
03:15		8	42		
03:30		4	54		
03:45		18	38	32	179
04:00		3	70		
04:15		8	62		
04:30		3	46		
04:45		9	50	23	228
05:00		10	76		
05:15		8	34		
05:30		16	38		
05:45		26	34	60	182
06:00		22	48		
06:15		29	59		
06:30		34	30		
06:45		40	42	125	179
07:00		40	44		
07:15		42	30		
07:30		44	32		
07:45		60	26	186	132
08:00		47	30		
08:15		50	19		
08:30		56	27		
08:45		80	15	233	91
09:00		58	25		
09:15		56	14		
09:30		31	28		
09:45		52	19	197	86
10:00		31	11		
10:15		48	14		
10:30		35	18		
10:45		58	17	172	60
11:00		44	14		
11:15		49	4		
11:30		57	9		
11:45		60	10	210	37
Total		1311	1780		
Percent		42.4%	57.6%		
Grand Total		2377	3550		
Percent		40.1%	59.9%		
ADT		ADT 2,964		AADT 2,964	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 37
Station ID: 37
I-526 EB OFF RAMP TO RIVERS AVENUE NB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		5	58		
12:15		9	57		
12:30		7	42		
12:45		3	50	24	207
01:00		1	54		
01:15		2	48		
01:30		2	50		
01:45		1	62	6	214
02:00		0	47		
02:15		4	46		
02:30		4	40		
02:45		0	46	8	179
03:00		1	52		
03:15		4	40		
03:30		2	58		
03:45		0	80	7	230
04:00		1	86		
04:15		0	110		
04:30		0	139		
04:45		4	124	5	459
05:00		6	107		
05:15		7	111		
05:30		10	144		
05:45		11	75	34	437
06:00		16	72		
06:15		15	62		
06:30		31	47		
06:45		28	44	90	225
07:00		30	48		
07:15		42	22		
07:30		22	24		
07:45		24	26	118	120
08:00		28	20		
08:15		34	23		
08:30		32	15		
08:45		31	17	125	75
09:00		30	15		
09:15		38	14		
09:30		39	17		
09:45		38	17	145	63
10:00		39	13		
10:15		55	15		
10:30		44	8		
10:45		44	17	182	53
11:00		56	5		
11:15		42	5		
11:30		44	10		
11:45		50	8	192	28
Total		936	2290		
Percent		29.0%	71.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 37
Station ID: 37
I-526 EB OFF RAMP TO RIVERS AVENUE NB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	38		
12:15		9	66		
12:30		6	53		
12:45		2	58	20	215
01:00		2	58		
01:15		4	56		
01:30		3	45		
01:45		1	44	10	203
02:00		1	48		
02:15		1	56		
02:30		0	39		
02:45		0	38	2	181
03:00		8	59		
03:15		0	64		
03:30		1	58		
03:45		1	66	10	247
04:00		2	93		
04:15		0	73		
04:30		4	138		
04:45		4	144	10	448
05:00		4	102		
05:15		8	86		
05:30		12	60		
05:45		9	57	33	305
06:00		17	63		
06:15		24	86		
06:30		26	40		
06:45		35	40	102	229
07:00		38	34		
07:15		35	35		
07:30		30	33		
07:45		25	23	128	125
08:00		26	26		
08:15		14	21		
08:30		34	20		
08:45		32	22	106	89
09:00		36	22		
09:15		36	20		
09:30		40	10		
09:45		34	13	146	65
10:00		26	17		
10:15		32	4		
10:30		38	5		
10:45		48	8	144	34
11:00		51	6		
11:15		46	4		
11:30		58	5		
11:45		65	9	220	24
Total		931	2165		
Percent		30.1%	69.9%		
Grand Total		1867	4455		
Percent		29.5%	70.5%		
ADT		ADT 3,161		AADT 3,161	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 38
Station ID: 38
RIVERS AVENUE NB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	36		
12:15		1	42		
12:30		5	38		
12:45		3	32	15	148
01:00		1	50		
01:15		3	58		
01:30		5	28		
01:45		1	39	10	175
02:00		0	53		
02:15		2	46		
02:30		2	62		
02:45		1	36	5	197
03:00		2	40		
03:15		0	42		
03:30		0	41		
03:45		3	32	5	155
04:00		0	37		
04:15		4	34		
04:30		2	40		
04:45		1	33	7	144
05:00		4	66		
05:15		3	36		
05:30		18	38		
05:45		20	40	45	180
06:00		22	21		
06:15		16	32		
06:30		24	10		
06:45		21	13	83	76
07:00		25	20		
07:15		32	17		
07:30		34	10		
07:45		44	12	135	59
08:00		50	12		
08:15		54	7		
08:30		34	10		
08:45		65	10	203	39
09:00		56	9		
09:15		46	5		
09:30		36	8		
09:45		38	10	176	32
10:00		58	4		
10:15		43	7		
10:30		40	4		
10:45		48	5	189	20
11:00		41	10		
11:15		49	3		
11:30		41	3		
11:45		50	4	181	20
Total		1054	1245		
Percent		45.8%	54.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 38
Station ID: 38
RIVERS AVENUE NB ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	50		
12:15		1	34		
12:30		4	44		
12:45		1	60	12	188
01:00		1	49		
01:15		4	46		
01:30		4	54		
01:45		2	39	11	188
02:00		1	46		
02:15		0	53		
02:30		1	64		
02:45		0	71	2	234
03:00		1	50		
03:15		1	58		
03:30		2	22		
03:45		0	34	4	164
04:00		4	44		
04:15		1	32		
04:30		3	40		
04:45		2	34	10	150
05:00		11	44		
05:15		14	38		
05:30		6	38		
05:45		12	38	43	158
06:00		18	28		
06:15		21	26		
06:30		24	17		
06:45		29	17	92	88
07:00		34	18		
07:15		46	10		
07:30		50	16		
07:45		66	9	196	53
08:00		58	18		
08:15		37	14		
08:30		40	16		
08:45		45	12	180	60
09:00		38	9		
09:15		49	10		
09:30		38	10		
09:45		41	7	166	36
10:00		43	7		
10:15		54	4		
10:30		24	1		
10:45		54	5	175	17
11:00		36	4		
11:15		35	5		
11:30		42	4		
11:45		38	4	151	17
Total		1042	1353		
Percent		43.5%	56.5%		
Grand Total		2096	2598		
Percent		44.7%	55.3%		
ADT		ADT 2,347		AADT 2,347	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 39
Station ID: 39
RIVERS AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		7	92		
12:15		6	102		
12:30		10	114		
12:45		3	87	26	395
01:00		1	110		
01:15		2	102		
01:30		7	82		
01:45		4	100	14	394
02:00		2	98		
02:15		5	94		
02:30		3	107		
02:45		4	106	14	405
03:00		2	110		
03:15		1	91		
03:30		1	92		
03:45		12	94	16	387
04:00		1	90		
04:15		8	102		
04:30		4	99		
04:45		6	103	19	394
05:00		8	140		
05:15		16	105		
05:30		30	122		
05:45		44	81	98	448
06:00		49	79		
06:15		62	79		
06:30		124	43		
06:45		151	40	386	241
07:00		170	38		
07:15		213	50		
07:30		156	36		
07:45		173	38	712	162
08:00		192	38		
08:15		145	24		
08:30		157	30		
08:45		155	18	649	110
09:00		147	20		
09:15		108	21		
09:30		159	32		
09:45		158	16	572	89
10:00		149	20		
10:15		100	16		
10:30		96	8		
10:45		86	17	431	61
11:00		86	13		
11:15		86	6		
11:30		86	8		
11:45		114	3	372	30
Total		3309	3116		
Percent		51.5%	48.5%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 39
Station ID: 39
RIVERS AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	112		
12:15		7	100		
12:30		5	99		
12:45		0	124	22	435
01:00		1	118		
01:15		8	106		
01:30		8	106		
01:45		4	96	21	426
02:00		5	112		
02:15		2	126		
02:30		4	123		
02:45		1	132	12	493
03:00		1	131		
03:15		2	109		
03:30		4	79		
03:45		5	88	12	407
04:00		4	96		
04:15		4	108		
04:30		10	91		
04:45		11	94	29	389
05:00		18	108		
05:15		14	126		
05:30		25	115		
05:45		28	107	85	456
06:00		52	78		
06:15		62	60		
06:30		118	58		
06:45		110	62	342	258
07:00		156	47		
07:15		188	35		
07:30		188	42		
07:45		138	32	670	156
08:00		120	50		
08:15		136	40		
08:30		132	39		
08:45		112	30	500	159
09:00		92	32		
09:15		84	27		
09:30		80	22		
09:45		86	24	342	105
10:00		82	20		
10:15		100	13		
10:30		74	6		
10:45		114	16	370	55
11:00		74	12		
11:15		92	8		
11:30		102	6		
11:45		112	11	380	37
Total		2785	3376		
Percent		45.2%	54.8%		
Grand Total		6094	6492		
Percent		48.4%	51.6%		
ADT		ADT 6,293		AADT 6,293	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 40
Station ID: 40
I-526 WB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	60		
12:15		12	72		
12:30		4	72		
12:45		5	74	27	278
01:00		0	60		
01:15		3	52		
01:30		3	66		
01:45		4	56	10	234
02:00		1	66		
02:15		3	57		
02:30		3	76		
02:45		0	82	7	281
03:00		2	64		
03:15		6	92		
03:30		2	82		
03:45		4	82	14	320
04:00		3	80		
04:15		1	97		
04:30		2	80		
04:45		6	81	12	338
05:00		3	87		
05:15		10	108		
05:30		6	87		
05:45		10	102	29	384
06:00		16	84		
06:15		17	90		
06:30		28	64		
06:45		40	65	101	303
07:00		40	52		
07:15		48	50		
07:30		56	40		
07:45		72	41	216	183
08:00		64	24		
08:15		88	24		
08:30		78	24		
08:45		44	24	274	96
09:00		49	22		
09:15		57	20		
09:30		48	20		
09:45		42	14	196	76
10:00		48	13		
10:15		54	12		
10:30		58	12		
10:45		42	22	202	59
11:00		52	6		
11:15		78	7		
11:30		56	8		
11:45		83	8	269	29
Total		1357	2581		
Percent		34.5%	65.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 40
Station ID: 40
I-526 WB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	76		
12:15		3	62		
12:30		10	57		
12:45		13	55	36	250
01:00		3	46		
01:15		4	52		
01:30		3	58		
01:45		1	60	11	216
02:00		7	71		
02:15		6	100		
02:30		4	61		
02:45		4	58	21	290
03:00		6	64		
03:15		11	69		
03:30		1	74		
03:45		4	58	22	265
04:00		2	58		
04:15		1	66		
04:30		7	98		
04:45		12	90	22	312
05:00		4	95		
05:15		4	93		
05:30		10	106		
05:45		12	108	30	402
06:00		14	92		
06:15		18	84		
06:30		35	73		
06:45		40	60	107	309
07:00		31	46		
07:15		46	54		
07:30		53	43		
07:45		59	34	189	177
08:00		59	37		
08:15		70	32		
08:30		48	22		
08:45		83	26	260	117
09:00		70	16		
09:15		58	30		
09:30		38	20		
09:45		38	15	204	81
10:00		38	8		
10:15		59	16		
10:30		50	15		
10:45		59	20	206	59
11:00		66	20		
11:15		67	4		
11:30		74	10		
11:45		64	8	271	42
Total		1379	2520		
Percent		35.4%	64.6%		
Grand Total		2736	5101		
Percent		34.9%	65.1%		
ADT		ADT 3,918		AADT 3,918	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 41
Station ID: 41
I-526 WB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		0	29		
12:15		2	12		
12:30		0	8		
12:45		0	12	2	61
01:00		0	19		
01:15		0	12		
01:30		0	12		
01:45		0	12	0	55
02:00		0	14		
02:15		0	14		
02:30		0	18		
02:45		0	23	0	69
03:00		0	19		
03:15		0	2		
03:30		0	4		
03:45		0	9	0	34
04:00		0	7		
04:15		0	4		
04:30		0	4		
04:45		0	1	0	16
05:00		0	7		
05:15		0	1		
05:30		0	2		
05:45		4	2	4	12
06:00		1	2		
06:15		2	0		
06:30		6	0		
06:45		1	0	10	2
07:00		6	0		
07:15		16	0		
07:30		3	0		
07:45		29	0	54	0
08:00		24	0		
08:15		9	0		
08:30		14	0		
08:45		20	0	67	0
09:00		18	0		
09:15		19	0		
09:30		18	0		
09:45		22	0	77	0
10:00		24	0		
10:15		12	0		
10:30		5	0		
10:45		10	0	51	0
11:00		14	0		
11:15		14	0		
11:30		17	0		
11:45		18	0	63	0
Total		328	249		
Percent		56.8%	43.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 41
Station ID: 41
I-526 WB OFF RAMP TO RIVERS AVENUE SB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		0	28		
12:15		0	14		
12:30		0	10		
12:45		0	6	0	58
01:00		0	10		
01:15		0	28		
01:30		0	10		
01:45		0	14	0	62
02:00		0	27		
02:15		0	8		
02:30		0	17		
02:45		0	22	0	74
03:00		0	20		
03:15		0	6		
03:30		0	12		
03:45		0	6	0	44
04:00		0	2		
04:15		0	6		
04:30		0	12		
04:45		0	0	0	20
05:00		0	0		
05:15		0	0		
05:30		0	0		
05:45		0	0	0	0
06:00		4	0		
06:15		2	0		
06:30		5	0		
06:45		10	0	21	0
07:00		7	0		
07:15		12	1		
07:30		4	0		
07:45		6	1	29	2
08:00		6	0		
08:15		18	0		
08:30		20	0		
08:45		12	0	56	0
09:00		28	0		
09:15		17	0		
09:30		6	0		
09:45		6	0	57	0
10:00		6	0		
10:15		20	0		
10:30		20	3		
10:45		8	0	54	3
11:00		14	0		
11:15		17	0		
11:30		25	0		
11:45		18	0	74	0
Total		291	263		
Percent		52.5%	47.5%		
Grand Total		619	512		
Percent		54.7%	45.3%		
ADT		ADT 566		AADT 566	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 42
Station ID: 42
RIVERS AVENUE SB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	78		
12:15		9	88		
12:30		12	75		
12:45		7	86	34	327
01:00		7	64		
01:15		8	63		
01:30		4	84		
01:45		8	84	27	295
02:00		4	73		
02:15		6	66		
02:30		3	83		
02:45		4	66	17	288
03:00		1	74		
03:15		2	84		
03:30		6	66		
03:45		1	70	10	294
04:00		12	76		
04:15		6	63		
04:30		3	80		
04:45		3	68	24	287
05:00		6	78		
05:15		7	64		
05:30		18	45		
05:45		9	48	40	235
06:00		36	42		
06:15		64	64		
06:30		100	52		
06:45		174	55	374	213
07:00		241	54		
07:15		230	60		
07:30		210	32		
07:45		237	38	918	184
08:00		218	44		
08:15		218	45		
08:30		245	38		
08:45		198	40	879	167
09:00		204	26		
09:15		150	26		
09:30		148	24		
09:45		112	28	614	104
10:00		87	17		
10:15		70	16		
10:30		80	14		
10:45		62	18	299	65
11:00		81	5		
11:15		72	12		
11:30		84	14		
11:45		67	7	304	38
Total		3540	2497		
Percent		58.6%	41.4%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 42
Station ID: 42
RIVERS AVENUE SB ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	78		
12:15		5	76		
12:30		4	62		
12:45		12	74	30	290
01:00		7	78		
01:15		4	70		
01:30		3	80		
01:45		6	89	20	317
02:00		4	67		
02:15		10	83		
02:30		1	80		
02:45		2	66	17	296
03:00		1	62		
03:15		4	80		
03:30		10	82		
03:45		1	78	16	302
04:00		4	69		
04:15		2	76		
04:30		7	72		
04:45		14	63	27	280
05:00		6	74		
05:15		10	68		
05:30		12	60		
05:45		16	61	44	263
06:00		37	58		
06:15		55	58		
06:30		104	42		
06:45		102	52	298	210
07:00		123	50		
07:15		166	48		
07:30		154	64		
07:45		177	46	620	208
08:00		180	39		
08:15		142	42		
08:30		109	32		
08:45		100	49	531	162
09:00		74	40		
09:15		56	21		
09:30		56	34		
09:45		86	25	272	120
10:00		52	16		
10:15		46	26		
10:30		56	18		
10:45		48	8	202	68
11:00		68	20		
11:15		80	12		
11:30		63	13		
11:45		72	11	283	56
Total		2360	2572		
Percent		47.9%	52.1%		
Grand Total		5900	5069		
Percent		53.8%	46.2%		
ADT		ADT 5,484		AADT 5,484	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 43
Station ID: 43
RIVERS AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		23	128		
12:15		12	104		
12:30		22	104		
12:45		20	134	77	470
01:00		13	89		
01:15		10	100		
01:30		10	106		
01:45		12	117	45	412
02:00		10	116		
02:15		12	109		
02:30		6	130		
02:45		6	108	34	463
03:00		4	120		
03:15		2	130		
03:30		10	112		
03:45		3	105	19	467
04:00		14	124		
04:15		12	104		
04:30		10	126		
04:45		12	112	48	466
05:00		9	131		
05:15		19	96		
05:30		26	90		
05:45		24	76	78	393
06:00		52	86		
06:15		87	97		
06:30		140	78		
06:45		229	88	508	349
07:00		252	98		
07:15		257	80		
07:30		235	62		
07:45		257	76	1001	316
08:00		236	62		
08:15		273	77		
08:30		248	59		
08:45		226	66	983	264
09:00		224	42		
09:15		168	42		
09:30		168	48		
09:45		136	44	696	176
10:00		109	35		
10:15		118	38		
10:30		111	31		
10:45		94	26	432	130
11:00		116	23		
11:15		96	23		
11:30		128	23		
11:45		82	18	422	87
Total		4343	3993		
Percent		52.1%	47.9%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 43
Station ID: 43
RIVERS AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	07-May-15 Thu	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		15	120		
12:15		13	108		
12:30		14	104		
12:45		22	110	64	442
01:00		15	110		
01:15		8	105		
01:30		7	100		
01:45		18	124	48	439
02:00		12	108		
02:15		15	120		
02:30		6	106		
02:45		4	122	37	456
03:00		4	126		
03:15		4	112		
03:30		14	102		
03:45		5	132	27	472
04:00		9	117		
04:15		5	117		
04:30		14	124		
04:45		18	99	46	457
05:00		14	126		
05:15		12	116		
05:30		27	82		
05:45		32	74	85	398
06:00		54	102		
06:15		82	87		
06:30		134	80		
06:45		130	66	400	335
07:00		172	102		
07:15		194	79		
07:30		192	110		
07:45		220	77	778	368
08:00		200	66		
08:15		167	62		
08:30		131	62		
08:45		152	67	650	257
09:00		110	62		
09:15		89	38		
09:30		89	60		
09:45		120	48	408	208
10:00		82	30		
10:15		63	40		
10:30		94	34		
10:45		88	26	327	130
11:00		102	28		
11:15		122	31		
11:30		95	22		
11:45		134	22	453	103
Total		3323	4065		
Percent		45.0%	55.0%		
Grand Total		7666	8058		
Percent		48.8%	51.2%		
ADT		ADT 7,862		AADT 7,862	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 44
Station ID: 44
I-526 EB OFF RAMP TO N. RHETT AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		28	106		
12:15		17	120		
12:30		32	150		
12:45		14	134	91	510
01:00		10	136		
01:15		10	138		
01:30		7	128		
01:45		15	98	42	500
02:00		13	142		
02:15		10	120		
02:30		10	126		
02:45		2	131	35	519
03:00		20	124		
03:15		14	132		
03:30		18	164		
03:45		15	140	67	560
04:00		13	144		
04:15		9	126		
04:30		20	120		
04:45		30	122	72	512
05:00		38	135		
05:15		48	138		
05:30		75	160		
05:45		100	161	261	594
06:00		110	142		
06:15		134	136		
06:30		127	98		
06:45		131	90	502	466
07:00		114	112		
07:15		102	124		
07:30		98	83		
07:45		76	99	390	418
08:00		72	92		
08:15		80	88		
08:30		68	88		
08:45		86	62	306	330
09:00		94	72		
09:15		94	63		
09:30		100	72		
09:45		124	60	412	267
10:00		89	50		
10:15		78	48		
10:30		76	44		
10:45		98	38	341	180
11:00		80	52		
11:15		116	46		
11:30		100	39		
11:45		140	30	436	167
Total		2955	5023		
Percent		37.0%	63.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 44
Station ID: 44
I-526 EB OFF RAMP TO N. RHETT AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		35	124		
12:15		26	130		
12:30		17	130		
12:45		14	111	92	495
01:00		22	137		
01:15		15	126		
01:30		12	110		
01:45		12	96	61	469
02:00		16	128		
02:15		10	112		
02:30		9	126		
02:45		8	116	43	482
03:00		15	114		
03:15		6	114		
03:30		6	137		
03:45		15	148	42	513
04:00		15	129		
04:15		11	121		
04:30		20	154		
04:45		28	136	74	540
05:00		38	101		
05:15		56	122		
05:30		84	106		
05:45		100	96	278	425
06:00		110	98		
06:15		121	124		
06:30		148	116		
06:45		144	115	523	453
07:00		144	114		
07:15		112	107		
07:30		66	110		
07:45		70	91	392	422
08:00		46	94		
08:15		84	102		
08:30		60	90		
08:45		88	78	278	364
09:00		66	60		
09:15		96	60		
09:30		104	49		
09:45		102	62	368	231
10:00		104	50		
10:15		80	49		
10:30		100	36		
10:45		98	34	382	169
11:00		106	38		
11:15		90	46		
11:30		134	30		
11:45		128	36	458	150
Total		2991	4713		
Percent		38.8%	61.2%		
Grand Total		5946	9736		
Percent		37.9%	62.1%		
ADT		ADT 7,841		AADT 7,841	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 45
Station ID: 45
N. RHETT AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	12-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		*	14		
12:15		*	16		
12:30		*	12		
12:45		*	10	0	52
01:00		*	11		
01:15		*	12		
01:30		*	8		
01:45		*	9	0	40
02:00		*	15		
02:15		*	4		
02:30		*	4		
02:45		*	0	0	23
03:00		*	4		
03:15		*	15		
03:30		*	14		
03:45		*	8	0	41
04:00		*	18		
04:15		*	30		
04:30		*	34		
04:45		*	37	0	119
05:00		*	54		
05:15		*	63		
05:30		*	108		
05:45		*	139	0	364
06:00		*	150		
06:15		*	159		
06:30		*	274		
06:45		*	290	0	873
07:00		*	305		
07:15		*	336		
07:30		*	352		
07:45		*	350	0	1343
08:00		*	367		
08:15		*	360		
08:30		*	354		
08:45		*	347	0	1428
09:00		*	274		
09:15		*	288		
09:30		*	266		
09:45		*	284	0	1112
10:00		*	258		
10:15		*	234		
10:30		*	180		
10:45		*	157	0	829
11:00		*	141		
11:15		*	174		
11:30		*	202		
11:45		*	168	0	685
Total		0	6909		
Percent		0.0%	100.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 45
Station ID: 45
N. RHETT AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	13-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		182	14		
12:15		162	6		
12:30		190	17		
12:45		160	11	694	48
01:00		146	14		
01:15		173	6		
01:30		162	4		
01:45		196	4	677	28
02:00		142	6		
02:15		173	14		
02:30		167	10		
02:45		191	8	673	38
03:00		244	6		
03:15		273	5		
03:30		282	22		
03:45		320	12	1119	45
04:00		256	25		
04:15		262	19		
04:30		262	22		
04:45		268	37	1048	103
05:00		259	50		
05:15		250	75		
05:30		214	104		
05:45		184	114	907	343
06:00		144	134		
06:15		114	156		
06:30		104	250		
06:45		94	324	456	864
07:00		72	326		
07:15		73	332		
07:30		70	316		
07:45		54	305	269	1279
08:00		43	318		
08:15		66	340		
08:30		33	286		
08:45		45	307	187	1251
09:00		40	244		
09:15		30	218		
09:30		42	207		
09:45		26	226	138	895
10:00		48	164		
10:15		28	146		
10:30		22	168		
10:45		22	170	120	648
11:00		20	158		
11:15		24	212		
11:30		16	160		
11:45		16	192	76	722
Total		6364	6264		
Percent		50.4%	49.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 45
Station ID: 45
N. RHETT AVENUE ON RAMP TO I-526 EB

Latitude: 0' 0.0000 Undefined

Start Time	14-May-15 Thu	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		188	*		
12:15		133	*		
12:30		160	*		
12:45		146	*	627	0
01:00		162	*		
01:15		160	*		
01:30		150	*		
01:45		182	*	654	0
02:00		178	*		
02:15		198	*		
02:30		172	*		
02:45		212	*	760	0
03:00		211	*		
03:15		286	*		
03:30		292	*		
03:45		248	*	1037	0
04:00		274	*		
04:15		230	*		
04:30		237	*		
04:45		236	*	977	0
05:00		262	*		
05:15		239	*		
05:30		262	*		
05:45		218	*	981	0
06:00		188	*		
06:15		140	*		
06:30		118	*		
06:45		110	*	556	0
07:00		88	*		
07:15		88	*		
07:30		54	*		
07:45		62	*	292	0
08:00		76	*		
08:15		68	*		
08:30		72	*		
08:45		53	*	269	0
09:00		42	*		
09:15		44	*		
09:30		53	*		
09:45		32	*	171	0
10:00		46	*		
10:15		26	*		
10:30		22	*		
10:45		35	*	129	0
11:00		20	*		
11:15		16	*		
11:30		22	*		
11:45		13	*	71	0
Total		6524	0		
Percent		100.0%	0.0%		
Grand Total		12888	13173		
Percent		49.5%	50.5%		
ADT		ADT 13,030		AADT 13,030	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 46
Station ID: 46
I-526 WB OFF RAMP TO N. RHETT AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		23	181		
12:15		20	184		
12:30		24	180		
12:45		10	174	77	719
01:00		8	197		
01:15		18	186		
01:30		8	175		
01:45		8	172	42	730
02:00		12	174		
02:15		8	215		
02:30		8	180		
02:45		5	234	33	803
03:00		1	236		
03:15		15	268		
03:30		10	264		
03:45		6	271	32	1039
04:00		10	272		
04:15		17	284		
04:30		22	304		
04:45		20	260	69	1120
05:00		30	308		
05:15		42	290		
05:30		60	322		
05:45		98	302	230	1222
06:00		108	262		
06:15		146	244		
06:30		158	203		
06:45		220	142	632	851
07:00		224	124		
07:15		306	152		
07:30		294	140		
07:45		308	130	1132	546
08:00		283	78		
08:15		248	80		
08:30		167	81		
08:45		170	74	868	313
09:00		120	52		
09:15		161	68		
09:30		174	68		
09:45		164	57	619	245
10:00		134	32		
10:15		158	42		
10:30		148	48		
10:45		147	48	587	170
11:00		132	30		
11:15		156	36		
11:30		132	40		
11:45		172	21	592	127
Total		4913	7885		
Percent		38.4%	61.6%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 46
Station ID: 46
I-526 WB OFF RAMP TO N. RHETT AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		30	178		
12:15		20	176		
12:30		20	169		
12:45		10	147	80	670
01:00		13	189		
01:15		11	143		
01:30		10	174		
01:45		7	167	41	673
02:00		10	214		
02:15		19	213		
02:30		14	168		
02:45		10	226	53	821
03:00		8	242		
03:15		3	274		
03:30		11	212		
03:45		8	168	30	896
04:00		12	178		
04:15		10	262		
04:30		13	312		
04:45		30	284	65	1036
05:00		32	316		
05:15		45	335		
05:30		61	310		
05:45		89	265	227	1226
06:00		106	261		
06:15		139	284		
06:30		159	153		
06:45		240	156	644	854
07:00		257	147		
07:15		280	156		
07:30		314	120		
07:45		297	132	1148	555
08:00		220	98		
08:15		194	88		
08:30		222	100		
08:45		184	68	820	354
09:00		192	58		
09:15		188	68		
09:30		152	66		
09:45		187	49	719	241
10:00		166	52		
10:15		171	45		
10:30		172	50		
10:45		172	62	681	209
11:00		146	46		
11:15		212	34		
11:30		177	18		
11:45		146	27	681	125
Total		5189	7660		
Percent		40.4%	59.6%		
Grand Total		10102	15545		
Percent		39.4%	60.6%		
ADT		ADT 12,824		AADT 12,824	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 47
Station ID: 47
I-526 WB OFF RAMP TO VIRGINIA AVENUE
VIA I-526 EB
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	76		
12:15		2	61		
12:30		16	46		
12:45		3	66	29	249
01:00		4	63		
01:15		4	54		
01:30		1	62		
01:45		4	66	13	245
02:00		10	32		
02:15		0	66		
02:30		4	50		
02:45		0	36	14	184
03:00		0	78		
03:15		9	76		
03:30		4	74		
03:45		3	121	16	349
04:00		5	58		
04:15		10	76		
04:30		6	80		
04:45		8	84	29	298
05:00		14	74		
05:15		8	64		
05:30		14	58		
05:45		28	42	64	238
06:00		24	36		
06:15		14	18		
06:30		44	20		
06:45		57	12	139	86
07:00		46	8		
07:15		73	24		
07:30		60	12		
07:45		72	20	251	64
08:00		61	5		
08:15		91	18		
08:30		58	4		
08:45		54	14	264	41
09:00		40	12		
09:15		70	3		
09:30		60	10		
09:45		78	3	248	28
10:00		56	8		
10:15		73	8		
10:30		62	4		
10:45		52	8	243	28
11:00		42	1		
11:15		68	16		
11:30		54	2		
11:45		58	4	222	23
Total		1532	1833		
Percent		45.5%	54.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 47
Station ID: 47
I-526 WB OFF RAMP TO VIRGINIA AVENUE
VIA I-526 EB
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	58		
12:15		0	28		
12:30		18	60		
12:45		0	40	24	186
01:00		0	64		
01:15		12	49		
01:30		0	42		
01:45		1	60	13	215
02:00		4	82		
02:15		14	76		
02:30		4	48		
02:45		6	63	28	269
03:00		6	68		
03:15		0	78		
03:30		4	76		
03:45		1	68	11	290
04:00		10	83		
04:15		4	84		
04:30		4	78		
04:45		6	55	24	300
05:00		15	70		
05:15		12	74		
05:30		12	48		
05:45		26	58	65	250
06:00		24	32		
06:15		18	32		
06:30		41	18		
06:45		69	27	152	109
07:00		61	22		
07:15		58	16		
07:30		77	18		
07:45		77	10	273	66
08:00		74	18		
08:15		46	6		
08:30		78	10		
08:45		54	7	252	41
09:00		69	4		
09:15		61	10		
09:30		61	12		
09:45		100	11	291	37
10:00		38	12		
10:15		46	7		
10:30		52	4		
10:45		62	16	198	39
11:00		71	10		
11:15		91	4		
11:30		54	4		
11:45		58	2	274	20
Total		1605	1822		
Percent		46.8%	53.2%		
Grand Total		3137	3655		
Percent		46.2%	53.8%		
ADT		ADT 3,396		AADT 3,396	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 48
Station ID: 48
N. RHETT AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		20	151		
12:15		15	149		
12:30		16	128		
12:45		13	124	64	552
01:00		7	118		
01:15		10	128		
01:30		18	150		
01:45		10	141	45	537
02:00		15	132		
02:15		3	166		
02:30		10	182		
02:45		10	174	38	654
03:00		12	183		
03:15		18	204		
03:30		16	199		
03:45		24	180	70	766
04:00		15	156		
04:15		26	171		
04:30		28	179		
04:45		44	127	113	633
05:00		40	132		
05:15		46	158		
05:30		65	146		
05:45		102	123	253	559
06:00		100	124		
06:15		172	136		
06:30		182	138		
06:45		203	86	657	484
07:00		182	108		
07:15		184	90		
07:30		151	80		
07:45		120	72	637	350
08:00		130	53		
08:15		166	71		
08:30		162	62		
08:45		167	78	625	264
09:00		186	78		
09:15		157	46		
09:30		176	75		
09:45		156	56	675	255
10:00		126	43		
10:15		166	23		
10:30		142	31		
10:45		121	35	555	132
11:00		164	37		
11:15		160	23		
11:30		164	27		
11:45		164	22	652	109
Total		4384	5295		
Percent		45.3%	54.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 48
Station ID: 48
N. RHETT AVENUE ON RAMP TO I-526 WB

Latitude: 0' 0.0000 Undefined

Start Time	07-May-15 Thu	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	145		
12:15		14	126		
12:30		17	127		
12:45		18	145	73	543
01:00		12	124		
01:15		22	132		
01:30		11	150		
01:45		12	139	57	545
02:00		18	114		
02:15		12	174		
02:30		8	162		
02:45		20	158	58	608
03:00		8	166		
03:15		22	152		
03:30		24	172		
03:45		10	152	64	642
04:00		20	189		
04:15		25	180		
04:30		41	148		
04:45		40	152	126	669
05:00		36	151		
05:15		56	112		
05:30		76	141		
05:45		77	106	245	510
06:00		107	116		
06:15		156	116		
06:30		209	105		
06:45		197	96	669	433
07:00		196	102		
07:15		206	86		
07:30		157	92		
07:45		128	92	687	372
08:00		116	87		
08:15		136	72		
08:30		144	65		
08:45		184	70	580	294
09:00		149	58		
09:15		132	68		
09:30		162	53		
09:45		144	56	587	235
10:00		114	42		
10:15		144	34		
10:30		140	44		
10:45		144	26	542	146
11:00		164	28		
11:15		152	24		
11:30		151	22		
11:45		166	18	633	92
Total		4321	5089		
Percent		45.9%	54.1%		
Grand Total		8705	10384		
Percent		45.6%	54.4%		
ADT		ADT 9,544		AADT 9,544	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 49
Station ID: 49
I-26 EB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	72		
12:15		22	93		
12:30		13	76		
12:45		12	78	51	319
01:00		9	81		
01:15		10	72		
01:30		17	76		
01:45		6	106	42	335
02:00		5	79		
02:15		9	86		
02:30		3	112		
02:45		8	101	25	378
03:00		4	90		
03:15		5	95		
03:30		8	92		
03:45		10	101	27	378
04:00		6	78		
04:15		11	63		
04:30		17	107		
04:45		19	83	53	331
05:00		38	104		
05:15		34	101		
05:30		52	85		
05:45		103	77	227	367
06:00		96	66		
06:15		158	83		
06:30		92	60		
06:45		58	54	404	263
07:00		74	56		
07:15		58	48		
07:30		44	44		
07:45		50	46	226	194
08:00		46	45		
08:15		52	42		
08:30		49	40		
08:45		58	52	205	179
09:00		80	37		
09:15		82	48		
09:30		102	50		
09:45		88	51	352	186
10:00		88	49		
10:15		96	36		
10:30		64	25		
10:45		70	44	318	154
11:00		88	27		
11:15		62	18		
11:30		81	22		
11:45		69	19	300	86
Total		2230	3170		
Percent		41.3%	58.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 49
Station ID: 49
I-26 EB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	104		
12:15		20	92		
12:30		17	89		
12:45		13	80	64	365
01:00		13	86		
01:15		9	92		
01:30		7	80		
01:45		6	81	35	339
02:00		6	72		
02:15		9	92		
02:30		6	96		
02:45		11	102	32	362
03:00		5	87		
03:15		6	92		
03:30		6	83		
03:45		7	90	24	352
04:00		16	74		
04:15		12	92		
04:30		14	100		
04:45		20	102	62	368
05:00		24	90		
05:15		40	92		
05:30		65	92		
05:45		103	82	232	356
06:00		99	68		
06:15		149	76		
06:30		156	75		
06:45		140	62	544	281
07:00		136	66		
07:15		118	66		
07:30		122	64		
07:45		131	63	507	259
08:00		108	56		
08:15		115	52		
08:30		108	55		
08:45		111	41	442	204
09:00		106	40		
09:15		60	50		
09:30		79	38		
09:45		68	30	313	158
10:00		64	39		
10:15		70	36		
10:30		66	32		
10:45		90	32	290	139
11:00		54	30		
11:15		72	29		
11:30		68	24		
11:45		71	25	265	108
Total		2810	3291		
Percent		46.1%	53.9%		
Grand Total		5040	6461		
Percent		43.8%	56.2%		
ADT		ADT 5,750		AADT 5,750	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 50
Station ID: 50
DORCHESTER ROAD ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		16	106		
12:15		12	84		
12:30		9	91		
12:45		10	94	47	375
01:00		4	80		
01:15		8	97		
01:30		19	111		
01:45		8	96	39	384
02:00		6	98		
02:15		16	106		
02:30		5	116		
02:45		5	128	32	448
03:00		4	122		
03:15		7	112		
03:30		7	128		
03:45		9	119	27	481
04:00		5	134		
04:15		10	135		
04:30		14	122		
04:45		16	126	45	517
05:00		19	141		
05:15		23	157		
05:30		40	117		
05:45		42	94	124	509
06:00		64	92		
06:15		98	92		
06:30		122	96		
06:45		110	66	394	346
07:00		108	60		
07:15		150	54		
07:30		179	39		
07:45		186	56	623	209
08:00		170	48		
08:15		152	68		
08:30		166	36		
08:45		160	40	648	192
09:00		118	36		
09:15		108	29		
09:30		124	35		
09:45		138	29	488	129
10:00		113	36		
10:15		122	40		
10:30		123	30		
10:45		104	33	462	139
11:00		94	24		
11:15		94	28		
11:30		90	26		
11:45		106	16	384	94
Total		3313	3823		
Percent		46.4%	53.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 50
Station ID: 50
DORCHESTER ROAD ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	87		
12:15		7	102		
12:30		8	96		
12:45		11	82	44	367
01:00		8	104		
01:15		3	102		
01:30		13	77		
01:45		16	106	40	389
02:00		14	91		
02:15		7	93		
02:30		4	125		
02:45		4	126	29	435
03:00		13	108		
03:15		10	124		
03:30		12	116		
03:45		8	118	43	466
04:00		10	124		
04:15		7	120		
04:30		12	104		
04:45		13	151	42	499
05:00		13	146		
05:15		26	153		
05:30		38	103		
05:45		38	109	115	511
06:00		64	92		
06:15		92	94		
06:30		120	91		
06:45		134	76	410	353
07:00		114	56		
07:15		134	58		
07:30		176	55		
07:45		192	47	616	216
08:00		170	54		
08:15		151	71		
08:30		143	55		
08:45		140	50	604	230
09:00		117	32		
09:15		126	51		
09:30		99	43		
09:45		102	32	444	158
10:00		94	38		
10:15		102	38		
10:30		93	29		
10:45		102	27	391	132
11:00		74	33		
11:15		98	35		
11:30		95	18		
11:45		99	20	366	106
Total		3144	3862		
Percent		44.9%	55.1%		
Grand Total		6457	7685		
Percent		45.7%	54.3%		
ADT		ADT 7,071		AADT 7,071	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 51
Station ID: 51
I-26 WB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	75		
12:15		18	70		
12:30		11	84		
12:45		12	76	55	305
01:00		9	79		
01:15		9	62		
01:30		7	72		
01:45		4	72	29	285
02:00		5	80		
02:15		10	94		
02:30		14	90		
02:45		8	62	37	326
03:00		8	96		
03:15		2	123		
03:30		0	106		
03:45		4	108	14	433
04:00		4	108		
04:15		4	118		
04:30		3	128		
04:45		4	106	15	460
05:00		5	104		
05:15		10	148		
05:30		15	144		
05:45		13	171	43	567
06:00		22	84		
06:15		30	80		
06:30		44	88		
06:45		64	76	160	328
07:00		55	50		
07:15		64	54		
07:30		80	54		
07:45		89	51	288	209
08:00		96	43		
08:15		80	50		
08:30		87	49		
08:45		70	33	333	175
09:00		60	42		
09:15		64	36		
09:30		44	33		
09:45		54	30	222	141
10:00		38	22		
10:15		58	25		
10:30		50	26		
10:45		68	37	214	110
11:00		65	20		
11:15		56	35		
11:30		74	27		
11:45		80	21	275	103
Total		1685	3442		
Percent		32.9%	67.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 51
Station ID: 51
I-26 WB OFF RAMP TO DORCHESTER ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		23	77		
12:15		21	83		
12:30		11	82		
12:45		10	64	65	306
01:00		8	64		
01:15		8	59		
01:30		12	76		
01:45		10	80	38	279
02:00		4	73		
02:15		13	78		
02:30		13	92		
02:45		8	83	38	326
03:00		5	118		
03:15		6	119		
03:30		5	122		
03:45		2	107	18	466
04:00		5	132		
04:15		5	106		
04:30		8	103		
04:45		4	122	22	463
05:00		3	118		
05:15		10	120		
05:30		12	99		
05:45		13	92	38	429
06:00		18	84		
06:15		30	86		
06:30		43	72		
06:45		64	65	155	307
07:00		59	61		
07:15		64	64		
07:30		90	52		
07:45		106	53	319	230
08:00		100	56		
08:15		80	47		
08:30		88	60		
08:45		80	36	348	199
09:00		59	34		
09:15		66	43		
09:30		71	37		
09:45		62	40	258	154
10:00		56	44		
10:15		72	29		
10:30		48	24		
10:45		66	39	242	136
11:00		64	34		
11:15		61	27		
11:30		54	27		
11:45		79	21	258	109
Total		1799	3404		
Percent		34.6%	65.4%		
Grand Total		3484	6846		
Percent		33.7%	66.3%		
ADT		ADT 5,165		AADT 5,165	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 52
Station ID: 52
DORCHESTER ROAD ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		22	67		
12:15		22	60		
12:30		10	62		
12:45		14	56	68	245
01:00		15	67		
01:15		22	60		
01:30		42	71		
01:45		14	113	93	311
02:00		11	94		
02:15		8	92		
02:30		8	112		
02:45		8	107	35	405
03:00		6	80		
03:15		9	82		
03:30		4	130		
03:45		7	102	26	394
04:00		14	110		
04:15		13	108		
04:30		11	126		
04:45		24	94	62	438
05:00		14	120		
05:15		28	100		
05:30		26	82		
05:45		36	62	104	364
06:00		32	68		
06:15		44	64		
06:30		65	58		
06:45		50	49	191	239
07:00		42	72		
07:15		48	62		
07:30		32	43		
07:45		58	48	180	225
08:00		42	58		
08:15		51	38		
08:30		60	40		
08:45		41	32	194	168
09:00		38	39		
09:15		39	52		
09:30		54	40		
09:45		58	33	189	164
10:00		50	30		
10:15		50	38		
10:30		74	30		
10:45		66	18	240	116
11:00		48	34		
11:15		68	24		
11:30		72	22		
11:45		60	14	248	94
Total		1630	3163		
Percent		34.0%	66.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 52
Station ID: 52
DORCHESTER ROAD ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		31	95		
12:15		23	61		
12:30		14	57		
12:45		11	91	79	304
01:00		13	72		
01:15		12	72		
01:30		37	64		
01:45		16	84	78	292
02:00		22	90		
02:15		9	86		
02:30		13	91		
02:45		9	94	53	361
03:00		8	74		
03:15		2	104		
03:30		6	134		
03:45		3	132	19	444
04:00		10	132		
04:15		16	94		
04:30		24	102		
04:45		21	89	71	417
05:00		12	126		
05:15		22	101		
05:30		26	83		
05:45		34	86	94	396
06:00		32	80		
06:15		37	86		
06:30		52	66		
06:45		54	54	175	286
07:00		53	60		
07:15		44	64		
07:30		46	49		
07:45		66	48	209	221
08:00		44	58		
08:15		84	58		
08:30		64	57		
08:45		59	60	251	233
09:00		82	44		
09:15		60	42		
09:30		55	41		
09:45		61	46	258	173
10:00		68	32		
10:15		50	29		
10:30		54	30		
10:45		70	28	242	119
11:00		50	30		
11:15		73	22		
11:30		71	22		
11:45		58	19	252	93
Total		1781	3339		
Percent		34.8%	65.2%		
Grand Total		3411	6502		
Percent		34.4%	65.6%		
ADT		ADT 4,956		AADT 4,956	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 53
Station ID: 53
I-26 WB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		22	128		
12:15		21	144		
12:30		22	140		
12:45		14	146	79	558
01:00		16	144		
01:15		12	141		
01:30		12	127		
01:45		12	134	52	546
02:00		9	148		
02:15		14	141		
02:30		7	149		
02:45		6	150	36	588
03:00		8	158		
03:15		7	174		
03:30		12	170		
03:45		10	156	37	658
04:00		12	145		
04:15		20	171		
04:30		12	174		
04:45		14	192	58	682
05:00		18	194		
05:15		24	178		
05:30		36	157		
05:45		44	201	122	730
06:00		38	216		
06:15		50	156		
06:30		77	154		
06:45		76	188	241	714
07:00		125	154		
07:15		148	174		
07:30		176	151		
07:45		204	136	653	615
08:00		132	131		
08:15		126	109		
08:30		121	75		
08:45		113	84	492	399
09:00		96	72		
09:15		98	78		
09:30		101	62		
09:45		98	60	393	272
10:00		100	42		
10:15		110	44		
10:30		112	48		
10:45		139	51	461	185
11:00		114	42		
11:15		126	60		
11:30		155	35		
11:45		126	42	521	179
Total		3145	6126		
Percent		33.9%	66.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 53
Station ID: 53
I-26 WB OFF RAMP TO MONTAGUE AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		33	176		
12:15		25	148		
12:30		22	142		
12:45		14	144	94	610
01:00		22	154		
01:15		19	139		
01:30		10	124		
01:45		11	166	62	583
02:00		22	138		
02:15		10	138		
02:30		17	176		
02:45		6	184	55	636
03:00		4	146		
03:15		5	126		
03:30		6	170		
03:45		10	153	25	595
04:00		12	196		
04:15		20	196		
04:30		14	218		
04:45		24	230	70	840
05:00		20	166		
05:15		19	208		
05:30		36	177		
05:45		41	181	116	732
06:00		40	204		
06:15		68	203		
06:30		76	189		
06:45		97	151	281	747
07:00		106	162		
07:15		165	144		
07:30		202	120		
07:45		187	98	660	524
08:00		156	94		
08:15		148	107		
08:30		144	88		
08:45		126	85	574	374
09:00		125	65		
09:15		114	71		
09:30		111	65		
09:45		116	60	466	261
10:00		116	56		
10:15		120	51		
10:30		110	40		
10:45		126	43	472	190
11:00		114	41		
11:15		144	46		
11:30		133	40		
11:45		162	44	553	171
Total		3428	6263		
Percent		35.4%	64.6%		
Grand Total		6573	12389		
Percent		34.7%	65.3%		
ADT		ADT 9,481		AADT 9,481	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 54
Station ID: 54
I-26 WB OFF RAMP TO MALL DRIVE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	22		
12:15		0	18		
12:30		0	11		
12:45		2	16	3	67
01:00		1	16		
01:15		0	17		
01:30		1	16		
01:45		0	26	2	75
02:00		3	17		
02:15		0	9		
02:30		1	20		
02:45		1	24	5	70
03:00		1	14		
03:15		2	18		
03:30		0	14		
03:45		0	10	3	56
04:00		1	17		
04:15		0	14		
04:30		1	22		
04:45		0	28	2	81
05:00		3	18		
05:15		1	23		
05:30		2	16		
05:45		1	30	7	87
06:00		2	9		
06:15		7	13		
06:30		7	8		
06:45		19	12	35	42
07:00		16	7		
07:15		24	11		
07:30		27	7		
07:45		64	10	131	35
08:00		33	10		
08:15		58	3		
08:30		28	4		
08:45		30	2	149	19
09:00		24	4		
09:15		20	7		
09:30		18	7		
09:45		22	4	84	22
10:00		7	4		
10:15		18	4		
10:30		18	3		
10:45		15	1	58	12
11:00		12	1		
11:15		14	3		
11:30		15	0		
11:45		16	1	57	5
Total		536	571		
Percent		48.4%	51.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 54
Station ID: 54
I-26 WB OFF RAMP TO MALL DRIVE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	12		
12:15		1	20		
12:30		2	21		
12:45		2	27	6	80
01:00		1	18		
01:15		1	19		
01:30		1	19		
01:45		0	14	3	70
02:00		0	19		
02:15		3	24		
02:30		3	18		
02:45		0	13	6	74
03:00		0	12		
03:15		0	19		
03:30		0	19		
03:45		0	19	0	69
04:00		0	17		
04:15		1	10		
04:30		0	22		
04:45		0	23	1	72
05:00		2	31		
05:15		1	25		
05:30		0	23		
05:45		3	9	6	88
06:00		1	10		
06:15		5	15		
06:30		10	6		
06:45		15	16	31	47
07:00		20	9		
07:15		22	19		
07:30		27	8		
07:45		48	4	117	40
08:00		36	7		
08:15		41	4		
08:30		28	6		
08:45		24	3	129	20
09:00		19	5		
09:15		30	5		
09:30		20	6		
09:45		20	6	89	22
10:00		14	2		
10:15		18	4		
10:30		14	5		
10:45		15	2	61	13
11:00		12	3		
11:15		16	2		
11:30		18	0		
11:45		18	2	64	7
Total		513	602		
Percent		46.0%	54.0%		
Grand Total		1049	1173		
Percent		47.2%	52.8%		
ADT		ADT 1,111		AADT 1,111	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 55
Station ID: 55
MONTAGUE AVENUE ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	38		
12:15		10	28		
12:30		3	32		
12:45		2	30	25	128
01:00		4	30		
01:15		4	43		
01:30		0	32		
01:45		3	27	11	132
02:00		0	40		
02:15		4	50		
02:30		1	50		
02:45		1	31	6	171
03:00		2	54		
03:15		2	78		
03:30		2	60		
03:45		2	38	8	230
04:00		6	68		
04:15		4	54		
04:30		2	74		
04:45		2	68	14	264
05:00		2	122		
05:15		1	68		
05:30		5	60		
05:45		5	40	13	290
06:00		8	50		
06:15		5	48		
06:30		6	30		
06:45		11	24	30	152
07:00		19	45		
07:15		12	33		
07:30		16	24		
07:45		13	17	60	119
08:00		12	22		
08:15		17	20		
08:30		10	21		
08:45		15	20	54	83
09:00		19	82		
09:15		15	18		
09:30		20	14		
09:45		23	11	77	125
10:00		12	20		
10:15		16	8		
10:30		32	4		
10:45		28	10	88	42
11:00		30	31		
11:15		32	18		
11:30		42	5		
11:45		38	8	142	62
Total		528	1798		
Percent		22.7%	77.3%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 55
Station ID: 55
MONTAGUE AVENUE ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		5	46		
12:15		7	32		
12:30		2	38		
12:45		2	40	16	156
01:00		3	28		
01:15		5	34		
01:30		2	54		
01:45		1	32	11	148
02:00		1	46		
02:15		2	28		
02:30		3	36		
02:45		1	36	7	146
03:00		2	42		
03:15		1	62		
03:30		15	63		
03:45		8	63	26	230
04:00		7	76		
04:15		6	76		
04:30		9	88		
04:45		10	70	32	310
05:00		11	119		
05:15		7	74		
05:30		4	44		
05:45		2	31	24	268
06:00		11	50		
06:15		14	42		
06:30		8	28		
06:45		18	24	51	144
07:00		26	59		
07:15		20	24		
07:30		16	20		
07:45		21	20	83	123
08:00		22	22		
08:15		20	22		
08:30		22	12		
08:45		17	13	81	69
09:00		30	69		
09:15		15	22		
09:30		22	21		
09:45		28	16	95	128
10:00		24	22		
10:15		30	7		
10:30		21	4		
10:45		17	9	92	42
11:00		52	32		
11:15		36	15		
11:30		42	5		
11:45		44	6	174	58
Total		692	1822		
Percent		27.5%	72.5%		
Grand Total		1220	3620		
Percent		25.2%	74.8%		
ADT		ADT 2,420		AADT 2,420	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 56
Station ID: 56
MALL DRIVE ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		25	139		
12:15		18	146		
12:30		26	163		
12:45		17	158	86	606
01:00		16	144		
01:15		11	132		
01:30		18	161		
01:45		11	152	56	589
02:00		10	118		
02:15		7	132		
02:30		16	165		
02:45		1	136	34	551
03:00		10	186		
03:15		8	188		
03:30		11	226		
03:45		5	189	34	789
04:00		8	192		
04:15		14	222		
04:30		12	204		
04:45		36	156	70	774
05:00		17	209		
05:15		36	156		
05:30		28	166		
05:45		40	112	121	643
06:00		69	126		
06:15		74	104		
06:30		90	92		
06:45		60	94	293	416
07:00		75	99		
07:15		98	114		
07:30		121	103		
07:45		84	68	378	384
08:00		118	94		
08:15		124	69		
08:30		97	66		
08:45		105	74	444	303
09:00		114	66		
09:15		106	82		
09:30		108	159		
09:45		117	74	445	381
10:00		102	47		
10:15		122	39		
10:30		128	28		
10:45		173	28	525	142
11:00		138	55		
11:15		148	84		
11:30		114	34		
11:45		162	28	562	201
Total		3048	5779		
Percent		34.5%	65.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 56
Station ID: 56
MALL DRIVE ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	145		
12:15		11	136		
12:30		15	148		
12:45		13	168	52	597
01:00		13	166		
01:15		8	154		
01:30		8	151		
01:45		11	153	40	624
02:00		16	142		
02:15		5	160		
02:30		10	168		
02:45		8	198	39	668
03:00		22	198		
03:15		8	195		
03:30		3	238		
03:45		12	178	45	809
04:00		12	209		
04:15		10	204		
04:30		24	202		
04:45		14	197	60	812
05:00		17	202		
05:15		22	166		
05:30		41	156		
05:45		32	132	112	656
06:00		50	156		
06:15		68	114		
06:30		79	110		
06:45		100	94	297	474
07:00		104	108		
07:15		152	82		
07:30		139	87		
07:45		156	80	551	357
08:00		160	67		
08:15		138	112		
08:30		108	114		
08:45		129	106	535	399
09:00		125	87		
09:15		117	72		
09:30		117	66		
09:45		138	66	497	291
10:00		117	55		
10:15		156	47		
10:30		157	34		
10:45		171	21	601	157
11:00		162	30		
11:15		134	44		
11:30		166	82		
11:45		166	67	628	223
Total		3457	6067		
Percent		36.3%	63.7%		
Grand Total		6505	11846		
Percent		35.4%	64.6%		
ADT		ADT 9,176		AADT 9,176	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 57
Station ID: 57
I-26 EB OFF RAMP TO MONTAGUE AVENUE WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		11	98		
12:15		5	88		
12:30		5	92		
12:45		8	104	29	382
01:00		1	77		
01:15		4	86		
01:30		8	76		
01:45		3	90	16	329
02:00		2	62		
02:15		0	76		
02:30		6	60		
02:45		1	80	9	278
03:00		2	48		
03:15		4	69		
03:30		2	56		
03:45		2	59	10	232
04:00		4	72		
04:15		2	86		
04:30		7	80		
04:45		7	76	20	314
05:00		4	70		
05:15		14	92		
05:30		9	92		
05:45		18	68	45	322
06:00		21	78		
06:15		23	89		
06:30		20	78		
06:45		17	60	81	305
07:00		20	62		
07:15		21	56		
07:30		26	50		
07:45		13	59	80	227
08:00		20	48		
08:15		31	36		
08:30		36	41		
08:45		29	34	116	159
09:00		42	18		
09:15		58	22		
09:30		50	23		
09:45		84	17	234	80
10:00		80	15		
10:15		68	8		
10:30		65	12		
10:45		87	12	300	47
11:00		86	8		
11:15		86	13		
11:30		113	10		
11:45		99	8	384	39
Total		1324	2714		
Percent		32.8%	67.2%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 57
Station ID: 57
I-26 EB OFF RAMP TO MONTAGUE AVENUE WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		5	100		
12:15		8	92		
12:30		3	90		
12:45		4	98	20	380
01:00		2	83		
01:15		1	77		
01:30		4	83		
01:45		2	63	9	306
02:00		3	52		
02:15		5	93		
02:30		2	75		
02:45		3	72	13	292
03:00		4	80		
03:15		4	59		
03:30		3	68		
03:45		8	70	19	277
04:00		1	81		
04:15		4	84		
04:30		4	92		
04:45		14	82	23	339
05:00		5	88		
05:15		5	72		
05:30		19	88		
05:45		21	90	50	338
06:00		15	77		
06:15		30	80		
06:30		40	72		
06:45		56	74	141	303
07:00		65	57		
07:15		58	45		
07:30		58	43		
07:45		50	44	231	189
08:00		53	39		
08:15		66	31		
08:30		61	34		
08:45		92	36	272	140
09:00		47	16		
09:15		69	22		
09:30		73	22		
09:45		74	21	263	81
10:00		57	26		
10:15		74	20		
10:30		74	9		
10:45		78	6	283	61
11:00		79	14		
11:15		88	6		
11:30		98	7		
11:45		108	6	373	33
Total		1697	2739		
Percent		38.3%	61.7%		
Grand Total		3021	5453		
Percent		35.7%	64.3%		
ADT		ADT 4,237		AADT 4,237	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 58
Station ID: 58
I-26 EB OFF RAMP TO TANGER OUTLET BLVD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		8	75		
12:15		10	74		
12:30		14	68		
12:45		7	60	39	277
01:00		10	48		
01:15		8	50		
01:30		6	80		
01:45		3	80	27	258
02:00		8	49		
02:15		6	66		
02:30		1	62		
02:45		5	60	20	237
03:00		4	66		
03:15		4	72		
03:30		8	89		
03:45		18	85	34	312
04:00		16	72		
04:15		13	78		
04:30		14	75		
04:45		11	58	54	283
05:00		18	83		
05:15		27	74		
05:30		49	82		
05:45		52	64	146	303
06:00		64	62		
06:15		90	68		
06:30		52	82		
06:45		55	63	261	275
07:00		46	48		
07:15		44	32		
07:30		32	47		
07:45		47	26	169	153
08:00		45	36		
08:15		30	28		
08:30		66	25		
08:45		61	18	202	107
09:00		57	25		
09:15		87	18		
09:30		78	14		
09:45		68	20	290	77
10:00		78	10		
10:15		56	9		
10:30		70	12		
10:45		76	23	280	54
11:00		64	5		
11:15		58	10		
11:30		63	12		
11:45		90	8	275	35
Total		1797	2371		
Percent		43.1%	56.9%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 58
Station ID: 58
I-26 EB OFF RAMP TO TANGER OUTLET BLVD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	84		
12:15		4	82		
12:30		7	62		
12:45		0	44	20	272
01:00		4	94		
01:15		4	72		
01:30		2	82		
01:45		8	54	18	302
02:00		3	54		
02:15		4	66		
02:30		6	60		
02:45		12	60	25	240
03:00		2	60		
03:15		13	48		
03:30		16	78		
03:45		16	56	47	242
04:00		10	68		
04:15		14	62		
04:30		10	82		
04:45		24	64	58	276
05:00		29	65		
05:15		40	74		
05:30		35	80		
05:45		47	98	151	317
06:00		62	89		
06:15		94	88		
06:30		104	68		
06:45		110	70	370	315
07:00		106	50		
07:15		134	42		
07:30		120	38		
07:45		142	39	502	169
08:00		130	28		
08:15		124	20		
08:30		107	22		
08:45		118	27	479	97
09:00		86	24		
09:15		56	22		
09:30		66	15		
09:45		72	18	280	79
10:00		60	16		
10:15		56	16		
10:30		75	10		
10:45		64	18	255	60
11:00		52	14		
11:15		64	9		
11:30		80	11		
11:45		69	10	265	44
Total		2470	2413		
Percent		50.6%	49.4%		
Grand Total		4267	4784		
Percent		47.1%	52.9%		
ADT		ADT 4,526		AADT 4,526	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 59
Station ID: 59
MONTAGUE AVENUE EB ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	34		
12:15		4	48		
12:30		6	37		
12:45		3	56	19	175
01:00		5	38		
01:15		5	44		
01:30		7	45		
01:45		1	58	18	185
02:00		1	38		
02:15		8	30		
02:30		0	52		
02:45		1	56	10	176
03:00		1	82		
03:15		4	130		
03:30		0	111		
03:45		1	62	6	385
04:00		5	58		
04:15		2	90		
04:30		2	129		
04:45		10	55	19	332
05:00		3	118		
05:15		5	90		
05:30		9	68		
05:45		11	52	28	328
06:00		10	47		
06:15		18	44		
06:30		28	35		
06:45		42	33	98	159
07:00		58	46		
07:15		70	27		
07:30		96	35		
07:45		55	20	279	128
08:00		76	27		
08:15		91	27		
08:30		85	19		
08:45		66	19	318	92
09:00		73	22		
09:15		60	17		
09:30		50	23		
09:45		66	22	249	84
10:00		70	20		
10:15		60	17		
10:30		36	10		
10:45		36	7	202	54
11:00		34	16		
11:15		34	13		
11:30		38	8		
11:45		48	5	154	42
Total		1400	2140		
Percent		39.5%	60.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 59
Station ID: 59
MONTAGUE AVENUE EB ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	70		
12:15		5	42		
12:30		3	41		
12:45		1	40	13	193
01:00		0	56		
01:15		4	39		
01:30		2	46		
01:45		1	40	7	181
02:00		6	48		
02:15		2	43		
02:30		2	38		
02:45		1	45	11	174
03:00		1	62		
03:15		0	89		
03:30		2	110		
03:45		1	60	4	321
04:00		2	66		
04:15		3	71		
04:30		2	112		
04:45		10	59	17	308
05:00		3	118		
05:15		8	86		
05:30		7	81		
05:45		9	66	27	351
06:00		11	59		
06:15		29	44		
06:30		35	50		
06:45		42	48	117	201
07:00		47	44		
07:15		59	42		
07:30		76	28		
07:45		74	25	256	139
08:00		96	34		
08:15		62	36		
08:30		52	40		
08:45		73	33	283	143
09:00		80	38		
09:15		44	18		
09:30		36	33		
09:45		40	31	200	120
10:00		46	38		
10:15		36	12		
10:30		31	12		
10:45		38	16	151	78
11:00		39	13		
11:15		32	15		
11:30		52	4		
11:45		46	5	169	37
Total		1255	2246		
Percent		35.8%	64.2%		
Grand Total		2655	4386		
Percent		37.7%	62.3%		
ADT		ADT 3,520		AADT 3,520	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 60
Station ID: 60
I-26 EB OFF RAMP TO MONTAGUE AVENUE EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		7	82		
12:15		9	97		
12:30		9	77		
12:45		3	80	28	336
01:00		5	64		
01:15		3	72		
01:30		4	78		
01:45		2	103	14	317
02:00		3	72		
02:15		2	84		
02:30		0	58		
02:45		2	79	7	293
03:00		2	82		
03:15		4	87		
03:30		1	68		
03:45		8	98	15	335
04:00		0	93		
04:15		3	87		
04:30		5	80		
04:45		6	94	14	354
05:00		10	96		
05:15		15	90		
05:30		20	90		
05:45		49	62	94	338
06:00		60	58		
06:15		74	42		
06:30		38	41		
06:45		42	40	214	181
07:00		36	33		
07:15		48	32		
07:30		39	28		
07:45		53	25	176	118
08:00		48	26		
08:15		62	17		
08:30		68	20		
08:45		92	24	270	87
09:00		98	16		
09:15		126	18		
09:30		154	18		
09:45		136	23	514	75
10:00		110	7		
10:15		90	18		
10:30		76	7		
10:45		128	9	404	41
11:00		97	10		
11:15		98	5		
11:30		100	7		
11:45		102	6	397	28
Total		2147	2503		
Percent		46.2%	53.8%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 60
Station ID: 60
I-26 EB OFF RAMP TO MONTAGUE AVENUE EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	74		
12:15		4	84		
12:30		2	82		
12:45		4	62	20	302
01:00		4	92		
01:15		2	83		
01:30		7	81		
01:45		2	88	15	344
02:00		6	54		
02:15		2	78		
02:30		3	96		
02:45		6	110	17	338
03:00		4	73		
03:15		8	92		
03:30		1	80		
03:45		2	79	15	324
04:00		1	76		
04:15		6	70		
04:30		11	107		
04:45		8	81	26	334
05:00		8	69		
05:15		11	122		
05:30		28	128		
05:45		40	158	87	477
06:00		52	94		
06:15		88	57		
06:30		120	66		
06:45		128	65	388	282
07:00		124	50		
07:15		155	44		
07:30		143	44		
07:45		196	35	618	173
08:00		154	20		
08:15		204	24		
08:30		171	18		
08:45		178	14	707	76
09:00		181	17		
09:15		117	18		
09:30		138	20		
09:45		121	22	557	77
10:00		86	8		
10:15		101	9		
10:30		89	10		
10:45		84	12	360	39
11:00		103	9		
11:15		100	10		
11:30		108	10		
11:45		123	6	434	35
Total		3244	2801		
Percent		53.7%	46.3%		
Grand Total		5391	5304		
Percent		50.4%	49.6%		
ADT		ADT 5,348		AADT 5,348	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 61
Station ID: 61
MONTAGUE AVENUE EB ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	104		
12:15		18	84		
12:30		11	125		
12:45		10	120	51	433
01:00		4	124		
01:15		9	92		
01:30		11	116		
01:45		6	116	30	448
02:00		4	116		
02:15		7	116		
02:30		2	106		
02:45		4	112	17	450
03:00		8	117		
03:15		3	116		
03:30		6	108		
03:45		6	133	23	474
04:00		8	126		
04:15		6	118		
04:30		10	136		
04:45		17	136	41	516
05:00		12	136		
05:15		12	134		
05:30		24	124		
05:45		30	132	78	526
06:00		64	109		
06:15		57	98		
06:30		108	87		
06:45		106	79	335	373
07:00		100	68		
07:15		137	74		
07:30		128	79		
07:45		124	54	489	275
08:00		96	59		
08:15		121	63		
08:30		104	49		
08:45		92	92	413	263
09:00		106	47		
09:15		102	67		
09:30		123	119		
09:45		87	60	418	293
10:00		86	67		
10:15		101	42		
10:30		100	42		
10:45		86	46	373	197
11:00		108	86		
11:15		91	214		
11:30		104	59		
11:45		92	25	395	384
Total		2663	4632		
Percent		36.5%	63.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 61
Station ID: 61
MONTAGUE AVENUE EB ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		23	109		
12:15		18	95		
12:30		17	124		
12:45		16	112	74	440
01:00		14	108		
01:15		10	114		
01:30		12	107		
01:45		17	90	53	419
02:00		5	94		
02:15		11	92		
02:30		8	124		
02:45		16	106	40	416
03:00		3	118		
03:15		1	98		
03:30		4	166		
03:45		8	108	16	490
04:00		6	125		
04:15		8	144		
04:30		6	138		
04:45		16	128	36	535
05:00		20	170		
05:15		28	133		
05:30		33	118		
05:45		40	119	121	540
06:00		72	107		
06:15		80	100		
06:30		138	98		
06:45		110	91	400	396
07:00		116	65		
07:15		143	79		
07:30		132	72		
07:45		124	77	515	293
08:00		143	46		
08:15		122	62		
08:30		115	70		
08:45		114	58	494	236
09:00		92	66		
09:15		94	59		
09:30		90	52		
09:45		99	45	375	222
10:00		82	46		
10:15		74	40		
10:30		84	47		
10:45		97	27	337	160
11:00		94	28		
11:15		76	52		
11:30		79	62		
11:45		93	86	342	228
Total		2803	4375		
Percent		39.0%	61.0%		
Grand Total		5466	9007		
Percent		37.8%	62.2%		
ADT		ADT 7,236		AADT 7,236	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 62
Station ID: 62
I-26 WB OFF RAMP TO REMOUNT ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	104		
12:15		22	116		
12:30		22	120		
12:45		10	121	64	461
01:00		11	108		
01:15		5	98		
01:30		4	96		
01:45		13	118	33	420
02:00		12	110		
02:15		11	98		
02:30		3	105		
02:45		8	88	34	401
03:00		4	112		
03:15		1	107		
03:30		5	110		
03:45		3	122	13	451
04:00		4	112		
04:15		8	112		
04:30		7	84		
04:45		4	80	23	388
05:00		5	66		
05:15		9	59		
05:30		19	67		
05:45		34	72	67	264
06:00		30	91		
06:15		52	109		
06:30		72	101		
06:45		89	86	243	387
07:00		82	73		
07:15		86	102		
07:30		108	62		
07:45		110	65	386	302
08:00		107	80		
08:15		102	74		
08:30		111	80		
08:45		93	55	413	289
09:00		91	54		
09:15		70	54		
09:30		64	36		
09:45		102	61	327	205
10:00		91	36		
10:15		75	36		
10:30		88	42		
10:45		102	28	356	142
11:00		92	28		
11:15		116	27		
11:30		99	30		
11:45		122	26	429	111
Total		2388	3821		
Percent		38.5%	61.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 62
Station ID: 62
I-26 WB OFF RAMP TO REMOUNT ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		25	121		
12:15		16	98		
12:30		10	120		
12:45		11	114	62	453
01:00		12	126		
01:15		10	119		
01:30		8	102		
01:45		5	113	35	460
02:00		7	83		
02:15		11	116		
02:30		8	92		
02:45		13	123	39	414
03:00		5	111		
03:15		5	116		
03:30		2	119		
03:45		6	110	18	456
04:00		3	113		
04:15		7	96		
04:30		5	78		
04:45		6	90	21	377
05:00		1	66		
05:15		14	95		
05:30		19	81		
05:45		29	118	63	360
06:00		42	106		
06:15		49	107		
06:30		76	100		
06:45		87	92	254	405
07:00		93	96		
07:15		80	89		
07:30		112	64		
07:45		136	94	421	343
08:00		176	68		
08:15		158	71		
08:30		136	56		
08:45		114	70	584	265
09:00		95	58		
09:15		96	51		
09:30		88	48		
09:45		107	48	386	205
10:00		94	42		
10:15		94	41		
10:30		90	37		
10:45		98	37	376	157
11:00		114	34		
11:15		85	38		
11:30		116	33		
11:45		112	28	427	133
Total		2686	4028		
Percent		40.0%	60.0%		
Grand Total		5074	7849		
Percent		39.3%	60.7%		
ADT		ADT 6,462		AADT 6,462	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 63
Station ID: 63
I-26 WB OFF RAMP TO I--26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		22	130		
12:15		13	118		
12:30		15	134		
12:45		12	107	62	489
01:00		14	114		
01:15		14	147		
01:30		7	102		
01:45		8	130	43	493
02:00		8	103		
02:15		5	102		
02:30		7	101		
02:45		7	122	27	428
03:00		4	120		
03:15		6	122		
03:30		8	122		
03:45		4	132	22	496
04:00		8	121		
04:15		16	115		
04:30		10	97		
04:45		8	94	42	427
05:00		14	85		
05:15		24	96		
05:30		29	74		
05:45		36	88	103	343
06:00		54	116		
06:15		78	106		
06:30		114	106		
06:45		142	82	388	410
07:00		130	80		
07:15		150	76		
07:30		164	86		
07:45		206	81	650	323
08:00		168	64		
08:15		166	61		
08:30		136	55		
08:45		140	60	610	240
09:00		98	42		
09:15		105	34		
09:30		89	48		
09:45		94	51	386	175
10:00		76	40		
10:15		96	35		
10:30		94	34		
10:45		88	17	354	126
11:00		108	27		
11:15		134	29		
11:30		79	31		
11:45		117	24	438	111
Total		3125	4061		
Percent		43.5%	56.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 63
Station ID: 63
I-26 WB OFF RAMP TO I--26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	118		
12:15		21	102		
12:30		17	108		
12:45		5	108	67	436
01:00		10	116		
01:15		16	114		
01:30		8	136		
01:45		7	109	41	475
02:00		6	114		
02:15		16	104		
02:30		9	112		
02:45		5	118	36	448
03:00		6	102		
03:15		4	124		
03:30		6	130		
03:45		3	123	19	479
04:00		6	144		
04:15		13	121		
04:30		12	82		
04:45		8	92	39	439
05:00		12	86		
05:15		16	79		
05:30		27	100		
05:45		36	110	91	375
06:00		56	117		
06:15		72	114		
06:30		96	68		
06:45		154	75	378	374
07:00		121	84		
07:15		148	69		
07:30		159	76		
07:45		186	76	614	305
08:00		174	62		
08:15		137	64		
08:30		166	69		
08:45		164	44	641	239
09:00		114	49		
09:15		98	52		
09:30		107	48		
09:45		114	40	433	189
10:00		110	40		
10:15		100	36		
10:30		86	31		
10:45		113	37	409	144
11:00		96	42		
11:15		116	25		
11:30		99	27		
11:45		104	31	415	125
Total		3183	4028		
Percent		44.1%	55.9%		
Grand Total		6308	8089		
Percent		43.8%	56.2%		
ADT		ADT 7,198		AADT 7,198	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 64
Station ID: 64
REMOUNT ROAD ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		26	106		
12:15		17	82		
12:30		28	64		
12:45		19	79	90	331
01:00		10	103		
01:15		9	81		
01:30		12	129		
01:45		15	94	46	407
02:00		10	92		
02:15		9	120		
02:30		12	208		
02:45		4	185	35	605
03:00		10	215		
03:15		8	149		
03:30		6	236		
03:45		12	203	36	803
04:00		9	192		
04:15		10	168		
04:30		10	192		
04:45		3	200	32	752
05:00		20	212		
05:15		16	194		
05:30		27	159		
05:45		24	137	87	702
06:00		70	150		
06:15		54	121		
06:30		104	120		
06:45		58	74	286	465
07:00		78	87		
07:15		84	62		
07:30		72	62		
07:45		46	44	280	255
08:00		42	68		
08:15		60	72		
08:30		66	28		
08:45		54	46	222	214
09:00		44	48		
09:15		68	38		
09:30		48	40		
09:45		56	28	216	154
10:00		68	24		
10:15		72	30		
10:30		73	40		
10:45		64	22	277	116
11:00		90	49		
11:15		78	22		
11:30		82	52		
11:45		60	19	310	142
Total		1917	4946		
Percent		27.9%	72.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 64
Station ID: 64
REMOUNT ROAD ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		36	80		
12:15		22	72		
12:30		36	73		
12:45		18	65	112	290
01:00		16	71		
01:15		8	96		
01:30		11	116		
01:45		14	106	49	389
02:00		17	88		
02:15		11	112		
02:30		22	195		
02:45		6	140	56	535
03:00		5	204		
03:15		22	192		
03:30		4	198		
03:45		12	196	43	790
04:00		4	176		
04:15		9	196		
04:30		9	190		
04:45		16	190	38	752
05:00		14	212		
05:15		18	148		
05:30		24	155		
05:45		40	146	96	661
06:00		56	96		
06:15		65	100		
06:30		103	94		
06:45		59	72	283	362
07:00		83	88		
07:15		86	62		
07:30		74	56		
07:45		62	56	305	262
08:00		78	84		
08:15		68	45		
08:30		54	66		
08:45		66	57	266	252
09:00		90	58		
09:15		51	43		
09:30		62	52		
09:45		56	22	259	175
10:00		77	35		
10:15		73	42		
10:30		56	40		
10:45		71	29	277	146
11:00		74	48		
11:15		56	38		
11:30		78	53		
11:45		80	16	288	155
Total		2072	4769		
Percent		30.3%	69.7%		
Grand Total		3989	9715		
Percent		29.1%	70.9%		
ADT		ADT 6,852		AADT 6,852	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 65
Station ID: 65
I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		52	219		
12:15		32	210		
12:30		46	190		
12:45		28	186	158	805
01:00		26	220		
01:15		23	232		
01:30		20	206		
01:45		19	238	88	896
02:00		22	196		
02:15		16	215		
02:30		18	277		
02:45		12	312	68	1000
03:00		14	344		
03:15		12	284		
03:30		12	352		
03:45		16	333	54	1313
04:00		16	306		
04:15		29	287		
04:30		20	294		
04:45		12	292	77	1179
05:00		29	288		
05:15		42	300		
05:30		54	231		
05:45		58	240	183	1059
06:00		120	254		
06:15		134	226		
06:30		218	232		
06:45		190	160	662	872
07:00		206	169		
07:15		242	143		
07:30		235	145		
07:45		257	125	940	582
08:00		212	126		
08:15		227	134		
08:30		200	99		
08:45		190	100	829	459
09:00		148	78		
09:15		166	82		
09:30		144	84		
09:45		154	84	612	328
10:00		134	62		
10:15		162	69		
10:30		163	65		
10:45		160	50	619	246
11:00		198	65		
11:15		205	58		
11:30		168	84		
11:45		182	45	753	252
Total		5043	8991		
Percent		35.9%	64.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 65
Station ID: 65
I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		54	201		
12:15		47	171		
12:30		49	180		
12:45		26	180	176	732
01:00		28	186		
01:15		24	206		
01:30		18	248		
01:45		24	220	94	860
02:00		22	198		
02:15		26	215		
02:30		28	278		
02:45		12	284	88	975
03:00		10	276		
03:15		26	332		
03:30		10	322		
03:45		14	330	60	1260
04:00		13	306		
04:15		23	335		
04:30		19	258		
04:45		22	276	77	1175
05:00		28	311		
05:15		31	226		
05:30		50	264		
05:45		74	248	183	1049
06:00		108	229		
06:15		137	208		
06:30		197	160		
06:45		215	144	657	741
07:00		196	170		
07:15		238	146		
07:30		239	126		
07:45		244	140	917	582
08:00		242	138		
08:15		212	110		
08:30		218	137		
08:45		236	103	908	488
09:00		204	109		
09:15		145	96		
09:30		171	92		
09:45		174	68	694	365
10:00		176	74		
10:15		177	80		
10:30		143	70		
10:45		186	66	682	290
11:00		167	88		
11:15		178	64		
11:30		160	79		
11:45		189	54	694	285
Total		5230	8802		
Percent		37.3%	62.7%		
Grand Total		10273	17793		
Percent		36.6%	63.4%		
ADT		ADT 14,033		AADT 14,033	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 66
Station ID: 66
I-26 WB C-D OFF RAMP TO W. AVIATION AVE.

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		22	146		
12:15		12	124		
12:30		17	139		
12:45		11	117	62	526
01:00		15	116		
01:15		12	148		
01:30		10	118		
01:45		8	126	45	508
02:00		7	112		
02:15		6	104		
02:30		8	107		
02:45		5	124	26	447
03:00		3	124		
03:15		8	120		
03:30		5	149		
03:45		4	120	20	513
04:00		6	130		
04:15		18	122		
04:30		8	90		
04:45		8	106	40	448
05:00		16	88		
05:15		28	98		
05:30		28	94		
05:45		33	92	105	372
06:00		56	100		
06:15		81	102		
06:30		116	104		
06:45		152	86	405	392
07:00		126	78		
07:15		161	80		
07:30		160	78		
07:45		212	80	659	316
08:00		173	69		
08:15		174	56		
08:30		142	56		
08:45		156	60	645	241
09:00		101	44		
09:15		109	31		
09:30		84	43		
09:45		102	49	396	167
10:00		78	45		
10:15		107	32		
10:30		92	40		
10:45		103	17	380	134
11:00		110	25		
11:15		130	29		
11:30		86	30		
11:45		114	28	440	112
Total		3223	4176		
Percent		43.6%	56.4%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 66
Station ID: 66
I-26 WB C-D OFF RAMP TO W. AVIATION AVE.

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	122		
12:15		21	114		
12:30		19	106		
12:45		5	105	69	447
01:00		10	135		
01:15		14	113		
01:30		12	144		
01:45		8	106	44	498
02:00		6	124		
02:15		13	104		
02:30		12	116		
02:45		6	121	37	465
03:00		4	97		
03:15		6	128		
03:30		6	124		
03:45		3	126	19	475
04:00		6	140		
04:15		14	118		
04:30		13	78		
04:45		8	89	41	425
05:00		12	88		
05:15		16	92		
05:30		28	87		
05:45		35	106	91	373
06:00		57	107		
06:15		74	101		
06:30		106	65		
06:45		154	69	391	342
07:00		122	80		
07:15		150	71		
07:30		172	78		
07:45		188	78	632	307
08:00		176	60		
08:15		144	59		
08:30		162	69		
08:45		178	46	660	234
09:00		122	50		
09:15		98	52		
09:30		111	50		
09:45		118	41	449	193
10:00		112	38		
10:15		97	38		
10:30		72	34		
10:45		118	37	399	147
11:00		110	36		
11:15		114	32		
11:30		106	28		
11:45		116	26	446	122
Total		3278	4028		
Percent		44.9%	55.1%		
Grand Total		6501	8204		
Percent		44.2%	55.8%		
ADT		ADT 7,352		AADT 7,352	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 67
Station ID: 67
W. AVIATION AVENUE EAST ON RAMP TO
I-26 WB C-D
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		11	26		
12:15		28	28		
12:30		5	46		
12:45		9	14	53	114
01:00		6	46		
01:15		4	38		
01:30		1	43		
01:45		1	75	12	202
02:00		3	54		
02:15		4	38		
02:30		2	38		
02:45		2	64	11	194
03:00		1	68		
03:15		7	70		
03:30		5	131		
03:45		0	112	13	381
04:00		3	104		
04:15		8	100		
04:30		16	122		
04:45		3	93	30	419
05:00		3	126		
05:15		3	113		
05:30		4	109		
05:45		8	64	18	412
06:00		10	70		
06:15		12	47		
06:30		18	34		
06:45		8	29	48	180
07:00		15	16		
07:15		25	24		
07:30		20	15		
07:45		18	18	78	73
08:00		18	18		
08:15		24	12		
08:30		19	11		
08:45		12	12	73	53
09:00		12	13		
09:15		18	10		
09:30		17	11		
09:45		28	8	75	42
10:00		20	8		
10:15		29	8		
10:30		24	14		
10:45		17	11	90	41
11:00		27	3		
11:15		38	11		
11:30		32	11		
11:45		33	9	130	34
Total		631	2145		
Percent		22.7%	77.3%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 67
Station ID: 67
W. AVIATION AVENUE EAST ON RAMP TO
I-26 WB C-D
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	34		
12:15		19	34		
12:30		16	24		
12:45		6	24	51	116
01:00		17	37		
01:15		2	38		
01:30		0	40		
01:45		8	40	27	155
02:00		2	40		
02:15		0	42		
02:30		1	45		
02:45		2	50	5	177
03:00		4	50		
03:15		3	75		
03:30		2	96		
03:45		4	106	13	327
04:00		1	106		
04:15		5	98		
04:30		8	116		
04:45		2	107	16	427
05:00		3	134		
05:15		3	106		
05:30		4	112		
05:45		9	102	19	454
06:00		10	60		
06:15		16	48		
06:30		15	34		
06:45		9	30	50	172
07:00		22	24		
07:15		18	11		
07:30		31	18		
07:45		30	12	101	65
08:00		36	8		
08:15		25	9		
08:30		28	14		
08:45		15	5	104	36
09:00		29	8		
09:15		26	10		
09:30		18	14		
09:45		24	14	97	46
10:00		14	18		
10:15		18	6		
10:30		36	14		
10:45		28	18	96	56
11:00		36	7		
11:15		43	11		
11:30		30	12		
11:45		34	10	143	40
Total		722	2071		
Percent		25.9%	74.1%		
Grand Total		1353	4216		
Percent		24.3%	75.7%		
ADT		ADT 2,784		AADT 2,784	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 68
Station ID: 68
W AVIATION AVE WB ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	32		
12:15		3	42		
12:30		5	52		
12:45		0	38	11	164
01:00		5	46		
01:15		3	42		
01:30		1	35		
01:45		4	38	13	161
02:00		4	40		
02:15		1	36		
02:30		1	38		
02:45		1	41	7	155
03:00		2	36		
03:15		2	64		
03:30		2	54		
03:45		0	49	6	203
04:00		4	64		
04:15		3	58		
04:30		12	74		
04:45		2	65	21	261
05:00		12	131		
05:15		25	102		
05:30		5	90		
05:45		5	66	47	389
06:00		10	54		
06:15		10	51		
06:30		16	46		
06:45		16	25	52	176
07:00		12	23		
07:15		14	36		
07:30		14	26		
07:45		12	34	52	119
08:00		14	26		
08:15		8	16		
08:30		9	22		
08:45		18	34	49	98
09:00		9	28		
09:15		17	20		
09:30		16	26		
09:45		20	19	62	93
10:00		23	17		
10:15		37	10		
10:30		39	5		
10:45		9	7	108	39
11:00		23	5		
11:15		25	2		
11:30		40	5		
11:45		40	11	128	23
Total		556	1881		
Percent		22.8%	77.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 68
Station ID: 68
W AVIATION AVE WB ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	38		
12:15		7	29		
12:30		2	48		
12:45		6	26	17	141
01:00		3	36		
01:15		5	38		
01:30		3	46		
01:45		0	36	11	156
02:00		1	44		
02:15		2	46		
02:30		5	47		
02:45		0	45	8	182
03:00		0	42		
03:15		0	49		
03:30		4	38		
03:45		4	63	8	192
04:00		4	44		
04:15		4	62		
04:30		11	71		
04:45		2	63	21	240
05:00		20	128		
05:15		14	84		
05:30		12	74		
05:45		2	69	48	355
06:00		6	51		
06:15		19	26		
06:30		14	30		
06:45		16	37	55	144
07:00		26	49		
07:15		25	38		
07:30		23	31		
07:45		21	36	95	154
08:00		16	27		
08:15		20	18		
08:30		12	30		
08:45		18	24	66	99
09:00		16	31		
09:15		16	25		
09:30		20	29		
09:45		22	24	74	109
10:00		24	8		
10:15		26	10		
10:30		18	9		
10:45		34	11	102	38
11:00		30	8		
11:15		26	1		
11:30		28	4		
11:45		40	3	124	16
Total		629	1826		
Percent		25.6%	74.4%		
Grand Total		1185	3707		
Percent		24.2%	75.8%		
ADT		ADT 2,446		AADT 2,446	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 69
Station ID: 69
I-26 WB C-D ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		43	124		
12:15		47	165		
12:30		37	146		
12:45		26	118	153	553
01:00		26	188		
01:15		17	161		
01:30		12	179		
01:45		15	203	70	731
02:00		21	186		
02:15		17	178		
02:30		12	240		
02:45		6	296	56	900
03:00		17	309		
03:15		12	284		
03:30		12	396		
03:45		14	346	55	1335
04:00		12	362		
04:15		22	325		
04:30		34	387		
04:45		13	350	81	1424
05:00		27	444		
05:15		45	350		
05:30		26	372		
05:45		38	296	136	1462
06:00		80	266		
06:15		79	228		
06:30		128	192		
06:45		70	144	357	830
07:00		103	134		
07:15		102	114		
07:30		114	111		
07:45		70	94	389	453
08:00		75	112		
08:15		78	102		
08:30		86	82		
08:45		64	83	303	379
09:00		76	80		
09:15		90	79		
09:30		88	72		
09:45		96	60	350	291
10:00		92	47		
10:15		130	46		
10:30		126	50		
10:45		84	54	432	197
11:00		130	47		
11:15		128	40		
11:30		154	64		
11:45		136	48	548	199
Total		2930	8754		
Percent		25.1%	74.9%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 69
Station ID: 69
I-26 WB C-D ON RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		40	138		
12:15		50	129		
12:30		52	134		
12:45		32	124	174	525
01:00		36	127		
01:15		14	154		
01:30		12	199		
01:45		24	183	86	663
02:00		18	169		
02:15		12	178		
02:30		22	240		
02:45		10	272	62	859
03:00		7	270		
03:15		20	317		
03:30		14	326		
03:45		16	362	57	1275
04:00		12	332		
04:15		18	344		
04:30		24	367		
04:45		17	339	71	1382
05:00		40	449		
05:15		32	385		
05:30		37	332		
05:45		42	304	151	1470
06:00		69	250		
06:15		98	172		
06:30		114	159		
06:45		94	146	375	727
07:00		121	160		
07:15		113	122		
07:30		132	98		
07:45		99	113	465	493
08:00		120	108		
08:15		109	83		
08:30		85	111		
08:45		102	80	416	382
09:00		124	103		
09:15		90	80		
09:30		100	90		
09:45		96	62	410	335
10:00		108	60		
10:15		112	60		
10:30		118	60		
10:45		124	61	462	241
11:00		140	60		
11:15		111	48		
11:30		112	69		
11:45		154	38	517	215
Total		3246	8567		
Percent		27.5%	72.5%		
Grand Total		6176	17321		
Percent		26.3%	73.7%		
ADT		ADT 11,748		AADT 11,748	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 70
Station ID: 70
I-26 EB OFF RAMP TO AVIATION AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	38		
12:15		6	96		
12:30		5	68		
12:45		8	70	25	272
01:00		14	66		
01:15		1	81		
01:30		11	82		
01:45		6	76	32	305
02:00		4	90		
02:15		4	76		
02:30		6	78		
02:45		0	89	14	333
03:00		5	68		
03:15		6	61		
03:30		3	62		
03:45		7	50	21	241
04:00		14	60		
04:15		16	50		
04:30		32	40		
04:45		28	38	90	188
05:00		22	52		
05:15		42	66		
05:30		54	50		
05:45		68	50	186	218
06:00		86	64		
06:15		125	44		
06:30		140	50		
06:45		132	39	483	197
07:00		126	34		
07:15		112	49		
07:30		106	46		
07:45		119	79	463	208
08:00		112	70		
08:15		117	58		
08:30		69	32		
08:45		80	24	378	184
09:00		66	27		
09:15		65	32		
09:30		71	36		
09:45		54	20	256	115
10:00		39	24		
10:15		58	24		
10:30		46	15		
10:45		60	11	203	74
11:00		48	16		
11:15		82	12		
11:30		68	12		
11:45		62	10	260	50
Total		2411	2385		
Percent		50.3%	49.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 70
Station ID: 70
I-26 EB OFF RAMP TO AVIATION AVENUE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	51		
12:15		5	66		
12:30		7	56		
12:45		1	62	19	235
01:00		7	89		
01:15		12	96		
01:30		1	70		
01:45		2	76	22	331
02:00		6	74		
02:15		4	86		
02:30		4	73		
02:45		8	78	22	311
03:00		4	78		
03:15		2	74		
03:30		10	48		
03:45		9	52	25	252
04:00		10	64		
04:15		17	56		
04:30		32	46		
04:45		34	53	93	219
05:00		14	45		
05:15		38	61		
05:30		57	65		
05:45		80	65	189	236
06:00		82	60		
06:15		122	63		
06:30		138	47		
06:45		152	50	494	220
07:00		126	31		
07:15		130	38		
07:30		144	34		
07:45		160	29	560	132
08:00		144	27		
08:15		144	26		
08:30		104	22		
08:45		104	21	496	96
09:00		76	26		
09:15		68	22		
09:30		50	35		
09:45		68	31	262	114
10:00		46	18		
10:15		57	20		
10:30		55	31		
10:45		58	17	216	86
11:00		54	12		
11:15		68	8		
11:30		57	10		
11:45		54	10	233	40
Total		2631	2272		
Percent		53.7%	46.3%		
Grand Total		5042	4657		
Percent		52.0%	48.0%		
ADT		ADT 4,850		AADT 4,850	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 71
Station ID: 71
I-26 EB OFF RAMP TO I-26 EASTBOUND C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	100		
12:15		9	165		
12:30		18	94		
12:45		10	98	50	457
01:00		12	118		
01:15		4	106		
01:30		6	118		
01:45		8	122	30	464
02:00		6	111		
02:15		6	122		
02:30		6	118		
02:45		3	86	21	437
03:00		8	128		
03:15		16	98		
03:30		24	116		
03:45		12	96	60	438
04:00		28	82		
04:15		31	105		
04:30		70	94		
04:45		59	92	188	373
05:00		60	100		
05:15		83	112		
05:30		148	104		
05:45		156	91	447	407
06:00		216	98		
06:15		276	81		
06:30		304	72		
06:45		216	65	1012	316
07:00		118	61		
07:15		84	56		
07:30		142	72		
07:45		152	76	496	265
08:00		150	62		
08:15		100	34		
08:30		142	48		
08:45		132	66	524	210
09:00		117	58		
09:15		142	54		
09:30		186	59		
09:45		154	40	599	211
10:00		122	26		
10:15		110	44		
10:30		98	38		
10:45		108	30	438	138
11:00		87	22		
11:15		80	18		
11:30		82	21		
11:45		100	13	349	74
Total		4214	3790		
Percent		52.6%	47.4%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 71
Station ID: 71
I-26 EB OFF RAMP TO I-26 EASTBOUND C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		14	94		
12:15		15	94		
12:30		16	91		
12:45		12	96	57	375
01:00		11	120		
01:15		16	118		
01:30		13	110		
01:45		19	137	59	485
02:00		6	100		
02:15		5	120		
02:30		8	85		
02:45		11	109	30	414
03:00		14	127		
03:15		11	104		
03:30		16	116		
03:45		18	128	59	475
04:00		18	100		
04:15		34	106		
04:30		71	110		
04:45		67	93	190	409
05:00		57	114		
05:15		98	118		
05:30		158	118		
05:45		149	97	462	447
06:00		195	80		
06:15		263	82		
06:30		323	94		
06:45		310	86	1091	342
07:00		266	58		
07:15		268	63		
07:30		294	80		
07:45		210	54	1038	255
08:00		222	43		
08:15		187	46		
08:30		256	50		
08:45		219	64	884	203
09:00		130	44		
09:15		123	70		
09:30		129	51		
09:45		108	52	490	217
10:00		88	42		
10:15		89	46		
10:30		92	37		
10:45		106	35	375	160
11:00		86	22		
11:15		92	19		
11:30		91	20		
11:45		120	16	389	77
Total		5124	3859		
Percent		57.0%	43.0%		
Grand Total		9338	7649		
Percent		55.0%	45.0%		
ADT		ADT 8,494		AADT 8,494	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 72
Station ID: 72
W. AVIATION AVENUE WB ON RAMP
TO I-26 EB C-D
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		5	104		
12:15		4	104		
12:30		5	96		
12:45		0	90	14	394
01:00		3	106		
01:15		3	102		
01:30		4	86		
01:45		5	87	15	381
02:00		6	104		
02:15		1	79		
02:30		4	88		
02:45		3	70	14	341
03:00		1	95		
03:15		1	90		
03:30		4	94		
03:45		6	84	12	363
04:00		4	94		
04:15		8	92		
04:30		6	111		
04:45		8	102	26	399
05:00		7	120		
05:15		16	94		
05:30		23	83		
05:45		22	83	68	380
06:00		36	84		
06:15		38	61		
06:30		60	56		
06:45		69	60	203	261
07:00		64	56		
07:15		62	53		
07:30		60	58		
07:45		52	48	238	215
08:00		56	72		
08:15		46	66		
08:30		32	38		
08:45		38	48	172	224
09:00		49	38		
09:15		82	44		
09:30		106	37		
09:45		94	29	331	148
10:00		82	32		
10:15		60	30		
10:30		78	21		
10:45		79	17	299	100
11:00		89	10		
11:15		87	13		
11:30		95	7		
11:45		104	9	375	39
Total		1767	3245		
Percent		35.3%	64.7%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 72
Station ID: 72
W. AVIATION AVENUE WB ON RAMP
TO I-26 EB C-D
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	92		
12:15		4	112		
12:30		6	84		
12:45		2	97	24	385
01:00		4	88		
01:15		2	94		
01:30		6	90		
01:45		10	85	22	357
02:00		0	88		
02:15		7	106		
02:30		2	95		
02:45		5	71	14	360
03:00		5	88		
03:15		4	90		
03:30		5	85		
03:45		3	88	17	351
04:00		2	94		
04:15		7	97		
04:30		8	84		
04:45		8	88	25	363
05:00		12	122		
05:15		22	72		
05:30		15	98		
05:45		21	66	70	358
06:00		38	112		
06:15		44	61		
06:30		76	60		
06:45		70	62	228	295
07:00		76	60		
07:15		87	58		
07:30		82	49		
07:45		60	55	305	222
08:00		50	50		
08:15		62	44		
08:30		40	32		
08:45		60	34	212	160
09:00		60	49		
09:15		55	33		
09:30		56	37		
09:45		66	40	237	159
10:00		68	21		
10:15		66	27		
10:30		57	21		
10:45		93	24	284	93
11:00		64	11		
11:15		82	9		
11:30		82	10		
11:45		96	11	324	41
Total		1762	3144		
Percent		35.9%	64.1%		
Grand Total		3529	6389		
Percent		35.6%	64.4%		
ADT		ADT 4,959		AADT 4,959	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 73
Station ID: 73
W. AVIATION AVENUE EAST ON RAMP TO
I-26 EB C-D
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	48		
12:15		3	48		
12:30		1	50		
12:45		8	52	15	198
01:00		1	36		
01:15		1	42		
01:30		3	50		
01:45		8	56	13	184
02:00		3	54		
02:15		1	50		
02:30		3	62		
02:45		2	52	9	218
03:00		0	78		
03:15		2	60		
03:30		1	78		
03:45		5	68	8	284
04:00		6	88		
04:15		6	78		
04:30		2	86		
04:45		6	73	20	325
05:00		8	92		
05:15		5	58		
05:30		11	60		
05:45		18	36	42	246
06:00		23	41		
06:15		40	36		
06:30		39	30		
06:45		44	30	146	137
07:00		50	17		
07:15		36	22		
07:30		30	19		
07:45		46	12	162	70
08:00		32	15		
08:15		30	14		
08:30		27	11		
08:45		52	12	141	52
09:00		31	24		
09:15		42	10		
09:30		56	14		
09:45		62	13	191	61
10:00		52	8		
10:15		47	7		
10:30		54	15		
10:45		52	9	205	39
11:00		45	8		
11:15		54	6		
11:30		72	11		
11:45		53	9	224	34
Total		1176	1848		
Percent		38.9%	61.1%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 73
Station ID: 73
W. AVIATION AVENUE EAST ON RAMP TO
I-26 EB C-D
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	32		
12:15		2	41		
12:30		4	28		
12:45		2	43	14	144
01:00		4	54		
01:15		5	52		
01:30		3	52		
01:45		0	44	12	202
02:00		2	52		
02:15		5	69		
02:30		4	56		
02:45		2	65	13	242
03:00		0	56		
03:15		4	54		
03:30		3	94		
03:45		0	64	7	268
04:00		6	84		
04:15		4	84		
04:30		4	90		
04:45		8	68	22	326
05:00		6	73		
05:15		6	56		
05:30		10	66		
05:45		12	46	34	241
06:00		30	46		
06:15		33	43		
06:30		52	26		
06:45		52	23	167	138
07:00		60	25		
07:15		73	16		
07:30		72	17		
07:45		55	19	260	77
08:00		46	22		
08:15		54	10		
08:30		48	18		
08:45		44	13	192	63
09:00		58	11		
09:15		32	13		
09:30		44	7		
09:45		54	18	188	49
10:00		48	12		
10:15		47	7		
10:30		61	10		
10:45		48	9	204	38
11:00		46	3		
11:15		60	7		
11:30		63	6		
11:45		52	9	221	25
Total		1334	1813		
Percent		42.4%	57.6%		
Grand Total		2510	3661		
Percent		40.7%	59.3%		
ADT		ADT 3,086		AADT 3,086	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 74
Station ID: 74
I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		24	263		
12:15		15	311		
12:30		22	243		
12:45		21	242	82	1059
01:00		14	260		
01:15		7	244		
01:30		14	248		
01:45		19	267	54	1019
02:00		14	268		
02:15		8	244		
02:30		12	266		
02:45		8	220	42	998
03:00		10	290		
03:15		22	247		
03:30		30	301		
03:45		20	232	82	1070
04:00		40	274		
04:15		48	272		
04:30		80	290		
04:45		74	262	242	1098
05:00		74	314		
05:15		106	260		
05:30		193	238		
05:45		187	202	560	1014
06:00		282	230		
06:15		352	176		
06:30		390	166		
06:45		316	142	1340	714
07:00		196	133		
07:15		157	128		
07:30		258	150		
07:45		248	136	859	547
08:00		212	153		
08:15		180	105		
08:30		174	96		
08:45		206	128	772	482
09:00		160	120		
09:15		320	108		
09:30		340	106		
09:45		309	84	1129	418
10:00		252	60		
10:15		214	86		
10:30		236	68		
10:45		234	56	936	270
11:00		214	46		
11:15		232	30		
11:30		252	41		
11:45		238	28	936	145
Total		7034	8834		
Percent		44.3%	55.7%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 74
Station ID: 74
I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		30	231		
12:15		21	236		
12:30		26	200		
12:45		19	237	96	904
01:00		18	268		
01:15		24	262		
01:30		20	242		
01:45		29	264	91	1036
02:00		9	242		
02:15		16	294		
02:30		14	228		
02:45		22	246	61	1010
03:00		16	275		
03:15		17	244		
03:30		25	291		
03:45		20	289	78	1099
04:00		26	275		
04:15		44	288		
04:30		90	272		
04:45		78	256	238	1091
05:00		78	302		
05:15		128	244		
05:30		180	282		
05:45		184	208	570	1036
06:00		270	230		
06:15		348	195		
06:30		445	168		
06:45		442	173	1505	766
07:00		400	143		
07:15		420	138		
07:30		440	150		
07:45		317	124	1577	555
08:00		326	110		
08:15		302	105		
08:30		350	98		
08:45		314	114	1292	427
09:00		245	102		
09:15		203	112		
09:30		238	96		
09:45		220	108	906	418
10:00		209	72		
10:15		204	82		
10:30		205	70		
10:45		242	60	860	284
11:00		201	38		
11:15		240	37		
11:30		234	35		
11:45		260	33	935	143
Total		8209	8769		
Percent		48.4%	51.6%		
Grand Total		15243	17603		
Percent		46.4%	53.6%		
ADT		ADT 16,423		AADT 16,423	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 75
Station ID: 75
I-26 EB C-D OFF RAMP TO REMOUNT ROAD

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	84		
12:15		7	120		
12:30		18	70		
12:45		9	94	47	368
01:00		12	85		
01:15		6	87		
01:30		6	79		
01:45		6	95	30	346
02:00		6	90		
02:15		6	100		
02:30		6	107		
02:45		2	75	20	372
03:00		8	110		
03:15		12	84		
03:30		20	94		
03:45		16	74	56	362
04:00		22	78		
04:15		26	86		
04:30		62	69		
04:45		60	87	170	320
05:00		50	70		
05:15		66	77		
05:30		120	76		
05:45		130	82	366	305
06:00		140	74		
06:15		168	57		
06:30		198	59		
06:45		231	48	737	238
07:00		178	55		
07:15		111	46		
07:30		121	57		
07:45		126	66	536	224
08:00		122	58		
08:15		116	32		
08:30		102	34		
08:45		119	54	459	178
09:00		86	38		
09:15		80	44		
09:30		103	57		
09:45		112	36	381	175
10:00		86	24		
10:15		71	40		
10:30		68	36		
10:45		94	24	319	124
11:00		68	26		
11:15		64	14		
11:30		65	20		
11:45		78	12	275	72
Total		3396	3084		
Percent		52.4%	47.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 75
Station ID: 75
I-26 EB C-D OFF RAMP TO REMOUNT ROAD

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	86		
12:15		12	74		
12:30		11	78		
12:45		16	78	51	316
01:00		10	94		
01:15		14	92		
01:30		11	80		
01:45		19	123	54	389
02:00		8	82		
02:15		7	102		
02:30		8	76		
02:45		10	84	33	344
03:00		12	117		
03:15		9	72		
03:30		10	82		
03:45		20	105	51	376
04:00		16	74		
04:15		26	90		
04:30		62	82		
04:45		67	78	171	324
05:00		49	82		
05:15		68	91		
05:30		128	91		
05:45		130	82	375	346
06:00		126	62		
06:15		164	68		
06:30		162	74		
06:45		138	76	590	280
07:00		150	55		
07:15		139	57		
07:30		147	64		
07:45		162	46	598	222
08:00		144	34		
08:15		161	34		
08:30		169	42		
08:45		162	50	636	160
09:00		100	39		
09:15		78	50		
09:30		92	46		
09:45		76	46	346	181
10:00		62	38		
10:15		66	32		
10:30		70	36		
10:45		81	30	279	136
11:00		66	20		
11:15		70	18		
11:30		78	16		
11:45		90	18	304	72
Total		3488	3146		
Percent		52.6%	47.4%		
Grand Total		6884	6230		
Percent		52.5%	47.5%		
ADT		ADT 6,557		AADT 6,557	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 76
Station ID: 76
REMOUNT ROAD ON RAMP TO I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		15	86		
12:15		6	76		
12:30		10	78		
12:45		6	76	37	316
01:00		4	87		
01:15		9	90		
01:30		8	80		
01:45		4	82	25	339
02:00		4	88		
02:15		3	75		
02:30		5	78		
02:45		2	94	14	335
03:00		5	96		
03:15		0	122		
03:30		4	96		
03:45		6	109	15	423
04:00		4	96		
04:15		5	89		
04:30		8	97		
04:45		7	78	24	360
05:00		14	135		
05:15		14	111		
05:30		17	99		
05:45		19	87	64	432
06:00		45	76		
06:15		56	76		
06:30		49	62		
06:45		56	64	206	278
07:00		65	62		
07:15		64	56		
07:30		52	62		
07:45		47	30	228	210
08:00		50	40		
08:15		62	46		
08:30		66	34		
08:45		56	40	234	160
09:00		60	32		
09:15		82	25		
09:30		99	27		
09:45		102	27	343	111
10:00		98	31		
10:15		72	14		
10:30		66	28		
10:45		69	10	305	83
11:00		86	18		
11:15		88	9		
11:30		82	19		
11:45		72	19	328	65
Total		1823	3112		
Percent		36.9%	63.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 76
Station ID: 76
REMOUNT ROAD ON RAMP TO I-26 EB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		10	91		
12:15		12	80		
12:30		7	74		
12:45		2	82	31	327
01:00		3	89		
01:15		2	64		
01:30		3	98		
01:45		10	78	18	329
02:00		10	68		
02:15		2	110		
02:30		5	96		
02:45		5	78	22	352
03:00		6	82		
03:15		3	88		
03:30		0	94		
03:45		6	88	15	352
04:00		4	98		
04:15		6	98		
04:30		12	104		
04:45		12	97	34	397
05:00		14	136		
05:15		11	87		
05:30		17	112		
05:45		26	56	68	391
06:00		30	94		
06:15		69	85		
06:30		82	72		
06:45		68	65	249	316
07:00		110	54		
07:15		81	45		
07:30		104	46		
07:45		65	45	360	190
08:00		92	47		
08:15		72	47		
08:30		70	42		
08:45		90	50	324	186
09:00		70	42		
09:15		58	25		
09:30		74	20		
09:45		82	26	284	113
10:00		74	38		
10:15		76	17		
10:30		79	24		
10:45		74	26	303	105
11:00		89	20		
11:15		90	16		
11:30		86	18		
11:45		88	11	353	65
Total		2061	3123		
Percent		39.8%	60.2%		
Grand Total		3884	6235		
Percent		38.4%	61.6%		
ADT		ADT 5,060		AADT 5,060	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 77
Station ID: 77
I-26 EB C-D ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		27	244		
12:15		14	276		
12:30		16	232		
12:45		13	230	70	982
01:00		8	244		
01:15		13	261		
01:30		16	253		
01:45		16	246	53	1004
02:00		15	256		
02:15		4	224		
02:30		12	250		
02:45		7	234	38	964
03:00		6	267		
03:15		5	287		
03:30		11	292		
03:45		17	270	39	1116
04:00		18	290		
04:15		20	274		
04:30		24	306		
04:45		24	271	86	1141
05:00		38	364		
05:15		44	284		
05:30		70	284		
05:45		78	220	230	1152
06:00		160	212		
06:15		237	206		
06:30		316	154		
06:45		366	177	1079	749
07:00		337	138		
07:15		394	137		
07:30		362	153		
07:45		260	102	1353	530
08:00		260	134		
08:15		294	130		
08:30		258	90		
08:45		255	113	1067	467
09:00		174	109		
09:15		300	92		
09:30		346	83		
09:45		300	74	1120	358
10:00		279	74		
10:15		208	58		
10:30		222	64		
10:45		230	40	939	236
11:00		234	37		
11:15		244	29		
11:30		258	36		
11:45		256	42	992	144
Total		7066	8843		
Percent		44.4%	55.6%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 77
Station ID: 77
I-26 EB C-D ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		30	236		
12:15		19	239		
12:30		19	204		
12:45		8	230	76	909
01:00		11	253		
01:15		9	236		
01:30		14	250		
01:45		15	224	49	963
02:00		15	224		
02:15		13	286		
02:30		11	258		
02:45		15	244	54	1012
03:00		12	230		
03:15		13	261		
03:30		10	296		
03:45		10	256	45	1043
04:00		14	302		
04:15		18	302		
04:30		26	294		
04:45		40	277	98	1175
05:00		38	348		
05:15		52	245		
05:30		68	286		
05:45		82	190	240	1069
06:00		138	270		
06:15		234	206		
06:30		356	170		
06:45		370	157	1098	803
07:00		360	154		
07:15		360	124		
07:30		379	126		
07:45		249	130	1348	534
08:00		208	126		
08:15		214	110		
08:30		230	101		
08:45		264	111	916	448
09:00		220	112		
09:15		183	86		
09:30		205	70		
09:45		240	91	848	359
10:00		216	76		
10:15		201	58		
10:30		212	58		
10:45		247	66	876	258
11:00		199	38		
11:15		258	36		
11:30		248	38		
11:45		262	30	967	142
Total		6615	8715		
Percent		43.2%	56.8%		
Grand Total		13681	17558		
Percent		43.8%	56.2%		
ADT		ADT 15,620		AADT 15,620	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 78
Station ID: 78
I-26 WB OFF RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		134	500		
12:15		148	510		
12:30		112	514		
12:45		92	514	486	2038
01:00		74	526		
01:15		76	583		
01:30		72	556		
01:45		58	622	280	2287
02:00		52	586		
02:15		58	614		
02:30		40	663		
02:45		32	692	182	2555
03:00		35	690		
03:15		34	721		
03:30		32	714		
03:45		24	766	125	2891
04:00		38	730		
04:15		42	740		
04:30		48	728		
04:45		64	760	192	2958
05:00		66	771		
05:15		104	685		
05:30		136	771		
05:45		222	744	528	2971
06:00		225	760		
06:15		326	778		
06:30		436	629		
06:45		472	594	1459	2761
07:00		409	566		
07:15		485	574		
07:30		562	530		
07:45		492	474	1948	2144
08:00		450	532		
08:15		457	476		
08:30		432	430		
08:45		418	387	1757	1825
09:00		318	403		
09:15		372	412		
09:30		380	398		
09:45		376	360	1446	1573
10:00		379	280		
10:15		440	285		
10:30		478	250		
10:45		442	218	1739	1033
11:00		472	216		
11:15		478	248		
11:30		494	218		
11:45		508	188	1952	870
Total		12094	25906		
Percent		31.8%	68.2%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 78
Station ID: 78
I-26 WB OFF RAMP TO I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		190	536		
12:15		190	518		
12:30		127	544		
12:45		104	547	611	2145
01:00		88	535		
01:15		83	562		
01:30		98	618		
01:45		78	594	347	2309
02:00		62	604		
02:15		68	652		
02:30		50	646		
02:45		46	696	226	2598
03:00		38	659		
03:15		46	762		
03:30		34	780		
03:45		33	763	151	2964
04:00		47	744		
04:15		39	796		
04:30		50	792		
04:45		54	760	190	3092
05:00		70	758		
05:15		92	785		
05:30		136	762		
05:45		185	786	483	3091
06:00		244	752		
06:15		325	750		
06:30		412	671		
06:45		476	564	1457	2737
07:00		406	580		
07:15		485	544		
07:30		564	532		
07:45		550	460	2005	2116
08:00		502	476		
08:15		470	481		
08:30		450	480		
08:45		460	426	1882	1863
09:00		401	434		
09:15		427	394		
09:30		400	380		
09:45		458	300	1686	1508
10:00		428	297		
10:15		486	289		
10:30		464	274		
10:45		486	234	1864	1094
11:00		486	178		
11:15		510	238		
11:30		496	205		
11:45		562	240	2054	861
Total		12956	26378		
Percent		32.9%	67.1%		
Grand Total		25050	52284		
Percent		32.4%	67.6%		
ADT		ADT 38,667		AADT 38,667	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 79
Station ID: 79
I-26 WB C-D OFF RAMP TO ASHLEY PHOSPHATE

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		49	296		
12:15		60	287		
12:30		44	304		
12:45		47	290	200	1177
01:00		30	297		
01:15		31	294		
01:30		35	308		
01:45		33	356	129	1255
02:00		22	318		
02:15		28	313		
02:30		18	362		
02:45		16	342	84	1335
03:00		11	371		
03:15		20	360		
03:30		23	381		
03:45		13	382	67	1494
04:00		20	336		
04:15		28	373		
04:30		24	364		
04:45		28	360	100	1433
05:00		38	364		
05:15		59	328		
05:30		76	362		
05:45		144	381	317	1435
06:00		127	397		
06:15		196	352		
06:30		247	319		
06:45		275	302	845	1370
07:00		224	285		
07:15		276	320		
07:30		302	313		
07:45		294	240	1096	1158
08:00		262	304		
08:15		251	266		
08:30		220	229		
08:45		238	212	971	1011
09:00		188	208		
09:15		217	216		
09:30		218	176		
09:45		237	170	860	770
10:00		229	140		
10:15		230	138		
10:30		288	108		
10:45		262	106	1009	492
11:00		276	111		
11:15		299	106		
11:30		313	96		
11:45		309	88	1197	401
Total		6875	13331		
Percent		34.0%	66.0%		

All Traffic Data Services, Inc
1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 79
Station ID: 79
I-26 WB C-D OFF RAMP TO ASHLEY PHOSPHATE

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		82	324		
12:15		79	288		
12:30		60	332		
12:45		48	307	269	1251
01:00		33	304		
01:15		30	318		
01:30		41	336		
01:45		43	342	147	1300
02:00		24	346		
02:15		32	342		
02:30		26	340		
02:45		23	380	105	1408
03:00		16	356		
03:15		22	390		
03:30		20	374		
03:45		22	390	80	1510
04:00		30	375		
04:15		24	401		
04:30		32	400		
04:45		37	386	123	1562
05:00		38	364		
05:15		60	344		
05:30		76	370		
05:45		110	371	284	1449
06:00		125	368		
06:15		184	396		
06:30		269	358		
06:45		257	296	835	1418
07:00		228	337		
07:15		271	275		
07:30		309	293		
07:45		306	244	1114	1149
08:00		301	240		
08:15		270	269		
08:30		258	246		
08:45		276	230	1105	985
09:00		240	213		
09:15		262	190		
09:30		242	186		
09:45		262	154	1006	743
10:00		252	159		
10:15		306	148		
10:30		260	132		
10:45		306	98	1124	537
11:00		282	84		
11:15		278	106		
11:30		314	78		
11:45		354	90	1228	358
Total		7420	13670		
Percent		35.2%	64.8%		
Grand Total		14295	27001		
Percent		34.6%	65.4%		
ADT		ADT 20,648		AADT 20,648	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 80
Station ID: 80
ASHLEY PHOSPHATE ROAD ON RAMP TO
I-26 WB C-D
Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		56	261		
12:15		50	256		
12:30		46	308		
12:45		46	260	198	1085
01:00		56	234		
01:15		45	187		
01:30		23	260		
01:45		28	304	152	985
02:00		23	248		
02:15		24	315		
02:30		24	346		
02:45		38	315	109	1224
03:00		38	366		
03:15		48	312		
03:30		44	382		
03:45		28	355	158	1415
04:00		34	370		
04:15		19	405		
04:30		62	406		
04:45		53	386	168	1567
05:00		79	430		
05:15		94	397		
05:30		90	384		
05:45		114	391	377	1602
06:00		143	294		
06:15		198	328		
06:30		210	288		
06:45		233	286	784	1196
07:00		185	264		
07:15		183	255		
07:30		214	217		
07:45		205	198	787	934
08:00		150	206		
08:15		154	194		
08:30		182	204		
08:45		186	176	672	780
09:00		210	204		
09:15		150	198		
09:30		199	168		
09:45		200	152	759	722
10:00		205	144		
10:15		170	146		
10:30		223	116		
10:45		192	104	790	510
11:00		234	102		
11:15		228	90		
11:30		229	113		
11:45		280	62	971	367
Total		5925	12387		
Percent		32.4%	67.6%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 80
Station ID: 80
ASHLEY PHOSPHATE ROAD ON RAMP TO
I-26 WB C-D
Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		84	276		
12:15		64	265		
12:30		38	278		
12:45		44	242	230	1061
01:00		56	271		
01:15		27	252		
01:30		32	258		
01:45		30	280	145	1061
02:00		43	278		
02:15		25	354		
02:30		37	334		
02:45		26	322	131	1288
03:00		22	346		
03:15		44	381		
03:30		46	372		
03:45		34	366	146	1465
04:00		38	369		
04:15		46	384		
04:30		68	395		
04:45		48	371	200	1519
05:00		90	420		
05:15		80	410		
05:30		88	382		
05:45		122	325	380	1537
06:00		160	282		
06:15		198	293		
06:30		244	338		
06:45		210	266	812	1179
07:00		206	243		
07:15		199	260		
07:30		208	258		
07:45		238	232	851	993
08:00		218	244		
08:15		218	288		
08:30		191	211		
08:45		207	230	834	973
09:00		236	218		
09:15		196	212		
09:30		228	149		
09:45		218	166	878	745
10:00		229	136		
10:15		205	157		
10:30		241	110		
10:45		226	89	901	492
11:00		218	98		
11:15		246	91		
11:30		234	96		
11:45		244	62	942	347
Total		6450	12660		
Percent		33.8%	66.2%		
Grand Total		12375	25047		
Percent		33.1%	66.9%		
ADT		ADT 18,711		AADT 18,711	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 81
Station ID: 81
I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		124	412		
12:15		134	443		
12:30		106	483		
12:45		84	432	448	1770
01:00		91	433		
01:15		88	398		
01:30		52	456		
01:45		49	562	280	1849
02:00		47	462		
02:15		48	574		
02:30		46	574		
02:45		46	620	187	2230
03:00		56	622		
03:15		46	628		
03:30		48	645		
03:45		38	686	188	2581
04:00		46	704		
04:15		32	714		
04:30		72	704		
04:45		76	733	226	2855
05:00		98	739		
05:15		124	730		
05:30		128	700		
05:45		180	702	530	2871
06:00		223	636		
06:15		292	678		
06:30		326	546		
06:45		393	546	1234	2406
07:00		344	503		
07:15		366	477		
07:30		389	418		
07:45		382	392	1481	1790
08:00		306	418		
08:15		338	379		
08:30		348	374		
08:45		340	340	1332	1511
09:00		318	364		
09:15		280	396		
09:30		318	369		
09:45		304	324	1220	1453
10:00		338	276		
10:15		347	274		
10:30		386	230		
10:45		349	212	1420	992
11:00		374	188		
11:15		392	212		
11:30		368	207		
11:45		437	162	1571	769
Total		10117	23077		
Percent		30.5%	69.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 81
Station ID: 81
I-26 WB C-D

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		178	434		
12:15		162	454		
12:30		102	444		
12:45		99	458	541	1790
01:00		99	472		
01:15		78	466		
01:30		84	476		
01:45		62	500	323	1914
02:00		78	470		
02:15		50	594		
02:30		61	592		
02:45		44	590	233	2246
03:00		42	593		
03:15		52	678		
03:30		56	726		
03:45		40	706	190	2703
04:00		49	677		
04:15		52	718		
04:30		72	706		
04:45		58	710	231	2811
05:00		100	718		
05:15		94	748		
05:30		140	717		
05:45		163	704	497	2887
06:00		246	615		
06:15		308	614		
06:30		334	619		
06:45		390	498	1278	2346
07:00		356	453		
07:15		384	491		
07:30		411	470		
07:45		460	425	1611	1839
08:00		378	433		
08:15		391	478		
08:30		358	420		
08:45		360	404	1487	1735
09:00		350	432		
09:15		339	370		
09:30		352	344		
09:45		373	290	1414	1436
10:00		372	260		
10:15		362	280		
10:30		388	242		
10:45		392	216	1514	998
11:00		378	181		
11:15		454	196		
11:30		367	212		
11:45		418	216	1617	805
Total		10936	23510		
Percent		31.7%	68.3%		
Grand Total		21053	46587		
Percent		31.1%	68.9%		
ADT		ADT 33,820		AADT 33,820	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 82
Station ID: 82
I-26 WB C-D OFF RAMP TO US52

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		108	258		
12:15		108	310		
12:30		89	288		
12:45		60	294	365	1150
01:00		63	296		
01:15		69	289		
01:30		42	307		
01:45		28	386	202	1278
02:00		36	318		
02:15		37	410		
02:30		28	404		
02:45		26	468	127	1600
03:00		40	425		
03:15		25	474		
03:30		23	468		
03:45		14	504	102	1871
04:00		25	500		
04:15		19	504		
04:30		40	500		
04:45		50	532	134	2036
05:00		52	520		
05:15		82	540		
05:30		86	494		
05:45		121	490	341	2044
06:00		162	484		
06:15		196	510		
06:30		228	402		
06:45		285	392	871	1788
07:00		254	384		
07:15		266	361		
07:30		290	306		
07:45		284	291	1094	1342
08:00		238	320		
08:15		250	292		
08:30		263	261		
08:45		256	236	1007	1109
09:00		224	276		
09:15		197	274		
09:30		225	286		
09:45		198	236	844	1072
10:00		240	194		
10:15		254	210		
10:30		254	182		
10:45		248	162	996	748
11:00		249	153		
11:15		265	178		
11:30		249	152		
11:45		302	126	1065	609
Total		7148	16647		
Percent		30.0%	70.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 82
Station ID: 82
I-26 WB C-D OFF RAMP TO US52

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		141	278		
12:15		127	312		
12:30		81	276		
12:45		79	325	428	1191
01:00		68	300		
01:15		60	314		
01:30		72	344		
01:45		46	330	246	1288
02:00		46	334		
02:15		40	420		
02:30		36	419		
02:45		30	437	152	1610
03:00		30	422		
03:15		31	480		
03:30		26	521		
03:45		18	505	105	1928
04:00		33	480		
04:15		25	520		
04:30		37	506		
04:45		32	511	127	2017
05:00		54	512		
05:15		58	522		
05:30		100	513		
05:45		108	549	320	2096
06:00		181	478		
06:15		218	470		
06:30		230	445		
06:45		279	358	908	1751
07:00		266	342		
07:15		275	346		
07:30		316	332		
07:45		342	315	1199	1335
08:00		271	326		
08:15		288	327		
08:30		273	310		
08:45		260	286	1092	1249
09:00		228	298		
09:15		208	270		
09:30		230	260		
09:45		258	200	924	1028
10:00		256	188		
10:15		242	210		
10:30		256	194		
10:45		260	178	1014	770
11:00		270	139		
11:15		316	163		
11:30		252	162		
11:45		284	174	1122	638
Total		7637	16901		
Percent		31.1%	68.9%		
Grand Total		14785	33548		
Percent		30.6%	69.4%		
ADT		ADT 24,166		AADT 24,166	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 83
Station ID: 83
I-26 WB C-D ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		20	163		
12:15		24	144		
12:30		21	208		
12:45		22	154	87	669
01:00		28	140		
01:15		21	121		
01:30		10	151		
01:45		20	190	79	602
02:00		12	152		
02:15		13	169		
02:30		16	181		
02:45		20	161	61	663
03:00		16	210		
03:15		24	167		
03:30		22	202		
03:45		24	202	86	781
04:00		22	224		
04:15		12	228		
04:30		34	225		
04:45		26	218	94	895
05:00		45	248		
05:15		45	214		
05:30		43	221		
05:45		58	225	191	908
06:00		64	156		
06:15		105	176		
06:30		99	162		
06:45		114	158	382	652
07:00		96	140		
07:15		100	130		
07:30		112	118		
07:45		103	104	411	492
08:00		74	102		
08:15		91	96		
08:30		91	126		
08:45		90	103	346	427
09:00		109	102		
09:15		76	124		
09:30		97	86		
09:45		116	90	398	402
10:00		105	80		
10:15		100	66		
10:30		141	49		
10:45		105	48	451	243
11:00		132	40		
11:15		136	37		
11:30		122	55		
11:45		152	38	542	170
Total		3128	6904		
Percent		31.2%	68.8%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 83
Station ID: 83
I-26 WB C-D ON RAMP TO I-26 WB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		32	168		
12:15		32	149		
12:30		22	174		
12:45		19	139	105	630
01:00		30	170		
01:15		17	162		
01:30		14	134		
01:45		14	176	75	642
02:00		33	150		
02:15		10	184		
02:30		22	183		
02:45		16	166	81	683
03:00		10	180		
03:15		22	208		
03:30		28	217		
03:45		22	212	82	817
04:00		16	204		
04:15		27	219		
04:30		37	225		
04:45		24	209	104	857
05:00		46	231		
05:15		34	242		
05:30		41	223		
05:45		54	182	175	878
06:00		70	144		
06:15		101	170		
06:30		114	188		
06:45		111	146	396	648
07:00		104	128		
07:15		110	146		
07:30		99	144		
07:45		124	119	437	537
08:00		113	121		
08:15		106	155		
08:30		88	114		
08:45		108	128	415	518
09:00		134	133		
09:15		138	112		
09:30		127	84		
09:45		119	92	518	421
10:00		124	75		
10:15		130	66		
10:30		138	46		
10:45		135	38	527	225
11:00		118	44		
11:15		143	38		
11:30		130	45		
11:45		136	36	527	163
Total		3442	7019		
Percent		32.9%	67.1%		
Grand Total		6570	13923		
Percent		32.1%	67.9%		
ADT		ADT 10,246		AADT 10,246	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 84
Station ID: 84
I-26 EB OFF RAMP TO ASHLEY PHOSPHATE RD.

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		19	161		
12:15		6	162		
12:30		16	158		
12:45		16	166	57	647
01:00		22	172		
01:15		18	136		
01:30		11	104		
01:45		21	182	72	594
02:00		10	113		
02:15		19	146		
02:30		16	165		
02:45		21	160	66	584
03:00		12	150		
03:15		15	170		
03:30		18	136		
03:45		32	162	77	618
04:00		26	154		
04:15		36	158		
04:30		36	155		
04:45		40	140	138	607
05:00		27	136		
05:15		64	108		
05:30		94	151		
05:45		133	118	318	513
06:00		150	142		
06:15		206	138		
06:30		204	142		
06:45		222	104	782	526
07:00		190	122		
07:15		206	76		
07:30		124	54		
07:45		132	24	652	276
08:00		162	52		
08:15		98	106		
08:30		136	72		
08:45		160	85	556	315
09:00		134	64		
09:15		162	69		
09:30		168	54		
09:45		196	69	660	256
10:00		202	60		
10:15		162	54		
10:30		161	60		
10:45		140	48	665	222
11:00		180	40		
11:15		132	38		
11:30		168	29		
11:45		150	24	630	131
Total		4673	5289		
Percent		46.9%	53.1%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 84
Station ID: 84
I-26 EB OFF RAMP TO ASHLEY PHOSPHATE RD.

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		26	154		
12:15		29	137		
12:30		16	118		
12:45		22	158	93	567
01:00		16	186		
01:15		17	149		
01:30		14	163		
01:45		13	156	60	654
02:00		14	162		
02:15		13	135		
02:30		22	156		
02:45		22	132	71	585
03:00		15	182		
03:15		18	156		
03:30		22	161		
03:45		34	150	89	649
04:00		20	146		
04:15		32	160		
04:30		35	150		
04:45		29	143	116	599
05:00		44	142		
05:15		58	169		
05:30		108	136		
05:45		126	128	336	575
06:00		176	144		
06:15		164	166		
06:30		202	122		
06:45		176	136	718	568
07:00		179	118		
07:15		186	110		
07:30		198	100		
07:45		171	96	734	424
08:00		196	106		
08:15		175	88		
08:30		266	79		
08:45		204	98	841	371
09:00		159	66		
09:15		156	86		
09:30		176	81		
09:45		166	58	657	291
10:00		152	68		
10:15		138	45		
10:30		150	60		
10:45		164	54	604	227
11:00		178	24		
11:15		144	30		
11:30		157	36		
11:45		156	26	635	116
Total		4954	5626		
Percent		46.8%	53.2%		
Grand Total		9627	10915		
Percent		46.9%	53.1%		
ADT		ADT 10,271		AADT 10,271	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 85
Station ID: 85
US52 ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		16	195		
12:15		26	244		
12:30		23	240		
12:45		22	242	87	921
01:00		14	260		
01:15		13	230		
01:30		24	264		
01:45		16	200	67	954
02:00		19	232		
02:15		13	236		
02:30		7	284		
02:45		16	265	55	1017
03:00		21	240		
03:15		18	286		
03:30		44	250		
03:45		36	228	119	1004
04:00		41	258		
04:15		62	241		
04:30		126	230		
04:45		98	250	327	979
05:00		116	322		
05:15		180	268		
05:30		300	263		
05:45		296	273	892	1126
06:00		354	280		
06:15		458	230		
06:30		541	218		
06:45		452	165	1805	893
07:00		528	149		
07:15		515	166		
07:30		564	203		
07:45		500	170	2107	688
08:00		480	158		
08:15		394	108		
08:30		340	124		
08:45		342	118	1556	508
09:00		262	89		
09:15		301	104		
09:30		266	124		
09:45		264	96	1093	413
10:00		252	105		
10:15		223	76		
10:30		305	88		
10:45		212	52	992	321
11:00		201	53		
11:15		240	53		
11:30		208	45		
11:45		198	34	847	185
Total		9947	9009		
Percent		52.5%	47.5%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 85
Station ID: 85
US52 ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		21	224		
12:15		28	245		
12:30		17	202		
12:45		16	232	82	903
01:00		15	231		
01:15		9	258		
01:30		21	260		
01:45		14	219	59	968
02:00		9	250		
02:15		16	244		
02:30		20	250		
02:45		11	276	56	1020
03:00		13	226		
03:15		20	264		
03:30		46	238		
03:45		26	182	105	910
04:00		40	242		
04:15		63	218		
04:30		119	249		
04:45		118	251	340	960
05:00		110	255		
05:15		182	266		
05:30		300	249		
05:45		273	234	865	1004
06:00		320	236		
06:15		476	265		
06:30		570	252		
06:45		484	176	1850	929
07:00		532	166		
07:15		510	152		
07:30		558	158		
07:45		482	108	2082	584
08:00		512	126		
08:15		388	112		
08:30		352	113		
08:45		356	112	1608	463
09:00		281	90		
09:15		333	111		
09:30		295	140		
09:45		254	93	1163	434
10:00		254	88		
10:15		237	89		
10:30		254	87		
10:45		244	54	989	318
11:00		218	42		
11:15		258	37		
11:30		247	40		
11:45		242	22	965	141
Total		10164	8634		
Percent		54.1%	45.9%		
Grand Total		20111	17643		
Percent		53.3%	46.7%		
ADT		ADT 18,877		AADT 18,877	

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 86
Station ID: 86
ASHLEY PHOSPATE ROAD ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

Start Time	05-May-15 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		32	296		
12:15		22	286		
12:30		18	272		
12:45		34	318	106	1172
01:00		32	224		
01:15		28	226		
01:30		19	268		
01:45		16	269	95	987
02:00		10	255		
02:15		16	306		
02:30		24	258		
02:45		24	294	74	1113
03:00		16	292		
03:15		30	283		
03:30		38	315		
03:45		20	278	104	1168
04:00		34	314		
04:15		46	302		
04:30		62	312		
04:45		62	294	204	1222
05:00		66	290		
05:15		108	291		
05:30		189	250		
05:45		246	274	609	1105
06:00		262	276		
06:15		390	269		
06:30		397	258		
06:45		310	246	1359	1049
07:00		288	213		
07:15		280	198		
07:30		277	172		
07:45		258	180	1103	763
08:00		260	160		
08:15		237	142		
08:30		132	176		
08:45		220	147	849	625
09:00		238	163		
09:15		232	141		
09:30		266	130		
09:45		302	126	1038	560
10:00		312	103		
10:15		274	100		
10:30		210	84		
10:45		306	84	1102	371
11:00		268	67		
11:15		293	58		
11:30		292	59		
11:45		310	30	1163	214
Total		7806	10349		
Percent		43.0%	57.0%		

All Traffic Data Services, Inc

1336 Farmer Road
Conyers, GA 30012
alltrafficdata.net

Site Code: 86
Station ID: 86
ASHLEY PHOSPATE ROAD ON RAMP TO I-26 EB

Latitude: 0' 0.0000 Undefined

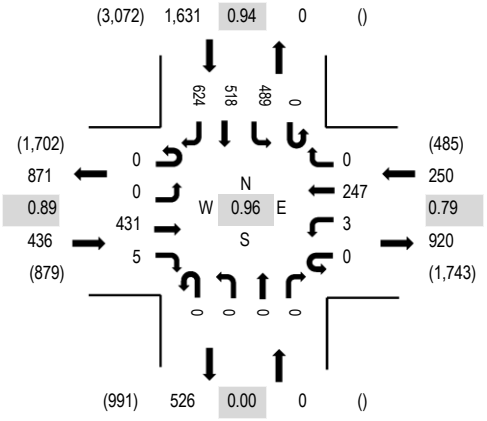
Start Time	06-May-15 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		39	294		
12:15		32	310		
12:30		33	315		
12:45		29	295	133	1214
01:00		24	303		
01:15		32	324		
01:30		19	301		
01:45		22	328	97	1256
02:00		25	277		
02:15		17	320		
02:30		20	285		
02:45		22	324	84	1206
03:00		20	323		
03:15		20	314		
03:30		28	312		
03:45		38	311	106	1260
04:00		29	321		
04:15		65	332		
04:30		66	312		
04:45		70	333	230	1298
05:00		72	278		
05:15		112	274		
05:30		176	299		
05:45		198	270	558	1121
06:00		294	260		
06:15		363	268		
06:30		440	314		
06:45		368	275	1465	1117
07:00		392	218		
07:15		384	205		
07:30		402	206		
07:45		330	172	1508	801
08:00		368	162		
08:15		368	176		
08:30		344	180		
08:45		316	136	1396	654
09:00		288	136		
09:15		288	129		
09:30		303	125		
09:45		314	130	1193	520
10:00		299	89		
10:15		324	110		
10:30		302	124		
10:45		286	84	1211	407
11:00		240	68		
11:15		326	56		
11:30		320	48		
11:45		332	41	1218	213
Total		9199	11067		
Percent		45.4%	54.6%		
Grand Total		17005	21416		
Percent		44.3%	55.7%		
ADT		ADT 19,210		AADT 19,210	

2.3 Peak Hour Intersection Turning Movement Counts

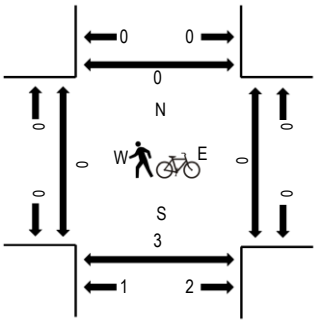
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 1 I-526 WB Ramps & Sam Rittenberg Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				I-526 WB Ramps Northbound				I-526 WB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	0	89	1	0	2	51	0	0	0	0	0	0	83	102	140	468	2,119	0	0	0	0
7:15:00 AM	0	0	111	0	0	1	52	0	0	0	0	0	0	78	100	153	495	2,219	0	0	0	0
7:30:00 AM	0	0	113	1	1	4	53	0	0	0	0	0	0	111	129	170	582	2,288	0	0	0	0
7:45:00 AM	0	0	127	1	0	5	66	0	0	0	0	0	0	110	119	146	574	2,310	0	0	0	0
8:00:00 AM	0	0	80	4	0	0	49	0	0	0	0	0	0	141	132	162	568	2,317	0	0	0	0
8:15:00 AM	0	0	122	0	0	1	58	0	0	0	0	0	0	109	130	144	564		0	0	1	0
8:30:00 AM	0	0	111	0	0	0	79	0	0	0	0	0	0	135	115	164	604		0	0	1	0
8:45:00 AM	0	0	118	1	0	2	61	0	0	0	0	0	0	104	141	154	581		0	0	1	0

Peak Rolling Hour Flow Rates

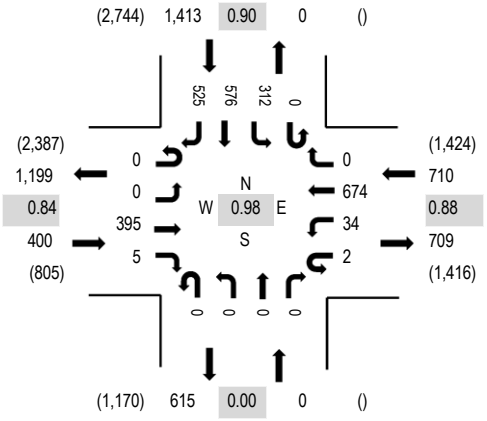
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	2	0	0	0	0	0	0	1	4	28	39
Lights	0	0	399	5	0	3	200	0	0	0	0	0	0	482	505	535	2,129
Mediums	0	0	28	0	0	0	45	0	0	0	0	0	0	6	9	61	149
Total	0	0	431	5	0	3	247	0	0	0	0	0	0	489	518	624	2,317

All Traffic Data Services Inc.

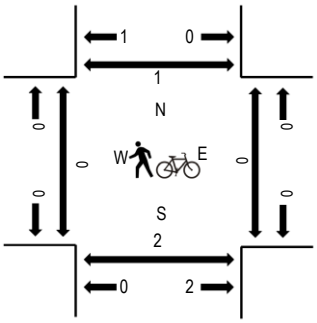
(303) 216-2439
www.alltrafficdata.net

Location: 1 I-526 WB Ramps & Sam Rittenberg Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				I-526 WB Ramps Northbound				I-526 WB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	0	93	1	1	6	157	0	0	0	0	0	0	81	158	116	613	2,481	0	0	0	2
4:15:00 PM	0	0	113	5	1	7	181	0	0	0	0	0	0	87	133	132	659	2,509	0	0	0	1
4:30:00 PM	0	0	95	1	1	8	166	0	0	0	0	0	0	68	108	140	587	2,480	0	0	0	0
4:45:00 PM	0	0	109	3	0	5	169	0	0	0	0	0	0	80	113	143	622	2,523	0	0	0	1
5:00:00 PM	0	0	76	2	0	8	162	0	0	0	0	0	0	86	151	156	641	2,492	0	0	0	0
5:15:00 PM	0	0	119	0	1	7	194	0	0	0	0	0	0	67	132	110	630		0	0	1	0
5:30:00 PM	0	0	91	0	1	14	149	0	0	0	0	0	0	79	180	116	630		0	0	0	0
5:45:00 PM	0	0	95	2	0	15	171	0	0	0	0	0	0	72	111	125	591		0	0	0	1

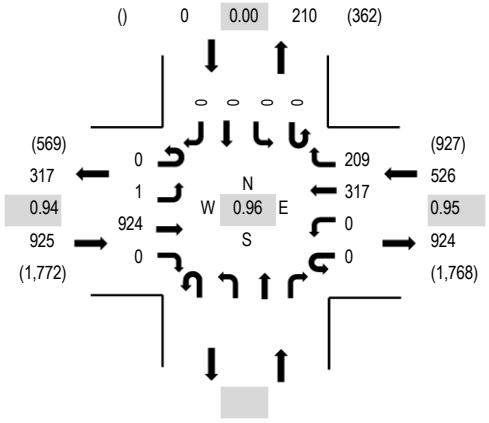
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	3	0	0	0	0	0	0	0	2	20	26
Lights	0	0	391	5	2	33	663	0	0	0	0	0	0	310	571	483	2,458
Mediums	0	0	3	0	0	1	8	0	0	0	0	0	0	2	3	22	39
Total	0	0	395	5	2	34	674	0	0	0	0	0	0	312	576	525	2,523

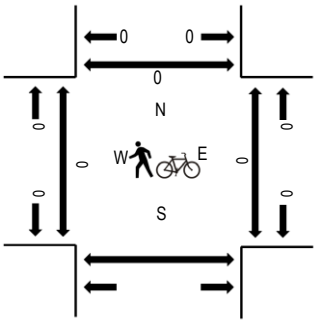
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 2 I-526 EB Ramps & Sam Rittenberg Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				Northbound				I-526 EB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	1	193	0	0	0	61	38					0	0	0	0	293	1,258	0	0		0
7:15:00 AM	0	0	206	0	0	0	53	28					0	0	0	0	287	1,317	0	0		0
7:30:00 AM	0	1	219	0	0	0	54	38					0	0	0	0	312	1,386	0	0		1
7:45:00 AM	0	0	228	0	0	0	82	56					0	0	0	0	366	1,451	0	0		0
8:00:00 AM	0	0	220	0	0	0	75	57					0	0	0	0	352	1,441	0	0		0
8:15:00 AM	0	1	230	0	0	0	85	40					0	0	0	0	356		0	0		0
8:30:00 AM	0	0	246	0	0	0	75	56					0	0	0	0	377		0	0		0
8:45:00 AM	0	1	226	0	0	0	84	45					0	0	0	0	356		0	0		0

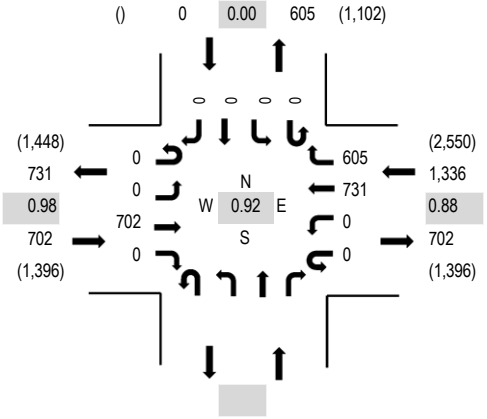
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	7	0	0	0	5	0					0	0	0	0	12
Lights	0	1	884	0	0	0	277	206					0	0	0	0	1,368
Mediums	0	0	33	0	0	0	35	3					0	0	0	0	71
Total	0	1	924	0	0	0	317	209					0	0	0	0	1,451

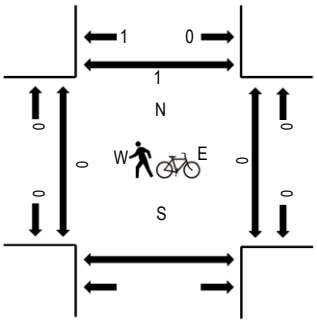
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 2 I-526 EB Ramps & Sam Rittenberg Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				Northbound				I-526 EB Ramps Southbound					Rolling Hour	Pedestrain Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
4:00:00 PM	0	0	184	0	0	0	185	147					0	0	0	0	516	1,962	0	0	2
4:15:00 PM	0	0	180	0	0	0	175	112					0	0	0	0	467	1,999	0	0	1
4:30:00 PM	0	0	179	0	0	0	182	141					0	0	0	0	502	2,038	0	0	0
4:45:00 PM	0	0	174	0	0	0	165	138					0	0	0	0	477	1,989	0	0	1
5:00:00 PM	0	0	172	0	0	0	188	193					0	0	0	0	553	1,984	0	0	0
5:15:00 PM	0	0	177	0	0	0	196	133					0	0	0	0	506		0	0	0
5:30:00 PM	0	0	159	0	0	0	169	125					0	0	0	0	453		0	0	0
5:45:00 PM	0	0	171	0	0	0	188	113					0	0	0	0	472		0	0	1

Peak Rolling Hour Flow Rates

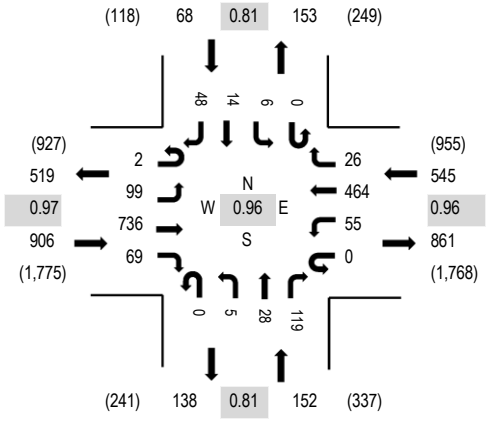
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	2	1					0	0	0	0	4
Lights	0	0	692	0	0	0	716	597					0	0	0	0	2,005
Mediums	0	0	9	0	0	0	13	7					0	0	0	0	29
Total	0	0	702	0	0	0	731	605					0	0	0	0	2,038

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

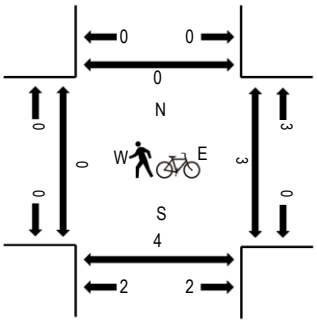
Location: 3 Sam Rittenberg Blvd & Sam Rittenberg Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Skylark Eastbound				Sam Rittenberg Blvd Westbound				Sam Rittenberg Blvd Northbound				Skylark Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	12	160	14	0	3	86	7	0	0	4	44	0	0	4	13	347	1,514	0	0	0	0
7:15:00 AM	0	15	179	19	0	5	78	3	0	0	7	43	0	1	3	6	359	1,571	0	0	0	0
7:30:00 AM	0	16	204	14	0	12	89	1	0	0	7	43	0	0	0	12	398	1,634	0	0	0	0
7:45:00 AM	0	20	198	18	0	6	118	2	0	0	2	35	0	0	5	6	410	1,647	0	0	0	1
8:00:00 AM	1	19	182	18	0	15	120	7	0	0	7	23	0	0	4	8	404	1,671	0	0	0	0
8:15:00 AM	0	28	190	13	0	10	110	8	0	1	7	39	0	1	4	11	422		0	0	0	0
8:30:00 AM	1	19	181	20	0	16	114	4	0	1	6	28	0	4	4	13	411		0	2	2	0
8:45:00 AM	0	33	183	18	0	14	120	7	0	3	8	29	0	1	2	16	434		0	1	2	0

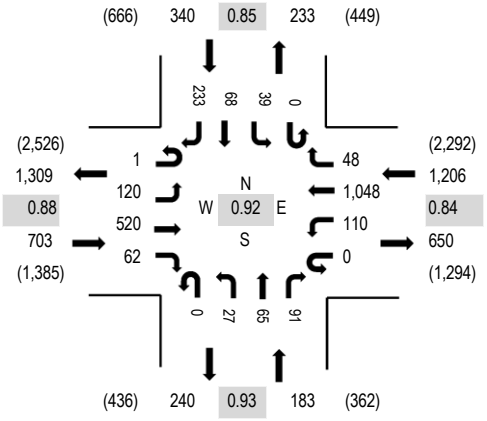
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	1	11
Lights	2	97	707	68	0	55	416	25	0	4	24	118	0	6	11	46	1,579
Mediums	0	2	23	1	0	0	44	1	0	1	4	1	0	0	3	1	81
Total	2	99	736	69	0	55	464	26	0	5	28	119	0	6	14	48	1,671

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

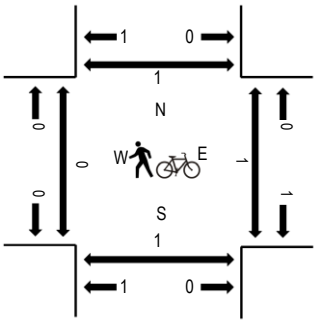
Location: 3 Sam Rittenberg Blvd & Sam Rittenberg Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Skylark Eastbound				Sam Rittenberg Blvd Westbound				Sam Rittenberg Blvd Northbound				Skylark Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	31	148	11	0	21	245	10	0	4	16	29	0	9	20	68	612	2,382	0	0	0	1
4:15:00 PM	0	29	145	11	0	29	236	9	0	5	19	23	0	8	15	53	582	2,432	0	1	0	1
4:30:00 PM	0	25	125	11	0	32	274	16	0	6	13	21	0	9	15	52	599	2,430	0	0	1	0
4:45:00 PM	1	41	138	19	0	22	223	8	0	8	17	24	0	11	21	56	589	2,418	0	0	0	0
5:00:00 PM	0	25	112	21	0	27	315	15	0	8	16	23	0	11	17	72	662	2,323	0	0	0	0
5:15:00 PM	0	22	140	18	1	14	245	9	0	8	15	25	0	15	13	55	580		0	0	0	0
5:30:00 PM	0	35	129	16	0	21	255	10	0	2	10	22	0	11	21	55	587		0	0	0	0
5:45:00 PM	0	26	88	18	0	15	227	13	0	6	19	23	0	4	8	47	494		0	0	0	0

Peak Rolling Hour Flow Rates

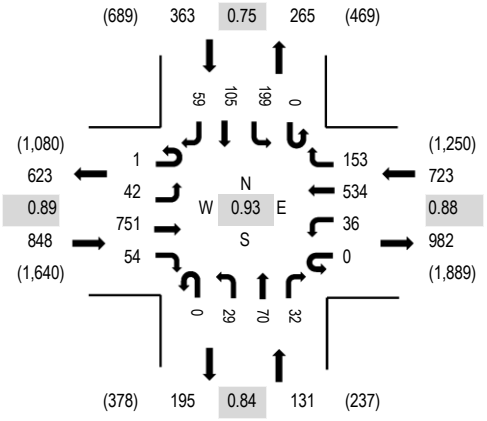
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	2	0	0	0	2	0	0	0	0	1	0	0	0	1	7
Lights	1	117	511	61	0	109	1,029	48	0	27	61	90	0	39	66	231	2,390
Mediums	0	2	7	1	0	1	17	0	0	0	4	0	0	0	2	1	35
Total	1	120	520	62	0	110	1,048	48	0	27	65	91	0	39	68	233	2,432

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

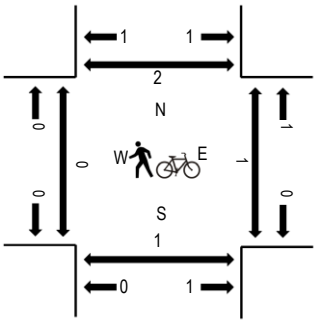
Location: 4 Orleans Rd & Sam Rittenberg Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				Orleans Rd Northbound				Orleans Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	7	158	14	0	0	81	14	0	6	14	4	0	35	19	6	358	1,763	0	0	0	0
7:15:00 AM	1	4	203	14	0	6	86	24	0	5	13	6	0	36	27	15	440	1,870	0	0	1	1
7:30:00 AM	0	7	171	18	0	9	96	29	0	3	8	7	0	44	29	16	437	1,945	0	0	0	0
7:45:00 AM	0	7	195	13	0	9	138	44	0	12	18	9	0	50	18	15	528	2,065	0	0	0	1
8:00:00 AM	0	7	159	16	0	10	129	41	0	8	18	7	0	38	19	13	465	2,053	0	0	0	0
8:15:00 AM	0	19	183	12	0	7	106	33	0	6	19	9	0	63	42	16	515		0	1	0	1
8:30:00 AM	1	9	214	13	0	10	161	35	0	3	15	7	0	48	26	15	557		0	0	0	0
8:45:00 AM	0	11	176	8	0	6	127	49	0	5	24	11	0	56	33	10	516		0	0	0	0

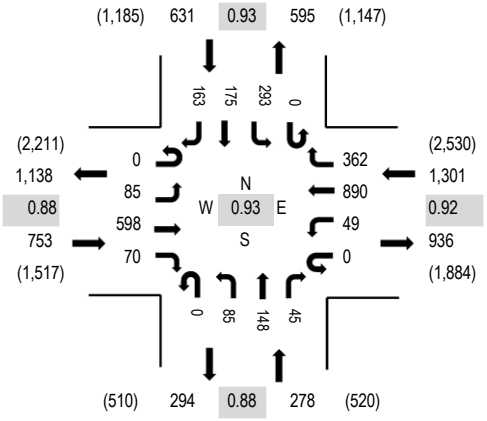
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	10	0	0	0	4	0	0	0	0	0	0	1	0	0	15
Lights	1	42	704	54	0	36	495	150	0	29	69	32	0	194	101	58	1,965
Mediums	0	0	37	0	0	0	35	3	0	0	1	0	0	4	4	1	85
Total	1	42	751	54	0	36	534	153	0	29	70	32	0	199	105	59	2,065

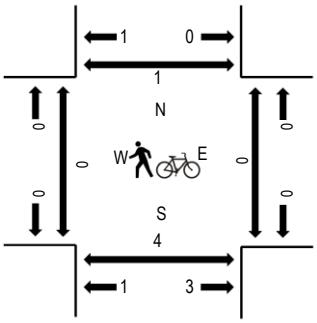
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 4 Orleans Rd & Sam Rittenberg Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sam Rittenberg Blvd Eastbound				Sam Rittenberg Blvd Westbound				Orleans Rd Northbound				Orleans Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	25	158	12	0	12	216	75	0	23	35	6	0	57	31	30	680	2,940	0	0	0	2
4:15:00 PM	0	24	172	18	0	16	236	103	0	15	41	11	0	64	52	42	794	2,963	0	0	0	1
4:30:00 PM	0	21	132	16	0	13	217	85	0	25	42	12	0	73	37	40	713	2,918	0	0	0	0
4:45:00 PM	0	18	170	20	0	9	226	94	0	19	31	13	0	83	34	36	753	2,890	0	0	1	0
5:00:00 PM	0	22	124	16	0	11	211	80	0	26	34	9	0	73	52	45	703	2,812	0	0	2	0
5:15:00 PM	0	26	170	10	0	11	224	92	0	20	29	8	0	85	29	45	749		1	0	0	1
5:30:00 PM	0	16	162	11	0	17	199	81	0	13	33	8	0	86	29	30	685		0	0	2	0
5:45:00 PM	0	21	146	7	0	11	206	85	0	24	34	9	0	53	36	43	675		0	0	1	1

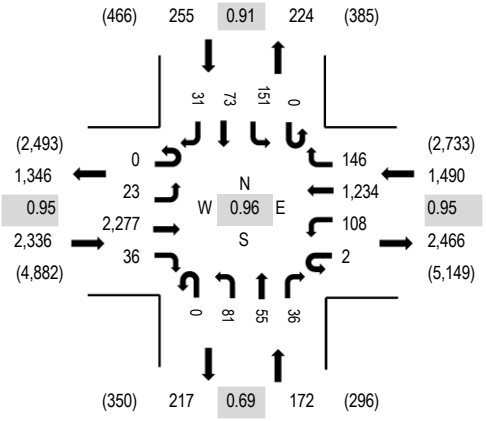
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Lights	0	84	588	70	0	49	878	355	0	85	147	45	0	291	174	160	2,926
Mediums	0	1	9	0	0	0	10	7	0	0	1	0	0	2	1	3	34
Total	0	85	598	70	0	49	890	362	0	85	148	45	0	293	175	163	2,963

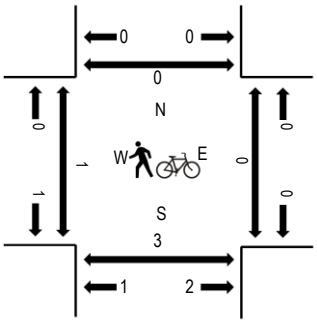
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 5 Ashley Town Center & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Ashley Town Center Northbound				Ashley Town Center Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	3	676	3	0	13	252	10	0	12	5	7	0	45	8	3	1,037	4,186	0	0	0	0
7:15:00 AM	0	7	725	7	0	15	265	26	0	6	8	6	0	28	6	7	1,106	4,134	0	0	0	0
7:30:00 AM	0	4	582	6	1	28	250	23	0	18	12	8	0	40	10	4	986	4,130	0	0	0	0
7:45:00 AM	0	5	600	7	1	30	296	36	0	13	10	6	0	30	15	8	1,057	4,253	0	0	0	0
8:00:00 AM	0	5	536	7	0	25	287	35	0	12	11	4	0	39	21	3	985	4,191	0	0	1	0
8:15:00 AM	0	5	563	10	0	27	328	37	0	30	19	13	0	40	22	8	1,102		0	0	1	0
8:30:00 AM	0	8	578	12	1	26	323	38	0	26	15	13	0	42	15	12	1,109		0	0	0	0
8:45:00 AM	0	9	521	3	2	25	295	38	0	23	16	3	0	39	9	12	995		0	0	1	0

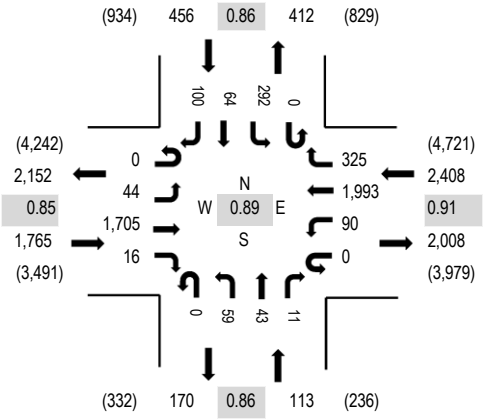
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	29	0	0	2	46	2	0	1	0	0	0	2	0	0	83
Lights	0	22	2,126	33	2	101	1,085	143	0	77	55	34	0	149	73	30	3,930
Mediums	0	0	122	3	0	5	103	1	0	3	0	2	0	0	0	1	240
Total	0	23	2,277	36	2	108	1,234	146	0	81	55	36	0	151	73	31	4,253

All Traffic Data
Services Inc.
(303) 216-2439
www.alltrafficdata.net

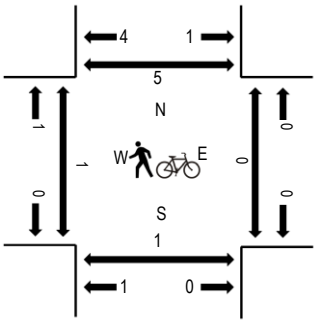
Location: 5 Ashley Town Center & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Ashley Town Center Northbound				Ashley Town Center Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	15	424	3	2	22	452	98	0	18	15	1	0	94	18	38	1,200	4,656	0	0	1	1
4:15:00 PM	0	11	435	5	0	16	498	72	0	14	8	1	0	62	6	29	1,157	4,561	0	0	0	2
4:30:00 PM	0	9	427	4	1	24	478	80	0	19	11	3	0	64	17	46	1,183	4,738	0	0	0	1
4:45:00 PM	0	9	396	3	0	19	490	76	0	18	7	2	0	54	11	31	1,116	4,742	0	0	0	1
5:00:00 PM	0	18	337	3	0	19	477	87	0	18	10	3	0	89	17	27	1,105	4,726	0	0	0	2
5:15:00 PM	0	7	511	4	0	25	546	93	0	9	8	5	0	81	22	23	1,334		1	0	1	0
5:30:00 PM	0	10	461	6	0	27	480	69	0	14	18	1	0	68	14	19	1,187		0	0	0	2
5:45:00 PM	0	7	384	2	1	32	454	83	0	23	8	2	0	70	13	21	1,100		0	0	0	0

Peak Rolling Hour Flow Rates

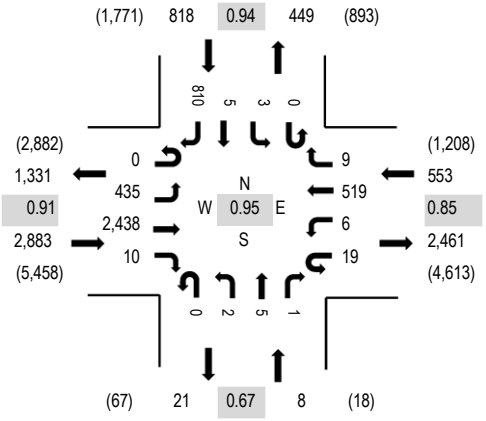
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	25	0	0	0	26	2	0	0	0	0	0	3	0	0	56
Lights	0	44	1,641	16	0	90	1,930	323	0	59	43	11	0	289	64	100	4,610
Mediums	0	0	39	0	0	0	37	0	0	0	0	0	0	0	0	0	76
Total	0	44	1,705	16	0	90	1,993	325	0	59	43	11	0	292	64	100	4,742

All Traffic Data Services Inc.

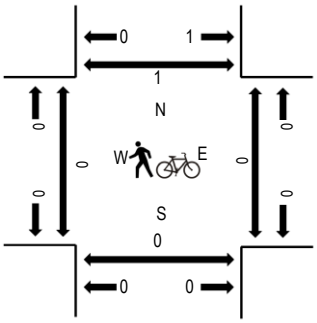
(303) 216-2439
www.alltrafficdata.net

Location: 6 Driveway & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Driveway Northbound				Sam Rittenberg Blvd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	95	691	3	0	0	113	2	0	1	1	1	0	0	1	217	1,125	4,262	0	0	0	0
7:15:00 AM	0	135	636	3	3	1	117	2	0	0	2	0	0	2	2	177	1,080	4,146	0	0	0	1
7:30:00 AM	0	108	565	3	13	3	144	2	0	1	0	0	0	1	0	201	1,041	4,152	0	0	0	0
7:45:00 AM	0	97	546	1	3	2	145	3	0	0	2	0	0	0	2	215	1,016	4,180	0	0	0	0
8:00:00 AM	0	92	506	5	0	1	155	3	0	3	1	0	0	1	7	235	1,009	4,193	0	0	0	0
8:15:00 AM	0	101	558	2	2	4	181	4	0	2	0	0	0	2	2	228	1,086		0	0	0	0
8:30:00 AM	0	116	554	2	1	1	144	4	0	0	0	1	0	7	5	234	1,069		0	0	0	0
8:45:00 AM	0	118	517	4	2	7	142	4	0	1	1	1	0	0	6	226	1,029		0	0	0	0

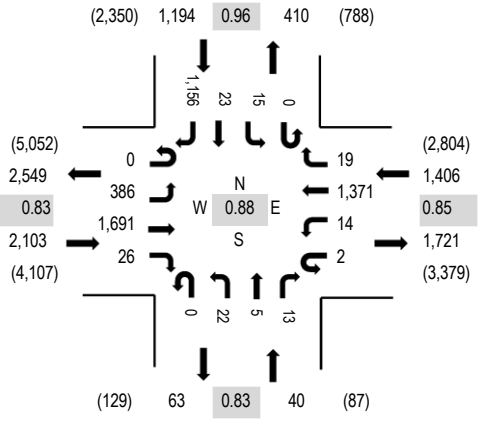
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	6	33	0	0	0	2	0	0	0	0	0	0	0	0	26	67
Lights	0	379	2,335	7	19	5	506	9	0	2	4	1	0	3	5	719	3,994
Mediums	0	50	70	3	0	1	11	0	0	0	1	0	0	0	0	65	201
Total	0	435	2,438	10	19	6	519	9	0	2	5	1	0	3	5	810	4,262

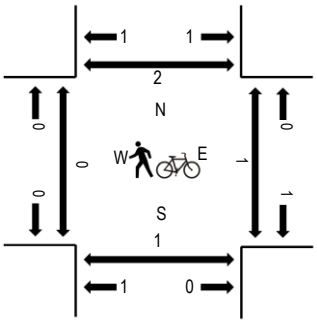
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 6 Driveway & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Driveway Northbound				Sam Rittenberg Blvd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	98	424	4	0	7	386	4	0	10	1	6	0	3	1	277	1,221	4,643	0	0	0	0
4:15:00 PM	0	84	388	4	1	6	335	6	0	3	5	2	0	4	2	293	1,133	4,532	0	0	0	0
4:30:00 PM	0	108	436	13	0	5	328	7	0	5	1	3	0	3	5	287	1,201	4,743	0	0	0	0
4:45:00 PM	0	73	364	5	0	4	313	6	0	8	1	3	0	5	6	300	1,088	4,648	0	0	0	0
5:00:00 PM	0	95	370	3	1	3	324	0	0	3	2	2	0	6	3	298	1,110	4,705	0	0	0	1
5:15:00 PM	0	110	521	5	1	2	406	6	0	6	1	5	0	1	9	271	1,344		0	0	0	1
5:30:00 PM	0	94	402	7	0	8	319	3	0	5	3	2	0	4	9	250	1,106		0	0	0	2
5:45:00 PM	0	77	415	7	3	5	313	2	0	6	1	3	0	1	6	306	1,145		0	0	0	0

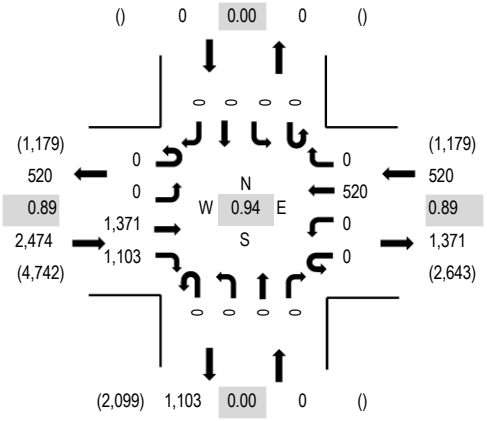
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	29	0	0	0	4	0	0	0	0	0	0	0	0	21	55
Lights	0	381	1,613	26	2	13	1,359	18	0	22	5	13	0	14	22	1,106	4,594
Mediums	0	4	49	0	0	1	8	1	0	0	0	0	0	1	1	29	94
Total	0	386	1,691	26	2	14	1,371	19	0	22	5	13	0	15	23	1,156	4,743

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

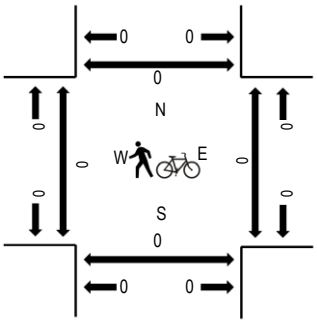
Location: 7 I-526 EB Ramps & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				I-526 EB Ramps Northbound				Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	0	426	268	0	0	106	0	0	0	0	0	0	0	0	0	800	2,994	0	0	0	0
7:15:00 AM	0	0	347	294	0	0	124	0	0	0	0	0	0	0	0	0	765	2,920	0	0	0	0
7:30:00 AM	0	0	315	277	0	0	144	0	0	0	0	0	0	0	0	0	736	2,925	0	0	0	0
7:45:00 AM	0	0	283	264	0	0	146	0	0	0	0	0	0	0	0	0	693	2,946	0	0	0	0
8:00:00 AM	0	0	303	244	0	0	179	0	0	0	0	0	0	0	0	0	726	2,927	0	0	0	0
8:15:00 AM	0	0	348	243	0	0	179	0	0	0	0	0	0	0	0	0	770		0	0	0	0
8:30:00 AM	0	0	325	271	0	0	161	0	0	0	0	0	0	0	0	0	757		0	0	0	0
8:45:00 AM	0	0	296	238	0	0	140	0	0	0	0	0	0	0	0	0	674		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	31	0	0	1	0	0	0	0	0	0	0	0	0	34
Lights	0	0	1,345	1,022	0	0	506	0	0	0	0	0	0	0	0	0	2,873
Mediums	0	0	24	50	0	0	13	0	0	0	0	0	0	0	0	0	87
Total	0	0	1,371	1,103	0	0	520	0	0	0	0	0	0	0	0	0	2,994

All Traffic Data Services Inc.
(303) 216-2439
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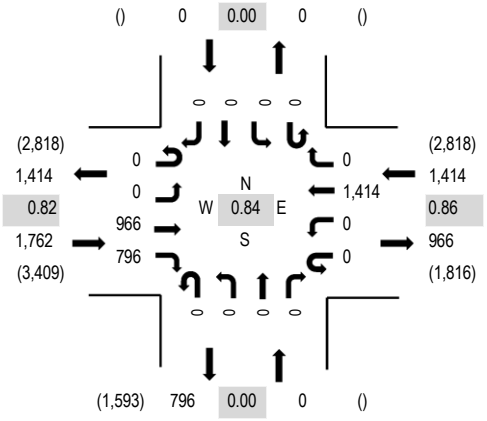
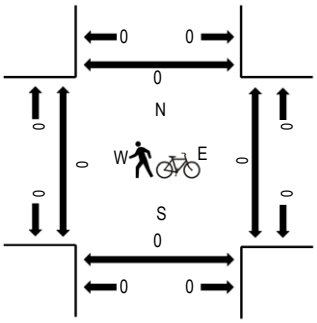
Location: 7 I-526 EB Ramps & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				I-526 EB Ramps Northbound				Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	0	224	208	0	0	390	0	0	0	0	0	0	0	0	0	822	3,051	0	0	0	0
4:15:00 PM	0	0	197	199	0	0	353	0	0	0	0	0	0	0	0	0	749	2,953	0	0	0	0
4:30:00 PM	0	0	226	218	0	0	335	0	0	0	0	0	0	0	0	0	779	3,147	0	0	0	0
4:45:00 PM	0	0	203	172	0	0	326	0	0	0	0	0	0	0	0	0	701	3,106	0	0	0	0
5:00:00 PM	0	0	205	180	0	0	339	0	0	0	0	0	0	0	0	0	724	3,176	0	0	0	0
5:15:00 PM	0	0	289	245	0	0	409	0	0	0	0	0	0	0	0	0	943		0	0	0	0
5:30:00 PM	0	0	210	205	0	0	323	0	0	0	0	0	0	0	0	0	738		0	0	0	0
5:45:00 PM	0	0	262	166	0	0	343	0	0	0	0	0	0	0	0	0	771		0	0	0	0

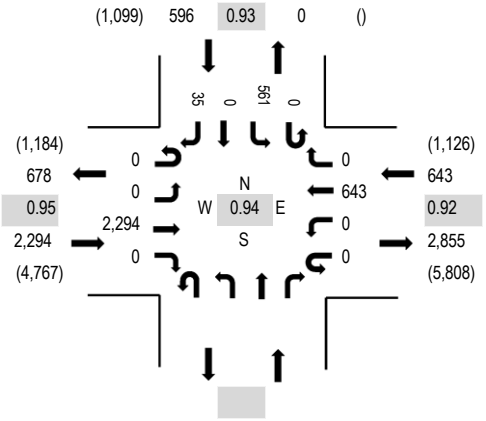
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	20	0	0	2	0	0	0	0	0	0	0	0	0	24
Lights	0	0	956	748	0	0	1,400	0	0	0	0	0	0	0	0	0	3,104
Mediums	0	0	8	28	0	0	12	0	0	0	0	0	0	0	0	0	48
Total	0	0	966	796	0	0	1,414	0	0	0	0	0	0	0	0	0	3,176

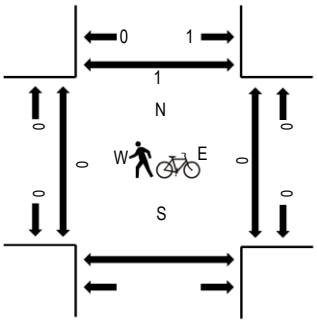
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 8 I-526 WB Ramps & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound						I-526 WB Ramps Northbound				I-526 WB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right					U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	0	699	0	0	0	93	0					0	87	0	3	882	3,464	0	0		0
7:15:00 AM	0	0	640	0	0	0	125	0					0	127	0	6	898	3,408	0	0		1
7:30:00 AM	0	0	591	0	0	0	128	0					0	100	0	8	827	3,450	1	0		1
7:45:00 AM	0	0	556	0	0	0	140	0					0	151	0	10	857	3,533	0	0		0
8:00:00 AM	0	0	533	0	0	0	160	0					0	120	0	13	826	3,528	0	0		0
8:15:00 AM	0	0	606	0	0	0	174	0					0	153	0	7	940		0	0		0
8:30:00 AM	0	0	599	0	0	0	169	0					0	137	0	5	910		0	0		1
8:45:00 AM	0	0	543	0	0	0	137	0					0	166	0	6	852		0	0		2

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	30	0	0	0	3	0					0	4	0	1	38
Lights	0	0	2,174	0	0	0	623	0					0	552	0	31	3,380
Mediums	0	0	90	0	0	0	17	0					0	5	0	3	115
Total	0	0	2,294	0	0	0	643	0					0	561	0	35	3,533

All Traffic Data Services Inc.
(303) 216-2439
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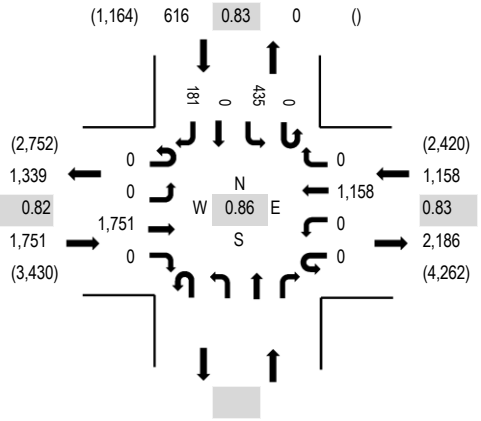
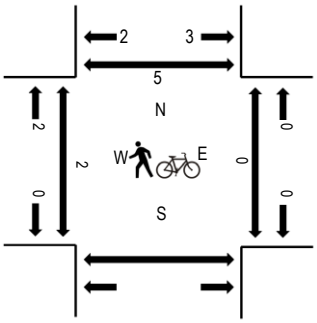
Location: 8 I-526 WB Ramps & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				I-526 WB Ramps Northbound				I-526 WB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	0	456	0	0	0	347	0					0	107	0	58	968	3,489	0	0		0
4:15:00 PM	0	0	387	0	0	0	297	0					0	108	0	41	833	3,302	0	0		2
4:30:00 PM	0	0	444	0	0	0	313	0					0	87	0	26	870	3,494	0	0		3
4:45:00 PM	0	0	392	0	0	0	305	0					0	95	0	26	818	3,502	0	0		0
5:00:00 PM	0	0	365	0	0	0	255	0					0	138	0	23	781	3,525	1	0		0
5:15:00 PM	0	0	531	0	0	0	349	0					0	93	0	52	1,025		1	0		3
5:30:00 PM	0	0	427	0	0	0	265	0					0	120	0	66	878		0	0		2
5:45:00 PM	0	0	428	0	0	0	289	0					0	84	0	40	841		0	0		0

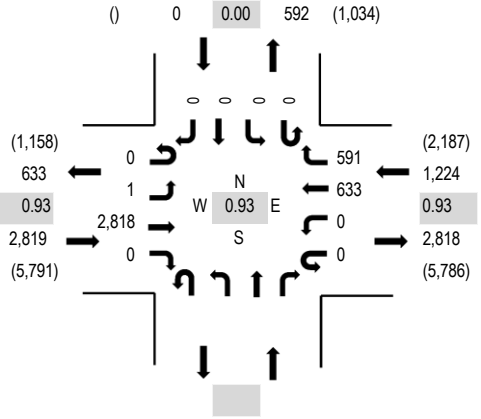
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	20	0	0	0	2	0					0	0	0	1	23
Lights	0	0	1,703	0	0	0	1,140	0					0	433	0	179	3,455
Mediums	0	0	28	0	0	0	16	0					0	2	0	1	47
Total	0	0	1,751	0	0	0	1,158	0					0	435	0	181	3,525

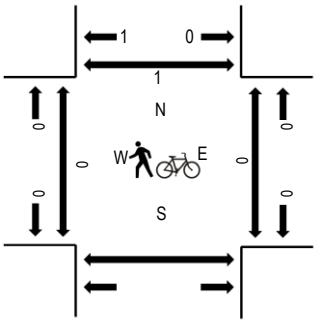
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #9 I-526 EB Ramps & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Northbound				I-526 EB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	1	779	0	0	0	104	91					0	0	0	0	975	3,941	0	0		0
7:15:00 AM	0	2	744	0	0	0	115	127					0	0	0	0	988	3,944	0	0		1
7:30:00 AM	0	0	712	0	0	0	141	172					0	0	0	0	1,025	4,043	0	0		1
7:45:00 AM	0	0	662	0	0	0	154	137					0	0	0	0	953	4,003	0	0		0
8:00:00 AM	0	0	687	0	0	0	150	141					0	0	0	0	978	4,037	0	0		0
8:15:00 AM	0	1	757	0	0	0	188	141					0	0	0	0	1,087		0	0		0
8:30:00 AM	1	0	741	0	0	0	130	113					0	0	0	0	985		0	0		1
8:45:00 AM	0	0	704	0	0	0	175	108					0	0	0	0	987		0	0		2

Peak Rolling Hour Flow Rates

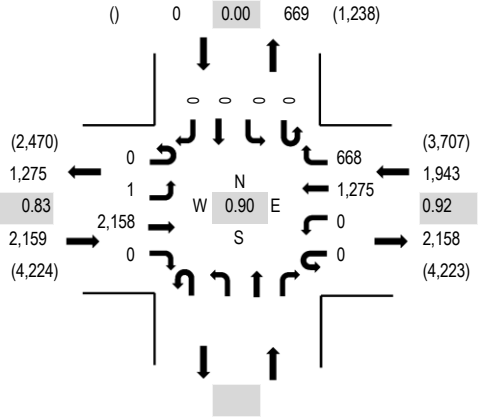
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	35	0	0	0	2	7					0	0	0	0	44
Lights	0	1	2,687	0	0	0	618	573					0	0	0	0	3,879
Mediums	0	0	96	0	0	0	13	11					0	0	0	0	120
Total	0	1	2,818	0	0	0	633	591					0	0	0	0	4,043

All Traffic Data Services Inc.

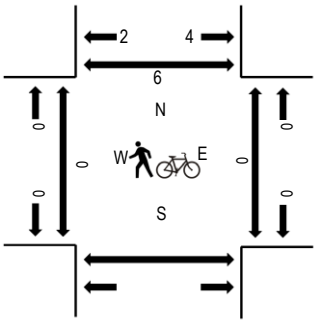
(303) 216-2439
www.alltrafficdata.net

Location: #9 I-526 EB Ramps & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				I-526 EB Ramps Northbound				I-526 EB Ramps Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	0	517	0	0	0	305	144					0	0	0	0	966	3,883	1	0		0
4:15:00 PM	0	0	517	0	0	0	332	134					0	0	0	0	983	3,940	0	0		1
4:30:00 PM	0	0	532	0	0	0	308	174					0	0	0	0	1,014	4,102	0	0		3
4:45:00 PM	0	0	481	0	0	0	299	140					0	0	0	0	920	4,017	0	0		0
5:00:00 PM	0	0	494	0	0	0	330	199					0	0	0	0	1,023	4,048	0	0		1
5:15:00 PM	0	1	651	0	0	0	338	155					0	0	0	0	1,145		0	0		2
5:30:00 PM	0	0	522	0	0	0	261	146					0	0	0	0	929		0	0		1
5:45:00 PM	0	0	509	0	0	0	297	145					0	0	0	0	951		0	0		0

Peak Rolling Hour Flow Rates

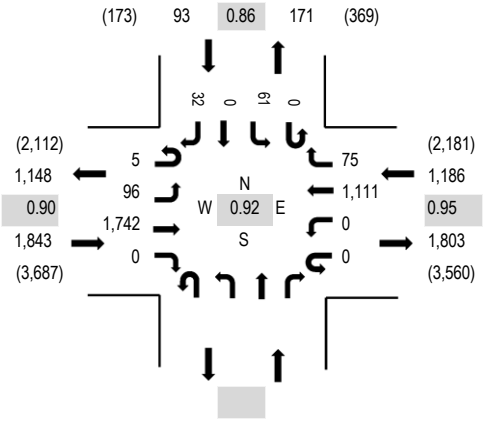
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	28	0	0	0	2	2					0	0	0	0	32
Lights	0	1	2,075	0	0	0	1,263	662					0	0	0	0	4,001
Mediums	0	0	55	0	0	0	10	4					0	0	0	0	69
Total	0	1	2,158	0	0	0	1,275	668					0	0	0	0	4,102

All Traffic Data Services Inc.

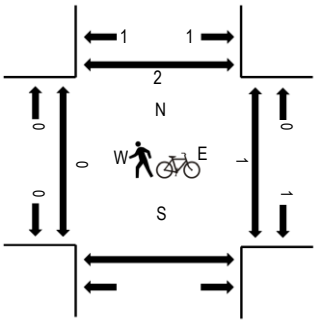
(303) 216-2439
www.alltrafficdata.net

Location: #10 Skylark Dr & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Northbound				Skylark Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	45	436	0	0	0	156	14					0	12	0	4	667	2,919	0	0		0
7:15:00 AM	0	36	472	0	0	0	253	14					0	11	0	10	796	2,972	0	0		0
7:30:00 AM	0	27	401	0	0	0	253	15					0	7	0	11	714	3,020	0	0		0
7:45:00 AM	0	29	398	0	0	0	272	18					0	20	0	5	742	3,082	0	0		0
8:00:00 AM	1	19	373	0	0	0	285	20					0	17	0	5	720	3,122	0	0		0
8:15:00 AM	0	26	485	0	0	0	289	22					0	11	0	11	844		0	0		0
8:30:00 AM	2	25	429	0	0	0	279	19					0	16	0	6	776		0	1		1
8:45:00 AM	2	26	455	0	0	0	258	14					0	17	0	10	782		0	0		1

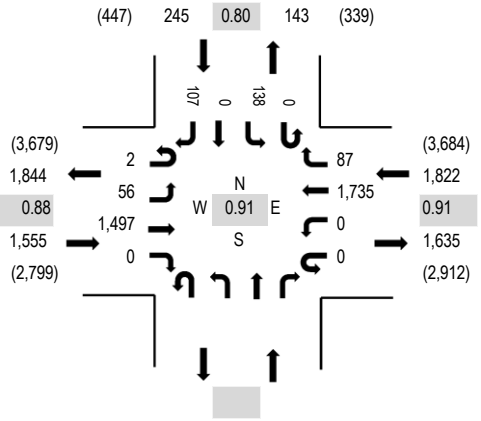
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	8	0	0	0	12	0					0	0	0	1	21
Lights	5	94	1,708	0	0	0	1,068	71					0	58	0	30	3,034
Mediums	0	2	26	0	0	0	31	4					0	3	0	1	67
Total	5	96	1,742	0	0	0	1,111	75					0	61	0	32	3,122

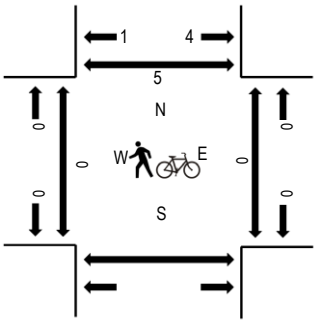
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #10 Skylark Dr & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Northbound				Skylark Dr Southbound					Rolling Hour	Pedestrain Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
4:00:00 PM	1	21	311	0	0	0	473	39					0	22	0	15	882	3,308	0	0	0
4:15:00 PM	0	20	288	0	0	0	393	33					0	25	0	25	784	3,367	0	0	0
4:30:00 PM	2	18	290	0	0	0	458	24					0	29	0	30	851	3,574	0	0	3
4:45:00 PM	1	14	278	0	0	0	415	27					0	34	0	22	791	3,605	0	0	0
5:00:00 PM	1	16	356	0	0	0	479	20					0	43	0	26	941	3,622	0	0	1
5:15:00 PM	0	15	428	0	0	0	479	22					0	22	0	25	991		0	0	3
5:30:00 PM	1	13	365	0	0	0	412	14					0	42	0	35	882		0	0	0
5:45:00 PM	0	12	348	0	0	0	365	31					0	31	0	21	808		0	0	1

Peak Rolling Hour Flow Rates

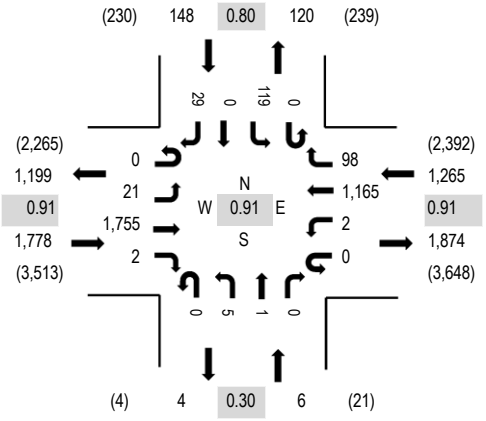
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	0	2	0					0	0	0	0	4
Lights	2	54	1,487	0	0	0	1,717	86					0	135	0	106	3,587
Mediums	0	2	8	0	0	0	16	1					0	3	0	1	31
Total	2	56	1,497	0	0	0	1,735	87					0	138	0	107	3,622

All Traffic Data Services Inc.

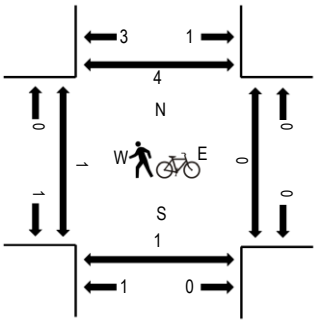
(303) 216-2439
www.alltrafficdata.net

Location: #11 Orleans Rd & US 17 AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Orleans Rd Northbound				Orleans Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	9	476	0	0	0	188	24	0	0	2	0	0	14	0	0	713	2,959	0	0	0	0
7:15:00 AM	0	2	427	0	0	0	241	17	0	4	3	1	0	17	0	3	715	2,981	0	0	0	0
7:30:00 AM	0	10	397	0	0	0	314	18	0	1	0	0	0	19	0	7	766	3,144	0	0	0	1
7:45:00 AM	0	7	407	0	0	0	299	26	0	1	1	2	0	14	0	8	765	3,147	0	0	0	0
8:00:00 AM	0	2	392	0	0	0	287	22	0	0	0	0	0	24	0	8	735	3,197	0	0	0	1
8:15:00 AM	0	6	481	0	0	0	321	28	0	4	1	0	0	29	0	8	878		1	0	0	0
8:30:00 AM	0	8	427	2	0	1	263	21	0	1	0	0	0	37	0	9	769		0	0	1	2
8:45:00 AM	0	5	455	0	0	1	294	27	0	0	0	0	0	29	0	4	815		0	0	0	1

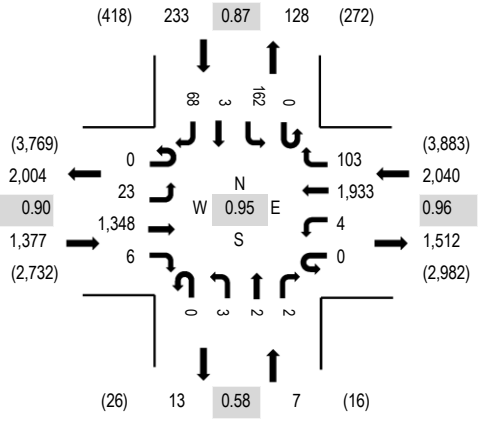
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	6	0	0	0	10	0	0	0	0	0	0	1	0	0	17
Lights	0	21	1,719	2	0	2	1,119	97	0	5	1	0	0	116	0	29	3,111
Mediums	0	0	30	0	0	0	36	1	0	0	0	0	0	2	0	0	69
Total	0	21	1,755	2	0	2	1,165	98	0	5	1	0	0	119	0	29	3,197

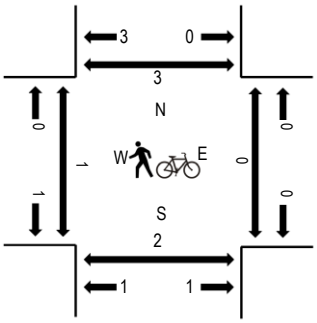
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #11 Orleans Rd & US 17 PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 17 Eastbound				US 17 Westbound				Orleans Rd Northbound				Orleans Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	8	355	2	0	2	456	38	0	1	0	1	0	30	1	6	900	3,455	0	0	2	1
4:15:00 PM	0	7	288	1	0	2	426	37	0	1	0	3	0	46	0	3	814	3,504	0	0	0	0
4:30:00 PM	0	4	322	4	0	1	498	29	0	1	0	0	0	38	0	15	912	3,657	0	0	0	1
4:45:00 PM	0	6	309	1	0	1	428	22	0	0	1	0	0	44	0	17	829	3,583	0	0	0	0
5:00:00 PM	0	5	341	1	0	2	513	18	0	1	0	1	0	45	2	20	949	3,594	0	0	0	0
5:15:00 PM	0	8	376	0	0	0	494	34	0	1	1	1	0	35	1	16	967		0	0	1	2
5:30:00 PM	0	6	330	1	0	0	414	21	0	2	1	0	0	41	0	22	838		1	0	1	0
5:45:00 PM	0	2	352	3	0	0	423	24	0	0	0	0	0	24	1	11	840		0	0	0	0

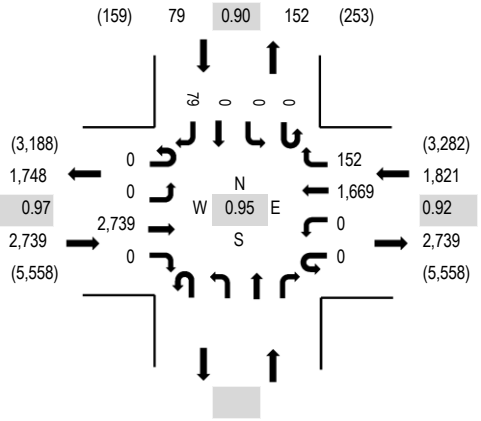
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
Lights	0	23	1,331	6	0	4	1,918	102	0	3	2	2	0	161	3	66	3,621
Mediums	0	0	17	0	0	0	11	1	0	0	0	0	0	1	0	2	32
Total	0	23	1,348	6	0	4	1,933	103	0	3	2	2	0	162	3	68	3,657

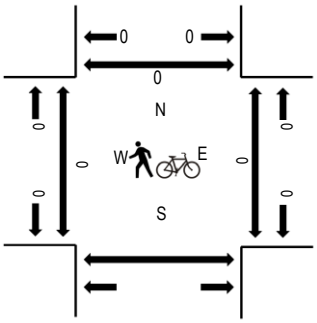
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #12 Frontage Rd & Paul Cantrell Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Paul Cantrell Blvd Eastbound				Paul Cantrell Blvd Westbound				Northbound				Frontage Rd Southbound					Rolling Hour	Pedestrain Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
7:00:00 AM	0	0	763	0	0	0	281	11					0	0	0	15	1,070	4,436	0	0	0
7:15:00 AM	0	0	774	0	0	0	296	27					0	0	0	27	1,124	4,479	0	0	0
7:30:00 AM	0	0	690	0	0	0	339	30					0	0	0	22	1,081	4,572	0	0	0
7:45:00 AM	0	0	688	0	0	0	414	38					0	0	0	21	1,161	4,639	0	0	0
8:00:00 AM	0	0	677	0	0	0	378	40					0	0	0	18	1,113	4,563	0	0	0
8:15:00 AM	0	0	706	0	0	0	457	36					0	0	0	18	1,217		0	0	0
8:30:00 AM	0	0	668	0	0	0	420	38					0	0	0	22	1,148		0	0	0
8:45:00 AM	0	0	592	0	0	0	444	33					0	0	0	16	1,085		0	0	0

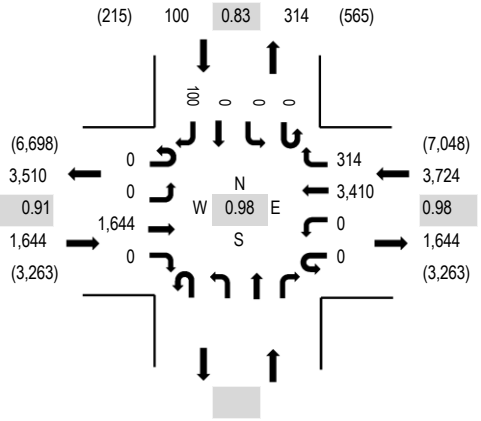
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	19	0	0	0	22	3					0	0	0	1	45
Lights	0	0	2,647	0	0	0	1,577	145					0	0	0	78	4,447
Mediums	0	0	73	0	0	0	70	4					0	0	0	0	147
Total	0	0	2,739	0	0	0	1,669	152					0	0	0	79	4,639

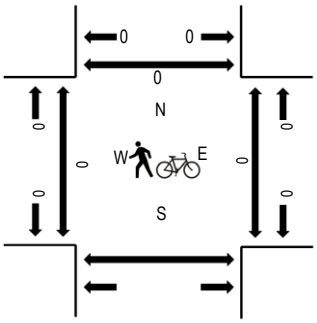
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #12 Frontage Rd & Paul Cantrell Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Paul Cantrell Blvd Eastbound				Paul Cantrell Blvd Westbound				Northbound				Frontage Rd Southbound					Rolling Hour	Pedestrain Crossings		
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South North
4:00:00 PM	0	0	449	0	0	0	750	68					0	0	0	26	1,293	5,058	0	0	0
4:15:00 PM	0	0	385	0	0	0	733	60					0	0	0	32	1,210	5,166	0	0	0
4:30:00 PM	0	0	374	0	0	0	801	64					0	0	0	26	1,265	5,299	0	0	0
4:45:00 PM	0	0	411	0	0	0	789	59					0	0	0	31	1,290	5,380	0	0	0
5:00:00 PM	0	0	450	0	0	0	848	76					0	0	0	27	1,401	5,468	0	0	0
5:15:00 PM	0	0	368	0	0	0	879	75					0	0	0	21	1,343		0	0	0
5:30:00 PM	0	0	427	0	0	0	817	80					0	0	0	22	1,346		0	0	0
5:45:00 PM	0	0	399	0	0	0	866	83					0	0	0	30	1,378		0	0	0

Peak Rolling Hour Flow Rates

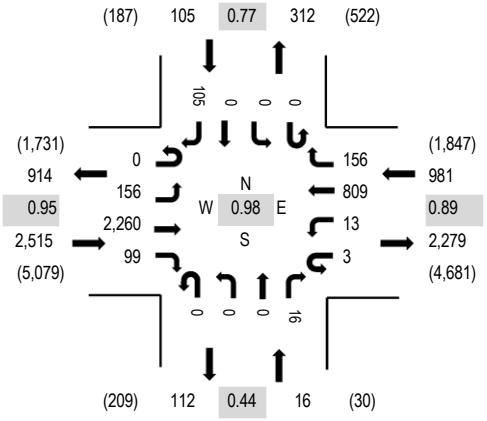
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	5	0					0	0	0	0	9
Lights	0	0	1,627	0	0	0	3,382	313					0	0	0	100	5,422
Mediums	0	0	13	0	0	0	23	1					0	0	0	0	37
Total	0	0	1,644	0	0	0	3,410	314					0	0	0	100	5,468

All Traffic Data Services Inc.

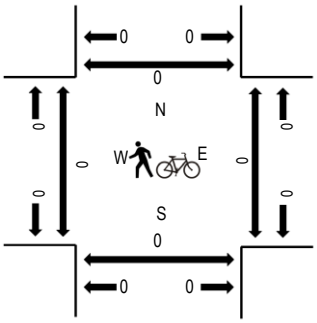
(303) 216-2439
www.alltrafficdata.net

Location: #13 Lowes Drwy & Paul Cantrell Blvd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Pal Cantrell Blvd Eastbound				Paul Cantrell Blvd Westbound				Lowes Drwy Northbound				Charlie Hall Blvd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	24	663	17	0	0	175	15	0	0	0	0	0	0	0	26	920	3,563	0	0	0	0
7:15:00 AM	1	18	653	16	0	3	144	35	0	0	0	0	0	0	0	13	883	3,549	0	0	0	0
7:30:00 AM	0	22	584	28	0	1	193	19	0	0	0	2	0	0	0	13	862	3,557	0	0	0	0
7:45:00 AM	0	43	594	25	1	3	183	27	0	0	0	2	0	0	0	20	898	3,617	0	0	0	0
8:00:00 AM	0	37	597	20	0	2	190	39	0	0	0	1	0	0	0	20	906	3,580	0	0	0	0
8:15:00 AM	0	40	536	21	1	3	218	37	0	0	0	4	0	0	0	31	891		0	0	0	0
8:30:00 AM	0	36	533	33	1	5	218	53	0	0	0	9	0	0	0	34	922		0	0	0	0
8:45:00 AM	1	34	484	19	4	13	221	43	0	0	0	12	0	0	0	30	861		0	0	0	0

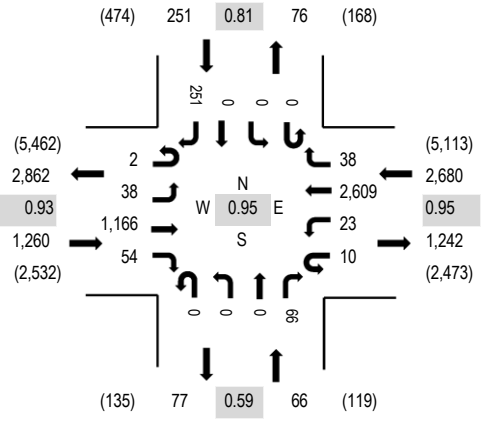
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	14
Lights	0	155	2,179	99	3	13	730	154	0	0	0	16	0	0	0	102	3,451
Mediums	0	1	72	0	0	0	74	2	0	0	0	0	0	0	0	3	152
Total	0	156	2,260	99	3	13	809	156	0	0	0	16	0	0	0	105	3,617

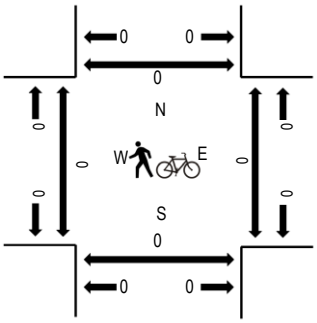
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: #13 Lowes Drwy & Paul Cantrell Blvd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Pal Cantrell Blvd Eastbound				Paul Cantrell Blvd Westbound				Lowes Drwy Northbound				Charlie Hall Blvd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	1	17	299	15	4	1	565	14	0	0	0	16	0	0	0	62	994	3,981	0	0	0	0
4:15:00 PM	0	12	300	13	1	3	588	10	0	0	0	12	0	0	0	51	990	4,110	0	0	0	0
4:30:00 PM	0	12	289	12	0	5	605	10	0	0	1	14	1	0	0	48	997	4,110	0	0	0	0
4:45:00 PM	0	10	285	7	1	2	619	5	0	0	0	10	0	0	0	61	1,000	4,218	0	0	0	0
5:00:00 PM	2	14	293	9	0	4	691	5	0	0	0	28	0	0	0	77	1,123	4,257	0	0	0	0
5:15:00 PM	0	7	265	17	2	5	620	6	0	0	0	13	0	0	0	55	990		0	0	0	0
5:30:00 PM	0	8	313	16	4	3	682	14	0	0	0	15	0	0	0	50	1,105		0	0	0	0
5:45:00 PM	0	9	295	12	4	11	616	13	0	0	0	10	0	0	0	69	1,039		0	0	0	0

Peak Rolling Hour Flow Rates

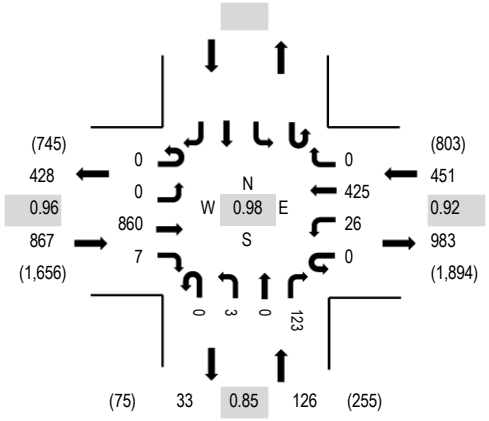
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
Lights	2	37	1,152	54	10	23	2,589	38	0	0	0	66	0	0	0	248	4,219
Mediums	0	1	10	0	0	0	16	0	0	0	0	0	0	0	0	3	30
Total	2	38	1,166	54	10	23	2,609	38	0	0	0	66	0	0	0	251	4,257

All Traffic Data Services Inc.

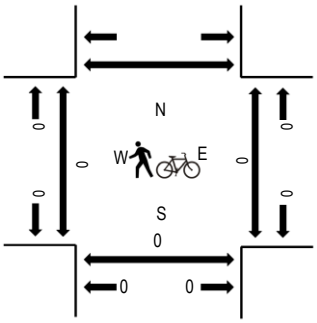
(303) 216-2439
www.alltrafficdata.net

Location: #14 Frontage Rd & Ashley River Rd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Ashley River Rd Eastbound				Ashley River Rd Westbound				Frontage Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00:00 AM	0	0	193	0	0	12	40	0	0	1	0	16					262	1,270	0	0	0	
7:15:00 AM	0	0	198	0	0	8	65	0	0	1	0	45					317	1,370	0	0	0	
7:30:00 AM	0	0	211	1	0	5	96	0	0	2	0	35					350	1,416	0	0	0	
7:45:00 AM	0	0	186	0	0	16	110	0	0	2	0	27					341	1,418	0	0	0	
8:00:00 AM	0	0	202	1	0	6	116	0	0	0	0	37					362	1,444	0	0	0	
8:15:00 AM	0	0	212	1	0	6	108	0	0	2	0	34					363		0	0	0	
8:30:00 AM	0	0	225	1	0	11	86	0	0	0	0	29					352		0	0	0	
8:45:00 AM	0	0	221	4	0	3	115	0	0	1	0	23					367		0	0	0	

Peak Rolling Hour Flow Rates

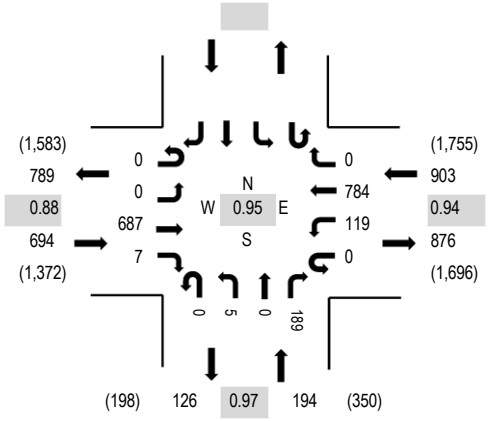
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	1	1	0	0	1	0	1					6
Lights	0	0	842	7	0	25	397	0	0	2	0	121					1,394
Mediums	0	0	16	0	0	0	27	0	0	0	0	1					44
Total	0	0	860	7	0	26	425	0	0	3	0	123					1,444

All Traffic Data Services Inc.

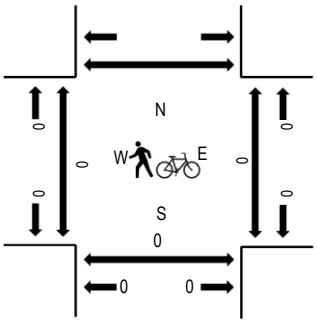
(303) 216-2439
www.alltrafficdata.net

Location: #14 Frontage Rd & Ashley River Rd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Ashley River Rd Eastbound				Ashley River Rd Westbound				Frontage Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00:00 PM	0	0	182	1	0	10	202	0	0	0	0	34					429	1,747	0	0	0	
4:15:00 PM	0	0	162	1	0	11	188	0	0	2	0	39					403	1,750	0	0	0	
4:30:00 PM	0	0	196	1	0	27	198	0	0	1	0	49					472	1,791	0	0	0	
4:45:00 PM	0	0	155	3	0	33	206	0	0	2	0	44					443	1,775	0	0	0	
5:00:00 PM	0	0	169	3	0	30	181	0	0	0	0	49					432	1,730	0	0	0	
5:15:00 PM	0	0	167	0	0	29	199	0	0	2	0	47					444		0	0	0	
5:30:00 PM	0	0	169	1	0	19	233	0	0	3	0	31					456		0	0	0	
5:45:00 PM	0	0	159	3	0	26	163	0	0	3	0	44					398		0	0	0	

Peak Rolling Hour Flow Rates

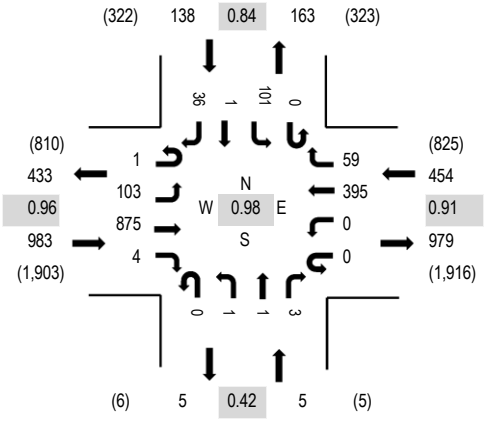
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	1	0	0	0	0	0					1
Lights	0	0	675	7	0	118	773	0	0	5	0	189					1,767
Mediums	0	0	12	0	0	1	10	0	0	0	0	0					23
Total	0	0	687	7	0	119	784	0	0	5	0	189					1,791

All Traffic Data Services Inc.

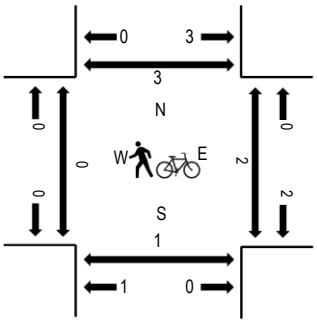
(303) 216-2439
www.alltrafficdata.net

Location: #15 Ashley Hall Plantation Rd & Ashley River Rd AM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Ashley River Rd Eastbound				Ashley River Rd Westbound				Ashley Hall Plantation Rd Northbound				Ashley Hall Plantation Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00:00 AM	0	22	206	0	0	0	52	13	0	0	0	0	0	34	0	12	339	1,475	0	1	0	0
7:15:00 AM	1	33	190	0	0	0	70	14	0	0	0	0	0	38	0	6	352	1,538	0	0	0	0
7:30:00 AM	0	37	207	0	0	0	101	4	0	0	0	0	0	33	0	12	394	1,571	1	0	0	0
7:45:00 AM	0	27	196	1	0	0	107	10	0	0	0	0	0	33	0	16	390	1,578	0	0	0	0
8:00:00 AM	0	24	217	0	0	0	110	15	0	0	0	0	0	20	0	16	402	1,580	0	1	1	0
8:15:00 AM	1	31	203	0	0	0	99	17	0	0	0	0	0	28	0	6	385		0	1	0	0
8:30:00 AM	0	23	225	3	0	0	90	17	0	1	0	1	0	33	0	8	401		0	0	0	2
8:45:00 AM	0	25	230	1	0	0	96	10	0	0	1	2	0	20	1	6	392		0	0	0	0

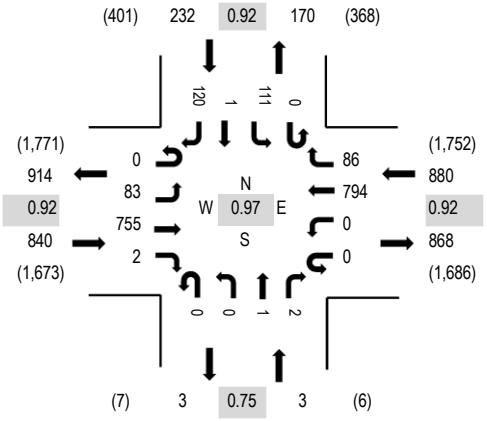
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Lights	0	100	852	4	0	0	371	54	0	1	1	3	0	100	1	34	1,521
Mediums	0	3	21	0	0	0	23	5	0	0	0	0	0	1	0	2	55
Total	1	103	875	4	0	0	395	59	0	1	1	3	0	101	1	36	1,580

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

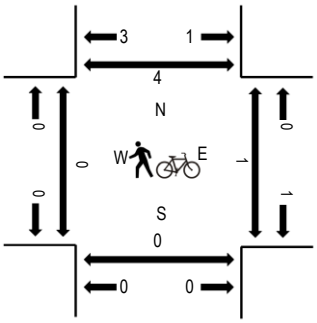
Location: #15 Ashley Hall Plantation Rd & Ashley River Rd PM
Date and Start Time: Wednesday, April 06, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Ashley River Rd Eastbound				Ashley River Rd Westbound				Ashley Hall Plantation Rd Northbound				Ashley Hall Plantation Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00:00 PM	0	29	180	0	0	0	211	29	0	0	0	2	0	19	1	18	489	1,922	0	0	0	2
4:15:00 PM	0	28	209	0	0	0	165	27	0	0	0	0	0	22	0	18	469	1,937	0	0	0	0
4:30:00 PM	0	24	183	0	0	0	211	27	0	0	1	0	0	23	1	29	499	1,955	0	0	0	0
4:45:00 PM	0	15	184	1	0	0	191	19	0	0	0	1	0	26	0	28	465	1,950	0	0	0	0
5:00:00 PM	0	27	200	1	0	0	199	13	0	0	0	1	0	32	0	31	504	1,910	0	0	0	2
5:15:00 PM	0	17	188	0	0	0	193	27	0	0	0	0	0	30	0	32	487		0	1	0	0
5:30:00 PM	0	16	184	0	0	0	216	27	0	0	0	0	0	18	0	33	494		0	1	0	0
5:45:00 PM	0	19	168	0	0	2	173	22	0	0	1	0	0	16	1	23	425		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	83	748	2	0	0	781	84	0	0	1	2	0	107	1	120	1,929
Mediums	0	0	7	0	0	0	13	2	0	0	0	0	0	4	0	0	26
Total	0	83	755	2	0	0	794	86	0	0	1	2	0	111	1	120	1,955

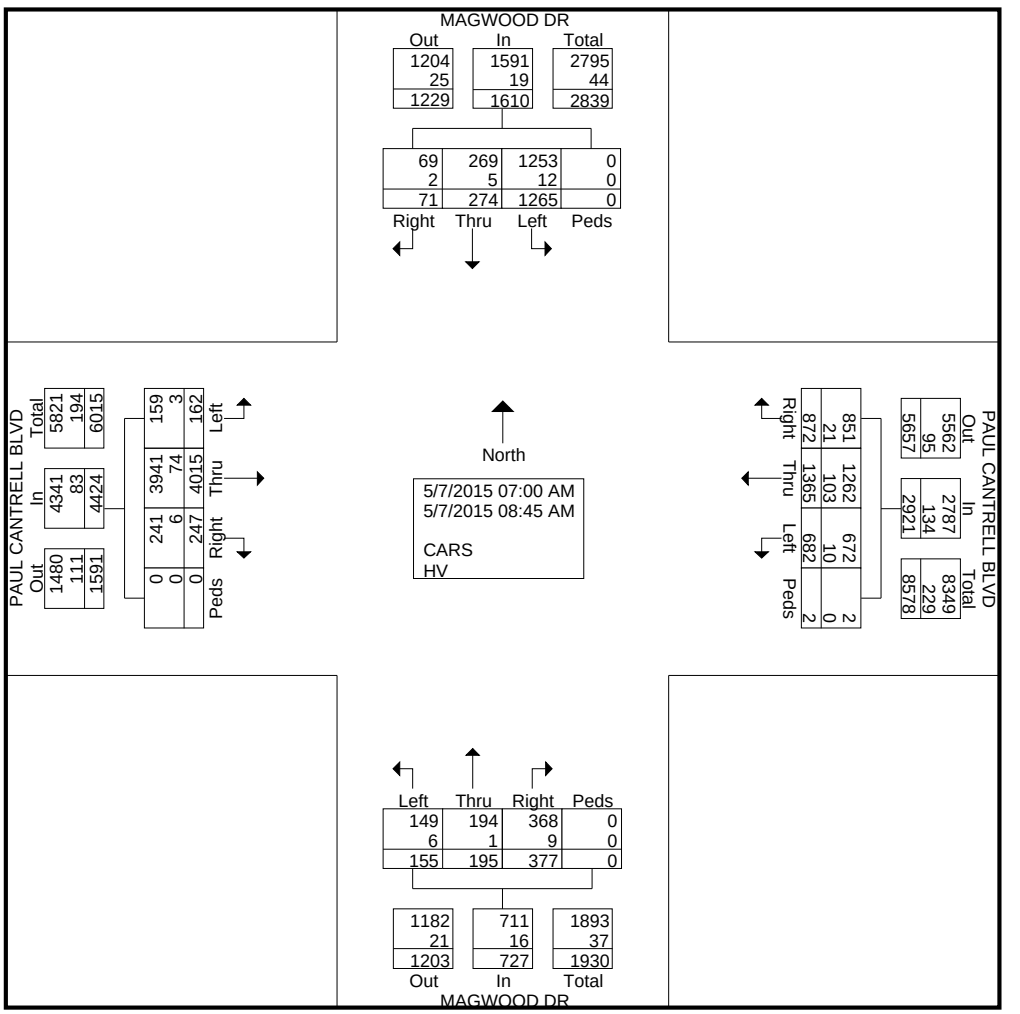
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #1 MAGWOOD&PAULCANTRELLAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MAGWOOD DR Southbound					PAUL CANTRELL BLVD Westbound					MAGWOOD DR Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	32	168	0	205	72	148	61	0	281	49	18	19	0	86	21	551	24	0	596	1168
07:15 AM	6	17	167	0	190	103	141	76	0	320	43	25	17	0	85	19	627	16	0	662	1257
07:30 AM	6	28	179	0	213	122	155	85	1	363	49	29	24	0	102	14	554	10	0	578	1256
07:45 AM	1	39	160	0	200	112	212	94	1	419	68	24	13	0	105	42	516	27	0	585	1309
Total	18	116	674	0	808	409	656	316	2	1383	209	96	73	0	378	96	2248	77	0	2421	4990
08:00 AM	9	45	176	0	230	115	173	85	0	373	48	21	21	0	90	28	556	18	0	602	1295
08:15 AM	12	31	141	0	184	115	186	106	0	407	34	25	18	0	77	52	402	21	0	475	1143
08:30 AM	14	49	139	0	202	104	185	84	0	373	46	30	23	0	99	36	444	18	0	498	1172
08:45 AM	18	33	135	0	186	129	165	91	0	385	40	23	20	0	83	35	365	28	0	428	1082
Total	53	158	591	0	802	463	709	366	0	1538	168	99	82	0	349	151	1767	85	0	2003	4692
Grand Total	71	274	1265	0	1610	872	1365	682	2	2921	377	195	155	0	727	247	4015	162	0	4424	9682
Apprch %	4.4	17	78.6	0		29.9	46.7	23.3	0.1		51.9	26.8	21.3	0		5.6	90.8	3.7	0		
Total %	0.7	2.8	13.1	0	16.6	9	14.1	7	0	30.2	3.9	2	1.6	0	7.5	2.6	41.5	1.7	0	45.7	
CARS	69	269	1253				1262										3941				
% CARS	97.2	98.2	99.1	0	98.8	97.6	92.5	98.5	100	95.4	97.6	99.5	96.1	0	97.8	97.6	98.2	98.1	0	98.1	97.4
HV	2	5	12	0	19	21	103	10	0	134	9	1	6	0	16	6	74	3	0	83	252
% HV	2.8	1.8	0.9	0	1.2	2.4	7.5	1.5	0	4.6	2.4	0.5	3.9	0	2.2	2.4	1.8	1.9	0	1.9	2.6

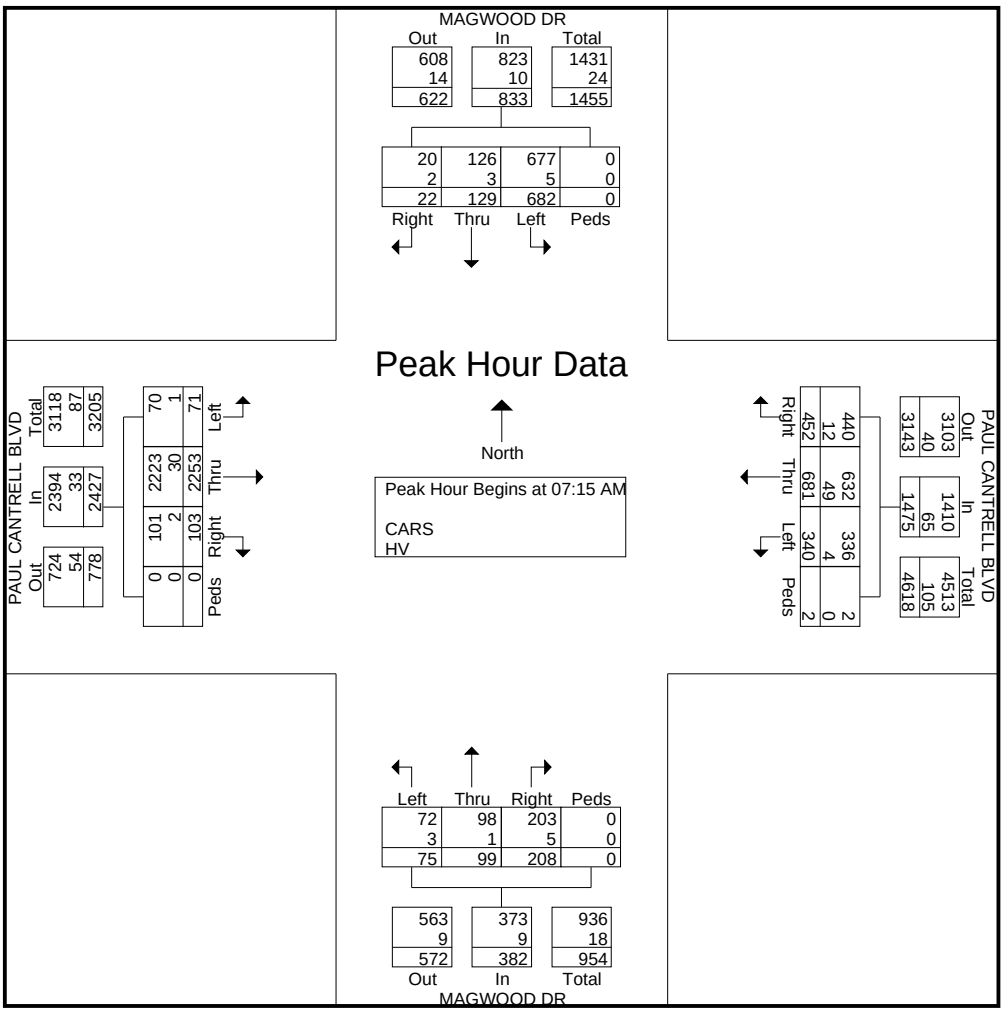


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #1 MAGWOOD&PAULCANTRELLAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	MAGWOOD DR Southbound					PAUL CANTRELL BLVD Westbound					MAGWOOD DR Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	6	17	167	0	190	103	141	76	0	320	43	25	17	0	85	19	**627**	16	0	**662**	1257
07:30 AM	6	28	**179**	0	213	**122**	155	85	**1**	363	49	**29**	**24**	0	102	14	554	10	0	578	1256
07:45 AM	1	39	160	0	200	112	**212**	**94**	1	**419**	**68**	24	13	0	**105**	**42**	516	**27**	0	585	**1309**
08:00 AM	**9**	**45**	176	0	**230**	115	173	85	0	373	48	21	21	0	90	28	556	18	0	602	1295
Total Volume	22	129	682	0	833	452	681	340	2	1475	208	99	75	0	382	103	2253	71	0	2427	5117
% App. Total	2.6	15.5	81.9	0		30.6	46.2	23.1	0.1		54.5	25.9	19.6	0		4.2	92.8	2.9	0		
PHF	.611	.717	.953	.000	.905	.926	.803	.904	.500	.880	.765	.853	.781	.000	.910	.613	.898	.657	.000	.917	.977
CARS	20	126	677	0	823	440	632	336	2	1410	203	98	72	0	373	101	2223				
% CARS	90.9	97.7	99.3	0	98.8	97.3	92.8	98.8	100	95.6	97.6	99.0	96.0	0	97.6	98.1	98.7	98.6	0	98.6	97.7
HV	2	3	5	0	10	12	49	4	0	65	5	1	3	0	9	2	30	1	0	33	117
% HV	9.1	2.3	0.7	0	1.2	2.7	7.2	1.2	0	4.4	2.4	1.0	4.0	0	2.4	1.9	1.3	1.4	0	1.4	2.3



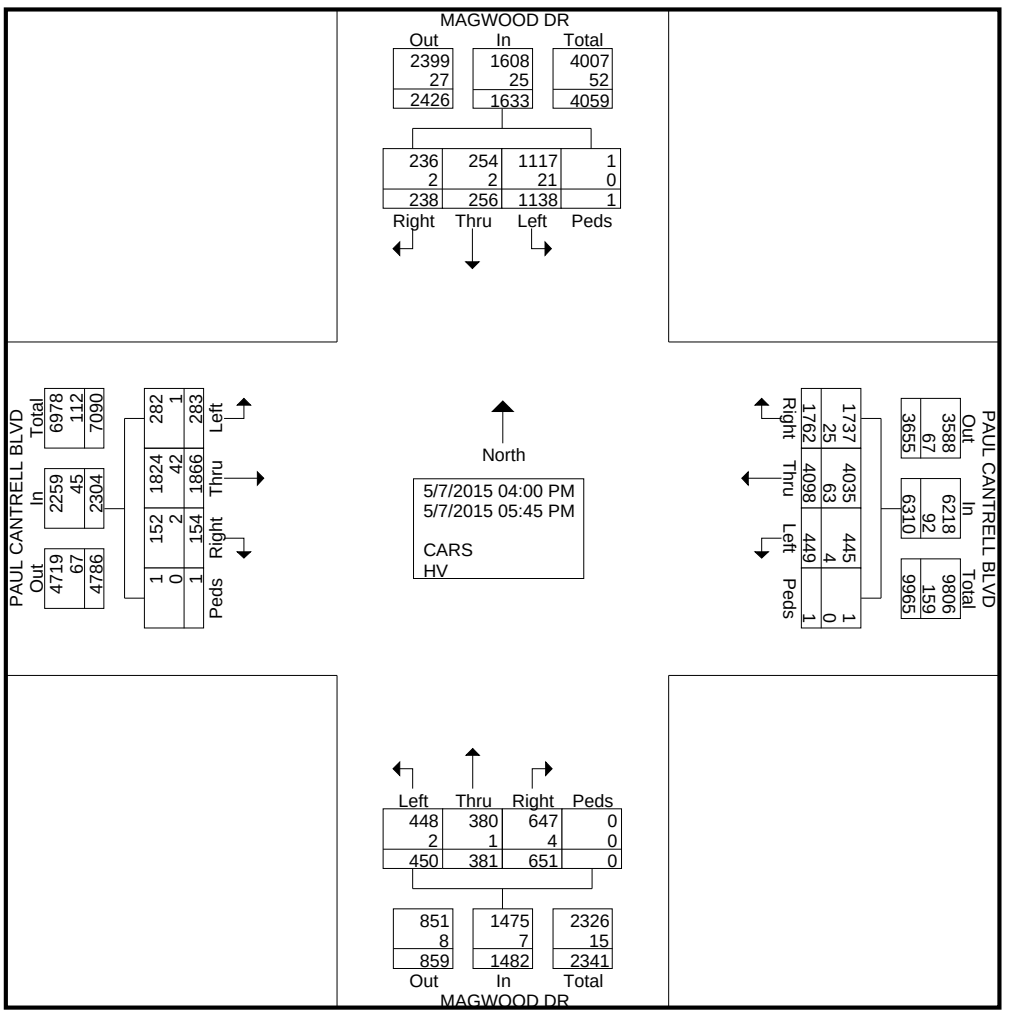
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #1 MAGWOOD&PAULCANTRELLPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MAGWOOD DR Southbound					PAUL CANTRELL BLVD Westbound					MAGWOOD DR Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	26	32	159	0	217	197	430	65	0	692	99	49	65	0	213	21	238	29	0	288	1410
04:15 PM	38	32	126	0	196	202	478	70	1	751	89	41	52	0	182	27	230	47	0	304	1433
04:30 PM	26	27	151	0	204	227	517	44	0	788	99	48	61	0	208	18	227	43	0	288	1488
04:45 PM	33	30	147	0	210	206	518	46	0	770	90	57	49	0	196	30	238	36	0	304	1480
Total	123	121	583	0	827	832	1943	225	1	3001	377	195	227	0	799	96	933	155	0	1184	5811
05:00 PM	19	31	156	1	207	229	600	65	0	894	101	46	64	0	211	13	255	32	1	301	1613
05:15 PM	33	43	166	0	242	221	513	59	0	793	59	54	63	0	176	13	245	29	0	287	1498
05:30 PM	32	29	118	0	179	228	566	44	0	838	67	45	42	0	154	13	237	32	0	282	1453
05:45 PM	31	32	115	0	178	252	476	56	0	784	47	41	54	0	142	19	196	35	0	250	1354
Total	115	135	555	1	806	930	2155	224	0	3309	274	186	223	0	683	58	933	128	1	1120	5918
Grand Total	238	256	1138	1	1633	1762	4098	449	1	6310	651	381	450	0	1482	154	1866	283	1	2304	11729
Apprch %	14.6	15.7	69.7	0.1		27.9	64.9	7.1	0		43.9	25.7	30.4	0		6.7	81	12.3	0		
Total %	2	2.2	9.7	0	13.9	15	34.9	3.8	0	53.8	5.6	3.2	3.8	0	12.6	1.3	15.9	2.4	0	19.6	
CARS	236	254	1117			1737	4035										1824				11560
% CARS	99.2	99.2	98.2	100	98.5	98.6	98.5	99.1	100	98.5	99.4	99.7	99.6	0	99.5	98.7	97.7	99.6	100	98	98.6
HV	2	2	21	0	25	25	63	4	0	92	4	1	2	0	7	2	42	1	0	45	169
% HV	0.8	0.8	1.8	0	1.5	1.4	1.5	0.9	0	1.5	0.6	0.3	0.4	0	0.5	1.3	2.3	0.4	0	2	1.4

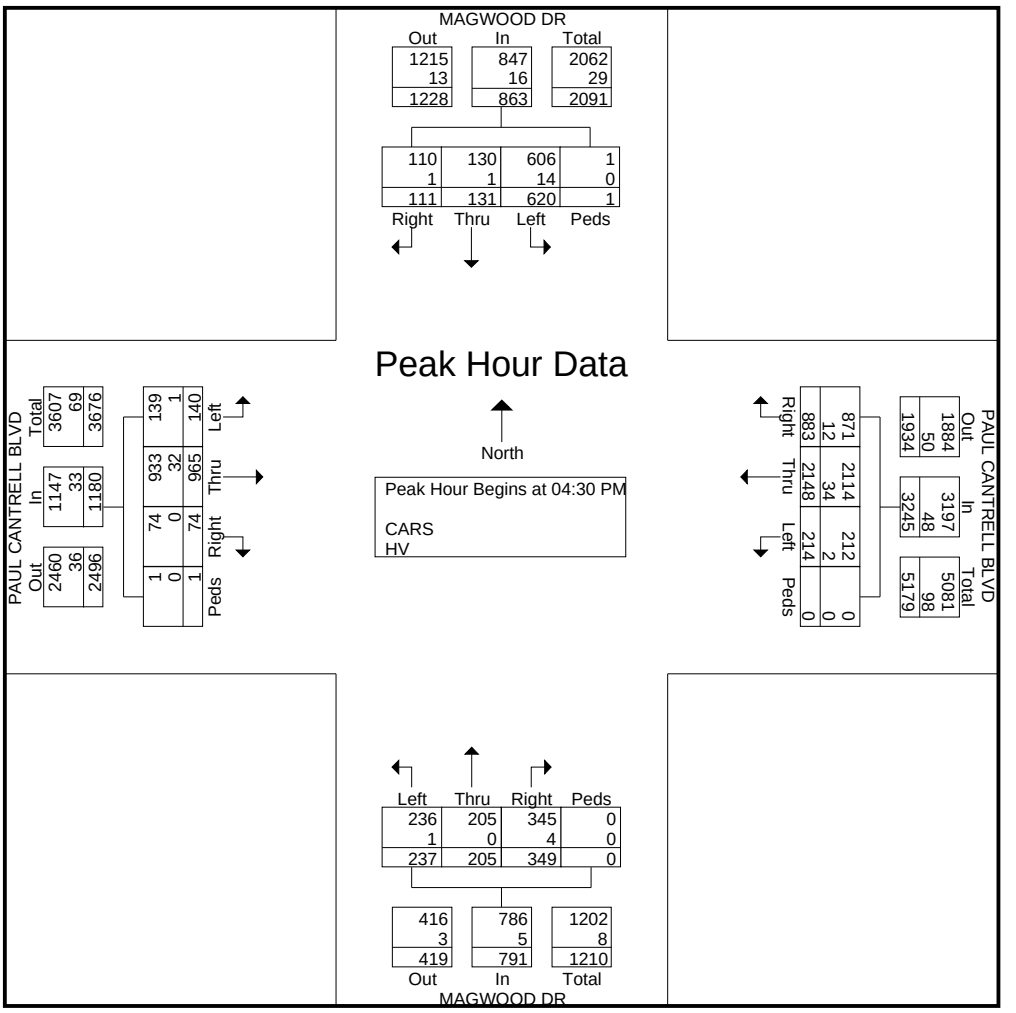


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #1 MAGWOOD&PAULCANTRELLPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	MAGWOOD DR Southbound					PAUL CANTRELL BLVD Westbound					MAGWOOD DR Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	27	151	0	204	227	517	44	0	788	99	48	61	0	208	18	227	**43**	0	288	1488
04:45 PM	**33**	30	147	0	210	206	518	46	0	770	90	**57**	49	0	196	**30**	238	36	0	**304**	1480
05:00 PM	19	31	156	**1**	207	**229**	**600**	**65**	0	**894**	**101**	46	**64**	0	**211**	13	**255**	32	**1**	301	**1613**
05:15 PM	33	**43**	**166**	0	**242**	221	513	59	0	793	59	54	63	0	176	13	245	29	0	287	1498
Total Volume	111	131	620	1	863	883	2148	214	0	3245	349	205	237	0	791	74	965	140	1	1180	6079
% App. Total	12.9	15.2	71.8	0.1		27.2	66.2	6.6	0		44.1	25.9	30	0		6.3	81.8	11.9	0.1		
PHF	.841	.762	.934	.250	.892	.964	.895	.823	.000	.907	.864	.899	.926	.000	.937	.617	.946	.814	.250	.970	.942
CARS	110	130	606	1	847	871	2114														
% CARS	99.1	99.2	97.7	100	98.1	98.6	98.4	99.1	0	98.5	98.9	100	99.6	0	99.4	100	96.7	99.3	100	97.2	98.3
HV	1	1	14	0	16	12	34	2	0	48	4	0	1	0	5	0	32	1	0	33	102
% HV	0.9	0.8	2.3	0	1.9	1.4	1.6	0.9	0	1.5	1.1	0	0.4	0	0.6	0	3.3	0.7	0	2.8	1.7



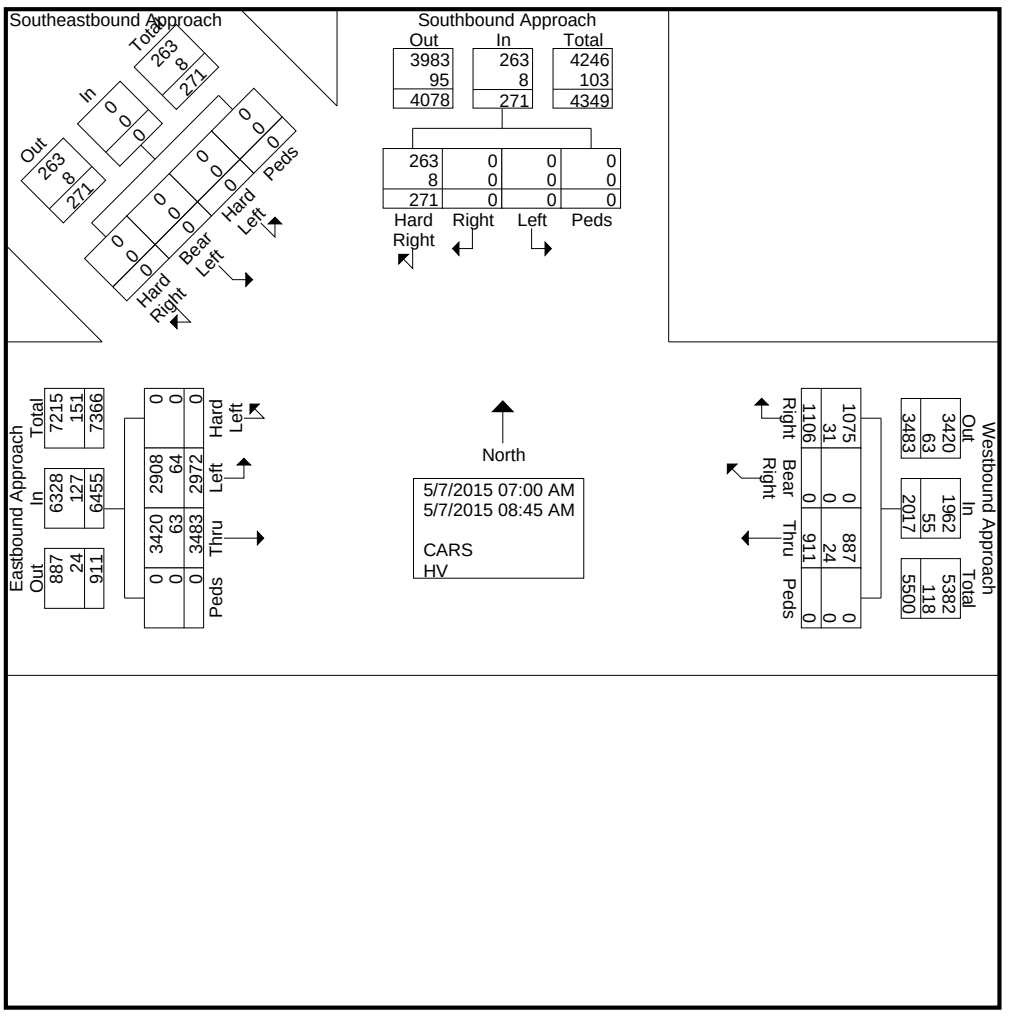
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #2 I526EBRAMPS&PAULAM
Site Code : 9513 - CHARLESTON 2
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	Southbound Approach Southbound					Westbound Approach Westbound					Eastbound Approach Eastbound					Southeastbound Approach Southeastbound					
Start Time	Hard Right	Right	Left	Peds	App. Total	Right	Bear Right	Thru	Peds	App. Total	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
07:00 AM	30	0	0	0	30	122	0	51	0	173	444	417	0	0	861	0	0	0	0	0	1064
07:15 AM	23	0	0	0	23	156	0	95	0	251	485	433	0	0	918	0	0	0	0	0	1192
07:30 AM	33	0	0	0	33	150	0	110	0	260	448	481	0	0	929	0	0	0	0	0	1222
07:45 AM	36	0	0	0	36	130	0	128	0	258	437	432	0	0	869	0	0	0	0	0	1163
Total	122	0	0	0	122	558	0	384	0	942	1814	1763	0	0	3577	0	0	0	0	0	4641
08:00 AM	38	0	0	0	38	117	0	116	0	233	470	417	0	0	887	0	0	0	0	0	1158
08:15 AM	44	0	0	0	44	137	0	152	0	289	407	271	0	0	678	0	0	0	0	0	1011
08:30 AM	38	0	0	0	38	147	0	92	0	239	401	314	0	0	715	0	0	0	0	0	992
08:45 AM	29	0	0	0	29	147	0	167	0	314	391	207	0	0	598	0	0	0	0	0	941
Total	149	0	0	0	149	548	0	527	0	1075	1669	1209	0	0	2878	0	0	0	0	0	4102
Grand Total	271	0	0	0	271	1106	0	911	0	2017	3483	2972	0	0	6455	0	0	0	0	0	8743
Apprch %	100	0	0	0		54.8	0	45.2	0		54	46	0	0		0	0	0	0		
Total %	3.1	0	0	0	3.1	12.7	0	10.4	0	23.1	39.8	34	0	0	73.8	0	0	0	0	0	
CARS	263	0	0	0	263	1075					3420	2908									
% CARS	97	0	0	0	97	97.2	0	97.4	0	97.3	98.2	97.8	0	0	98	0	0	0	0	0	97.8
HV	8	0	0	0	8	31	0	24	0	55	63	64	0	0	127	0	0	0	0	0	190
% HV	3	0	0	0	3	2.8	0	2.6	0	2.7	1.8	2.2	0	0	2	0	0	0	0	0	2.2

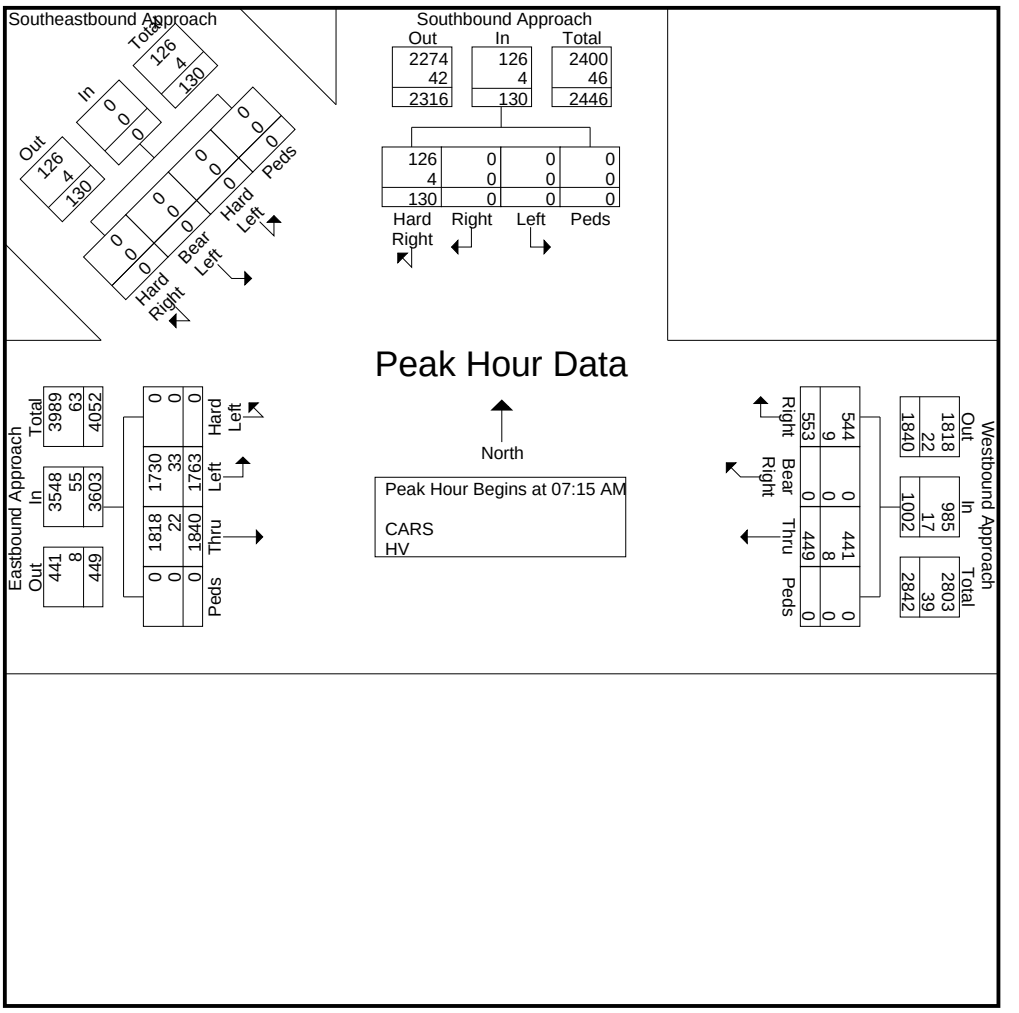


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #2 I526EBRAMPS&PAULAM
Site Code : 9513 - CHARLESTON 2
Start Date : 5/7/2015
Page No : 2

	Southbound Approach Southbound					Westbound Approach Westbound					Eastbound Approach Eastbound					Southeastbound Approach Southeastbound					
Start Time	Hard Right	Right	Left	Peds	App. Total	Right	Bear Right	Thru	Peds	App. Total	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	23	0	0	0	23	**156**	0	95	0	251	**485**	433	0	0	918	0	0	0	0	0	1192
07:30 AM	33	0	0	0	33	150	0	110	0	**260**	448	**481**	0	0	**929**	0	0	0	0	0	**1222**
07:45 AM	36	0	0	0	36	130	0	**128**	0	258	437	432	0	0	869	0	0	0	0	0	1163
08:00 AM	**38**	0	0	0	**38**	117	0	116	0	233	470	417	0	0	887	0	0	0	0	0	1158
Total Volume	130	0	0	0	130	553	0	449	0	1002	1840	1763	0	0	3603	0	0	0	0	0	4735
% App. Total	100	0	0	0		55.2	0	44.8	0		51.1	48.9	0	0		0	0	0	0		
PHF	.855	.000	.000	.000	.855	.886	.000	.877	.000	.963	.948	.916	.000	.000	.970	.000	.000	.000	.000	.000	.969
CARS	126	0	0	0	126	544	0	441	0	985	1818	1730									
% CARS	96.9	0	0	0	96.9	98.4	0	98.2	0	98.3	98.8	98.1	0	0	98.5	0	0	0	0	0	98.4
HV	4	0	0	0	4	9	0	8	0	17	22	33	0	0	55	0	0	0	0	0	76
% HV	3.1	0	0	0	3.1	1.6	0	1.8	0	1.7	1.2	1.9	0	0	1.5	0	0	0	0	0	1.6



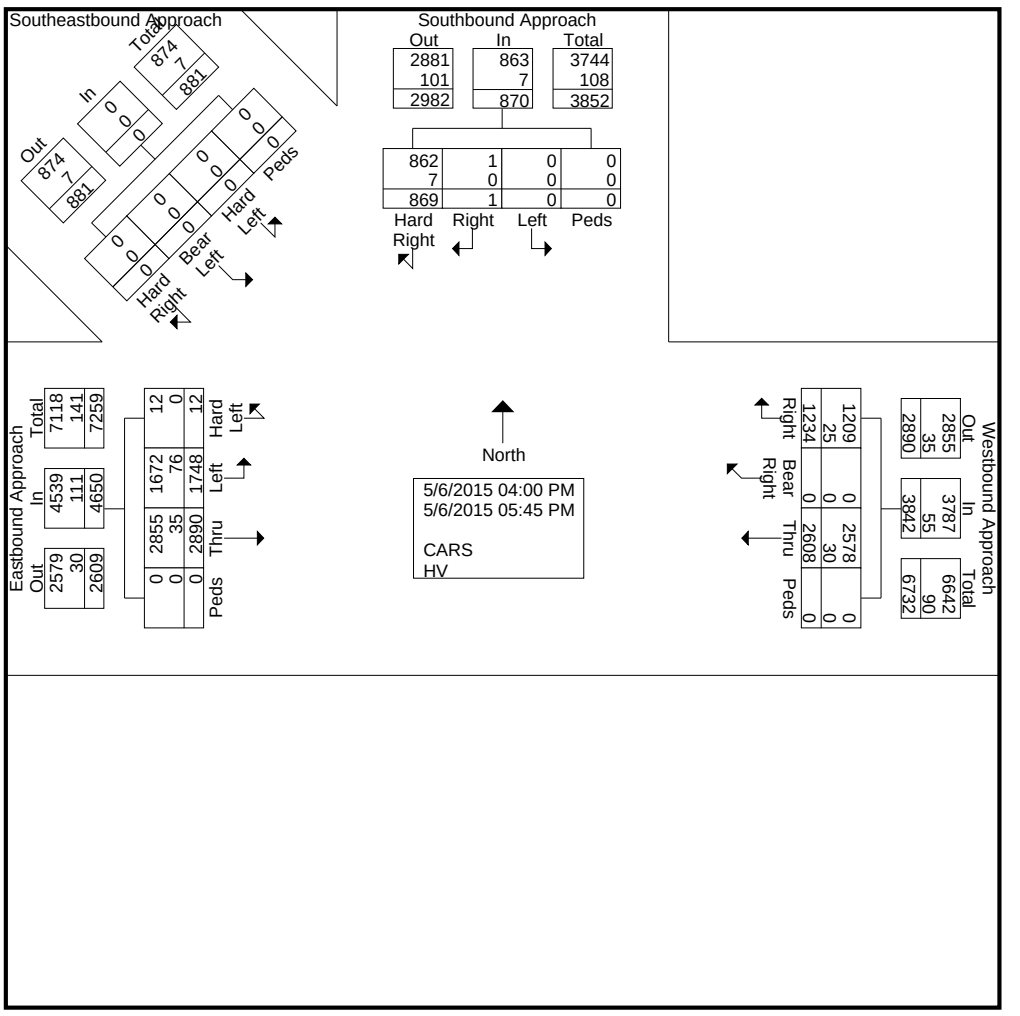
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #2 I526EBRAMPS&PAULPM
Site Code : 9513 - CHARLESTON 2
Start Date : 5/6/2015
Page No : 1

Groups Printed- CARS - HV

	Southbound Approach Southbound					Westbound Approach Westbound					Eastbound Approach Eastbound					Southeastbound Approach Southeastbound					
Start Time	Hard Right	Right	Left	Peds	App. Total	Right	Bear Right	Thru	Peds	App. Total	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
04:00 PM	92	1	0	0	93	145	0	293	0	438	366	245	0	0	611	0	0	0	0	0	1142
04:15 PM	94	0	0	0	94	132	0	273	0	405	363	198	0	0	561	0	0	0	0	0	1060
04:30 PM	102	0	0	0	102	144	0	331	0	475	344	242	0	0	586	0	0	0	0	0	1163
04:45 PM	103	0	0	0	103	165	0	332	0	497	379	203	0	0	582	0	0	0	0	0	1182
Total	391	1	0	0	392	586	0	1229	0	1815	1452	888	0	0	2340	0	0	0	0	0	4547
05:00 PM	142	0	0	0	142	177	0	334	0	511	384	295	3	0	682	0	0	0	0	0	1335
05:15 PM	109	0	0	0	109	179	0	377	0	556	391	191	4	0	586	0	0	0	0	0	1251
05:30 PM	106	0	0	0	106	153	0	318	0	471	350	223	2	0	575	0	0	0	0	0	1152
05:45 PM	121	0	0	0	121	139	0	350	0	489	313	151	3	0	467	0	0	0	0	0	1077
Total	478	0	0	0	478	648	0	1379	0	2027	1438	860	12	0	2310	0	0	0	0	0	4815
Grand Total	869	1	0	0	870	1234	0	2608	0	3842	2890	1748	12	0	4650	0	0	0	0	0	9362
Apprch %	99.9	0.1	0	0		32.1	0	67.9	0		62.2	37.6	0.3	0		0	0	0	0		
Total %	9.3	0	0	0	9.3	13.2	0	27.9	0	41	30.9	18.7	0.1	0	49.7	0	0	0	0	0	
CARS	862	1	0	0	863	1209		2578			2855	1672									
% CARS	99.2	100	0	0	99.2	98	0	98.8	0	98.6	98.8	95.7	100	0	97.6	0	0	0	0	0	98.2
HV	7	0	0	0	7	25	0	30	0	55	35	76	0	0	111	0	0	0	0	0	173
% HV	0.8	0	0	0	0.8	2	0	1.2	0	1.4	1.2	4.3	0	0	2.4	0	0	0	0	0	1.8

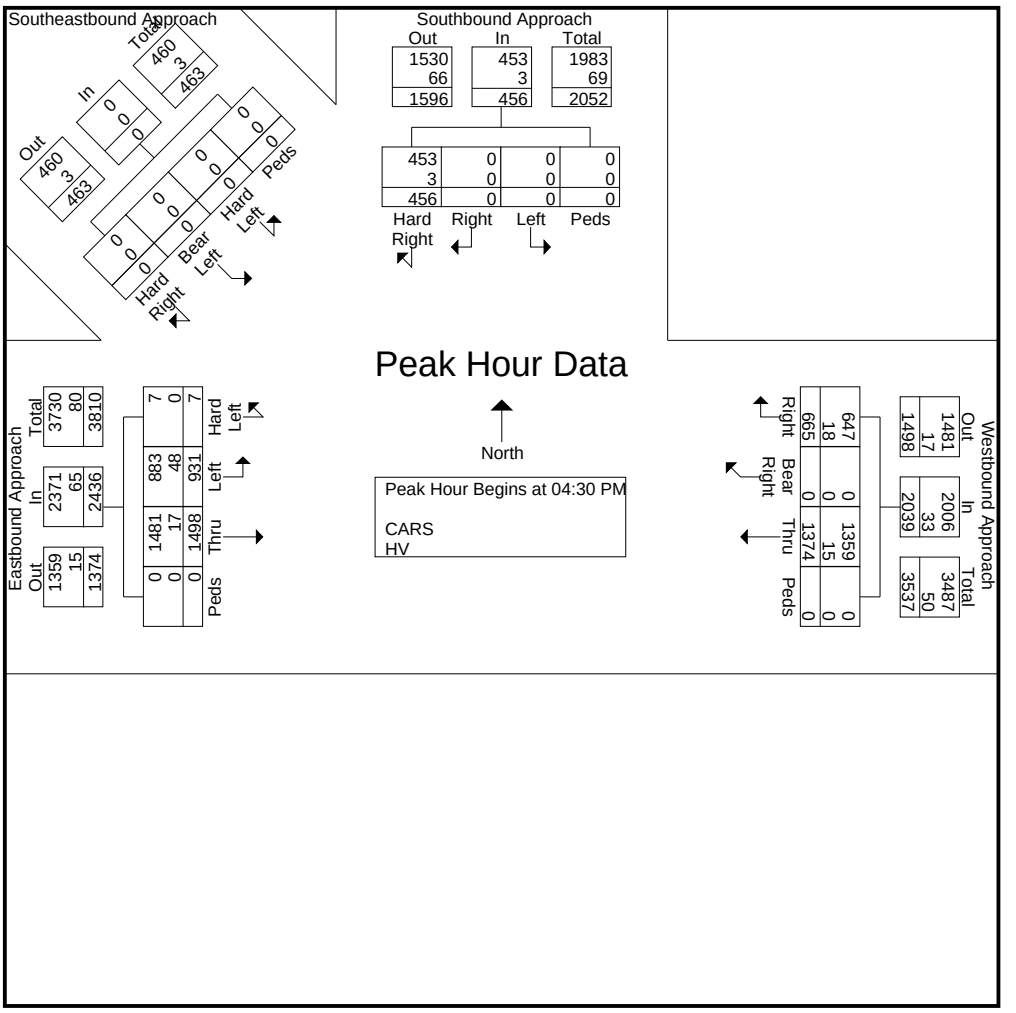


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #2 I526EBRAMPS&PAULPM
Site Code : 9513 - CHARLESTON 2
Start Date : 5/6/2015
Page No : 2

	Southbound Approach Southbound					Westbound Approach Westbound					Eastbound Approach Eastbound					Southeastbound Approach Southeastbound					
Start Time	Hard Right	Right	Left	Peds	App. Total	Right	Bear Right	Thru	Peds	App. Total	Thru	Left	Hard Left	Peds	App. Total	Hard Right	Bear Left	Hard Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	102	0	0	0	102	144	0	331	0	475	344	242	0	0	586	0	0	0	0	0	1163
04:45 PM	103	0	0	0	103	165	0	332	0	497	379	203	0	0	582	0	0	0	0	0	1182
05:00 PM	**142**	0	0	0	**142**	177	0	334	0	511	384	**295**	3	0	**682**	0	0	0	0	0	**1335**
05:15 PM	109	0	0	0	109	**179**	0	**377**	0	**556**	**391**	191	**4**	0	586	0	0	0	0	0	1251
Total Volume	456	0	0	0	456	665	0	1374	0	2039	1498	931	7	0	2436	0	0	0	0	0	4931
% App. Total	100	0	0	0		32.6	0	67.4	0		61.5	38.2	0.3	0		0	0	0	0		
PHF	.803	.000	.000	.000	.803	.929	.000	.911	.000	.917	.958	.789	.438	.000	.893	.000	.000	.000	.000	.000	.923
CARS	453	0	0	0	453	647	0	1359			1481										
% CARS	99.3	0	0	0	99.3	97.3	0	98.9	0	98.4	98.9	94.8	100	0	97.3	0	0	0	0	0	98.0
HV	3	0	0	0	3	18	0	15	0	33	17	48	0	0	65	0	0	0	0	0	101
% HV	0.7	0	0	0	0.7	2.7	0	1.1	0	1.6	1.1	5.2	0	0	2.7	0	0	0	0	0	2.0



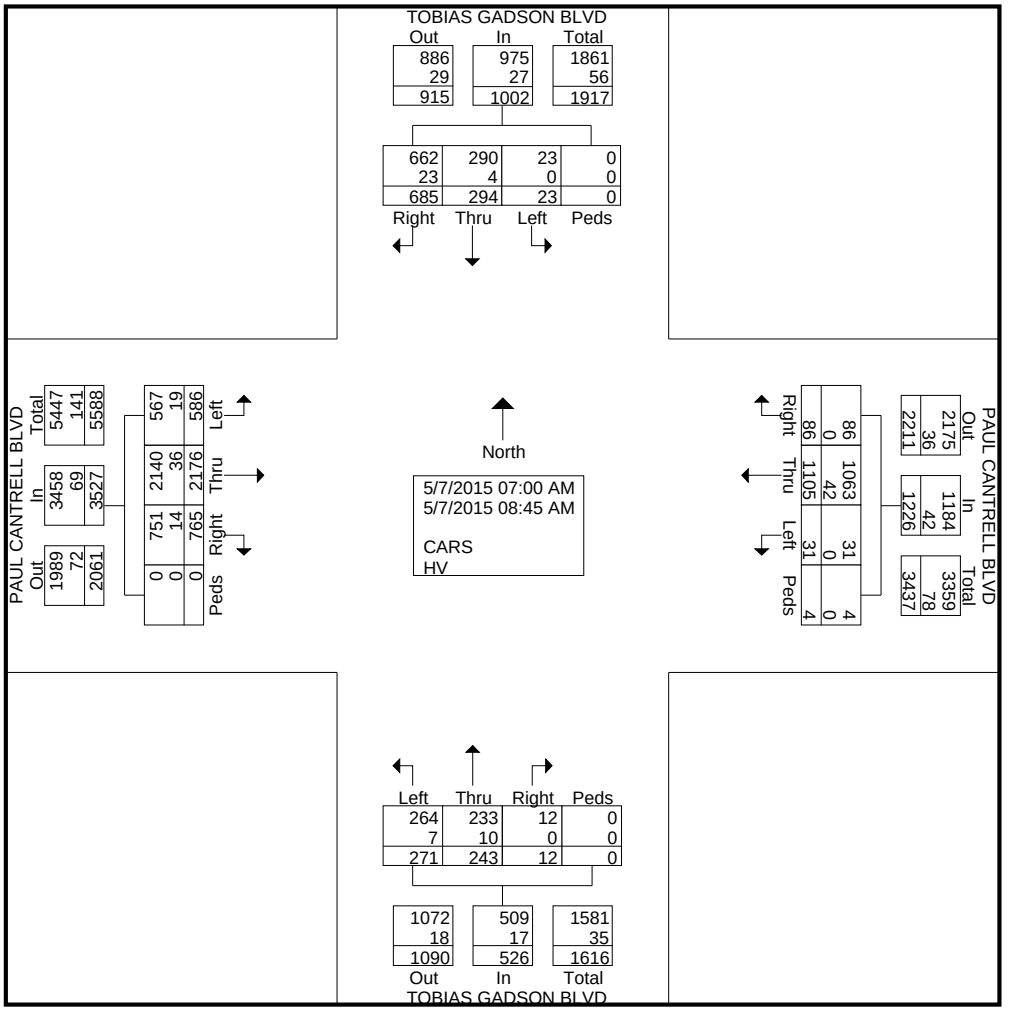
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #3 TOBIAS&PAULAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	TOBIAS GADSON BLVD Southbound					PAUL CANTRELL BLVD Westbound					TOBIAS GADSON BLVD Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	75	26	0	0	101	4	94	1	0	99	1	13	25	0	39	71	304	53	0	428	667
07:15 AM	91	32	0	0	123	6	109	0	0	115	2	19	38	0	59	86	338	65	0	489	786
07:30 AM	106	31	4	0	141	10	140	4	0	154	3	29	26	0	58	91	318	53	0	462	815
07:45 AM	68	45	1	0	114	15	142	10	1	168	3	40	34	0	77	116	252	76	0	444	803
Total	340	134	5	0	479	35	485	15	1	536	9	101	123	0	233	364	1212	247	0	1823	3071
08:00 AM	73	32	5	0	110	12	148	6	2	168	2	34	32	0	68	120	277	81	0	478	824
08:15 AM	83	45	1	0	129	17	164	3	0	184	0	30	40	0	70	91	230	78	0	399	782
08:30 AM	96	43	3	0	142	12	143	3	1	159	1	36	34	0	71	99	246	89	0	434	806
08:45 AM	93	40	9	0	142	10	165	4	0	179	0	42	42	0	84	91	211	91	0	393	798
Total	345	160	18	0	523	51	620	16	3	690	3	142	148	0	293	401	964	339	0	1704	3210
Grand Total	685	294	23	0	1002	86	1105	31	4	1226	12	243	271	0	526	765	2176	586	0	3527	6281
Apprch %	68.4	29.3	2.3	0		7	90.1	2.5	0.3		2.3	46.2	51.5	0		21.7	61.7	16.6	0		
Total %	10.9	4.7	0.4	0	16	1.4	17.6	0.5	0.1	19.5	0.2	3.9	4.3	0	8.4	12.2	34.6	9.3	0	56.2	
CARS	662	290	23	0	975	86	1063										2140				
% CARS	96.6	98.6	100	0	97.3	100	96.2	100	100	96.6	100	95.9	97.4	0	96.8	98.2	98.3	96.8	0	98	97.5
HV	23	4	0	0	27	0	42	0	0	42	0	10	7	0	17	14	36	19	0	69	155
% HV	3.4	1.4	0	0	2.7	0	3.8	0	0	3.4	0	4.1	2.6	0	3.2	1.8	1.7	3.2	0	2	2.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #3 TOBIAS&PAULAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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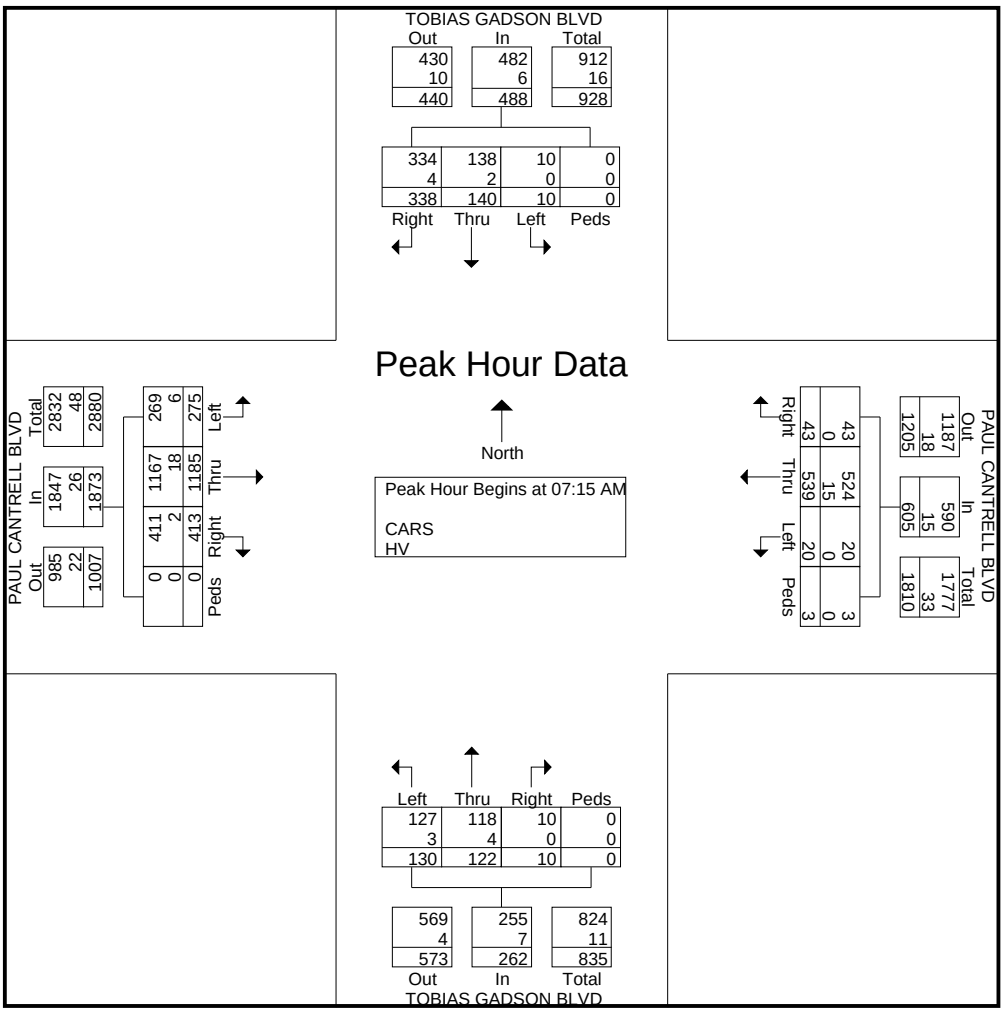
	TOBIAS GADSON BLVD Southbound					PAUL CANTRELL BLVD Westbound					TOBIAS GADSON BLVD Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	91	32	0	0	123	6	109	0	0	115	2	19	**38**	0	59	86	**338**	65	0	**489**	786
07:30 AM	**106**	31	4	0	**141**	10	140	4	0	154	**3**	29	26	0	58	91	318	53	0	462	815
07:45 AM	68	**45**	1	0	114	**15**	142	**10**	1	**168**	3	**40**	34	0	**77**	116	252	76	0	444	803
08:00 AM	73	32	**5**	0	110	12	**148**	6	**2**	168	2	34	32	0	68	**120**	277	**81**	0	478	**824**
Total Volume	338	140	10	0	488	43	539	20	3	605	10	122	130	0	262	413	1185	275	0	1873	3228
% App. Total	69.3	28.7	2	0		7.1	89.1	3.3	0.5		3.8	46.6	49.6	0		22.1	63.3	14.7	0		
PHF	.797	.778	.500	.000	.865	.717	.910	.500	.375	.900	.833	.763	.855	.000	.851	.860	.876	.849	.000	.958	.979
CARS	334	138	10	0	482	43	524	20	3	590	10	118	127	0	255	411	1167				
% CARS	98.8	98.6	100	0	98.8	100	97.2	100	100	97.5	100	96.7	97.7	0	97.3	99.5	98.5	97.8	0	98.6	98.3
HV	4	2	0	0	6	0	15	0	0	15	0	4	3	0	7	2	18	6	0	26	54
% HV	1.2	1.4	0	0	1.2	0	2.8	0	0	2.5	0	3.3	2.3	0	2.7	0.5	1.5	2.2	0	1.4	1.7



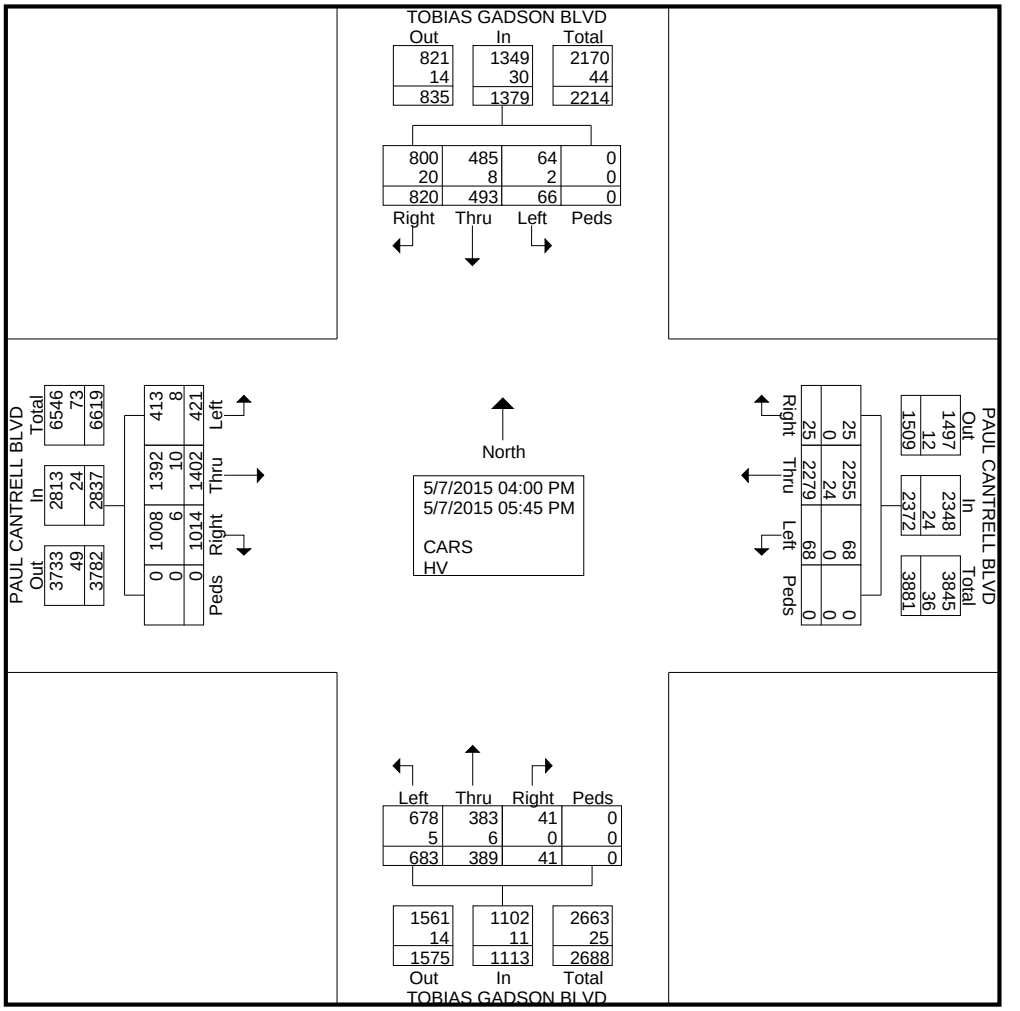
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #3 TOBIAS&PAULPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	TOBIAS GADSON BLVD Southbound					PAUL CANTRELL BLVD Westbound					TOBIAS GADSON BLVD Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	94	48	9	0	151	4	259	7	0	270	2	59	82	0	143	121	186	69	0	376	940
04:15 PM	91	54	9	0	154	4	226	9	0	239	4	70	84	0	158	125	161	61	0	347	898
04:30 PM	111	64	5	0	180	4	293	12	0	309	5	45	84	0	134	105	168	51	0	324	947
04:45 PM	115	58	13	0	186	3	256	12	0	271	13	43	86	0	142	122	169	52	0	343	942
Total	411	224	36	0	671	15	1034	40	0	1089	24	217	336	0	577	473	684	233	0	1390	3727
05:00 PM	124	60	9	0	193	2	319	9	0	330	8	43	94	0	145	150	213	43	0	406	1074
05:15 PM	111	60	8	0	179	2	328	4	0	334	2	45	92	0	139	133	177	56	0	366	1018
05:30 PM	95	69	9	0	173	5	261	3	0	269	6	40	89	0	135	142	182	34	0	358	935
05:45 PM	79	80	4	0	163	1	337	12	0	350	1	44	72	0	117	116	146	55	0	317	947
Total	409	269	30	0	708	10	1245	28	0	1283	17	172	347	0	536	541	718	188	0	1447	3974
Grand Total	820	493	66	0	1379	25	2279	68	0	2372	41	389	683	0	1113	1014	1402	421	0	2837	7701
Apprch %	59.5	35.8	4.8	0		1.1	96.1	2.9	0		3.7	35	61.4	0		35.7	49.4	14.8	0		
Total %	10.6	6.4	0.9	0	17.9	0.3	29.6	0.9	0	30.8	0.5	5.1	8.9	0	14.5	13.2	18.2	5.5	0	36.8	
CARS	800	485	64	0	1349	25	2255									1008	1392				
% CARS	97.6	98.4	97	0	97.8	100	98.9	100	0	99	100	98.5	99.3	0	99	99.4	99.3	98.1	0	99.2	98.8
HV	20	8	2	0	30	0	24	0	0	24	0	6	5	0	11	6	10	8	0	24	89
% HV	2.4	1.6	3	0	2.2	0	1.1	0	0	1	0	1.5	0.7	0	1	0.6	0.7	1.9	0	0.8	1.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #3 TOBIAS&PAULPM
Site Code : 9513 - CHARLESTON 1
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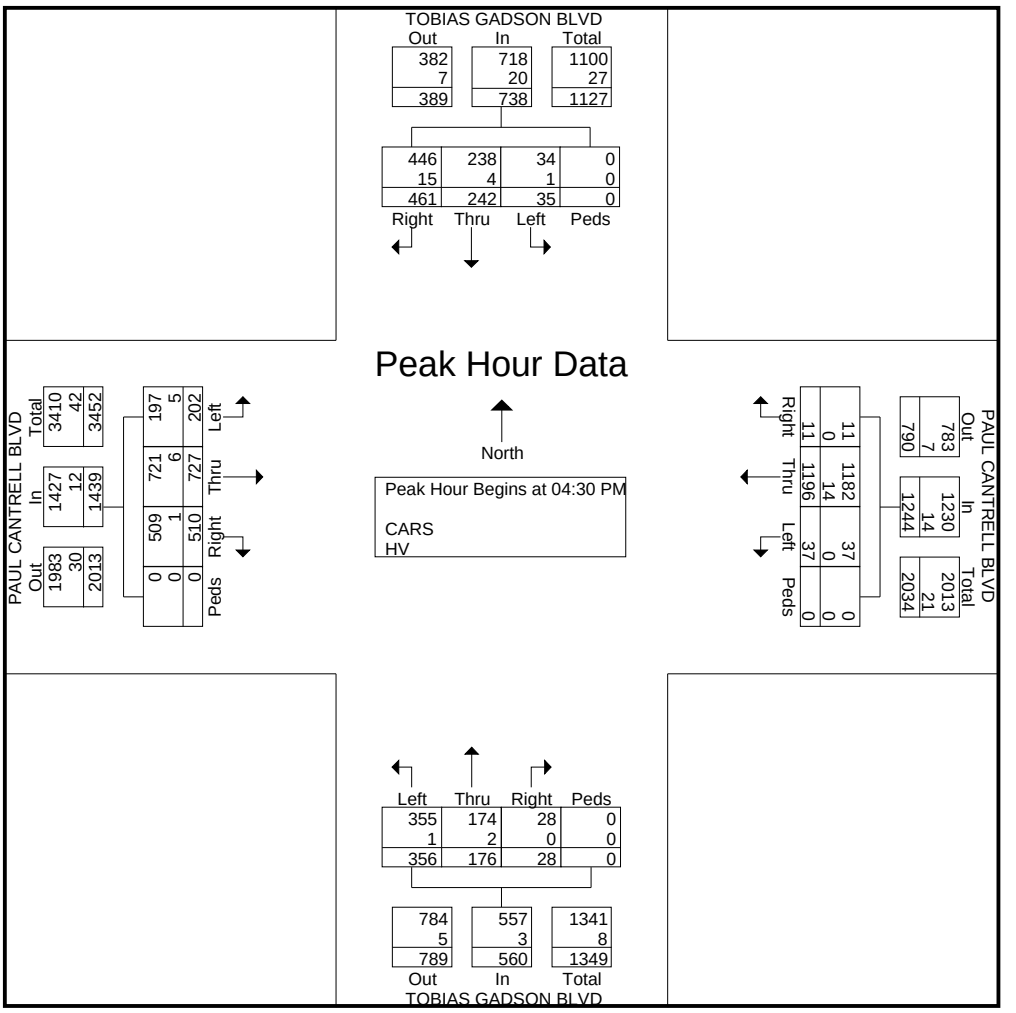
	TOBIAS GADSON BLVD Southbound					PAUL CANTRELL BLVD Westbound					TOBIAS GADSON BLVD Northbound					PAUL CANTRELL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	111	**64**	5	0	180	**4**	293	**12**	0	309	5	**45**	84	0	134	105	168	51	0	324	947
04:45 PM	115	58	**13**	0	186	3	256	12	0	271	**13**	43	86	0	142	122	169	52	0	343	942
05:00 PM	**124**	60	9	0	**193**	2	319	9	0	330	8	43	**94**	0	**145**	**150**	**213**	43	0	**406**	**1074**
05:15 PM	111	60	8	0	179	2	**328**	4	0	**334**	2	45	92	0	139	133	177	**56**	0	366	1018
Total Volume	461	242	35	0	738	11	1196	37	0	1244	28	176	356	0	560	510	727	202	0	1439	3981
% App. Total	62.5	32.8	4.7	0		0.9	96.1	3	0		5	31.4	63.6	0		35.4	50.5	14	0		
PHF	.929	.945	.673	.000	.956	.688	.912	.771	.000	.931	.538	.978	.947	.000	.966	.850	.853	.902	.000	.886	.927
CARS	446	238	34	0	718	11	1182														
% CARS	96.7	98.3	97.1	0	97.3	100	98.8	100	0	98.9	100	98.9	99.7	0	99.5	99.8	99.2	97.5	0	99.2	98.8
HV	15	4	1	0	20	0	14	0	0	14	0	2	1	0	3	1	6	5	0	12	49
% HV	3.3	1.7	2.9	0	2.7	0	1.2	0	0	1.1	0	1.1	0.3	0	0.5	0.2	0.8	2.5	0	0.8	1.2



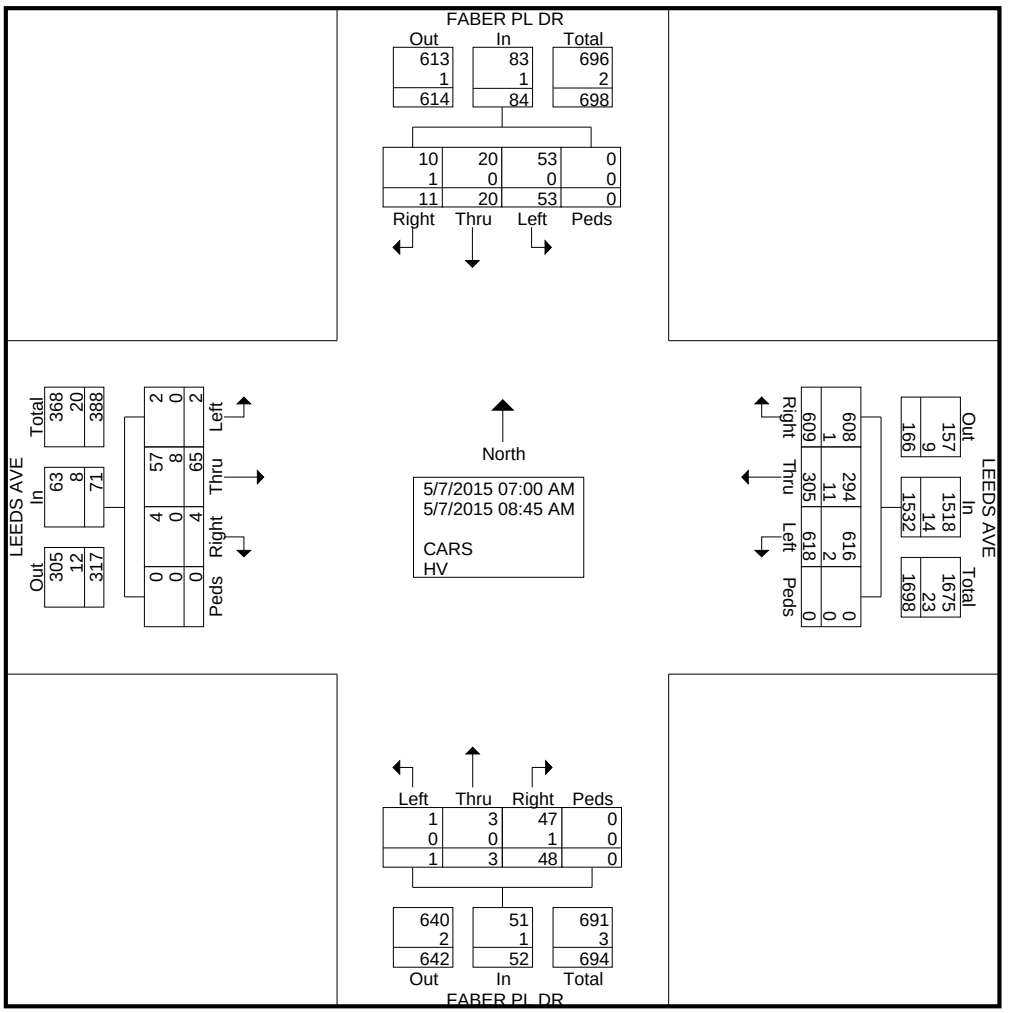
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #4 FABER&LEEDSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	FABER PL DR Southbound					LEEDS AVE Westbound					FABER PL DR Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	4	0	5	38	35	47	0	120	2	0	0	0	2	0	4	0	0	4	131
07:15 AM	3	1	2	0	6	63	45	68	0	176	2	0	0	0	2	0	10	0	0	10	194
07:30 AM	1	6	5	0	12	77	50	91	0	218	7	0	0	0	7	1	12	0	0	13	250
07:45 AM	1	2	8	0	11	107	54	101	0	262	2	0	0	0	2	0	6	1	0	7	282
Total	5	10	19	0	34	285	184	307	0	776	13	0	0	0	13	1	32	1	0	34	857
08:00 AM	2	2	5	0	9	93	50	91	0	234	6	0	0	0	6	1	9	0	0	10	259
08:15 AM	1	0	5	0	6	110	30	104	0	244	9	0	0	0	9	1	12	0	0	13	272
08:30 AM	2	3	15	0	20	60	23	76	0	159	8	2	0	0	10	1	4	1	0	6	195
08:45 AM	1	5	9	0	15	61	18	40	0	119	12	1	1	0	14	0	8	0	0	8	156
Total	6	10	34	0	50	324	121	311	0	756	35	3	1	0	39	3	33	1	0	37	882
Grand Total	11	20	53	0	84	609	305	618	0	1532	48	3	1	0	52	4	65	2	0	71	1739
Apprch %	13.1	23.8	63.1	0		39.8	19.9	40.3	0		92.3	5.8	1.9	0		5.6	91.5	2.8	0		
Total %	0.6	1.2	3	0	4.8	35	17.5	35.5	0	88.1	2.8	0.2	0.1	0	3	0.2	3.7	0.1	0	4.1	
CARS	10	20	53	0	83	608	294	616	0	1518	47	3	1	0	51	4	57	2	0	63	1715
% CARS	90.9	100	100	0	98.8	99.8	96.4	99.7	0	99.1	97.9	100	100	0	98.1	100	87.7	100	0	88.7	98.6
HV	1	0	0	0	1	1	11	2	0	14	1	0	0	0	1	0	8	0	0	8	24
% HV	9.1	0	0	0	1.2	0.2	3.6	0.3	0	0.9	2.1	0	0	0	1.9	0	12.3	0	0	11.3	1.4



All Traffic Data Services, Inc.

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File Name : #4 FABER&LEEDSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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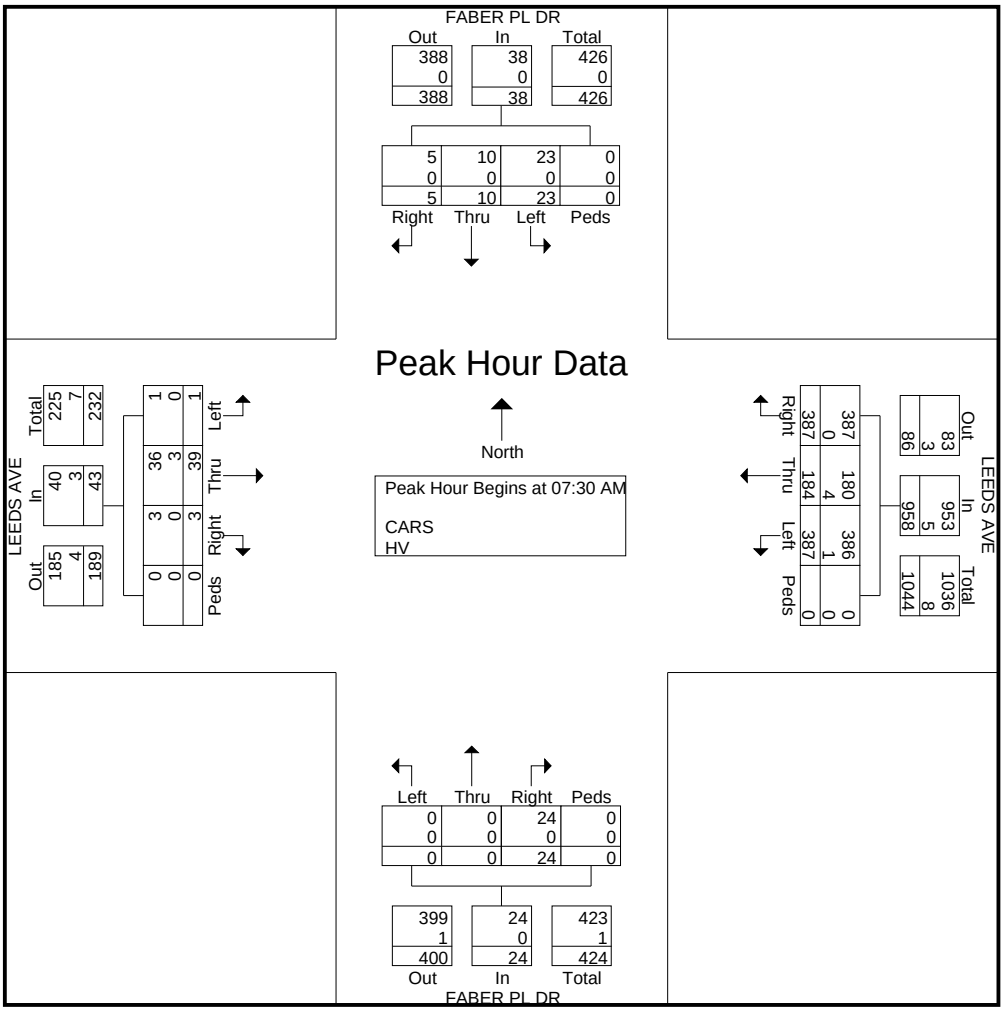
	FABER PL DR Southbound					LEEDS AVE Westbound					FABER PL DR Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	**6**	5	0	**12**	77	50	91	0	218	7	0	0	0	7	**1**	**12**	0	0	**13**	250
07:45 AM	1	2	**8**	0	11	107	**54**	101	0	**262**	2	0	0	0	2	0	6	**1**	0	7	**282**
08:00 AM	**2**	2	5	0	9	93	50	91	0	234	6	0	0	0	6	1	9	0	0	10	259
08:15 AM	1	0	5	0	6	**110**	30	**104**	0	244	**9**	0	0	0	**9**	1	12	0	0	13	272
Total Volume	5	10	23	0	38	387	184	387	0	958	24	0	0	0	24	3	39	1	0	43	1063
% App. Total	13.2	26.3	60.5	0		40.4	19.2	40.4	0		100	0	0	0		7	90.7	2.3	0		
PHF	.625	.417	.719	.000	.792	.880	.852	.930	.000	.914	.667	.000	.000	.000	.667	.750	.813	.250	.000	.827	.942
CARS	5	10	23	0	38	387	180	386	0	953	24	0	0	0	24	3	36	1	0	40	1055
% CARS	100	100	100	0	100	100	97.8	99.7	0	99.5	100	0	0	0	100	100	92.3	100	0	93.0	99.2
HV	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	3	0	0	3	8
% HV	0	0	0	0	0	0	2.2	0.3	0	0.5	0	0	0	0	0	0	7.7	0	0	7.0	0.8



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #4 FABER&LEEDSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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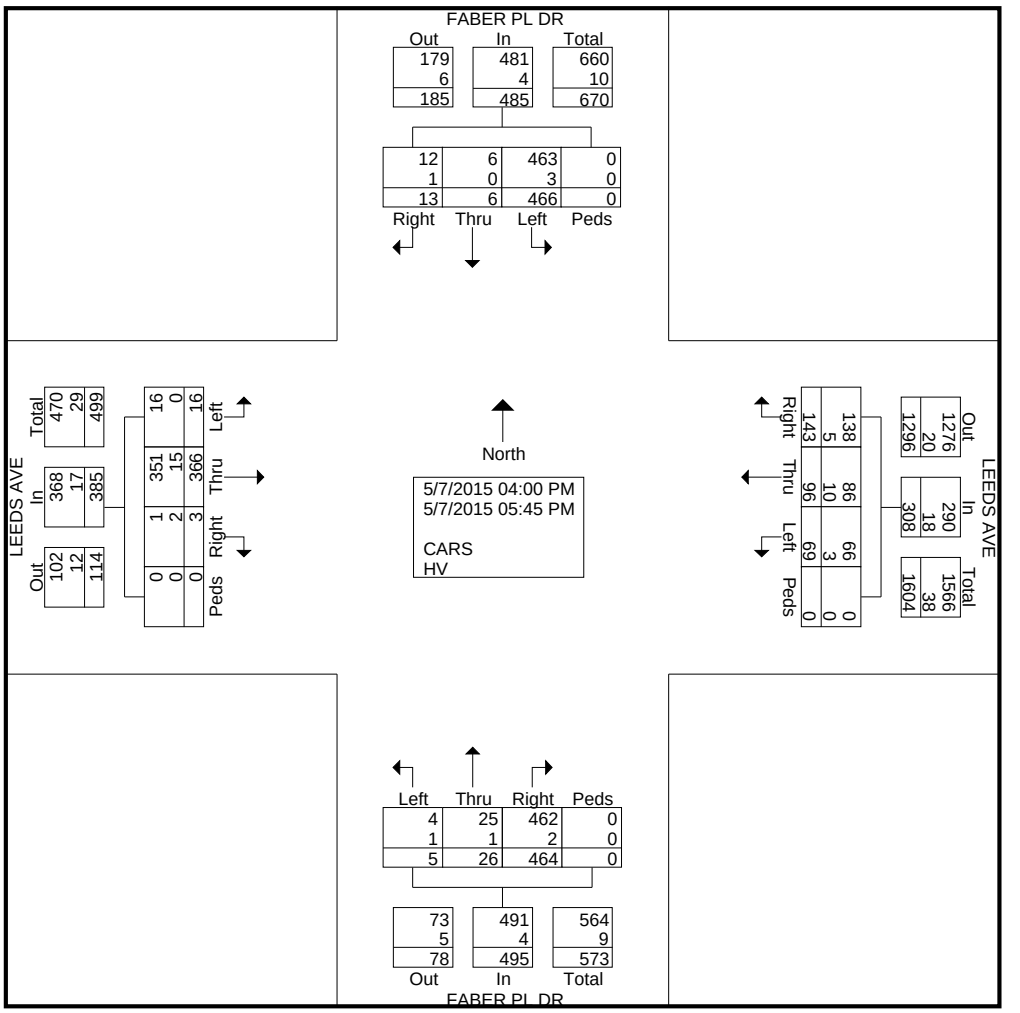
Groups Printed- CARS - HV

	FABER PL DR Southbound					LEEDS AVE Westbound					FABER PL DR Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	1	46	0	49	15	10	5	0	30	30	2	1	0	33	2	58	1	0	61	173
04:15 PM	1	0	42	0	43	17	9	10	0	36	38	2	0	0	40	1	29	3	0	33	152
04:30 PM	0	0	51	0	51	19	13	11	0	43	93	3	1	0	97	0	47	3	0	50	241
04:45 PM	1	0	59	0	60	18	11	7	0	36	56	4	0	0	60	0	47	2	0	49	205
Total	4	1	198	0	203	69	43	33	0	145	217	11	2	0	230	3	181	9	0	193	771
05:00 PM	5	2	108	0	115	22	13	11	0	46	99	8	1	0	108	0	75	2	0	77	346
05:15 PM	3	3	73	0	79	23	9	8	0	40	68	2	0	0	70	0	48	3	0	51	240
05:30 PM	0	0	47	0	47	14	15	7	0	36	52	4	0	0	56	0	28	1	0	29	168
05:45 PM	1	0	40	0	41	15	16	10	0	41	28	1	2	0	31	0	34	1	0	35	148
Total	9	5	268	0	282	74	53	36	0	163	247	15	3	0	265	0	185	7	0	192	902
Grand Total	13	6	466	0	485	143	96	69	0	308	464	26	5	0	495	3	366	16	0	385	1673
Apprch %	2.7	1.2	96.1	0		46.4	31.2	22.4	0		93.7	5.3	1	0		0.8	95.1	4.2	0		
Total %	0.8	0.4	27.9	0	29	8.5	5.7	4.1	0	18.4	27.7	1.6	0.3	0	29.6	0.2	21.9	1	0	23	
CARS	12	6	463	0	481	138	86	66	0	290	462	25	4	0	491	1	351	16	0	368	1630
% CARS	92.3	100	99.4	0	99.2	96.5	89.6	95.7	0	94.2	99.6	96.2	80	0	99.2	33.3	95.9	100	0	95.6	97.4
HV	1	0	3	0	4	5	10	3	0	18	2	1	1	0	4	2	15	0	0	17	43
% HV	7.7	0	0.6	0	0.8	3.5	10.4	4.3	0	5.8	0.4	3.8	20	0	0.8	66.7	4.1	0	0	4.4	2.6



All Traffic Data Services, Inc.

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File Name : #4 FABER&LEEDSPM
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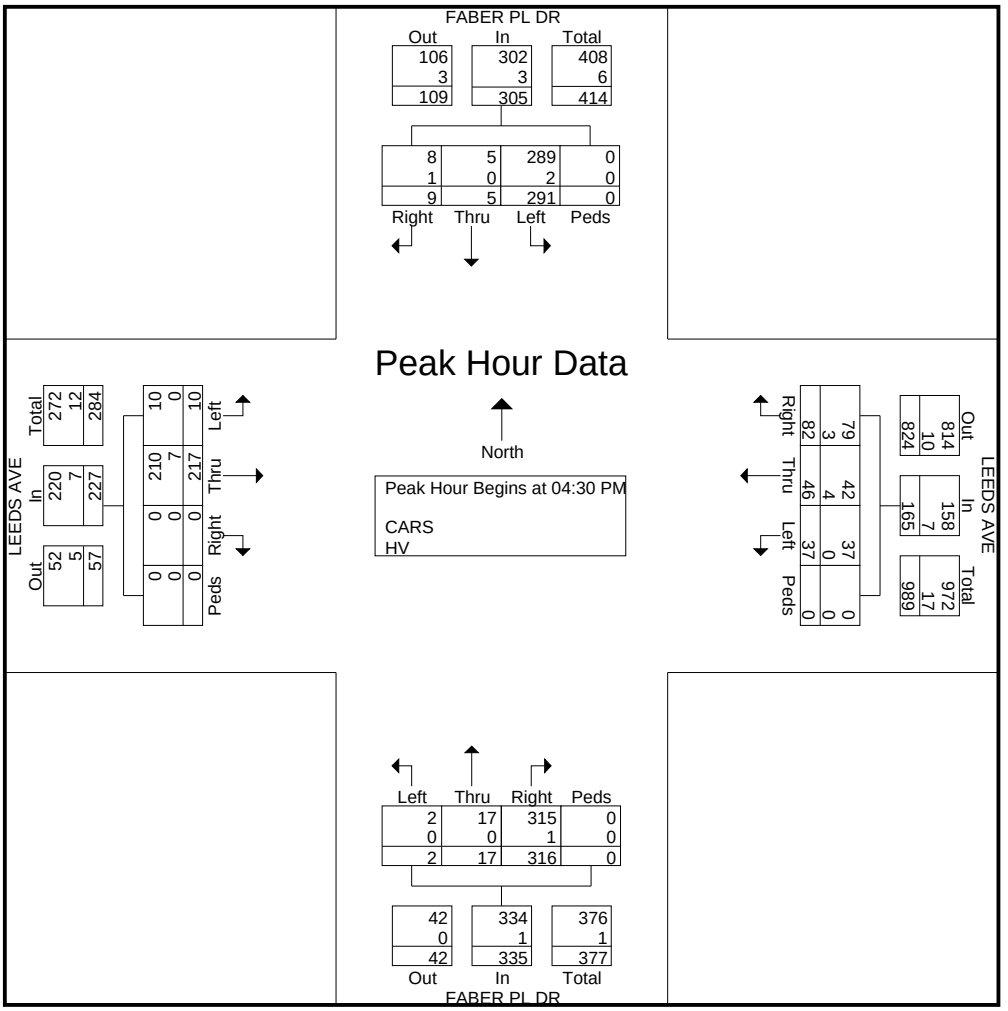
	FABER PL DR Southbound					LEEDS AVE Westbound					FABER PL DR Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	51	0	51	19	**13**	**11**	0	43	93	3	**1**	0	97	0	47	**3**	0	50	241
04:45 PM	1	0	59	0	60	18	11	7	0	36	56	4	0	0	60	0	47	2	0	49	205
05:00 PM	**5**	2	**108**	0	**115**	22	13	11	0	**46**	**99**	**8**	1	0	**108**	0	**75**	2	0	**77**	**346**
05:15 PM	3	**3**	73	0	79	**23**	9	8	0	40	68	2	0	0	70	0	48	3	0	51	240
Total Volume	9	5	291	0	305	82	46	37	0	165	316	17	2	0	335	0	217	10	0	227	1032
% App. Total	3	1.6	95.4	0		49.7	27.9	22.4	0		94.3	5.1	0.6	0		0	95.6	4.4	0		
PHF	.450	.417	.674	.000	.663	.891	.885	.841	.000	.897	.798	.531	.500	.000	.775	.000	.723	.833	.000	.737	.746
CARS	8	5	289	0	302	79	42	37	0	158	315	17	2	0	334	0	210	10	0	220	1014
% CARS	88.9	100	99.3	0	99.0	96.3	91.3	100	0	95.8	99.7	100	100	0	99.7	0	96.8	100	0	96.9	98.3
HV	1	0	2	0	3	3	4	0	0	7	1	0	0	0	1	0	7	0	0	7	18
% HV	11.1	0	0.7	0	1.0	3.7	8.7	0	0	4.2	0.3	0	0	0	0.3	0	3.2	0	0	3.1	1.7



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #5 I526WBSB&LEEDSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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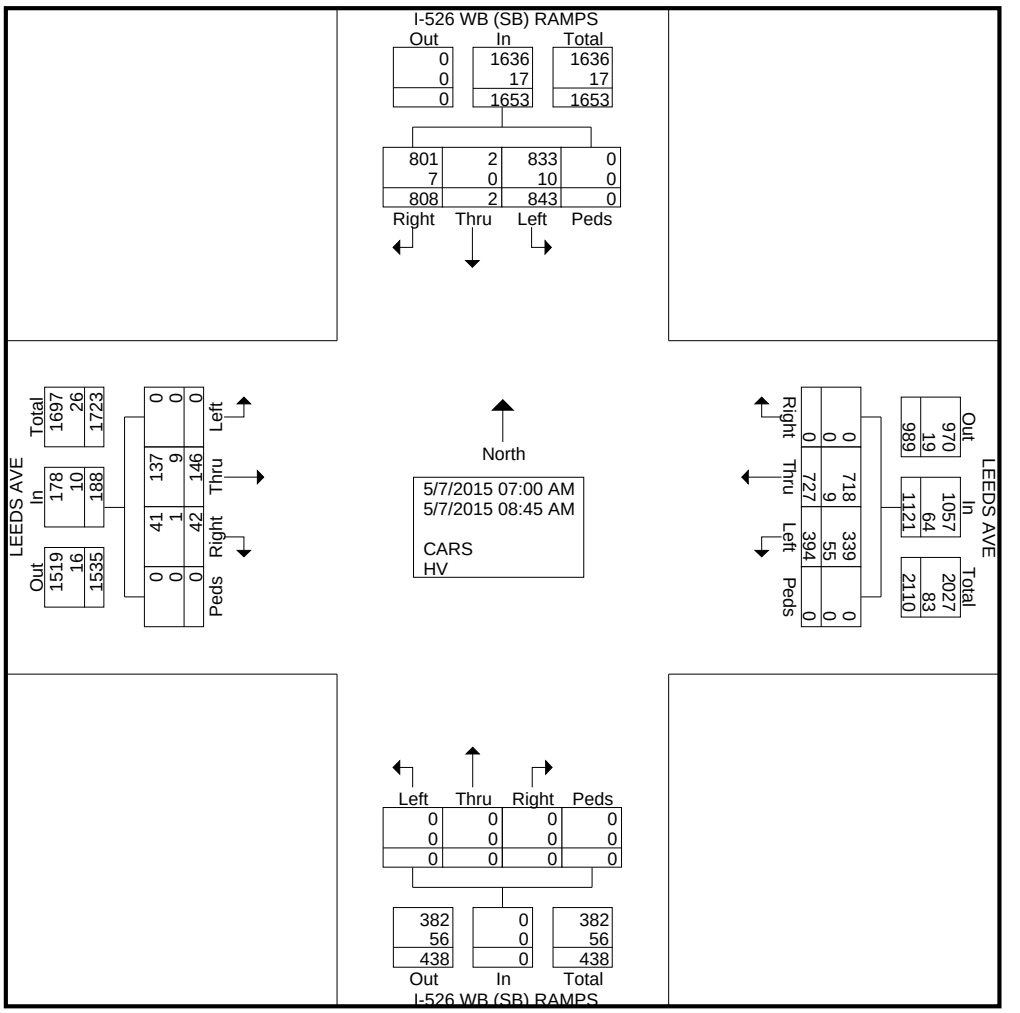
Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					LEEDS AVE Westbound					I-526 WB (SB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	74	0	72	0	146	0	43	35	0	78	0	0	0	0	0	2	9	0	0	11	235
07:15 AM	102	0	104	0	206	0	75	47	0	122	0	0	0	0	0	4	12	0	0	16	344
07:30 AM	123	0	109	0	232	0	97	46	0	143	0	0	0	0	0	6	20	0	0	26	401
07:45 AM	130	0	136	0	266	0	142	52	0	194	0	0	0	0	0	4	15	0	0	19	479
Total	429	0	421	0	850	0	357	180	0	537	0	0	0	0	0	16	56	0	0	72	1459
08:00 AM	103	0	100	0	203	0	123	43	0	166	0	0	0	0	0	7	18	0	0	25	394
08:15 AM	124	0	116	0	240	0	116	63	0	179	0	0	0	0	0	8	20	0	0	28	447
08:30 AM	98	1	129	0	228	0	64	45	0	109	0	0	0	0	0	3	30	0	0	33	370
08:45 AM	54	1	77	0	132	0	67	63	0	130	0	0	0	0	0	8	22	0	0	30	292
Total	379	2	422	0	803	0	370	214	0	584	0	0	0	0	0	26	90	0	0	116	1503
Grand Total	808	2	843	0	1653	0	727	394	0	1121	0	0	0	0	0	42	146	0	0	188	2962
Apprch %	48.9	0.1	51	0		0	64.9	35.1	0		0	0	0	0		22.3	77.7	0	0		
Total %	27.3	0.1	28.5	0	55.8	0	24.5	13.3	0	37.8	0	0	0	0	0	1.4	4.9	0	0	6.3	
CARS	801	2	833	0	1636	0	718	339	0	1057	0	0	0	0	0	41	137	0	0	178	2871
% CARS	99.1	100	98.8	0	99	0	98.8	86	0	94.3	0	0	0	0	0	97.6	93.8	0	0	94.7	96.9
HV	7	0	10	0	17	0	9	55	0	64	0	0	0	0	0	1	9	0	0	10	91
% HV	0.9	0	1.2	0	1	0	1.2	14	0	5.7	0	0	0	0	0	2.4	6.2	0	0	5.3	3.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #5 I526WBSB&LEEDSAM
Site Code : 9513 - CHARLESTON 1
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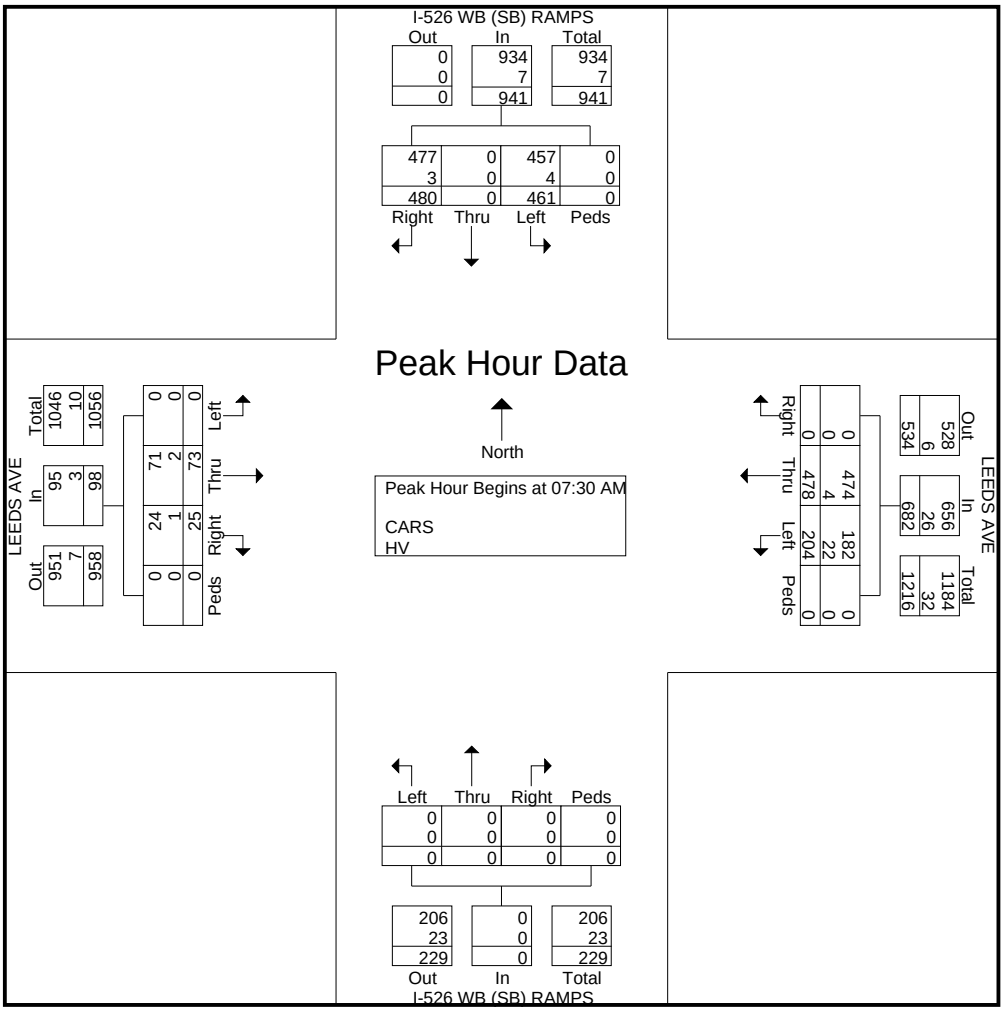
	I-526 WB (SB) RAMPS Southbound					LEEDS AVE Westbound					I-526 WB (SB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	123	0	109	0	232	0	97	46	0	143	0	0	0	0	0	6	**20**	0	0	26	401
07:45 AM	**130**	0	**136**	0	**266**	0	**142**	52	0	**194**	0	0	0	0	0	4	15	0	0	19	**479**
08:00 AM	103	0	100	0	203	0	123	43	0	166	0	0	0	0	0	7	18	0	0	25	394
08:15 AM	124	0	116	0	240	0	116	**63**	0	179	0	0	0	0	0	**8**	20	0	0	**28**	447
Total Volume	480	0	461	0	941	0	478	204	0	682	0	0	0	0	0	25	73	0	0	98	1721
% App. Total	51	0	49	0		0	70.1	29.9	0		0	0	0	0		25.5	74.5	0	0		
PHF	.923	.000	.847	.000	.884	.000	.842	.810	.000	.879	.000	.000	.000	.000	.000	.781	.913	.000	.000	.875	.898
CARS	477	0	457	0	934	0	474	182	0	656	0	0	0	0	0	24	71	0	0	95	1685
% CARS	99.4	0	99.1	0	99.3	0	99.2	89.2	0	96.2	0	0	0	0	0	96.0	97.3	0	0	96.9	97.9
HV	3	0	4	0	7	0	4	22	0	26	0	0	0	0	0	1	2	0	0	3	36
% HV	0.6	0	0.9	0	0.7	0	0.8	10.8	0	3.8	0	0	0	0	0	4.0	2.7	0	0	3.1	2.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #5 I526WBSB&LEEDSPM
Site Code : 9513 - CHARLESTON 1
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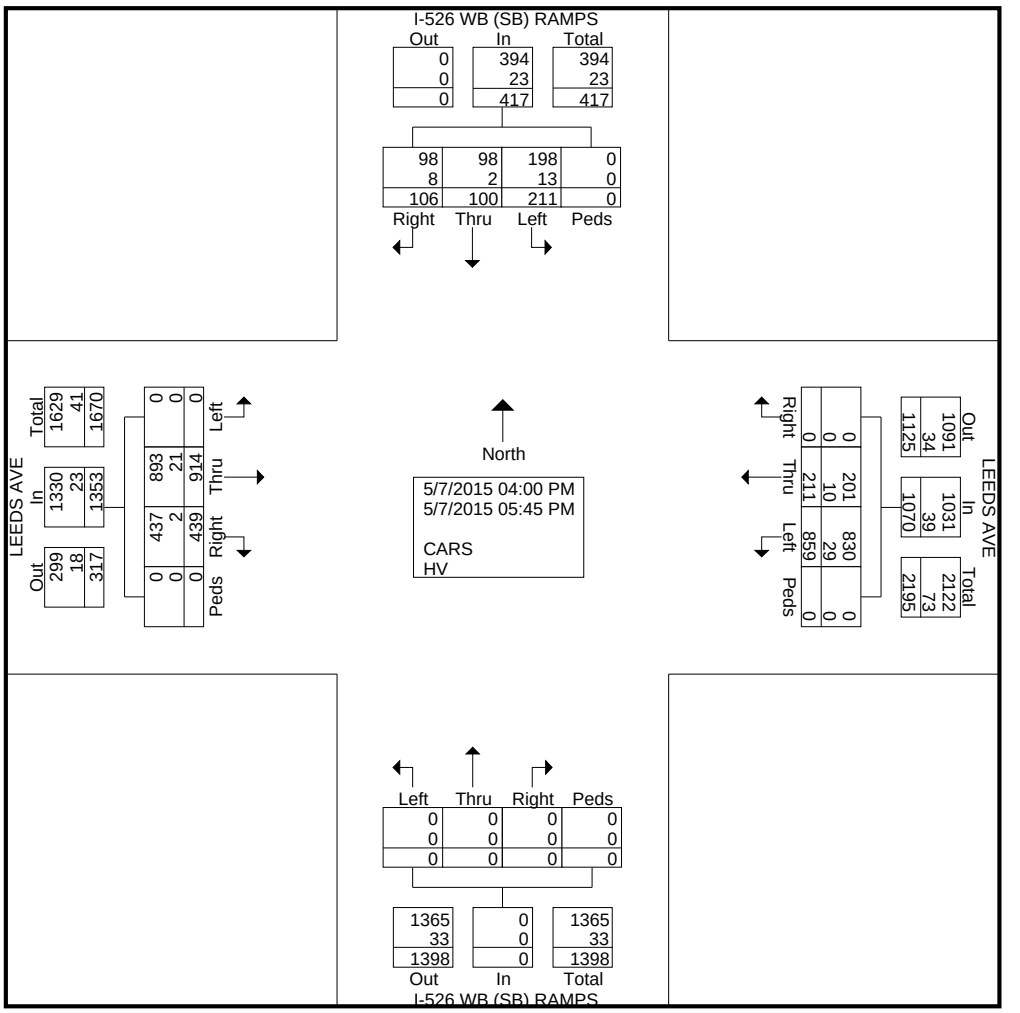
Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					LEEDS AVE Westbound					I-526 WB (SB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	14	1	40	0	55	0	19	111	0	130	0	0	0	0	0	35	104	0	0	139	324
04:15 PM	11	0	29	0	40	0	25	107	0	132	0	0	0	0	0	38	85	0	0	123	295
04:30 PM	17	0	27	0	44	0	24	130	0	154	0	0	0	0	0	49	147	0	0	196	394
04:45 PM	12	0	24	0	36	0	26	124	0	150	0	0	0	0	0	58	108	0	0	166	352
Total	54	1	120	0	175	0	94	472	0	566	0	0	0	0	0	180	444	0	0	624	1365
05:00 PM	13	7	26	0	46	0	41	115	0	156	0	0	0	0	0	111	160	0	0	271	473
05:15 PM	8	47	22	0	77	0	29	111	0	140	0	0	0	0	0	80	126	0	0	206	423
05:30 PM	14	35	23	0	72	0	24	96	0	120	0	0	0	0	0	29	113	0	0	142	334
05:45 PM	17	10	20	0	47	0	23	65	0	88	0	0	0	0	0	39	71	0	0	110	245
Total	52	99	91	0	242	0	117	387	0	504	0	0	0	0	0	259	470	0	0	729	1475
Grand Total	106	100	211	0	417	0	211	859	0	1070	0	0	0	0	0	439	914	0	0	1353	2840
Apprch %	25.4	24	50.6	0		0	19.7	80.3	0		0	0	0	0		32.4	67.6	0	0		
Total %	3.7	3.5	7.4	0	14.7	0	7.4	30.2	0	37.7	0	0	0	0	0	15.5	32.2	0	0	47.6	
CARS	98	98	198	0	394	0	201	830	0	1031	0	0	0	0	0	437	893	0	0	1330	2755
% CARS	92.5	98	93.8	0	94.5	0	95.3	96.6	0	96.4	0	0	0	0	0	99.5	97.7	0	0	98.3	97
HV	8	2	13	0	23	0	10	29	0	39	0	0	0	0	0	2	21	0	0	23	85
% HV	7.5	2	6.2	0	5.5	0	4.7	3.4	0	3.6	0	0	0	0	0	0.5	2.3	0	0	1.7	3



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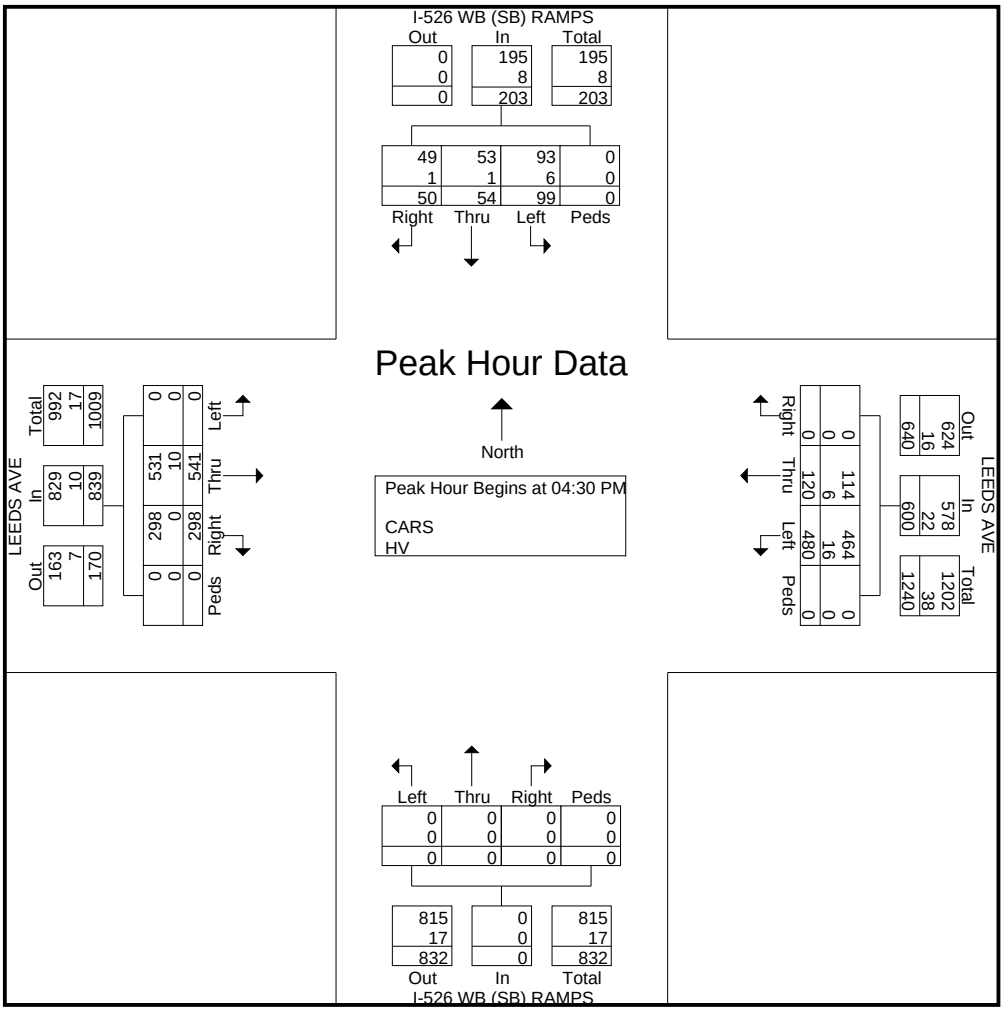
	I-526 WB (SB) RAMPS Southbound					LEEDS AVE Westbound					I-526 WB (SB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**17**	0	**27**	0	44	0	24	**130**	0	154	0	0	0	0	0	49	147	0	0	196	394
04:45 PM	12	0	24	0	36	0	26	124	0	150	0	0	0	0	0	58	108	0	0	166	352
05:00 PM	13	7	26	0	46	0	**41**	115	0	**156**	0	0	0	0	0	**111**	**160**	0	0	**271**	**473**
05:15 PM	8	**47**	22	0	**77**	0	29	111	0	140	0	0	0	0	0	80	126	0	0	206	423
Total Volume	50	54	99	0	203	0	120	480	0	600	0	0	0	0	0	298	541	0	0	839	1642
% App. Total	24.6	26.6	48.8	0		0	20	80	0		0	0	0	0		35.5	64.5	0	0		
PHF	.735	.287	.917	.000	.659	.000	.732	.923	.000	.962	.000	.000	.000	.000	.000	.671	.845	.000	.000	.774	.868
CARS	49	53	93	0	195	0	114	464	0	578	0	0	0	0	0	298	531	0	0	829	1602
% CARS	98.0	98.1	93.9	0	96.1	0	95.0	96.7	0	96.3	0	0	0	0	0	100	98.2	0	0	98.8	97.6
HV	1	1	6	0	8	0	6	16	0	22	0	0	0	0	0	0	10	0	0	10	40
% HV	2.0	1.9	6.1	0	3.9	0	5.0	3.3	0	3.7	0	0	0	0	0	0	1.8	0	0	1.2	2.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #6 I526EBNB&LEEDSAM
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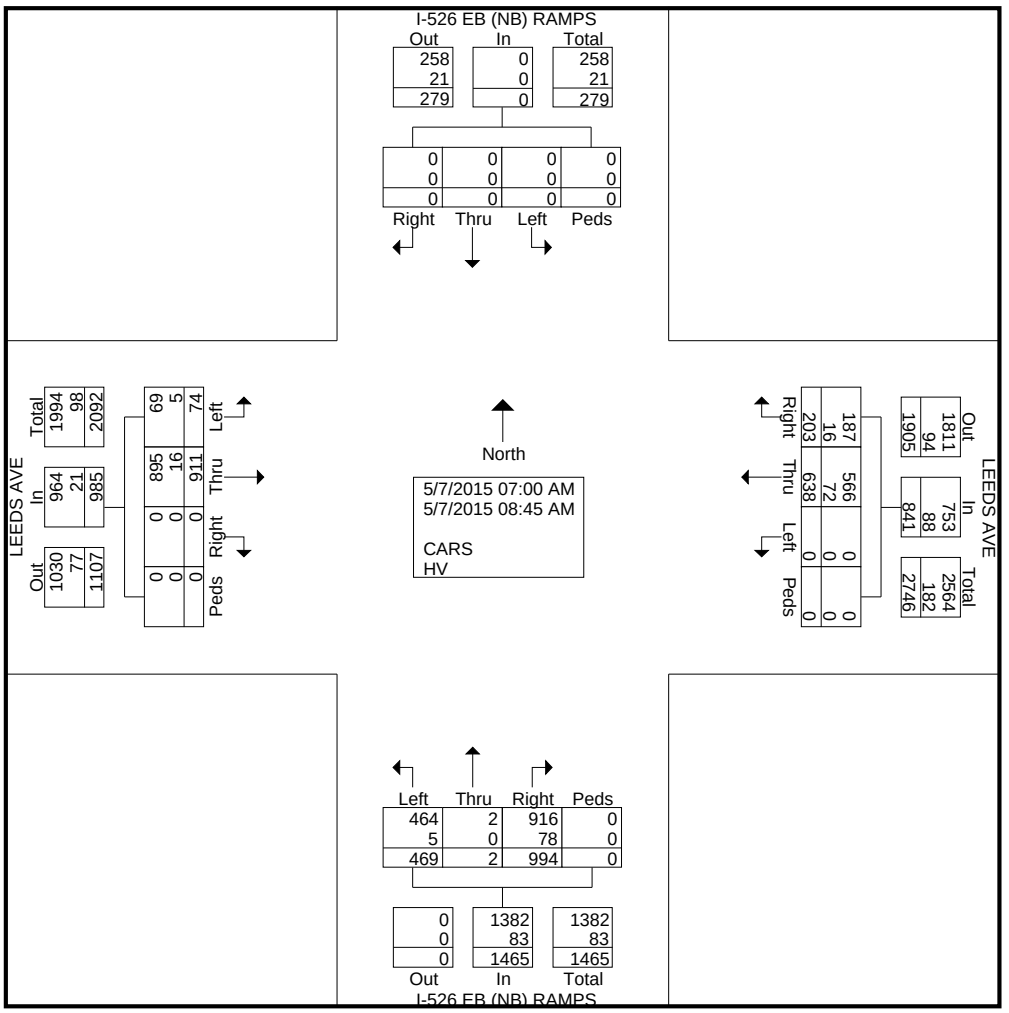
Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					LEEDS AVE Westbound					I-526 EB (NB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	14	46	0	0	60	99	0	31	0	130	0	77	3	0	80	270
07:15 AM	0	0	0	0	0	17	69	0	0	86	106	0	52	0	158	0	108	7	0	115	359
07:30 AM	0	0	0	0	0	16	76	0	0	92	127	0	66	0	193	0	122	8	0	130	415
07:45 AM	0	0	0	0	0	21	104	0	0	125	150	0	89	0	239	0	147	3	0	150	514
Total	0	0	0	0	0	68	295	0	0	363	482	0	238	0	720	0	454	21	0	475	1558
08:00 AM	0	0	0	0	0	30	81	0	0	111	154	2	81	0	237	0	106	10	0	116	464
08:15 AM	0	0	0	0	0	34	111	0	0	145	134	0	65	0	199	0	122	11	0	133	477
08:30 AM	0	0	0	0	0	34	67	0	0	101	118	0	47	0	165	0	147	15	0	162	428
08:45 AM	0	0	0	0	0	37	84	0	0	121	106	0	38	0	144	0	82	17	0	99	364
Total	0	0	0	0	0	135	343	0	0	478	512	2	231	0	745	0	457	53	0	510	1733
Grand Total	0	0	0	0	0	203	638	0	0	841	994	2	469	0	1465	0	911	74	0	985	3291
Apprch %	0	0	0	0		24.1	75.9	0	0		67.8	0.1	32	0		0	92.5	7.5	0		
Total %	0	0	0	0	0	6.2	19.4	0	0	25.6	30.2	0.1	14.3	0	44.5	0	27.7	2.2	0	29.9	
CARS	0	0	0	0	0	187	566	0	0	753	916	2	464	0	1382	0	895	69	0	964	3099
% CARS	0	0	0	0	0	92.1	88.7	0	0	89.5	92.2	100	98.9	0	94.3	0	98.2	93.2	0	97.9	94.2
HV	0	0	0	0	0	16	72	0	0	88	78	0	5	0	83	0	16	5	0	21	192
% HV	0	0	0	0	0	7.9	11.3	0	0	10.5	7.8	0	1.1	0	5.7	0	1.8	6.8	0	2.1	5.8



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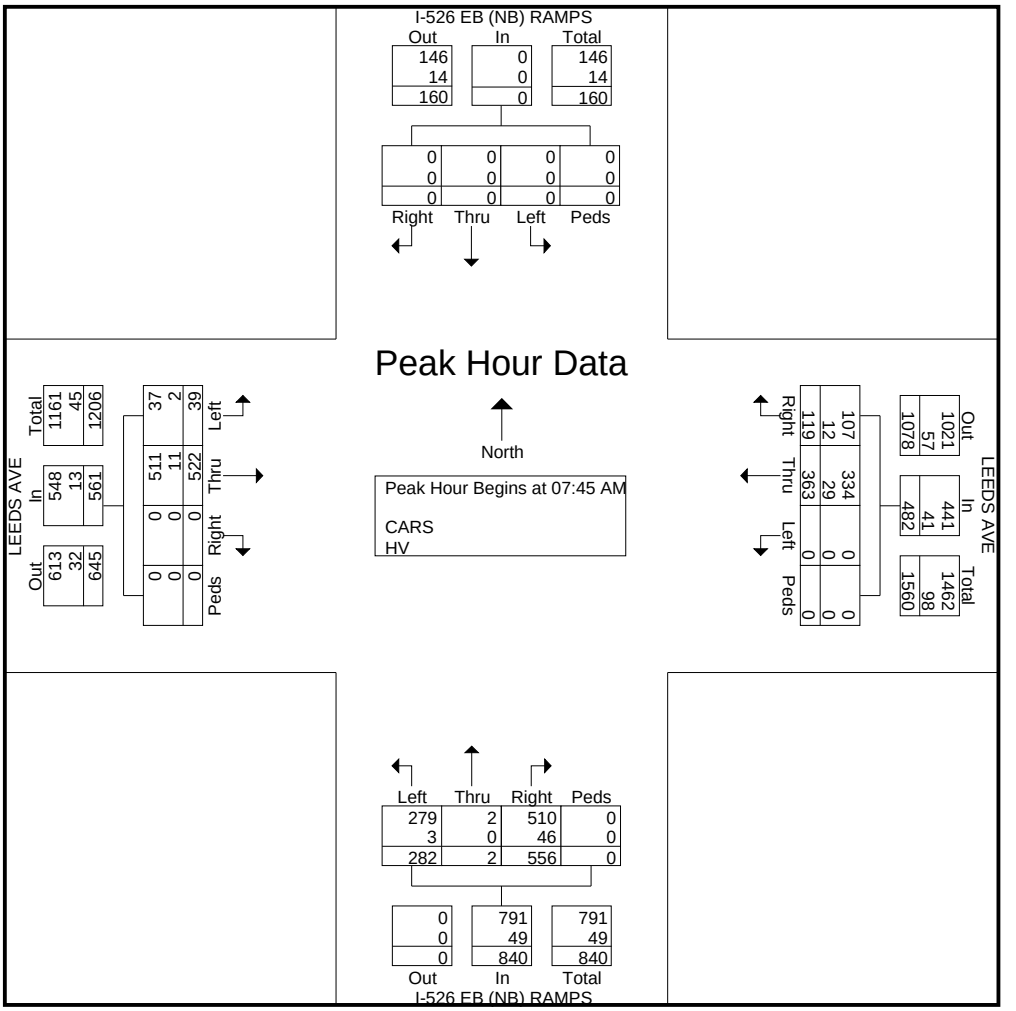
	I-526 EB (NB) RAMPS Southbound					LEEDS AVE Westbound					I-526 EB (NB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	21	104	0	0	125	150	0	**89**	0	**239**	0	**147**	3	0	150	**514**
08:00 AM	0	0	0	0	0	30	81	0	0	111	**154**	**2**	81	0	237	0	106	10	0	116	464
08:15 AM	0	0	0	0	0	**34**	**111**	0	0	**145**	134	0	65	0	199	0	122	11	0	133	477
08:30 AM	0	0	0	0	0	34	67	0	0	101	118	0	47	0	165	0	147	**15**	0	**162**	428
Total Volume	0	0	0	0	0	119	363	0	0	482	556	2	282	0	840	0	522	39	0	561	1883
% App. Total	0	0	0	0		24.7	75.3	0	0		66.2	0.2	33.6	0		0	93	7	0		
PHF	.000	.000	.000	.000	.000	.875	.818	.000	.000	.831	.903	.250	.792	.000	.879	.000	.888	.650	.000	.866	.916
CARS	0	0	0	0	0	107	334	0	0	441	510	2	279	0	791	0	511	37	0	548	1780
% CARS	0	0	0	0	0	89.9	92.0	0	0	91.5	91.7	100	98.9	0	94.2	0	97.9	94.9	0	97.7	94.5
HV	0	0	0	0	0	12	29	0	0	41	46	0	3	0	49	0	11	2	0	13	103
% HV	0	0	0	0	0	10.1	8.0	0	0	8.5	8.3	0	1.1	0	5.8	0	2.1	5.1	0	2.3	5.5



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1336 Farmer Rd
Conyers, GA 30012

File Name : #6 I526EBNB&LEEDSPM
Site Code : 9513 - CHARLESTON 1
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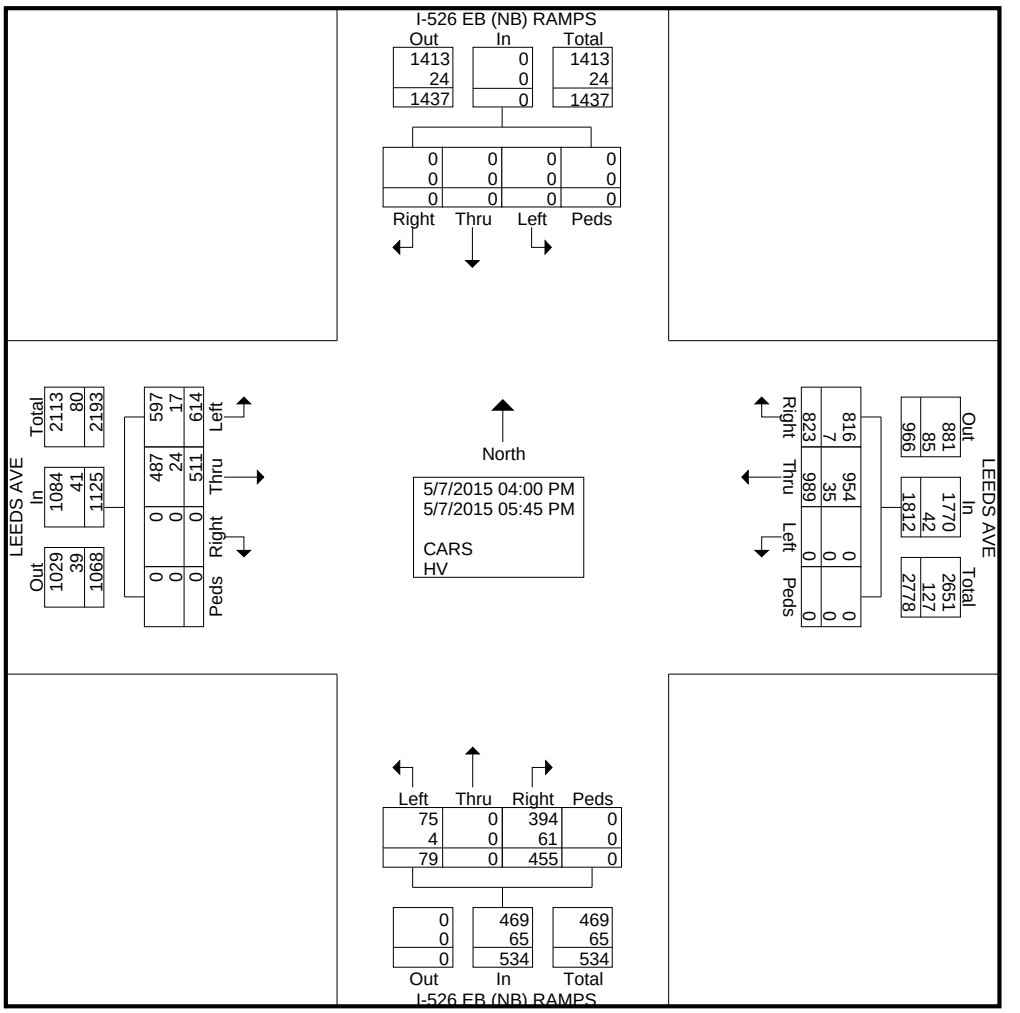
Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					LEEDS AVE Westbound					I-526 EB (NB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	102	121	0	0	223	52	0	10	0	62	0	75	70	0	145	430
04:15 PM	0	0	0	0	0	106	120	0	0	226	52	0	14	0	66	0	48	61	0	109	401
04:30 PM	0	0	0	0	0	121	143	0	0	264	60	0	10	0	70	0	73	104	0	177	511
04:45 PM	0	0	0	0	0	111	143	0	0	254	63	0	8	0	71	0	54	76	0	130	455
Total	0	0	0	0	0	440	527	0	0	967	227	0	42	0	269	0	250	311	0	561	1797
05:00 PM	0	0	0	0	0	166	145	0	0	311	77	0	13	0	90	0	88	101	0	189	590
05:15 PM	0	0	0	0	0	90	125	0	0	215	59	0	6	0	65	0	78	70	0	148	428
05:30 PM	0	0	0	0	0	69	110	0	0	179	49	0	9	0	58	0	62	75	0	137	374
05:45 PM	0	0	0	0	0	58	82	0	0	140	43	0	9	0	52	0	33	57	0	90	282
Total	0	0	0	0	0	383	462	0	0	845	228	0	37	0	265	0	261	303	0	564	1674
Grand Total	0	0	0	0	0	823	989	0	0	1812	455	0	79	0	534	0	511	614	0	1125	3471
Apprch %	0	0	0	0		45.4	54.6	0	0		85.2	0	14.8	0		0	45.4	54.6	0		
Total %	0	0	0	0	0	23.7	28.5	0	0	52.2	13.1	0	2.3	0	15.4	0	14.7	17.7	0	32.4	
CARS	0	0	0	0	0	816	954	0	0	1770	394	0	75	0	469	0	487	597	0	1084	3323
% CARS	0	0	0	0	0	99.1	96.5	0	0	97.7	86.6	0	94.9	0	87.8	0	95.3	97.2	0	96.4	95.7
HV	0	0	0	0	0	7	35	0	0	42	61	0	4	0	65	0	24	17	0	41	148
% HV	0	0	0	0	0	0.9	3.5	0	0	2.3	13.4	0	5.1	0	12.2	0	4.7	2.8	0	3.6	4.3



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File Name : #6 I526EBNB&LEEDSPM
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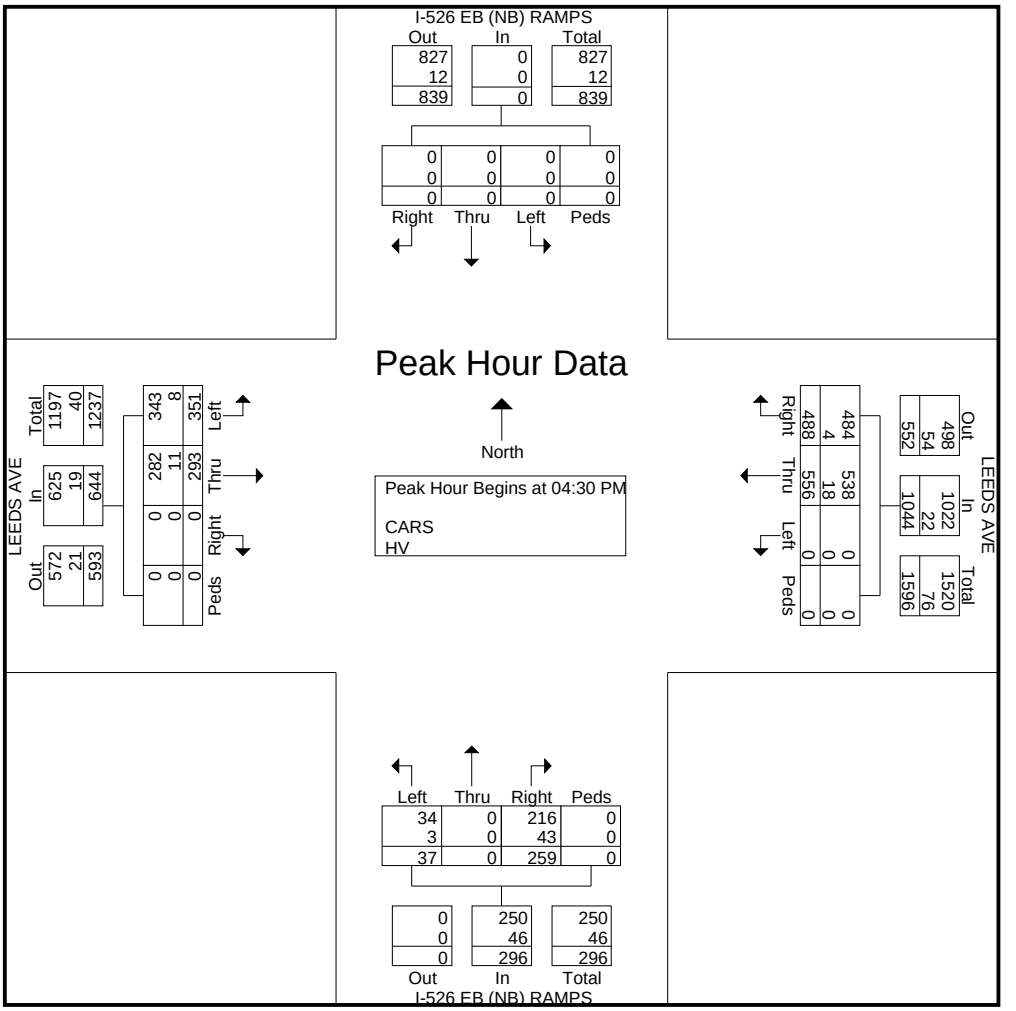
	I-526 EB (NB) RAMPS Southbound					LEEDS AVE Westbound					I-526 EB (NB) RAMPS Northbound					LEEDS AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	121	143	0	0	264	60	0	10	0	70	0	73	**104**	0	177	511
04:45 PM	0	0	0	0	0	111	143	0	0	254	63	0	8	0	71	0	54	76	0	130	455
05:00 PM	0	0	0	0	0	**166**	**145**	0	0	**311**	**77**	0	**13**	0	**90**	0	**88**	101	0	**189**	**590**
05:15 PM	0	0	0	0	0	90	125	0	0	215	59	0	6	0	65	0	78	70	0	148	428
Total Volume	0	0	0	0	0	488	556	0	0	1044	259	0	37	0	296	0	293	351	0	644	1984
% App. Total	0	0	0	0		46.7	53.3	0	0		87.5	0	12.5	0		0	45.5	54.5	0		
PHF	.000	.000	.000	.000	.000	.735	.959	.000	.000	.839	.841	.000	.712	.000	.822	.000	.832	.844	.000	.852	.841
CARS	0	0	0	0	0	484	538	0	0	1022	216	0	34	0	250	0	282	343	0	625	1897
% CARS	0	0	0	0	0	99.2	96.8	0	0	97.9	83.4	0	91.9	0	84.5	0	96.2	97.7	0	97.0	95.6
HV	0	0	0	0	0	4	18	0	0	22	43	0	3	0	46	0	11	8	0	19	87
% HV	0	0	0	0	0	0.8	3.2	0	0	2.1	16.6	0	8.1	0	15.5	0	3.8	2.3	0	3.0	4.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #7 LEEDS&BRIDGEVIEWAM
Site Code : 9513 - CHARLESTON 1
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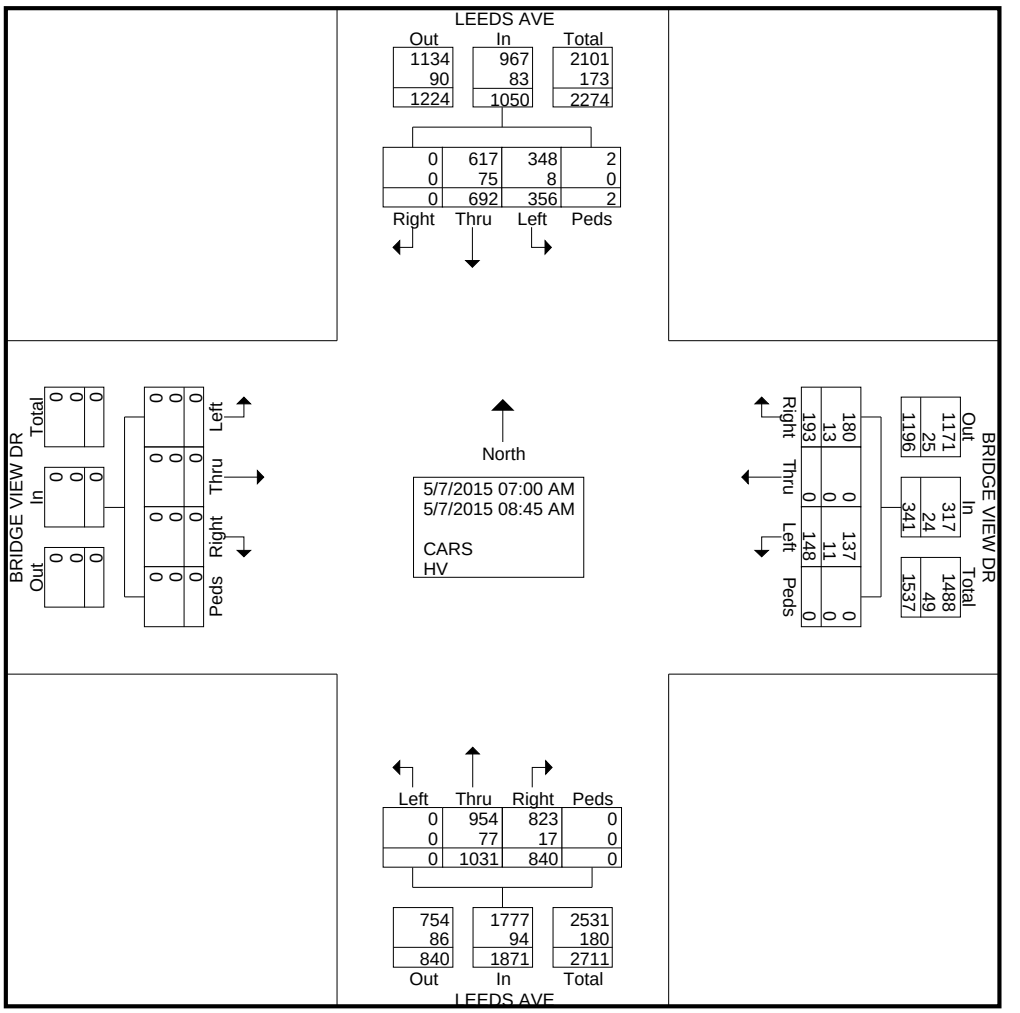
Groups Printed- CARS - HV

	LEEDS AVE Southbound					BRIDGE VIEW DR Westbound					LEEDS AVE Northbound					BRIDGE VIEW DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	49	21	0	70	16	0	10	0	26	77	108	0	0	185	0	0	0	0	0	281
07:15 AM	0	71	33	0	104	15	0	12	0	27	93	108	0	0	201	0	0	0	0	0	332
07:30 AM	0	75	27	0	102	14	0	13	0	27	105	129	0	0	234	0	0	0	0	0	363
07:45 AM	0	113	55	0	168	27	0	21	0	48	133	140	0	0	273	0	0	0	0	0	489
Total	0	308	136	0	444	72	0	56	0	128	408	485	0	0	893	0	0	0	0	0	1465
08:00 AM	0	107	55	0	162	21	0	19	0	40	106	151	0	0	257	0	0	0	0	0	459
08:15 AM	0	110	43	1	154	29	0	25	0	54	111	156	0	0	267	0	0	0	0	0	475
08:30 AM	0	86	61	1	148	32	0	20	0	52	128	131	0	0	259	0	0	0	0	0	459
08:45 AM	0	81	61	0	142	39	0	28	0	67	87	108	0	0	195	0	0	0	0	0	404
Total	0	384	220	2	606	121	0	92	0	213	432	546	0	0	978	0	0	0	0	0	1797
Grand Total	0	692	356	2	1050	193	0	148	0	341	840	1031	0	0	1871	0	0	0	0	0	3262
Apprch %	0	65.9	33.9	0.2		56.6	0	43.4	0		44.9	55.1	0	0		0	0	0	0		
Total %	0	21.2	10.9	0.1	32.2	5.9	0	4.5	0	10.5	25.8	31.6	0	0	57.4	0	0	0	0	0	
CARS	0	617	348	2	967	180	0	137	0	317	823	954	0	0	1777	0	0	0	0	0	3061
% CARS	0	89.2	97.8	100	92.1	93.3	0	92.6	0	93	98	92.5	0	0	95	0	0	0	0	0	93.8
HV	0	75	8	0	83	13	0	11	0	24	17	77	0	0	94	0	0	0	0	0	201
% HV	0	10.8	2.2	0	7.9	6.7	0	7.4	0	7	2	7.5	0	0	5	0	0	0	0	0	6.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #7 LEEDS&BRIDGEVIEWAM
Site Code : 9513 - CHARLESTON 1
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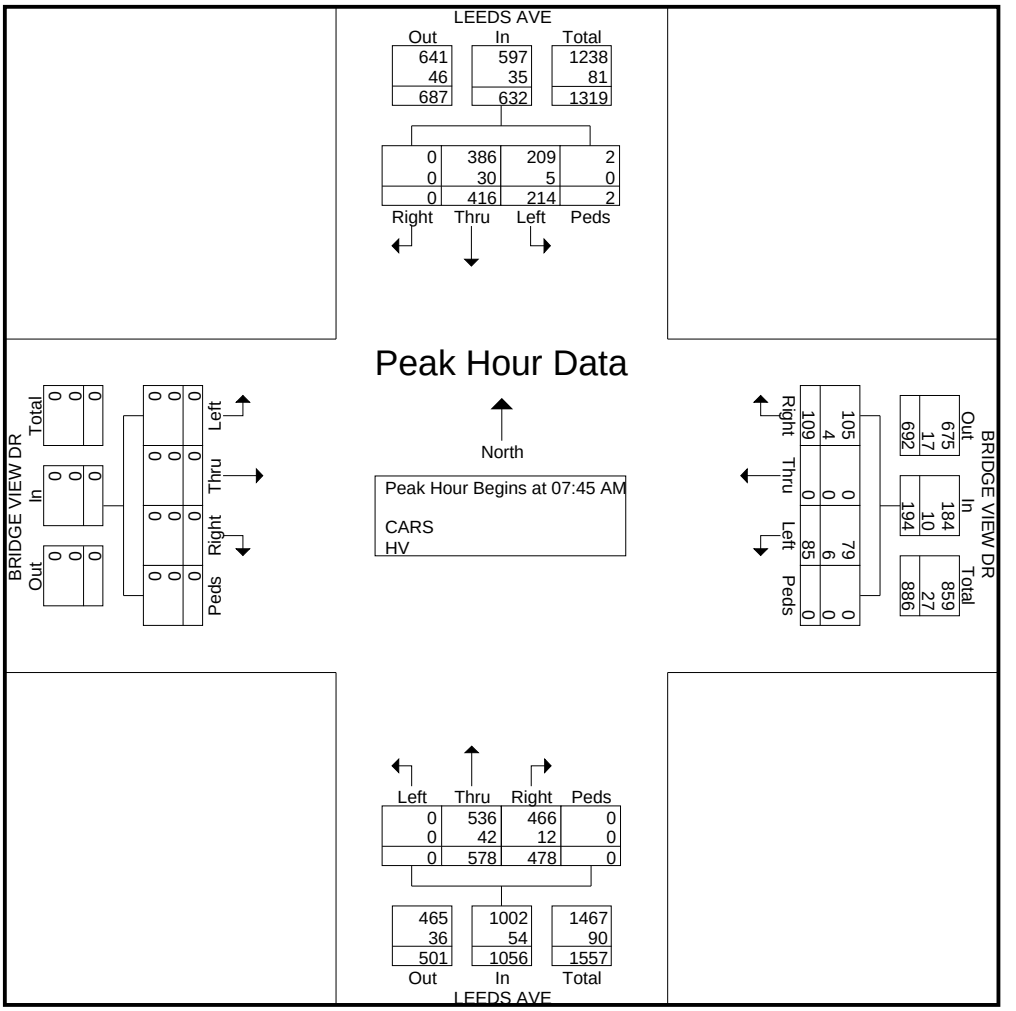
	LEEDS AVE Southbound					BRIDGE VIEW DR Westbound					LEEDS AVE Northbound					BRIDGE VIEW DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**113**	55	0	**168**	27	0	21	0	48	**133**	140	0	0	**273**	0	0	0	0	0	**489**
08:00 AM	0	107	55	0	162	21	0	19	0	40	106	151	0	0	257	0	0	0	0	0	459
08:15 AM	0	110	43	**1**	154	29	0	**25**	0	**54**	111	**156**	0	0	267	0	0	0	0	0	475
08:30 AM	0	86	**61**	1	148	**32**	0	20	0	52	128	131	0	0	259	0	0	0	0	0	459
Total Volume	0	416	214	2	632	109	0	85	0	194	478	578	0	0	1056	0	0	0	0	0	1882
% App. Total	0	65.8	33.9	0.3		56.2	0	43.8	0		45.3	54.7	0	0		0	0	0	0		
PHF	.000	.920	.877	.500	.940	.852	.000	.850	.000	.898	.898	.926	.000	.000	.967	.000	.000	.000	.000	.000	.962
CARS	0	386	209	2	597	105	0	79	0	184	466	536	0	0	1002	0	0	0	0	0	1783
% CARS	0	92.8	97.7	100	94.5	96.3	0	92.9	0	94.8	97.5	92.7	0	0	94.9	0	0	0	0	0	94.7
HV	0	30	5	0	35	4	0	6	0	10	12	42	0	0	54	0	0	0	0	0	99
% HV	0	7.2	2.3	0	5.5	3.7	0	7.1	0	5.2	2.5	7.3	0	0	5.1	0	0	0	0	0	5.3



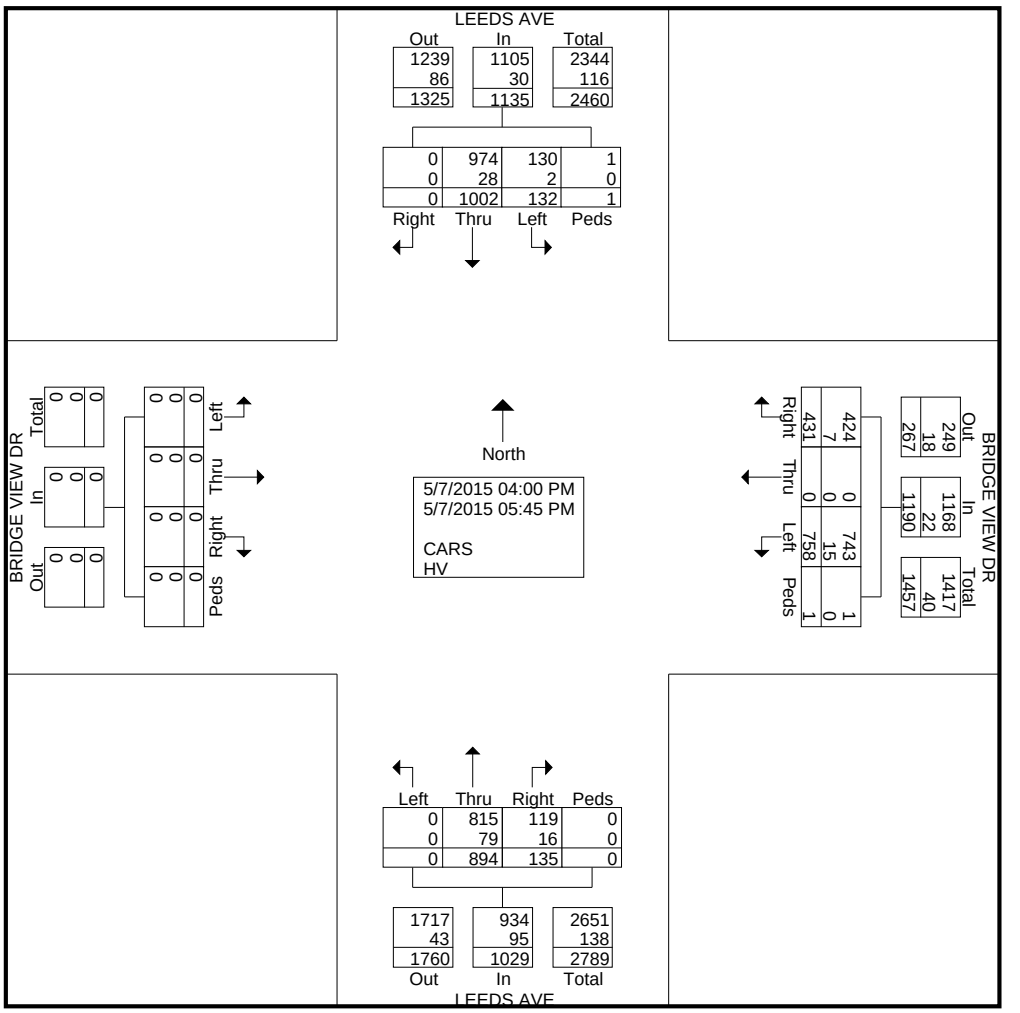
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #7 LEEDS&BRIDGEVIEWPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	LEEDS AVE Southbound					BRIDGE VIEW DR Westbound					LEEDS AVE Northbound					BRIDGE VIEW DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	121	22	0	143	58	0	98	0	156	29	117	0	0	146	0	0	0	0	0	445
04:15 PM	0	125	31	0	156	56	0	94	1	151	24	80	0	0	104	0	0	0	0	0	411
04:30 PM	0	147	15	0	162	78	0	122	0	200	18	121	0	0	139	0	0	0	0	0	501
04:45 PM	0	138	18	1	157	51	0	101	0	152	15	103	0	0	118	0	0	0	0	0	427
Total	0	531	86	1	618	243	0	415	1	659	86	421	0	0	507	0	0	0	0	0	1784
05:00 PM	0	151	15	0	166	78	0	166	0	244	14	146	0	0	160	0	0	0	0	0	570
05:15 PM	0	123	12	0	135	34	0	67	0	101	14	139	0	0	153	0	0	0	0	0	389
05:30 PM	0	114	12	0	126	57	0	68	0	125	11	111	0	0	122	0	0	0	0	0	373
05:45 PM	0	83	7	0	90	19	0	42	0	61	10	77	0	0	87	0	0	0	0	0	238
Total	0	471	46	0	517	188	0	343	0	531	49	473	0	0	522	0	0	0	0	0	1570
Grand Total	0	1002	132	1	1135	431	0	758	1	1190	135	894	0	0	1029	0	0	0	0	0	3354
Apprch %	0	88.3	11.6	0.1		36.2	0	63.7	0.1		13.1	86.9	0	0		0	0	0	0		
Total %	0	29.9	3.9	0	33.8	12.9	0	22.6	0	35.5	4	26.7	0	0	30.7	0	0	0	0	0	
CARS	0	974	130	1	1105	424	0	743	1	1168	119	815	0	0	934	0	0	0	0	0	3207
% CARS	0	97.2	98.5	100	97.4	98.4	0	98	100	98.2	88.1	91.2	0	0	90.8	0	0	0	0	0	95.6
HV	0	28	2	0	30	7	0	15	0	22	16	79	0	0	95	0	0	0	0	0	147
% HV	0	2.8	1.5	0	2.6	1.6	0	2	0	1.8	11.9	8.8	0	0	9.2	0	0	0	0	0	4.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #7 LEEDS&BRIDGEVIEWPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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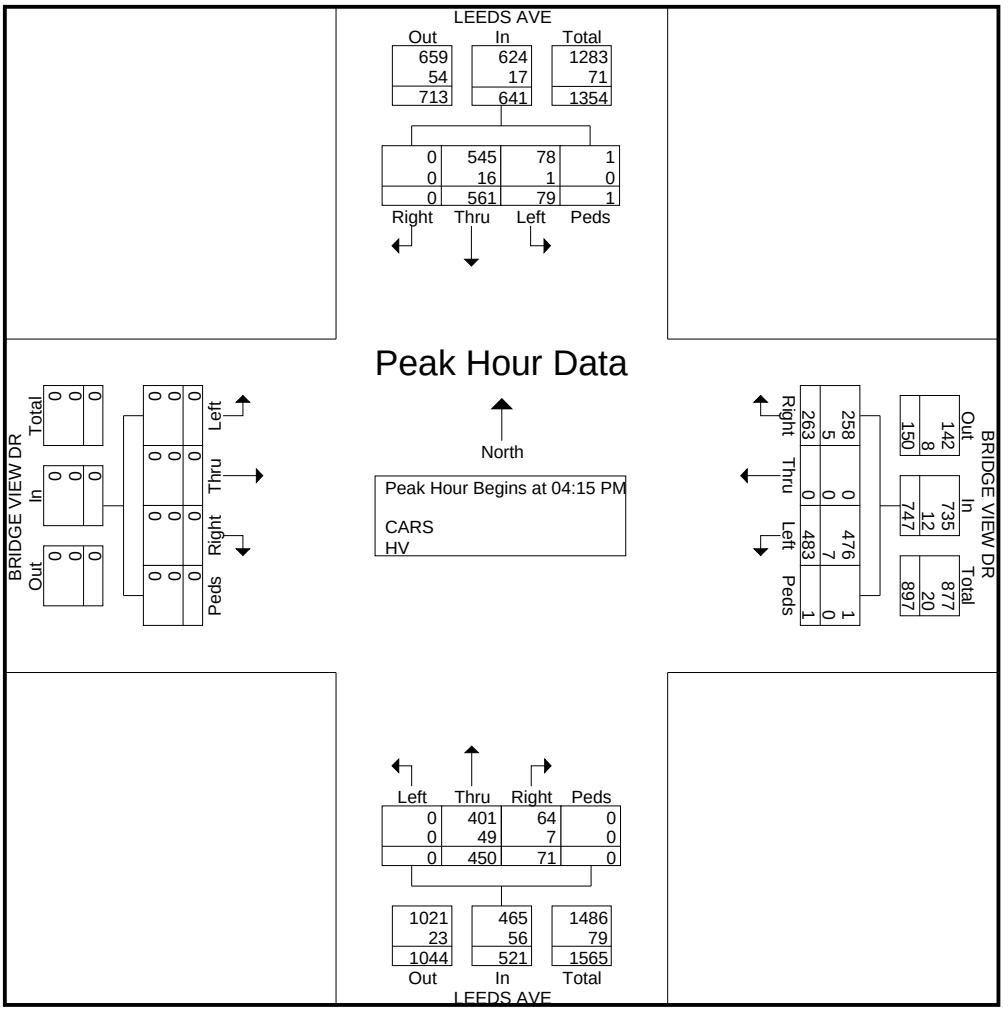
	LEEDS AVE Southbound					BRIDGE VIEW DR Westbound					LEEDS AVE Northbound					BRIDGE VIEW DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	125	**31**	0	156	56	0	94	**1**	151	**24**	80	0	0	104	0	0	0	0	0	411
04:30 PM	0	147	15	0	162	**78**	0	122	0	200	18	121	0	0	139	0	0	0	0	0	501
04:45 PM	0	138	18	**1**	157	51	0	101	0	152	15	103	0	0	118	0	0	0	0	0	427
05:00 PM	0	**151**	15	0	**166**	78	0	**166**	0	**244**	14	**146**	0	0	**160**	0	0	0	0	0	**570**
Total Volume	0	561	79	1	641	263	0	483	1	747	71	450	0	0	521	0	0	0	0	0	1909
% App. Total	0	87.5	12.3	0.2		35.2	0	64.7	0.1		13.6	86.4	0	0		0	0	0	0		
PHF	.000	.929	.637	.250	.965	.843	.000	.727	.250	.765	.740	.771	.000	.000	.814	.000	.000	.000	.000	.000	.837
CARS	0	545	78	1	624	258	0	476	1	735	64	401	0	0	465	0	0	0	0	0	1824
% CARS	0	97.1	98.7	100	97.3	98.1	0	98.6	100	98.4	90.1	89.1	0	0	89.3	0	0	0	0	0	95.5
HV	0	16	1	0	17	5	0	7	0	12	7	49	0	0	56	0	0	0	0	0	85
% HV	0	2.9	1.3	0	2.7	1.9	0	1.4	0	1.6	9.9	10.9	0	0	10.7	0	0	0	0	0	4.5



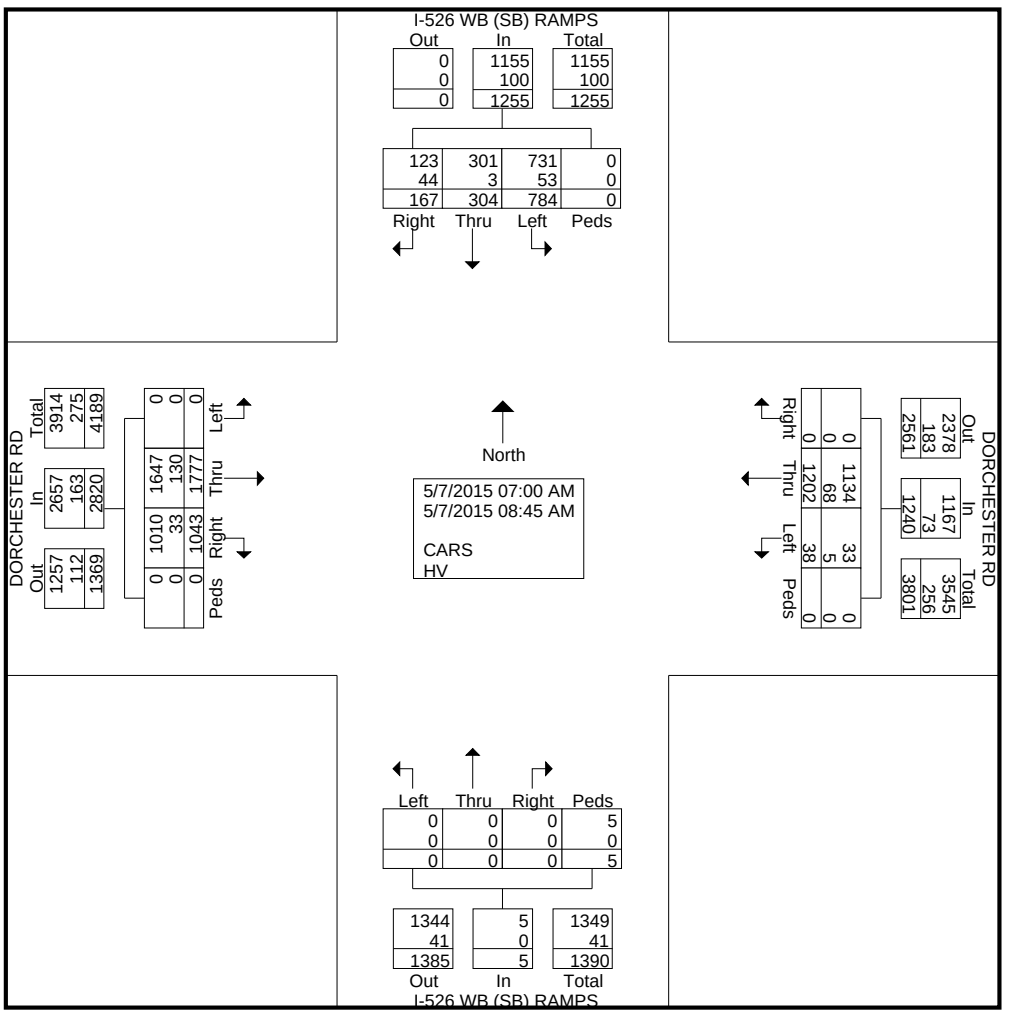
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #8 I526WBSB&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 WB (SB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	30	21	112	0	163	0	154	1	0	155	0	0	0	0	0	106	204	0	0	310	628
07:15 AM	18	32	96	0	146	0	165	6	0	171	0	0	0	0	0	104	238	0	0	342	659
07:30 AM	15	40	103	0	158	0	132	3	0	135	0	0	0	0	0	139	265	0	0	404	697
07:45 AM	23	47	96	0	166	0	172	4	0	176	0	0	0	0	0	169	251	0	0	420	762
Total	86	140	407	0	633	0	623	14	0	637	0	0	0	0	0	518	958	0	0	1476	2746
08:00 AM	17	55	111	0	183	0	159	2	0	161	0	0	0	1	1	141	234	0	0	375	720
08:15 AM	20	46	82	0	148	0	144	2	0	146	0	0	0	0	0	126	226	0	0	352	646
08:30 AM	24	27	97	0	148	0	143	9	0	152	0	0	0	2	2	137	177	0	0	314	616
08:45 AM	20	36	87	0	143	0	133	11	0	144	0	0	0	2	2	121	182	0	0	303	592
Total	81	164	377	0	622	0	579	24	0	603	0	0	0	5	5	525	819	0	0	1344	2574
Grand Total	167	304	784	0	1255	0	1202	38	0	1240	0	0	0	5	5	1043	1777	0	0	2820	5320
Apprch %	13.3	24.2	62.5	0		0	96.9	3.1	0		0	0	0	100		37	63	0	0		
Total %	3.1	5.7	14.7	0	23.6	0	22.6	0.7	0	23.3	0	0	0	0.1	0.1	19.6	33.4	0	0	53	
CARS	123	301	731	0	1155	0	1134									1010	1647				
% CARS	73.7	99	93.2	0	92	0	94.3	86.8	0	94.1	0	0	0	100	100	96.8	92.7	0	0	94.2	93.7
HV	44	3	53	0	100	0	68	5	0	73	0	0	0	0	0	33	130	0	0	163	336
% HV	26.3	1	6.8	0	8	0	5.7	13.2	0	5.9	0	0	0	0	0	3.2	7.3	0	0	5.8	6.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #8 I526WBSB&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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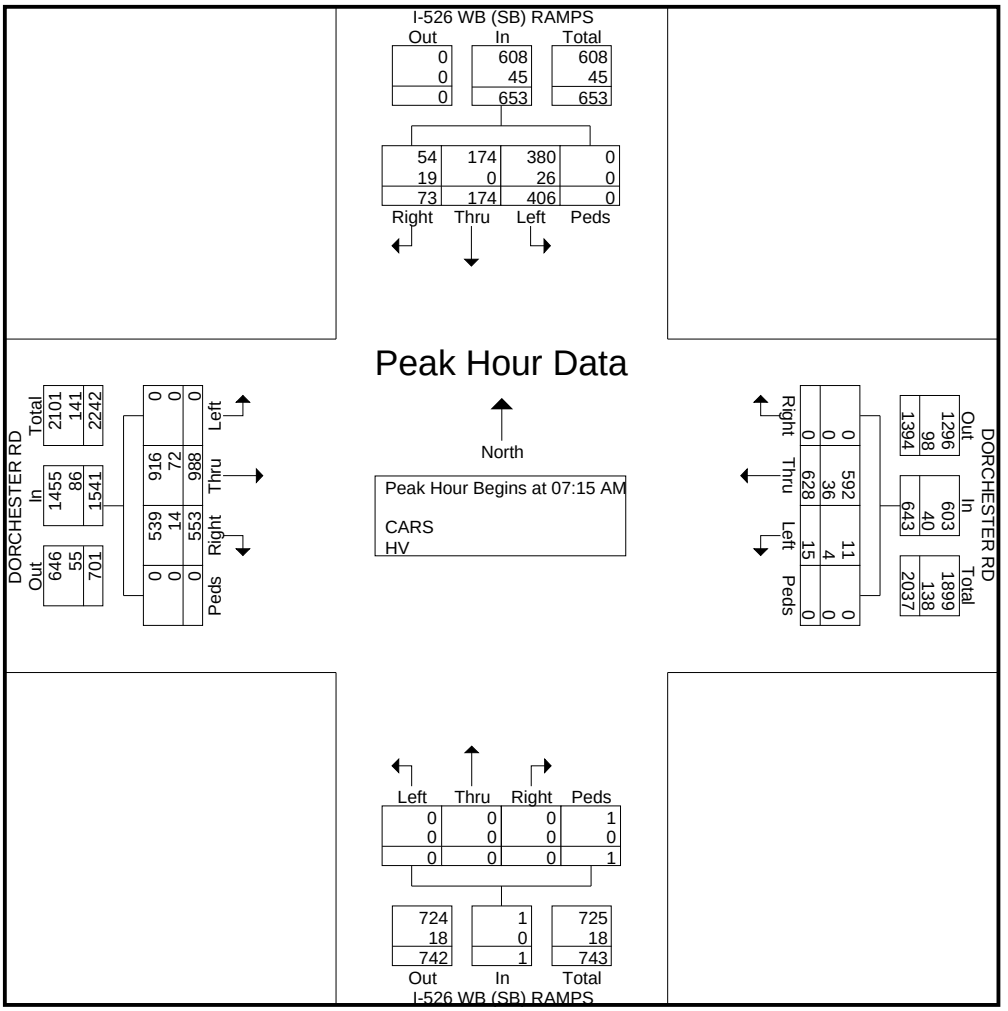
	I-526 WB (SB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 WB (SB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	18	32	96	0	146	0	165	**6**	0	171	0	0	0	0	0	104	238	0	0	342	659
07:30 AM	15	40	103	0	158	0	132	3	0	135	0	0	0	0	0	139	**265**	0	0	404	697
07:45 AM	**23**	47	96	0	166	0	**172**	4	0	**176**	0	0	0	0	0	**169**	251	0	0	**420**	**762**
08:00 AM	17	**55**	**111**	0	**183**	0	159	2	0	161	0	0	0	**1**	**1**	141	234	0	0	375	720
Total Volume	73	174	406	0	653	0	628	15	0	643	0	0	0	1	1	553	988	0	0	1541	2838
% App. Total	11.2	26.6	62.2	0		0	97.7	2.3	0		0	0	0	100		35.9	64.1	0	0		
PHF	.793	.791	.914	.000	.892	.000	.913	.625	.000	.913	.000	.000	.000	.250	.250	.818	.932	.000	.000	.917	.931
CARS	54	174	380	0	608	0	592	11	0	603	0	0	0	1	1	539	916	0	0	1455	2667
% CARS	74.0	100	93.6	0	93.1	0	94.3	73.3	0	93.8	0	0	0	100	100	97.5	92.7	0	0	94.4	94.0
HV	19	0	26	0	45	0	36	4	0	40	0	0	0	0	0	14	72	0	0	86	171
% HV	26.0	0	6.4	0	6.9	0	5.7	26.7	0	6.2	0	0	0	0	0	2.5	7.3	0	0	5.6	6.0



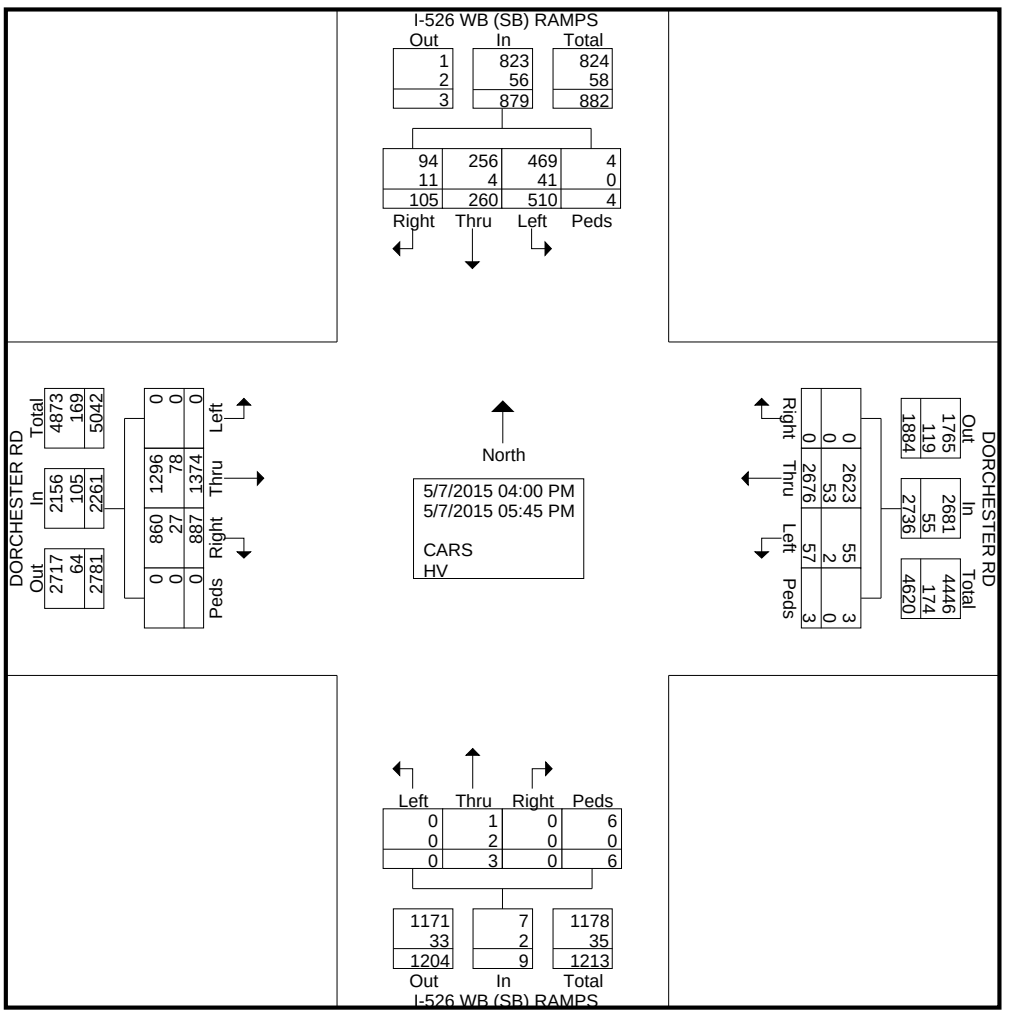
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #8 I526WBSB&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 WB (SB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	17	19	61	0	97	0	344	10	1	355	0	0	0	2	2	117	187	0	0	304	758
04:15 PM	13	24	71	0	108	0	313	7	0	320	0	1	0	3	4	106	175	0	0	281	713
04:30 PM	17	15	77	0	109	0	299	7	2	308	0	2	0	0	2	128	168	0	0	296	715
04:45 PM	10	28	60	0	98	0	324	12	0	336	0	0	0	0	0	122	190	0	0	312	746
Total	57	86	269	0	412	0	1280	36	3	1319	0	3	0	5	8	473	720	0	0	1193	2932
05:00 PM	8	24	61	0	93	0	371	6	0	377	0	0	0	0	0	127	188	0	0	315	785
05:15 PM	12	66	55	2	135	0	431	8	0	439	0	0	0	0	0	130	180	0	0	310	884
05:30 PM	9	60	76	0	145	0	318	6	0	324	0	0	0	1	1	79	147	0	0	226	696
05:45 PM	19	24	49	2	94	0	276	1	0	277	0	0	0	0	0	78	139	0	0	217	588
Total	48	174	241	4	467	0	1396	21	0	1417	0	0	0	1	1	414	654	0	0	1068	2953
Grand Total	105	260	510	4	879	0	2676	57	3	2736	0	3	0	6	9	887	1374	0	0	2261	5885
Apprch %	11.9	29.6	58	0.5		0	97.8	2.1	0.1		0	33.3	0	66.7		39.2	60.8	0	0		
Total %	1.8	4.4	8.7	0.1	14.9	0	45.5	1	0.1	46.5	0	0.1	0	0.1	0.2	15.1	23.3	0	0	38.4	
CARS	94	256	469	4	823	0	2623										1296				
% CARS	89.5	98.5	92	100	93.6	0	98	96.5	100	98	0	33.3	0	100	77.8	97	94.3	0	0	95.4	96.3
HV	11	4	41	0	56	0	53	2	0	55	0	2	0	0	2	27	78	0	0	105	218
% HV	10.5	1.5	8	0	6.4	0	2	3.5	0	2	0	66.7	0	0	22.2	3	5.7	0	0	4.6	3.7

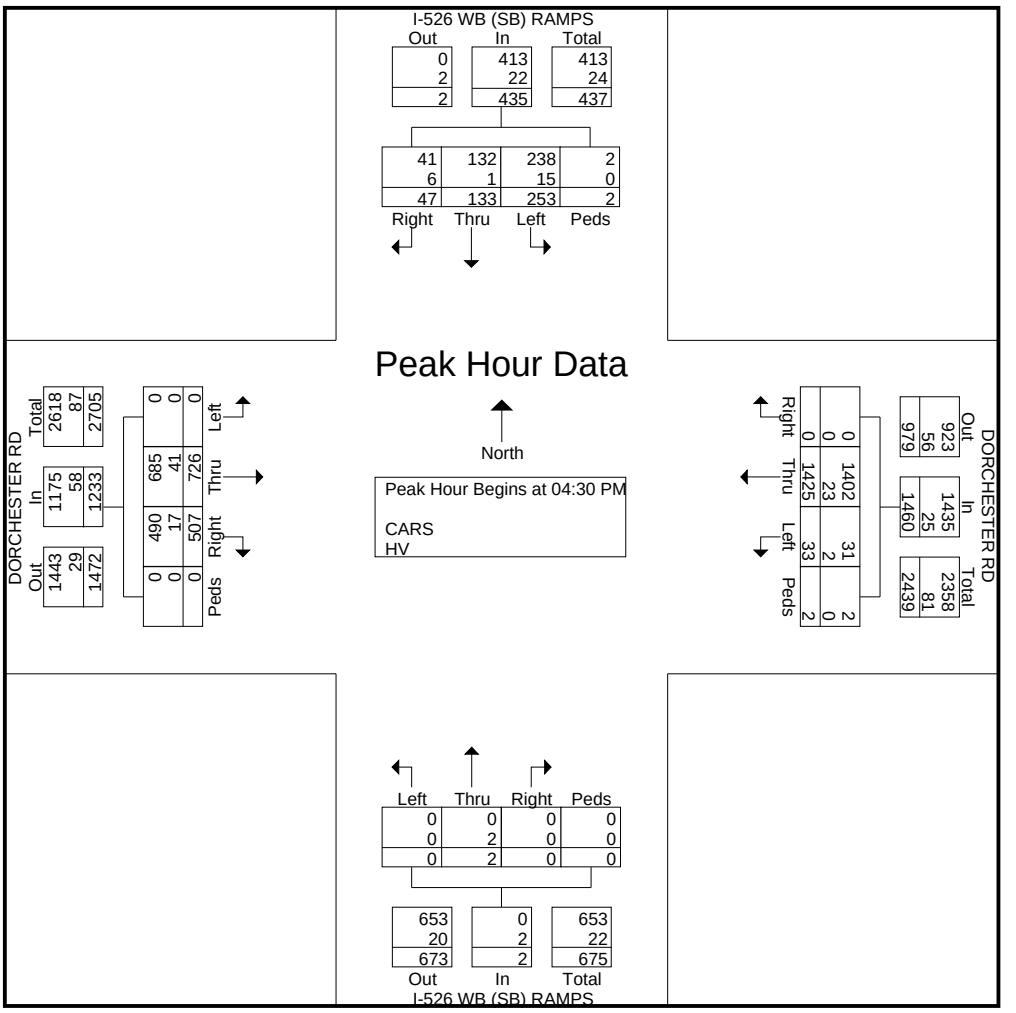


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #8 I526WBSB&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-526 WB (SB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 WB (SB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**17**	15	**77**	0	109	0	299	7	**2**	308	0	**2**	0	0	**2**	128	168	0	0	296	715
04:45 PM	10	28	60	0	98	0	324	**12**	0	336	0	0	0	0	0	122	**190**	0	0	312	746
05:00 PM	8	24	61	0	93	0	371	6	0	377	0	0	0	0	0	127	188	0	0	**315**	785
05:15 PM	12	**66**	55	**2**	**135**	0	**431**	8	0	**439**	0	0	0	0	0	**130**	180	0	0	310	**884**
Total Volume	47	133	253	2	435	0	1425	33	2	1460	0	2	0	0	2	507	726	0	0	1233	3130
% App. Total	10.8	30.6	58.2	0.5		0	97.6	2.3	0.1		0	100	0	0		41.1	58.9	0	0		
PHF	.691	.504	.821	.250	.806	.000	.827	.688	.250	.831	.000	.250	.000	.000	.250	.975	.955	.000	.000	.979	.885
CARS	41	132	238	2	413	0	1402														
% CARS	87.2	99.2	94.1	100	94.9	0	98.4	93.9	100	98.3	0	0	0	0	0	96.6	94.4	0	0	95.3	96.6
HV	6	1	15	0	22	0	23	2	0	25	0	2	0	0	2	17	41	0	0	58	107
% HV	12.8	0.8	5.9	0	5.1	0	1.6	6.1	0	1.7	0	100	0	0	100	3.4	5.6	0	0	4.7	3.4



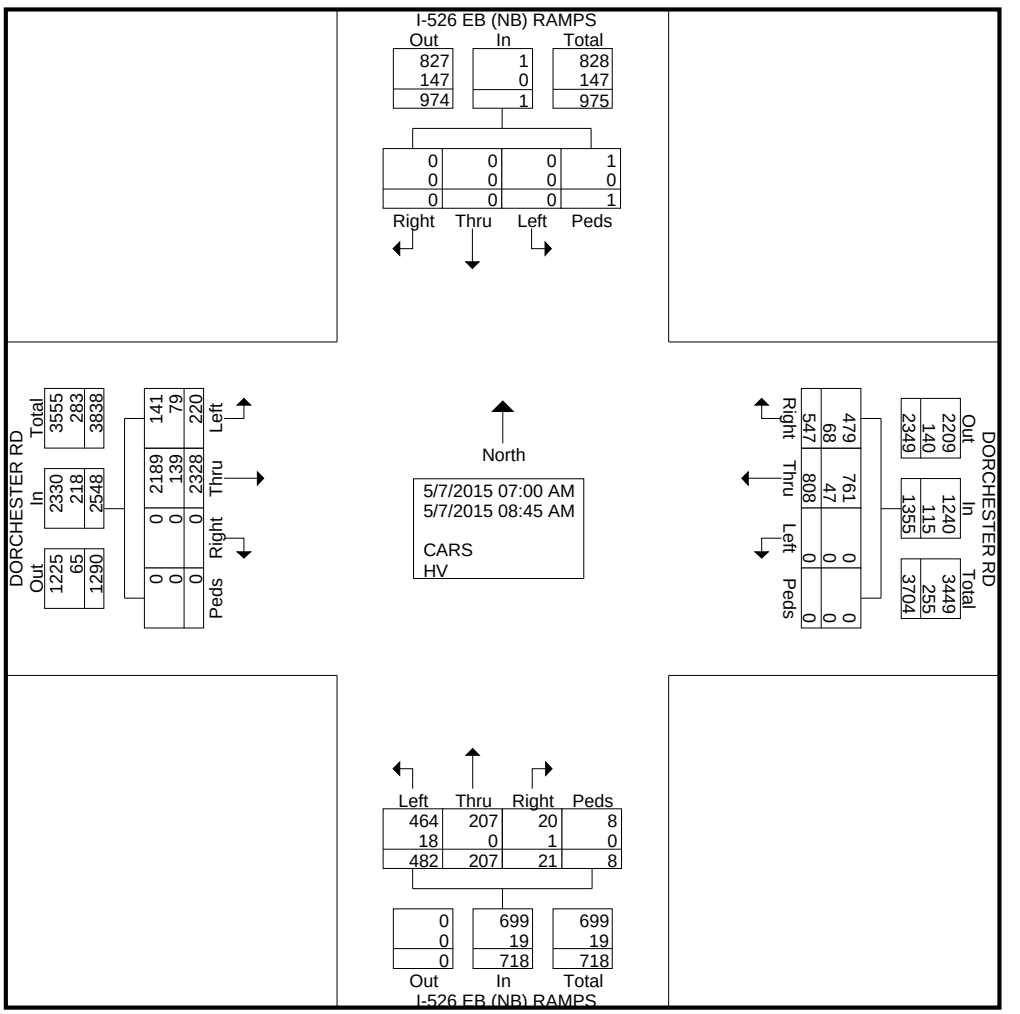
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #9 I526EBNB&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 EB (NB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	56	86	0	0	142	0	22	69	0	91	0	301	29	0	330	563
07:15 AM	0	0	0	0	0	48	132	0	0	180	2	15	60	2	79	0	346	44	0	390	649
07:30 AM	0	0	0	0	0	59	94	0	0	153	3	42	58	1	104	0	353	33	0	386	643
07:45 AM	0	0	0	0	0	78	109	0	0	187	2	26	82	0	110	0	317	28	0	345	642
Total	0	0	0	0	0	241	421	0	0	662	7	105	269	3	384	0	1317	134	0	1451	2497
08:00 AM	0	0	0	1	1	76	99	0	0	175	5	34	58	0	97	0	289	20	0	309	582
08:15 AM	0	0	0	0	0	74	101	0	0	175	5	22	51	1	79	0	255	20	0	275	529
08:30 AM	0	0	0	0	0	77	101	0	0	178	2	21	51	3	77	0	253	21	0	274	529
08:45 AM	0	0	0	0	0	79	86	0	0	165	2	25	53	1	81	0	214	25	0	239	485
Total	0	0	0	1	1	306	387	0	0	693	14	102	213	5	334	0	1011	86	0	1097	2125
Grand Total	0	0	0	1	1	547	808	0	0	1355	21	207	482	8	718	0	2328	220	0	2548	4622
Apprch %	0	0	0	100		40.4	59.6	0	0		2.9	28.8	67.1	1.1		0	91.4	8.6	0		
Total %	0	0	0	0	0	11.8	17.5	0	0	29.3	0.5	4.5	10.4	0.2	15.5	0	50.4	4.8	0	55.1	
CARS	0	0	0	1	1	479	761	0	0	1240	20	207	464	8	699	0	2189				
% CARS	0	0	0	100	100	87.6	94.2	0	0	91.5	95.2	100	96.3	100	97.4	0	94	64.1	0	91.4	92.4
HV	0	0	0	0	0	68	47	0	0	115	1	0	18	0	19	0	139	79	0	218	352
% HV	0	0	0	0	0	12.4	5.8	0	0	8.5	4.8	0	3.7	0	2.6	0	6	35.9	0	8.6	7.6

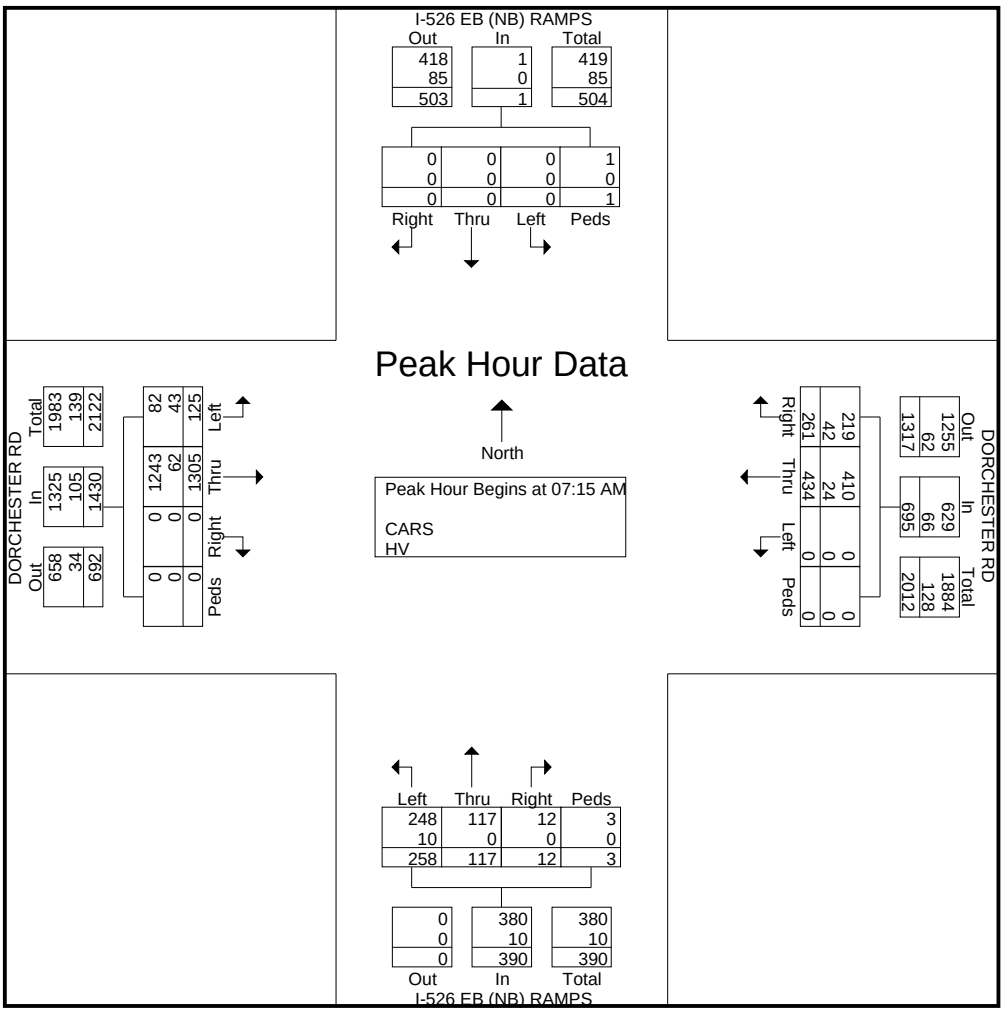


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #9 I526EBNB&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-526 EB (NB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 EB (NB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	48	**132**	0	0	180	2	15	60	**2**	79	0	346	**44**	0	**390**	**649**
07:30 AM	0	0	0	0	0	59	94	0	0	153	3	**42**	58	1	104	0	**353**	33	0	386	643
07:45 AM	0	0	0	0	0	**78**	109	0	0	**187**	2	26	**82**	0	**110**	0	317	28	0	345	642
08:00 AM	0	0	0	**1**	**1**	76	99	0	0	175	**5**	34	58	0	97	0	289	20	0	309	582
Total Volume	0	0	0	1	1	261	434	0	0	695	12	117	258	3	390	0	1305	125	0	1430	2516
% App. Total	0	0	0	100		37.6	62.4	0	0		3.1	30	66.2	0.8		0	91.3	8.7	0		
PHF	.000	.000	.000	.250	.250	.837	.822	.000	.000	.929	.600	.696	.787	.375	.886	.000	.924	.710	.000	.917	.969
CARS	0	0	0	1	1	219	410	0	0	629	12	117	248	3	380	0	1243				
% CARS	0	0	0	100	100	83.9	94.5	0	0	90.5	100	100	96.1	100	97.4	0	95.2	65.6	0	92.7	92.8
HV	0	0	0	0	0	42	24	0	0	66	0	0	10	0	10	0	62	43	0	105	181
% HV	0	0	0	0	0	16.1	5.5	0	0	9.5	0	0	3.9	0	2.6	0	4.8	34.4	0	7.3	7.2



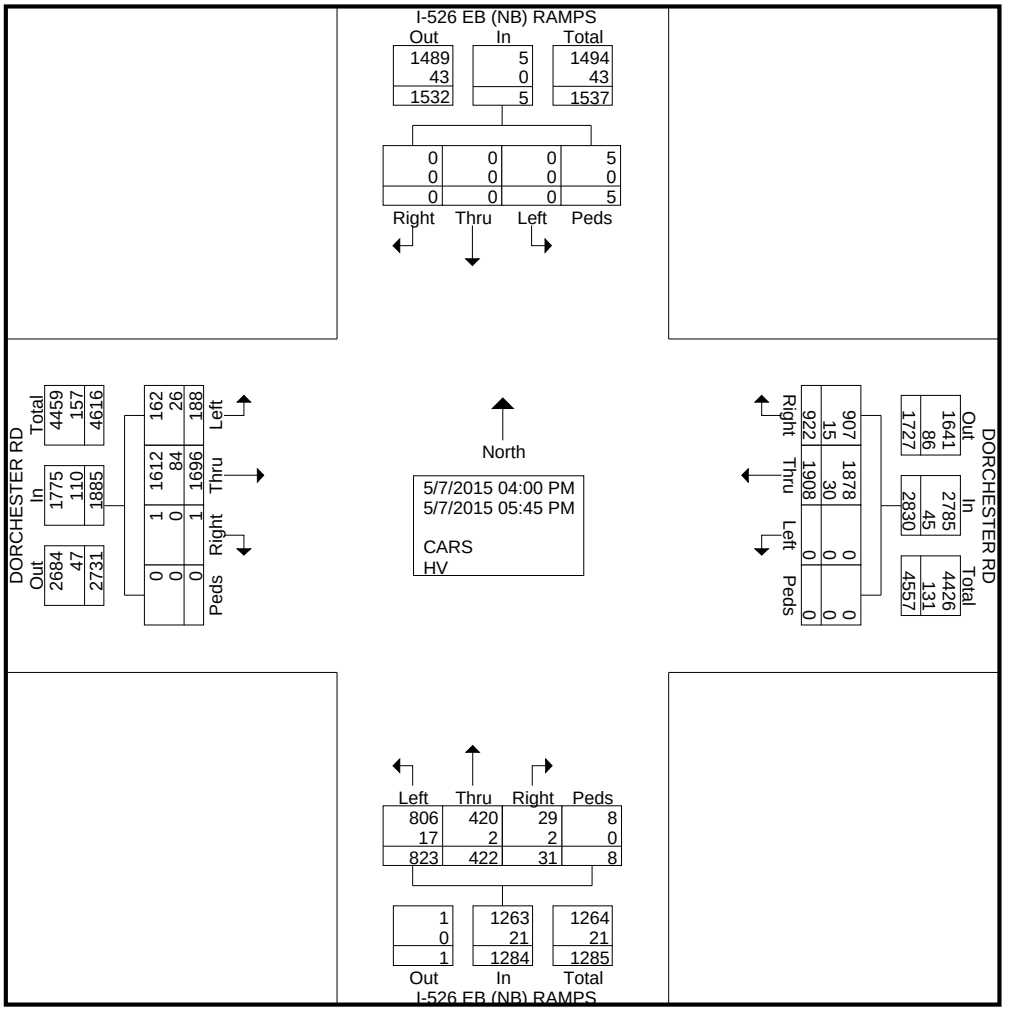
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #9 I526EBNB&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 EB (NB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	96	221	0	0	317	6	39	103	2	150	0	215	27	0	242	709
04:15 PM	0	0	0	0	0	106	215	0	0	321	8	33	85	3	129	0	216	32	0	248	698
04:30 PM	0	0	0	0	0	106	218	0	0	324	4	75	91	2	172	0	223	21	0	244	740
04:45 PM	0	0	0	0	0	106	213	0	0	319	2	45	104	0	151	0	231	24	0	255	725
Total	0	0	0	0	0	414	867	0	0	1281	20	192	383	7	602	0	885	104	0	989	2872
05:00 PM	0	0	0	0	0	170	299	0	0	469	3	71	125	0	199	0	226	29	0	255	923
05:15 PM	0	0	0	3	3	128	290	0	0	418	5	69	149	0	223	0	210	17	0	227	871
05:30 PM	0	0	0	0	0	116	241	0	0	357	1	53	94	1	149	1	209	16	0	226	732
05:45 PM	0	0	0	2	2	94	211	0	0	305	2	37	72	0	111	0	166	22	0	188	606
Total	0	0	0	5	5	508	1041	0	0	1549	11	230	440	1	682	1	811	84	0	896	3132
Grand Total	0	0	0	5	5	922	1908	0	0	2830	31	422	823	8	1284	1	1696	188	0	1885	6004
Apprch %	0	0	0	100		32.6	67.4	0	0		2.4	32.9	64.1	0.6		0.1	90	10	0		
Total %	0	0	0	0.1	0.1	15.4	31.8	0	0	47.1	0.5	7	13.7	0.1	21.4	0	28.2	3.1	0	31.4	
CARS	0	0	0	5	5	907	1878										1612				
% CARS	0	0	0	100	100	98.4	98.4	0	0	98.4	93.5	99.5	97.9	100	98.4	100	95	86.2	0	94.2	97.1
HV	0	0	0	0	0	15	30	0	0	45	2	2	17	0	21	0	84	26	0	110	176
% HV	0	0	0	0	0	1.6	1.6	0	0	1.6	6.5	0.5	2.1	0	1.6	0	5	13.8	0	5.8	2.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #9 I526EBNB&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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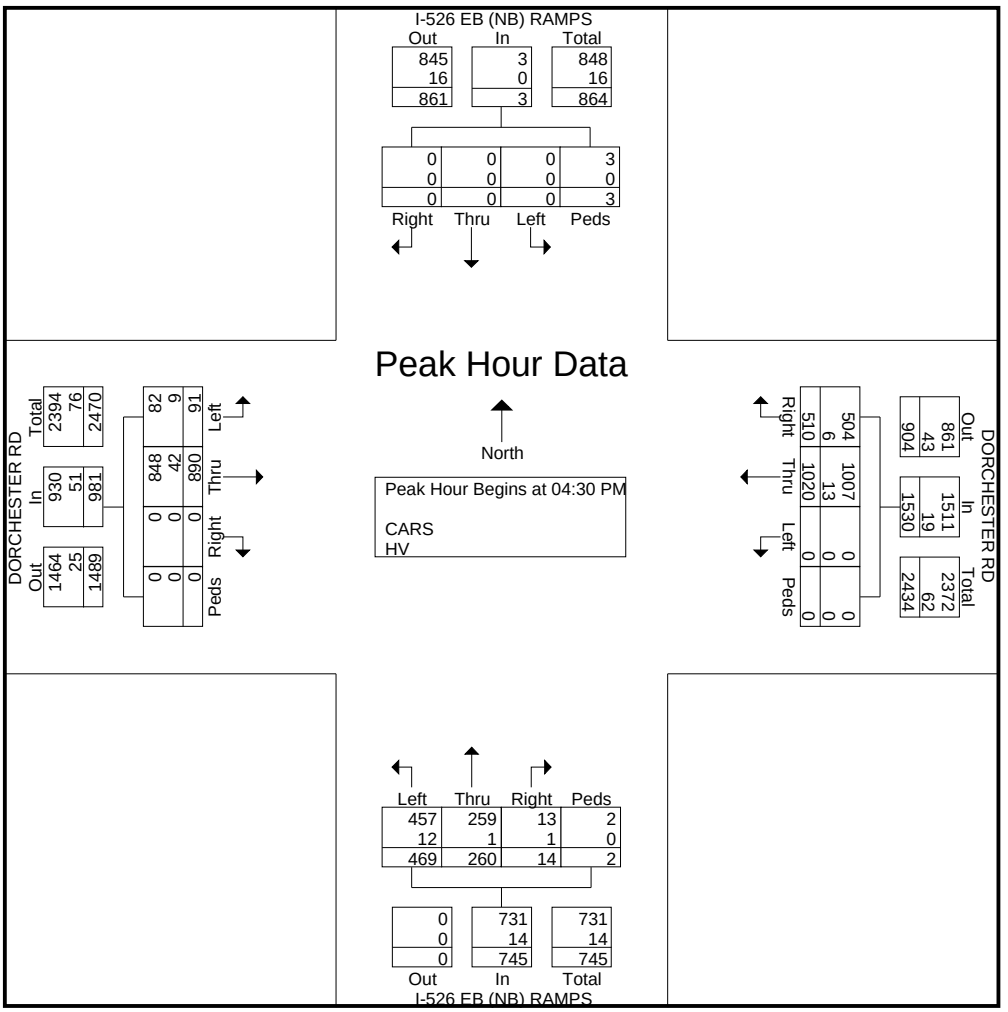
	I-526 EB (NB) RAMPS Southbound					DORCHESTER RD Westbound					I-526 EB (NB) RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	106	218	0	0	324	4	**75**	91	**2**	172	0	223	21	0	244	740
04:45 PM	0	0	0	0	0	106	213	0	0	319	2	45	104	0	151	0	**231**	24	0	**255**	725
05:00 PM	0	0	0	0	0	**170**	**299**	0	0	**469**	3	71	125	0	199	0	226	**29**	0	255	**923**
05:15 PM	0	0	0	**3**	**3**	128	290	0	0	418	**5**	69	**149**	0	**223**	0	210	17	0	227	871
Total Volume	0	0	0	3	3	510	1020	0	0	1530	14	260	469	2	745	0	890	91	0	981	3259
% App. Total	0	0	0	100		33.3	66.7	0	0		1.9	34.9	63	0.3		0	90.7	9.3	0		
PHF	.000	.000	.000	.250	.250	.750	.853	.000	.000	.816	.700	.867	.787	.250	.835	.000	.963	.784	.000	.962	.883
CARS	0	0	0	3	3	504	1007														
% CARS	0	0	0	100	100	98.8	98.7	0	0	98.8	92.9	99.6	97.4	100	98.1	0	95.3	90.1	0	94.8	97.4
HV	0	0	0	0	0	6	13	0	0	19	1	1	12	0	14	0	42	9	0	51	84
% HV	0	0	0	0	0	1.2	1.3	0	0	1.2	7.1	0.4	2.6	0	1.9	0	4.7	9.9	0	5.2	2.6



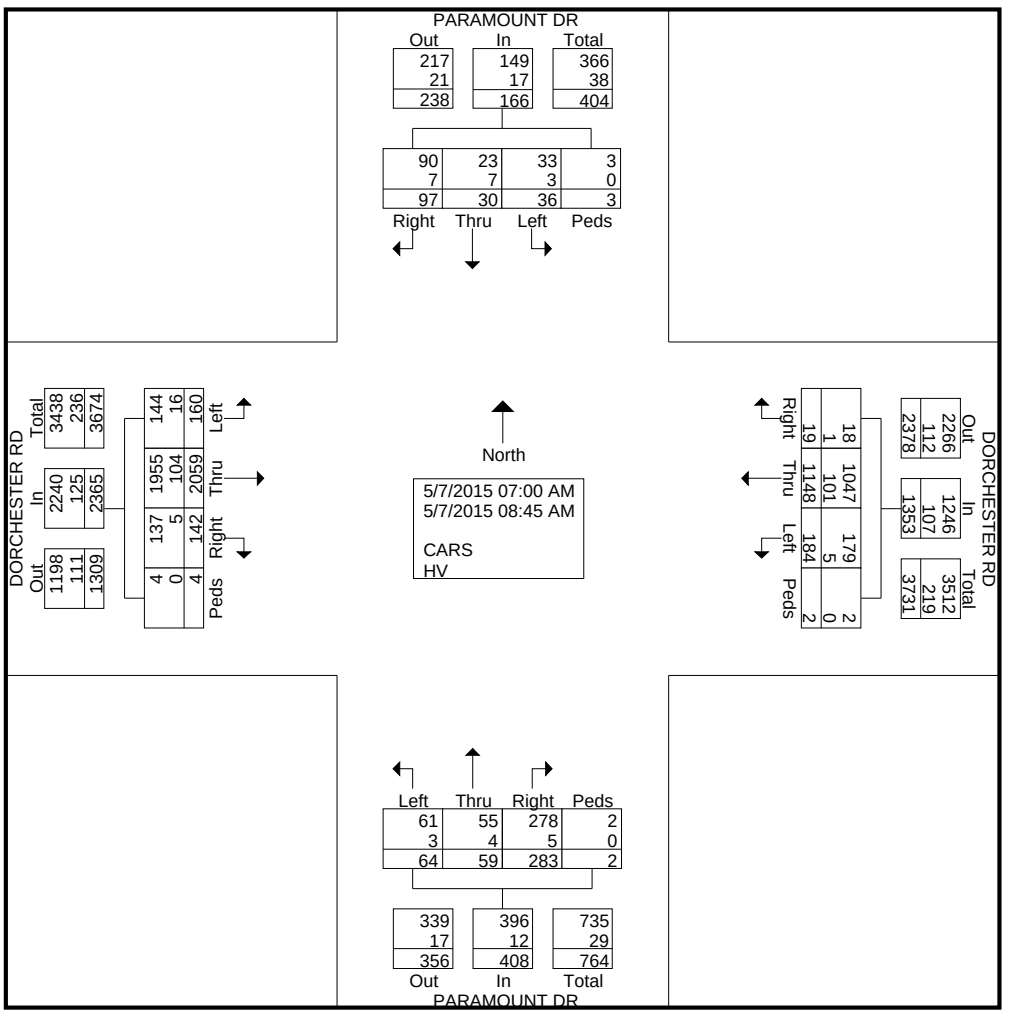
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #10 PARAMOUNT&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	PARAMOUNT DR Southbound					DORCHESTER RD Westbound					PARAMOUNT DR Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	8	2	2	0	12	1	130	10	0	141	25	12	3	0	40	10	272	35	0	317	510
07:15 AM	10	2	5	0	17	2	149	14	0	165	46	10	5	0	61	16	304	27	0	347	590
07:30 AM	11	4	4	0	19	0	124	25	0	149	33	8	9	1	51	22	290	21	0	333	552
07:45 AM	13	2	7	1	23	4	151	28	0	183	43	8	8	0	59	20	295	22	1	338	603
Total	42	10	18	1	71	7	554	77	0	638	147	38	25	1	211	68	1161	105	1	1335	2255
08:00 AM	15	5	5	1	26	7	154	34	1	196	37	7	9	0	53	24	264	13	1	302	577
08:15 AM	16	9	5	1	31	3	144	27	1	175	29	5	10	0	44	16	233	17	1	267	517
08:30 AM	14	4	6	0	24	0	145	18	0	163	41	5	9	1	56	17	214	16	0	247	490
08:45 AM	10	2	2	0	14	2	151	28	0	181	29	4	11	0	44	17	187	9	1	214	453
Total	55	20	18	2	95	12	594	107	2	715	136	21	39	1	197	74	898	55	3	1030	2037
Grand Total	97	30	36	3	166	19	1148	184	2	1353	283	59	64	2	408	142	2059	160	4	2365	4292
Apprch %	58.4	18.1	21.7	1.8		1.4	84.8	13.6	0.1		69.4	14.5	15.7	0.5		6	87.1	6.8	0.2		
Total %	2.3	0.7	0.8	0.1	3.9	0.4	26.7	4.3	0	31.5	6.6	1.4	1.5	0	9.5	3.3	48	3.7	0.1	55.1	
CARS	90	23	33	3	149	18	1047										1955				
% CARS	92.8	76.7	91.7	100	89.8	94.7	91.2	97.3	100	92.1	98.2	93.2	95.3	100	97.1	96.5	94.9	90	100	94.7	93.9
HV	7	7	3	0	17	1	101	5	0	107	5	4	3	0	12	5	104	16	0	125	261
% HV	7.2	23.3	8.3	0	10.2	5.3	8.8	2.7	0	7.9	1.8	6.8	4.7	0	2.9	3.5	5.1	10	0	5.3	6.1

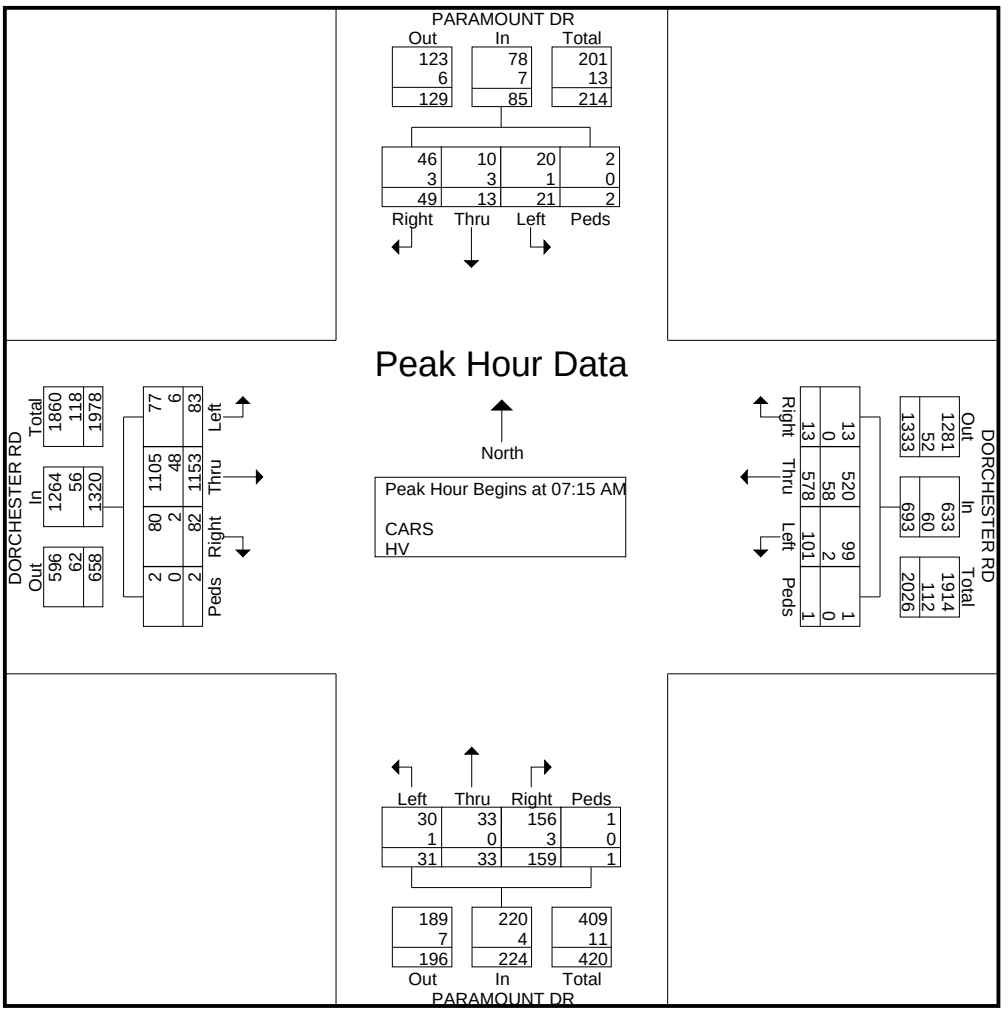


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #10 PARAMOUNT&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	PARAMOUNT DR Southbound					DORCHESTER RD Westbound					PARAMOUNT DR Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	10	2	5	0	17	2	149	14	0	165	**46**	**10**	5	0	**61**	16	**304**	**27**	0	**347**	590
07:30 AM	11	4	4	0	19	0	124	25	0	149	33	8	**9**	**1**	51	22	290	21	0	333	552
07:45 AM	13	2	**7**	**1**	23	4	151	28	0	183	43	8	8	0	59	20	295	22	**1**	338	**603**
08:00 AM	**15**	**5**	5	1	**26**	**7**	**154**	**34**	**1**	**196**	37	7	9	0	53	**24**	264	13	1	302	577
Total Volume	49	13	21	2	85	13	578	101	1	693	159	33	31	1	224	82	1153	83	2	1320	2322
% App. Total	57.6	15.3	24.7	2.4		1.9	83.4	14.6	0.1		71	14.7	13.8	0.4		6.2	87.3	6.3	0.2		
PHF	.817	.650	.750	.500	.817	.464	.938	.743	.250	.884	.864	.825	.861	.250	.918	.854	.948	.769	.500	.951	.963
CARS	46	10	20	2	78	13	520	99	1	633	156	33	30	1	220	80	1105				
% CARS	93.9	76.9	95.2	100	91.8	100	90.0	98.0	100	91.3	98.1	100	96.8	100	98.2	97.6	95.8	92.8	100	95.8	94.5
HV	3	3	1	0	7	0	58	2	0	60	3	0	1	0	4	2	48	6	0	56	127
% HV	6.1	23.1	4.8	0	8.2	0	10.0	2.0	0	8.7	1.9	0	3.2	0	1.8	2.4	4.2	7.2	0	4.2	5.5



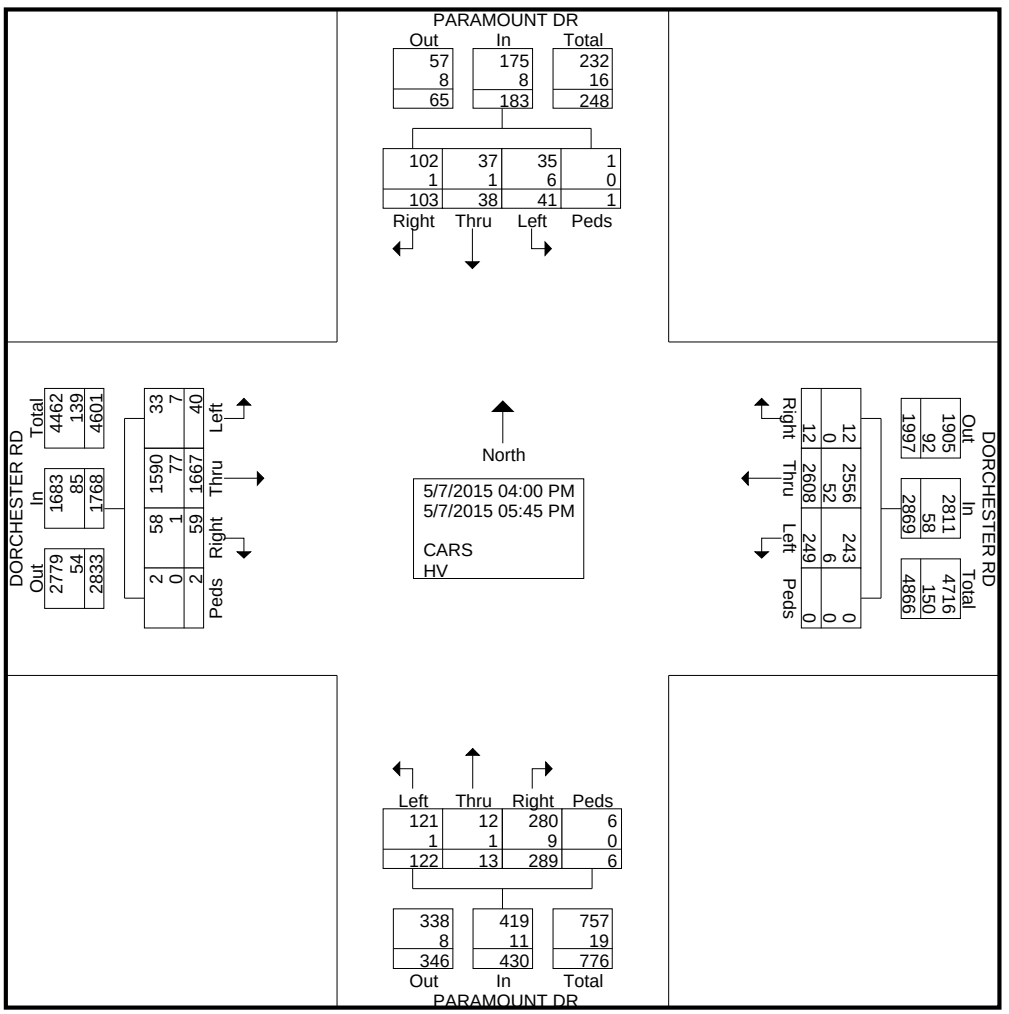
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #10 PARAMOUNT&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	PARAMOUNT DR Southbound					DORCHESTER RD Westbound					PARAMOUNT DR Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	13	4	5	0	22	3	306	31	0	340	30	1	23	1	55	6	216	6	0	228	645
04:15 PM	16	3	7	0	26	3	314	44	0	361	28	5	3	2	38	5	221	10	1	237	662
04:30 PM	12	9	8	1	30	1	308	21	0	330	31	2	10	1	44	12	224	5	1	242	646
04:45 PM	11	4	6	0	21	1	323	30	0	354	39	1	15	0	55	10	225	3	0	238	668
Total	52	20	26	1	99	8	1251	126	0	1385	128	9	51	4	192	33	886	24	2	945	2621
05:00 PM	23	12	7	0	42	1	377	33	0	411	44	1	33	1	79	10	200	3	0	213	745
05:15 PM	18	3	5	0	26	2	379	35	0	416	50	1	16	0	67	6	218	5	0	229	738
05:30 PM	3	0	3	0	6	1	302	30	0	333	26	2	17	1	46	8	196	3	0	207	592
05:45 PM	7	3	0	0	10	0	299	25	0	324	41	0	5	0	46	2	167	5	0	174	554
Total	51	18	15	0	84	4	1357	123	0	1484	161	4	71	2	238	26	781	16	0	823	2629
Grand Total	103	38	41	1	183	12	2608	249	0	2869	289	13	122	6	430	59	1667	40	2	1768	5250
Apprch %	56.3	20.8	22.4	0.5		0.4	90.9	8.7	0		67.2	3	28.4	1.4		3.3	94.3	2.3	0.1		
Total %	2	0.7	0.8	0	3.5	0.2	49.7	4.7	0	54.6	5.5	0.2	2.3	0.1	8.2	1.1	31.8	0.8	0	33.7	
CARS	102	37	35	1	175	12	2556										1590				
% CARS	99	97.4	85.4	100	95.6	100	98	97.6	0	98	96.9	92.3	99.2	100	97.4	98.3	95.4	82.5	100	95.2	96.9
HV	1	1	6	0	8	0	52	6	0	58	9	1	1	0	11	1	77	7	0	85	162
% HV	1	2.6	14.6	0	4.4	0	2	2.4	0	2	3.1	7.7	0.8	0	2.6	1.7	4.6	17.5	0	4.8	3.1

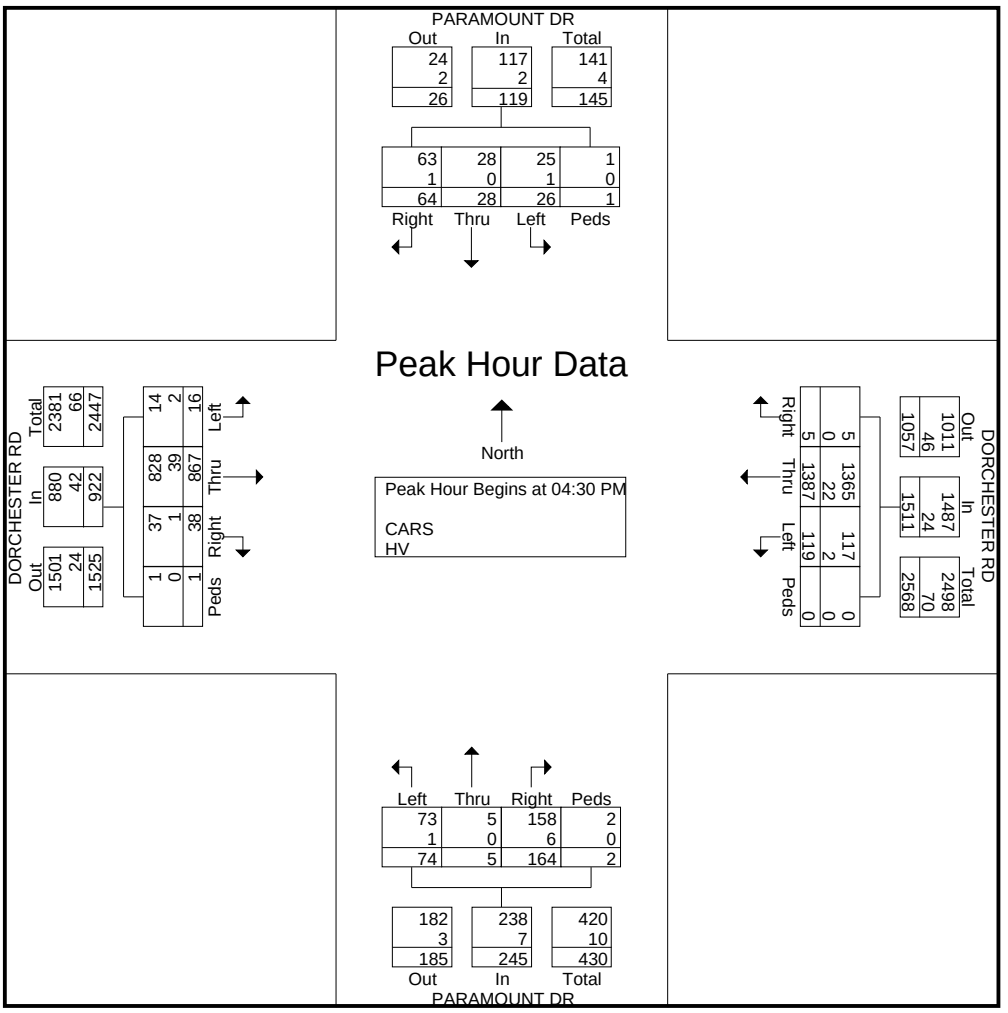


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #10 PARAMOUNT&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	PARAMOUNT DR Southbound					DORCHESTER RD Westbound					PARAMOUNT DR Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	12	9	**8**	**1**	30	1	308	21	0	330	31	**2**	10	**1**	44	**12**	224	**5**	**1**	**242**	646
04:45 PM	11	4	6	0	21	1	323	30	0	354	39	1	15	0	55	10	**225**	3	0	238	668
05:00 PM	**23**	**12**	7	0	**42**	1	377	33	0	411	44	1	**33**	1	**79**	10	200	3	0	213	**745**
05:15 PM	18	3	5	0	26	**2**	**379**	**35**	0	**416**	**50**	1	16	0	67	6	218	5	0	229	738
Total Volume	64	28	26	1	119	5	1387	119	0	1511	164	5	74	2	245	38	867	16	1	922	2797
% App. Total	53.8	23.5	21.8	0.8		0.3	91.8	7.9	0		66.9	2	30.2	0.8		4.1	94	1.7	0.1		
PHF	.696	.583	.813	.250	.708	.625	.915	.850	.000	.908	.820	.625	.561	.500	.775	.792	.963	.800	.250	.952	.939
CARS	63	28	25	1	117	5	1365														
% CARS	98.4	100	96.2	100	98.3	100	98.4	98.3	0	98.4	96.3	100	98.6	100	97.1	97.4	95.5	87.5	100	95.4	97.3
HV	1	0	1	0	2	0	22	2	0	24	6	0	1	0	7	1	39	2	0	42	75
% HV	1.6	0	3.8	0	1.7	0	1.6	1.7	0	1.6	3.7	0	1.4	0	2.9	2.6	4.5	12.5	0	4.6	2.7



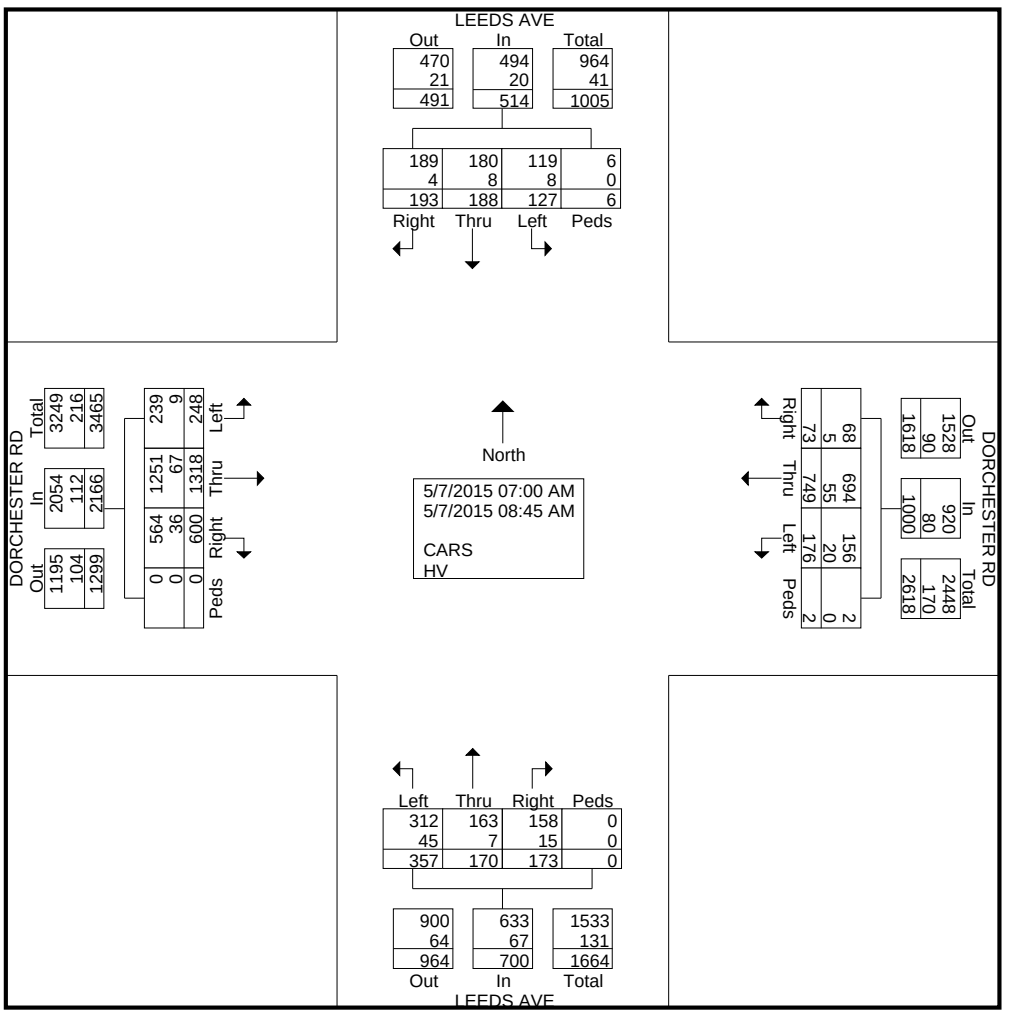
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #11 LEEDS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	LEEDS AVE Southbound					DORCHESTER RD Westbound					LEEDS AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	21	14	14	1	50	8	70	15	0	93	12	23	43	0	78	75	167	34	0	276	497
07:15 AM	16	26	18	1	61	9	99	13	1	122	21	19	51	0	91	86	185	33	0	304	578
07:30 AM	31	21	19	0	71	8	93	14	0	115	17	26	27	0	70	65	195	54	0	314	570
07:45 AM	34	33	15	1	83	5	108	29	0	142	17	22	39	0	78	72	193	51	0	316	619
Total	102	94	66	3	265	30	370	71	1	472	67	90	160	0	317	298	740	172	0	1210	2264
08:00 AM	27	21	15	1	64	7	99	30	1	137	28	17	57	0	102	72	150	32	0	254	557
08:15 AM	25	32	18	0	75	12	97	20	0	129	20	24	45	0	89	93	143	16	0	252	545
08:30 AM	21	24	14	0	59	10	89	28	0	127	27	20	51	0	98	67	147	14	0	228	512
08:45 AM	18	17	14	2	51	14	94	27	0	135	31	19	44	0	94	70	138	14	0	222	502
Total	91	94	61	3	249	43	379	105	1	528	106	80	197	0	383	302	578	76	0	956	2116
Grand Total	193	188	127	6	514	73	749	176	2	1000	173	170	357	0	700	600	1318	248	0	2166	4380
Apprch %	37.5	36.6	24.7	1.2		7.3	74.9	17.6	0.2		24.7	24.3	51	0		27.7	60.8	11.4	0		
Total %	4.4	4.3	2.9	0.1	11.7	1.7	17.1	4	0	22.8	3.9	3.9	8.2	0	16	13.7	30.1	5.7	0	49.5	
CARS	189	180	119	6	494	68	694	156	2	920	158	163	312	0	633	564	1251				
% CARS	97.9	95.7	93.7	100	96.1	93.2	92.7	88.6	100	92	91.3	95.9	87.4	0	90.4	94	94.9	96.4	0	94.8	93.6
HV	4	8	8	0	20	5	55	20	0	80	15	7	45	0	67	36	67	9	0	112	279
% HV	2.1	4.3	6.3	0	3.9	6.8	7.3	11.4	0	8	8.7	4.1	12.6	0	9.6	6	5.1	3.6	0	5.2	6.4

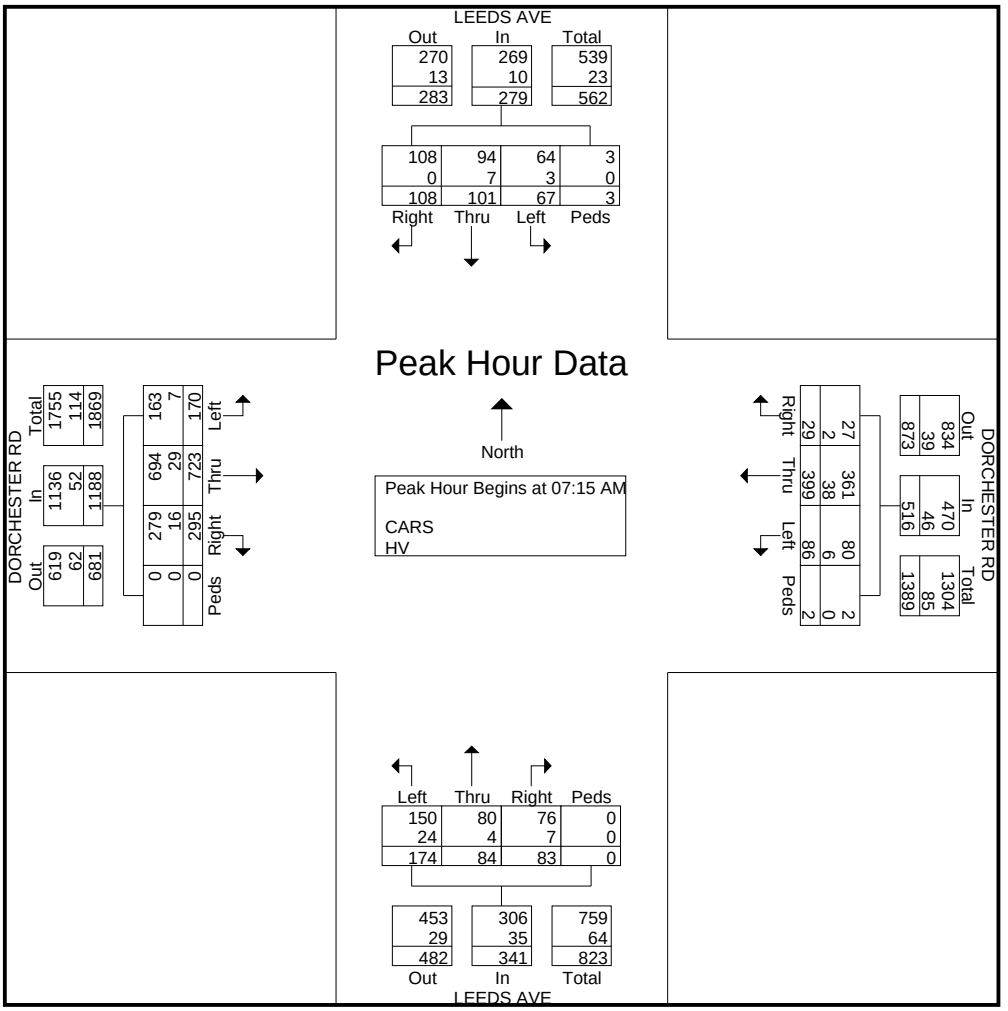


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #11 LEEDS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	LEEDS AVE Southbound					DORCHESTER RD Westbound					LEEDS AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	16	26	18	**1**	61	**9**	99	13	**1**	122	21	19	51	0	91	**86**	185	33	0	304	578
07:30 AM	31	21	**19**	0	71	8	93	14	0	115	17	**26**	27	0	70	65	**195**	**54**	0	314	570
07:45 AM	**34**	**33**	15	1	**83**	5	**108**	29	0	**142**	17	22	39	0	78	72	193	51	0	**316**	**619**
08:00 AM	27	21	15	1	64	7	99	**30**	1	137	**28**	17	**57**	0	**102**	72	150	32	0	254	557
Total Volume	108	101	67	3	279	29	399	86	2	516	83	84	174	0	341	295	723	170	0	1188	2324
% App. Total	38.7	36.2	24	1.1		5.6	77.3	16.7	0.4		24.3	24.6	51	0		24.8	60.9	14.3	0		
PHF	.794	.765	.882	.750	.840	.806	.924	.717	.500	.908	.741	.808	.763	.000	.836	.858	.927	.787	.000	.940	.939
CARS	108	94	64	3	269	27	361	80	2	470	76	80	150	0	306	279	694	163	0	1136	2181
% CARS	100	93.1	95.5	100	96.4	93.1	90.5	93.0	100	91.1	91.6	95.2	86.2	0	89.7	94.6	96.0	95.9	0	95.6	93.8
HV	0	7	3	0	10	2	38	6	0	46	7	4	24	0	35	16	29	7	0	52	143
% HV	0	6.9	4.5	0	3.6	6.9	9.5	7.0	0	8.9	8.4	4.8	13.8	0	10.3	5.4	4.0	4.1	0	4.4	6.2



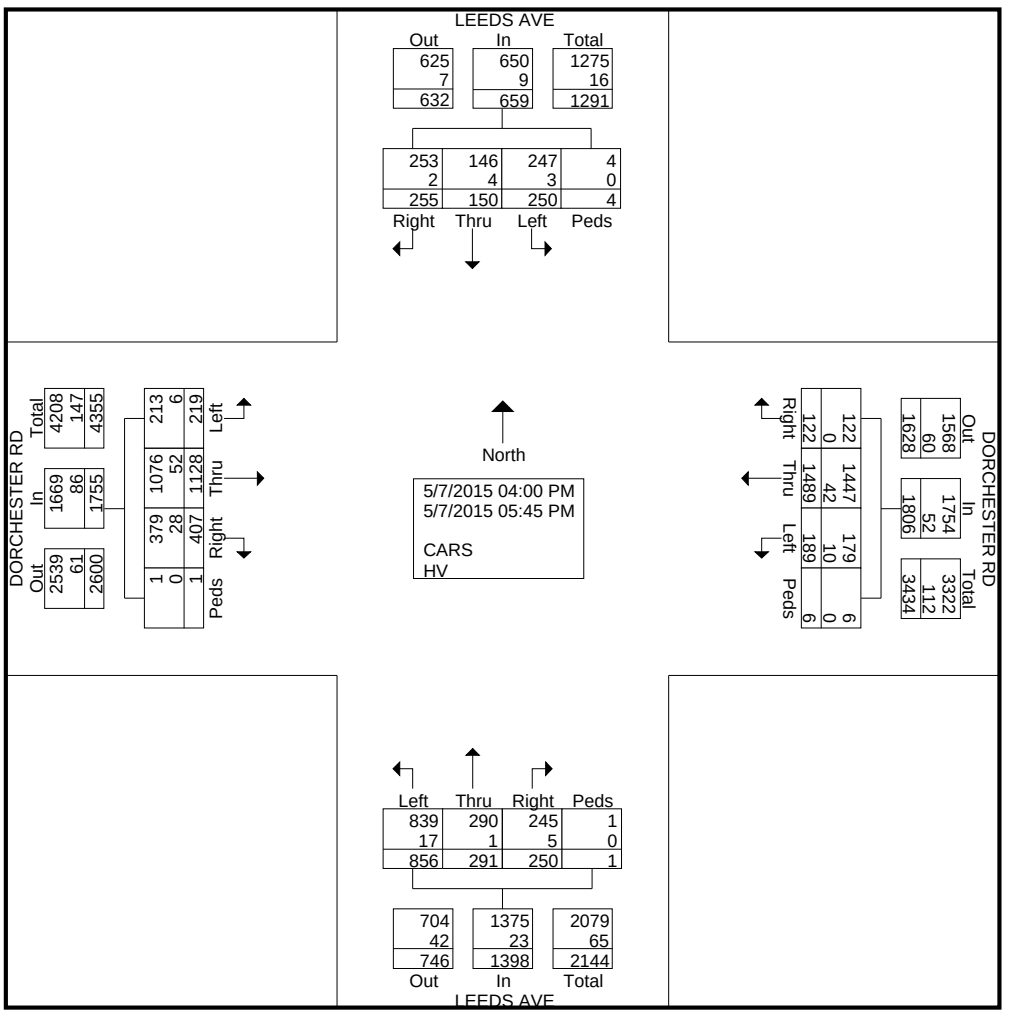
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #11 LEEDS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	LEEDS AVE Southbound					DORCHESTER RD Westbound					LEEDS AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	28	18	47	0	93	11	191	31	0	233	37	31	103	0	171	65	116	22	0	203	700
04:15 PM	21	22	25	0	68	14	183	33	0	230	28	34	121	0	183	63	145	12	0	220	701
04:30 PM	30	10	25	0	65	12	189	34	0	235	39	36	112	0	187	42	165	35	0	242	729
04:45 PM	28	24	28	0	80	11	178	22	3	214	27	34	115	0	176	57	148	39	0	244	714
Total	107	74	125	0	306	48	741	120	3	912	131	135	451	0	717	227	574	108	0	909	2844
05:00 PM	26	14	30	0	70	22	217	27	2	268	52	58	107	0	217	45	170	32	0	247	802
05:15 PM	42	23	38	1	104	15	193	12	1	221	35	37	119	0	191	56	149	27	0	232	748
05:30 PM	39	21	30	0	90	18	175	17	0	210	17	27	102	0	146	41	136	28	0	205	651
05:45 PM	41	18	27	3	89	19	163	13	0	195	15	34	77	1	127	38	99	24	1	162	573
Total	148	76	125	4	353	74	748	69	3	894	119	156	405	1	681	180	554	111	1	846	2774
Grand Total	255	150	250	4	659	122	1489	189	6	1806	250	291	856	1	1398	407	1128	219	1	1755	5618
Apprch %	38.7	22.8	37.9	0.6		6.8	82.4	10.5	0.3		17.9	20.8	61.2	0.1		23.2	64.3	12.5	0.1		
Total %	4.5	2.7	4.4	0.1	11.7	2.2	26.5	3.4	0.1	32.1	4.4	5.2	15.2	0	24.9	7.2	20.1	3.9	0	31.2	
CARS	253	146	247	4	650	122	1447										1076				
% CARS	99.2	97.3	98.8	100	98.6	100	97.2	94.7	100	97.1	98	99.7	98	100	98.4	93.1	95.4	97.3	100	95.1	97
HV	2	4	3	0	9	0	42	10	0	52	5	1	17	0	23	28	52	6	0	86	170
% HV	0.8	2.7	1.2	0	1.4	0	2.8	5.3	0	2.9	2	0.3	2	0	1.6	6.9	4.6	2.7	0	4.9	3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #11 LEEDS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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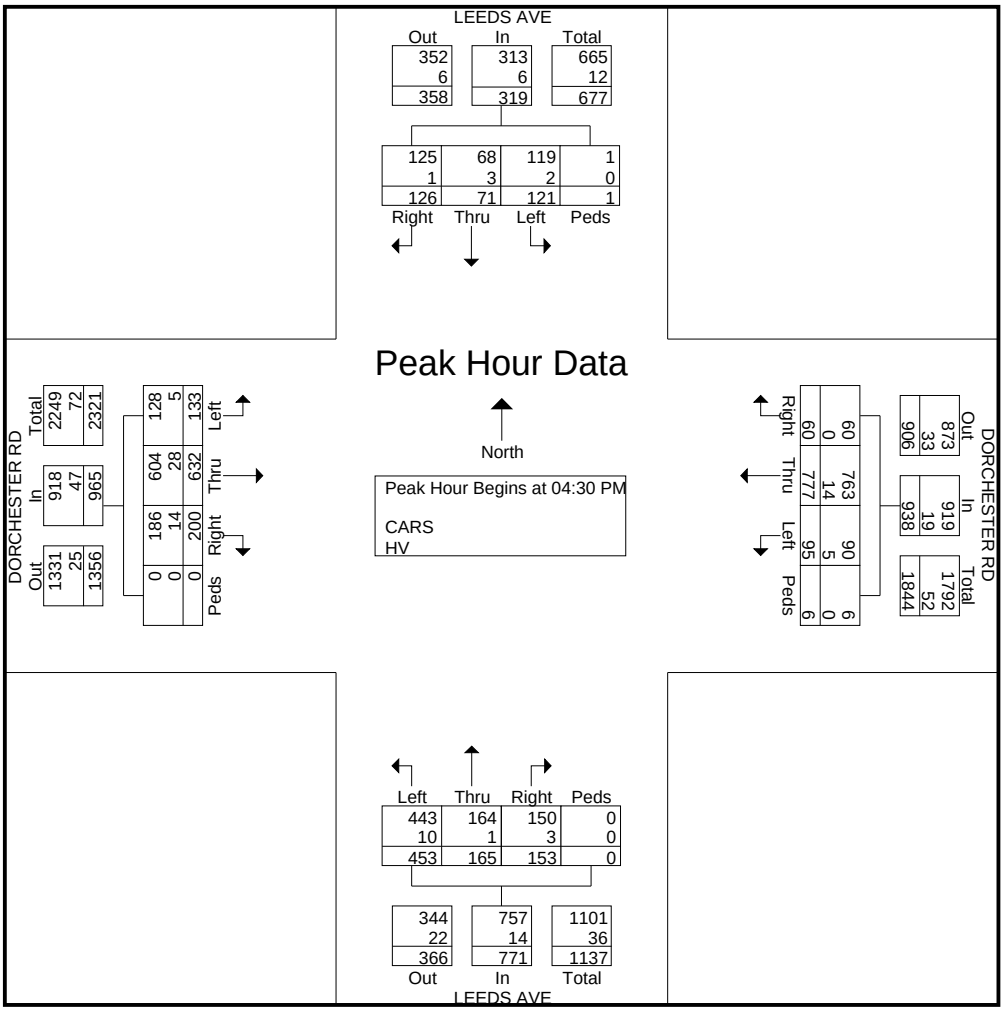
	LEEDS AVE Southbound					DORCHESTER RD Westbound					LEEDS AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	30	10	25	0	65	12	189	**34**	0	235	39	36	112	0	187	42	165	35	0	242	729
04:45 PM	28	**24**	28	0	80	11	178	22	**3**	214	27	34	115	0	176	**57**	148	**39**	0	244	714
05:00 PM	26	14	30	0	70	**22**	**217**	27	2	**268**	**52**	**58**	107	0	**217**	45	**170**	32	0	**247**	**802**
05:15 PM	**42**	23	**38**	**1**	**104**	15	193	12	1	221	35	37	**119**	0	191	56	149	27	0	232	748
Total Volume	126	71	121	1	319	60	777	95	6	938	153	165	453	0	771	200	632	133	0	965	2993
% App. Total	39.5	22.3	37.9	0.3		6.4	82.8	10.1	0.6		19.8	21.4	58.8	0		20.7	65.5	13.8	0		
PHF	.750	.740	.796	.250	.767	.682	.895	.699	.500	.875	.736	.711	.952	.000	.888	.877	.929	.853	.000	.977	.933
CARS	125	68	119	1	313	60	763	90	6	919	150	164	443	0	757	186	604	128	0	918	2907
% CARS	99.2	95.8	98.3	100	98.1	100	98.2	94.7	100	98.0	98.0	99.4	97.8	0	98.2	93.0	95.6	96.2	0	95.1	97.1
HV	1	3	2	0	6	0	14	5	0	19	3	1	10	0	14	14	28	5	0	47	86
% HV	0.8	4.2	1.7	0	1.9	0	1.8	5.3	0	2.0	2.0	0.6	2.2	0	1.8	7.0	4.4	3.8	0	4.9	2.9



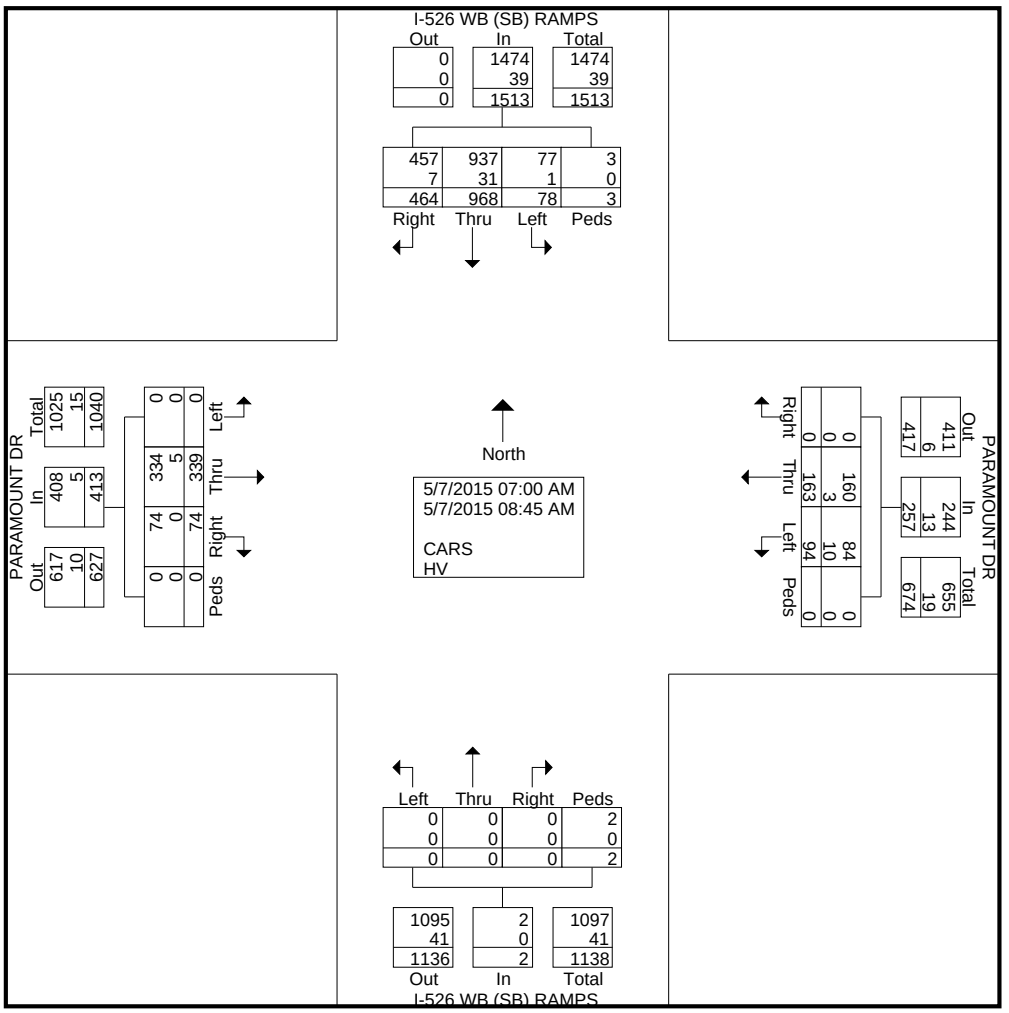
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #12 I526WBSB&PARAMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 WB (SB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	31	100	8	0	139	0	11	3	0	14	0	0	0	0	0	6	33	0	0	39	192
07:15 AM	44	107	7	0	158	0	15	5	0	20	0	0	0	0	0	13	34	0	0	47	225
07:30 AM	63	127	28	2	220	0	22	15	0	37	0	0	0	0	0	10	48	0	0	58	315
07:45 AM	79	144	10	1	234	0	33	10	0	43	0	0	0	0	0	7	46	0	0	53	330
Total	217	478	53	3	751	0	81	33	0	114	0	0	0	0	0	36	161	0	0	197	1062
08:00 AM	80	117	11	0	208	0	28	18	0	46	0	0	0	1	1	8	56	0	0	64	319
08:15 AM	58	122	1	0	181	0	27	16	0	43	0	0	0	1	1	10	40	0	0	50	275
08:30 AM	50	132	6	0	188	0	15	16	0	31	0	0	0	0	0	12	43	0	0	55	274
08:45 AM	59	119	7	0	185	0	12	11	0	23	0	0	0	0	0	8	39	0	0	47	255
Total	247	490	25	0	762	0	82	61	0	143	0	0	0	2	2	38	178	0	0	216	1123
Grand Total	464	968	78	3	1513	0	163	94	0	257	0	0	0	2	2	74	339	0	0	413	2185
Apprch %	30.7	64	5.2	0.2		0	63.4	36.6	0		0	0	0	100		17.9	82.1	0	0		
Total %	21.2	44.3	3.6	0.1	69.2	0	7.5	4.3	0	11.8	0	0	0	0.1	0.1	3.4	15.5	0	0	18.9	
CARS	457	937	77	3	1474	0	160	84	0	244	0	0	0	2	2	74	334	0	0	408	2128
% CARS	98.5	96.8	98.7	100	97.4	0	98.2	89.4	0	94.9	0	0	0	100	100	100	98.5	0	0	98.8	97.4
HV	7	31	1	0	39	0	3	10	0	13	0	0	0	0	0	0	5	0	0	5	57
% HV	1.5	3.2	1.3	0	2.6	0	1.8	10.6	0	5.1	0	0	0	0	0	0	1.5	0	0	1.2	2.6

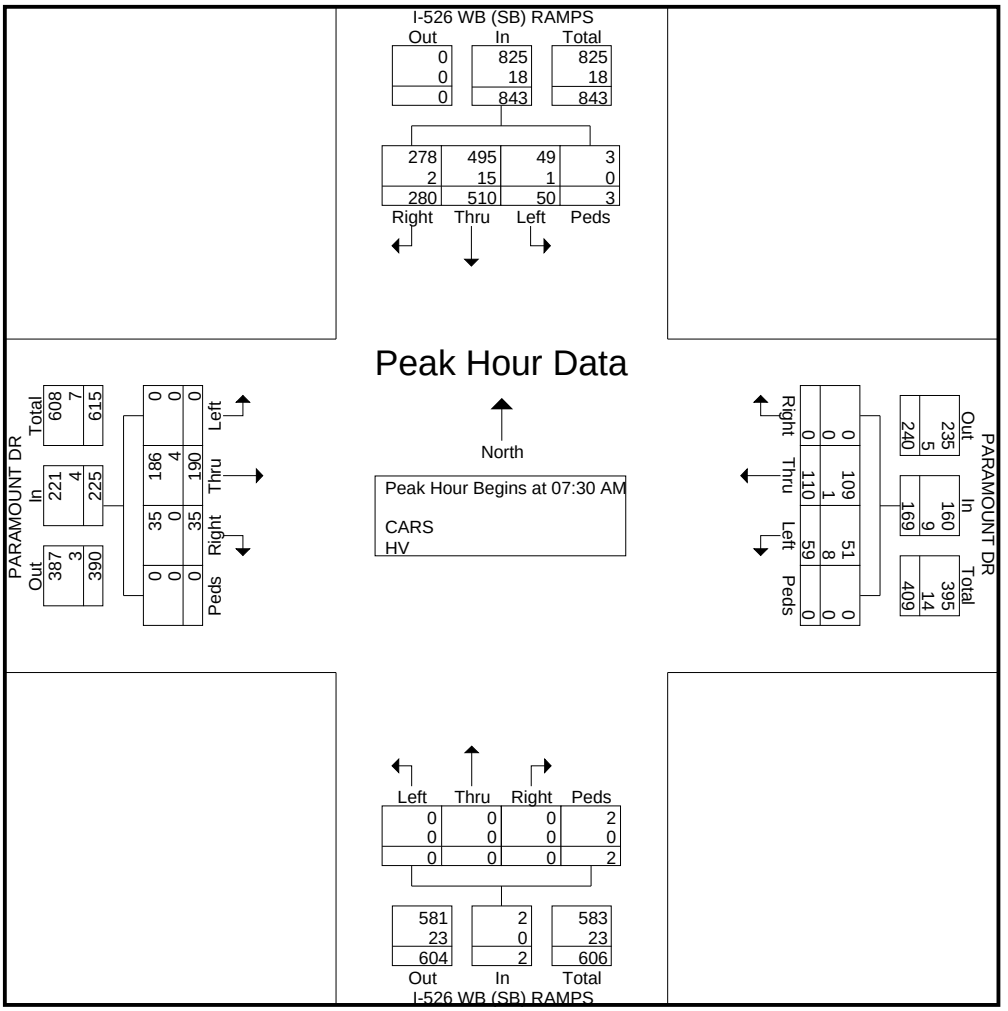


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #12 I526WBSB&PARAMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-526 WB (SB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 WB (SB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	63	127	**28**	**2**	220	0	22	15	0	37	0	0	0	0	0	**10**	48	0	0	58	315
07:45 AM	79	**144**	10	1	**234**	0	**33**	10	0	43	0	0	0	0	0	7	46	0	0	53	**330**
08:00 AM	**80**	117	11	0	208	0	28	**18**	0	**46**	0	0	0	**1**	**1**	8	**56**	0	0	**64**	319
08:15 AM	58	122	1	0	181	0	27	16	0	43	0	0	0	1	1	10	40	0	0	50	275
Total Volume	280	510	50	3	843	0	110	59	0	169	0	0	0	2	2	35	190	0	0	225	1239
% App. Total	33.2	60.5	5.9	0.4		0	65.1	34.9	0		0	0	0	100		15.6	84.4	0	0		
PHF	.875	.885	.446	.375	.901	.000	.833	.819	.000	.918	.000	.000	.000	.500	.500	.875	.848	.000	.000	.879	.939
CARS	278	495	49	3	825	0	109	51	0	160	0	0	0	2	2	35	186	0	0	221	1208
% CARS	99.3	97.1	98.0	100	97.9	0	99.1	86.4	0	94.7	0	0	0	100	100	100	97.9	0	0	98.2	97.5
HV	2	15	1	0	18	0	1	8	0	9	0	0	0	0	0	0	4	0	0	4	31
% HV	0.7	2.9	2.0	0	2.1	0	0.9	13.6	0	5.3	0	0	0	0	0	0	2.1	0	0	1.8	2.5



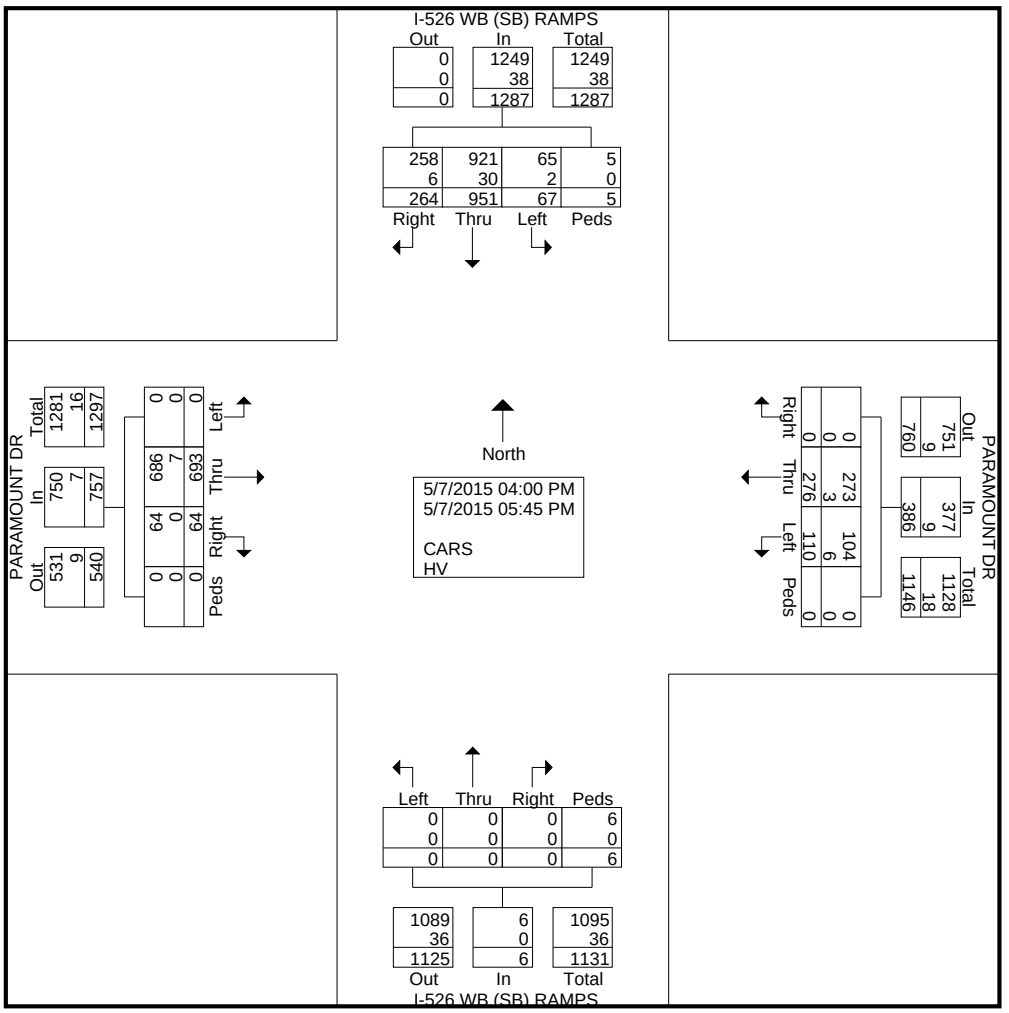
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #12 I526WBSB&PARAMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 WB (SB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	30	118	5	0	153	0	34	14	0	48	0	0	0	0	0	6	70	0	0	76	277
04:15 PM	37	107	7	1	152	0	45	11	0	56	0	0	0	0	0	5	53	0	0	58	266
04:30 PM	26	128	5	0	159	0	25	14	0	39	0	0	0	5	5	11	109	0	0	120	323
04:45 PM	41	129	4	0	174	0	33	19	0	52	0	0	0	0	0	7	77	0	0	84	310
Total	134	482	21	1	638	0	137	58	0	195	0	0	0	5	5	29	309	0	0	338	1176
05:00 PM	24	128	14	2	168	0	35	22	0	57	0	0	0	0	0	11	154	0	0	165	390
05:15 PM	48	151	16	0	215	0	41	11	0	52	0	0	0	0	0	8	86	0	0	94	361
05:30 PM	28	112	9	2	151	0	38	9	0	47	0	0	0	1	1	7	85	0	0	92	291
05:45 PM	30	78	7	0	115	0	25	10	0	35	0	0	0	0	0	9	59	0	0	68	218
Total	130	469	46	4	649	0	139	52	0	191	0	0	0	1	1	35	384	0	0	419	1260
Grand Total	264	951	67	5	1287	0	276	110	0	386	0	0	0	6	6	64	693	0	0	757	2436
Apprch %	20.5	73.9	5.2	0.4		0	71.5	28.5	0		0	0	0	100		8.5	91.5	0	0		
Total %	10.8	39	2.8	0.2	52.8	0	11.3	4.5	0	15.8	0	0	0	0.2	0.2	2.6	28.4	0	0	31.1	
CARS	258	921	65	5	1249	0	273	104	0	377	0	0	0	6	6	64	686	0	0	750	2382
% CARS	97.7	96.8	97	100	97	0	98.9	94.5	0	97.7	0	0	0	100	100	100	99	0	0	99.1	97.8
HV	6	30	2	0	38	0	3	6	0	9	0	0	0	0	0	0	7	0	0	7	54
% HV	2.3	3.2	3	0	3	0	1.1	5.5	0	2.3	0	0	0	0	0	0	1	0	0	0.9	2.2

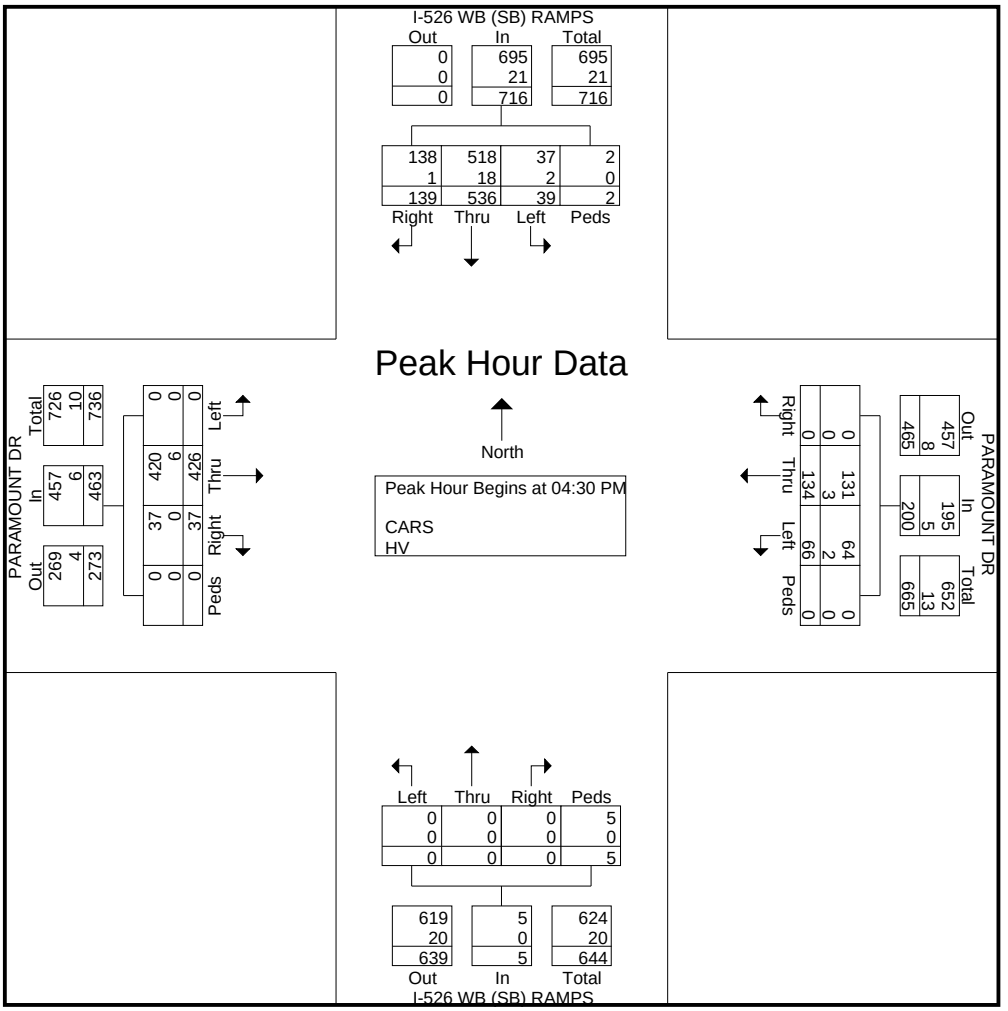


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #12 I526WBSB&PARAMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-526 WB (SB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 WB (SB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	128	5	0	159	0	25	14	0	39	0	0	0	**5**	**5**	**11**	109	0	0	120	323
04:45 PM	41	129	4	0	174	0	33	19	0	52	0	0	0	0	0	7	77	0	0	84	310
05:00 PM	24	128	14	**2**	168	0	35	**22**	0	**57**	0	0	0	0	0	11	**154**	0	0	**165**	**390**
05:15 PM	**48**	**151**	**16**	0	**215**	0	**41**	11	0	52	0	0	0	0	0	8	86	0	0	94	361
Total Volume	139	536	39	2	716	0	134	66	0	200	0	0	0	5	5	37	426	0	0	463	1384
% App. Total	19.4	74.9	5.4	0.3		0	67	33	0		0	0	0	100		8	92	0	0		
PHF	.724	.887	.609	.250	.833	.000	.817	.750	.000	.877	.000	.000	.000	.250	.250	.841	.692	.000	.000	.702	.887
CARS	138	518	37	2	695	0	131	64	0	195	0	0	0	5	5	37	420	0	0	457	1352
% CARS	99.3	96.6	94.9	100	97.1	0	97.8	97.0	0	97.5	0	0	0	100	100	100	98.6	0	0	98.7	97.7
HV	1	18	2	0	21	0	3	2	0	5	0	0	0	0	0	0	6	0	0	6	32
% HV	0.7	3.4	5.1	0	2.9	0	2.2	3.0	0	2.5	0	0	0	0	0	0	1.4	0	0	1.3	2.3



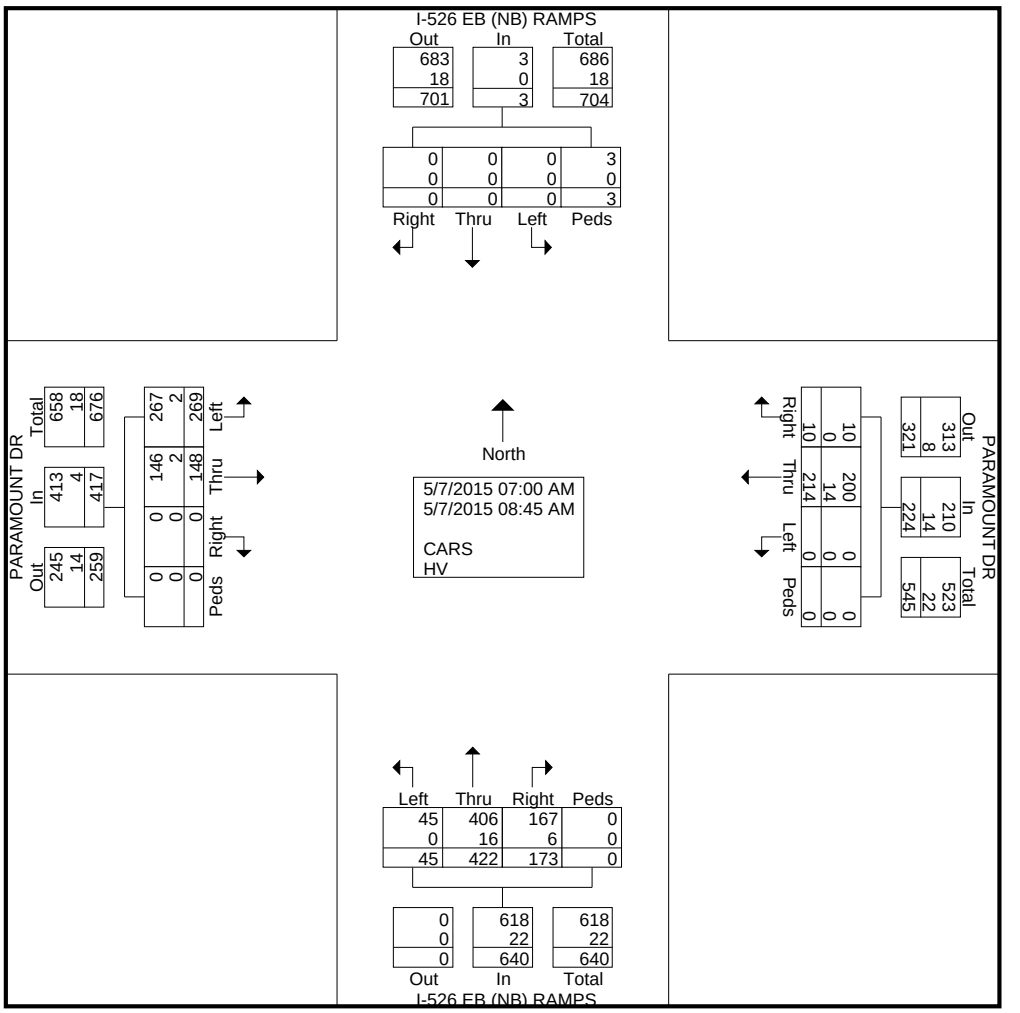
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #13 I526EBNB&PARAMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 EB (NB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	11	0	0	12	21	59	3	0	83	0	17	26	0	43	138
07:15 AM	0	0	0	0	0	1	15	0	0	16	27	50	6	0	83	0	21	20	0	41	140
07:30 AM	0	0	0	2	2	3	31	0	0	34	24	44	5	0	73	0	15	58	0	73	182
07:45 AM	0	0	0	1	1	2	33	0	0	35	25	62	9	0	96	0	23	34	0	57	189
Total	0	0	0	3	3	7	90	0	0	97	97	215	23	0	335	0	76	138	0	214	649
08:00 AM	0	0	0	0	0	0	39	0	0	39	17	57	6	0	80	0	21	43	0	64	183
08:15 AM	0	0	0	0	0	3	36	0	0	39	15	51	4	0	70	0	17	25	0	42	151
08:30 AM	0	0	0	0	0	0	27	0	0	27	29	48	8	0	85	0	18	31	0	49	161
08:45 AM	0	0	0	0	0	0	22	0	0	22	15	51	4	0	70	0	16	32	0	48	140
Total	0	0	0	0	0	3	124	0	0	127	76	207	22	0	305	0	72	131	0	203	635
Grand Total	0	0	0	3	3	10	214	0	0	224	173	422	45	0	640	0	148	269	0	417	1284
Apprch %	0	0	0	100		4.5	95.5	0	0		27	65.9	7	0		0	35.5	64.5	0		
Total %	0	0	0	0.2	0.2	0.8	16.7	0	0	17.4	13.5	32.9	3.5	0	49.8	0	11.5	21	0	32.5	
CARS	0	0	0	3	3	10	200	0	0	210	167	406	45	0	618	0	146	267	0	413	1244
% CARS	0	0	0	100	100	100	93.5	0	0	93.8	96.5	96.2	100	0	96.6	0	98.6	99.3	0	99	96.9
HV	0	0	0	0	0	0	14	0	0	14	6	16	0	0	22	0	2	2	0	4	40
% HV	0	0	0	0	0	0	6.5	0	0	6.2	3.5	3.8	0	0	3.4	0	1.4	0.7	0	1	3.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #13 I526EBNB&PARAMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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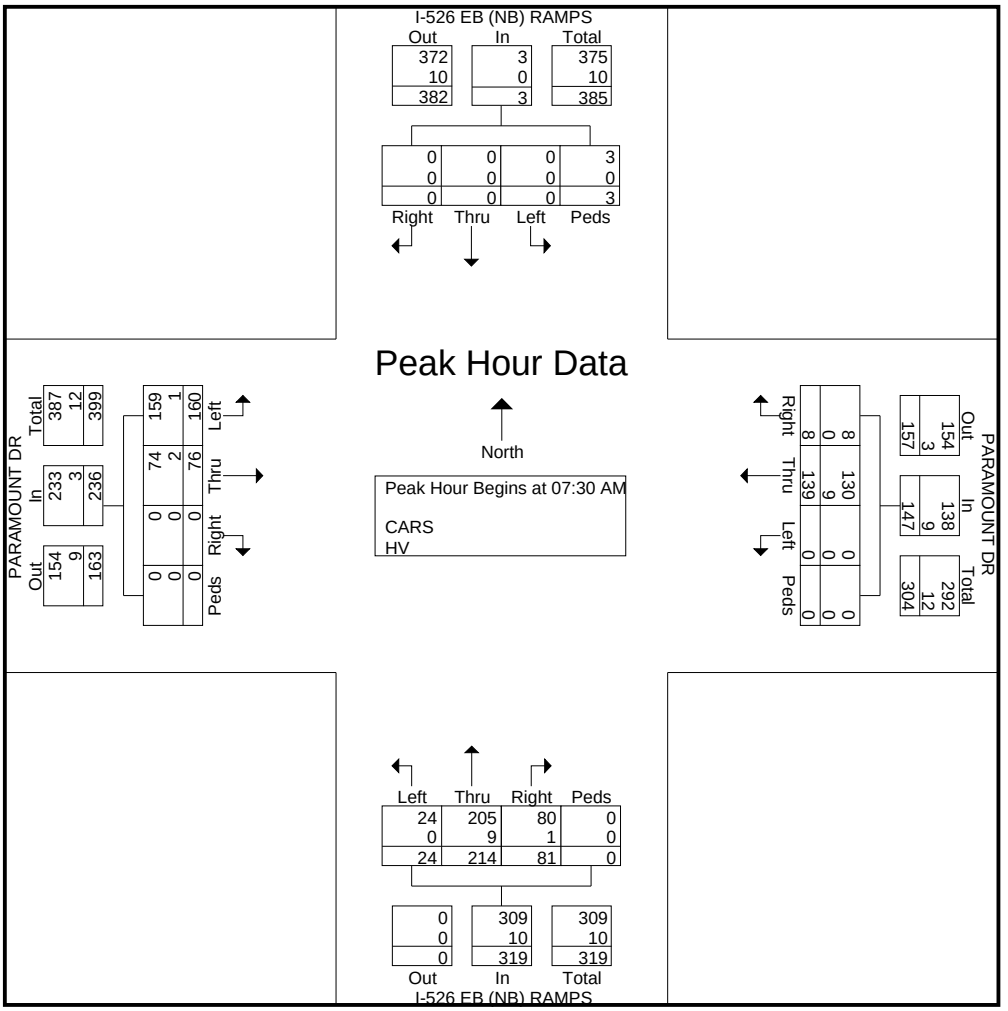
	I-526 EB (NB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 EB (NB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	**2**	**2**	**3**	31	0	0	34	24	44	5	0	73	0	15	**58**	0	**73**	182
07:45 AM	0	0	0	1	1	2	33	0	0	35	**25**	**62**	**9**	0	**96**	0	**23**	34	0	57	**189**
08:00 AM	0	0	0	0	0	0	**39**	0	0	**39**	17	57	6	0	80	0	21	43	0	64	183
08:15 AM	0	0	0	0	0	3	36	0	0	39	15	51	4	0	70	0	17	25	0	42	151
Total Volume	0	0	0	3	3	8	139	0	0	147	81	214	24	0	319	0	76	160	0	236	705
% App. Total	0	0	0	100		5.4	94.6	0	0		25.4	67.1	7.5	0		0	32.2	67.8	0		
PHF	.000	.000	.000	.375	.375	.667	.891	.000	.000	.942	.810	.863	.667	.000	.831	.000	.826	.690	.000	.808	.933
CARS	0	0	0	3	3	8	130	0	0	138	80	205	24	0	309	0	74	159	0	233	683
% CARS	0	0	0	100	100	100	93.5	0	0	93.9	98.8	95.8	100	0	96.9	0	97.4	99.4	0	98.7	96.9
HV	0	0	0	0	0	0	9	0	0	9	1	9	0	0	10	0	2	1	0	3	22
% HV	0	0	0	0	0	0	6.5	0	0	6.1	1.2	4.2	0	0	3.1	0	2.6	0.6	0	1.3	3.1



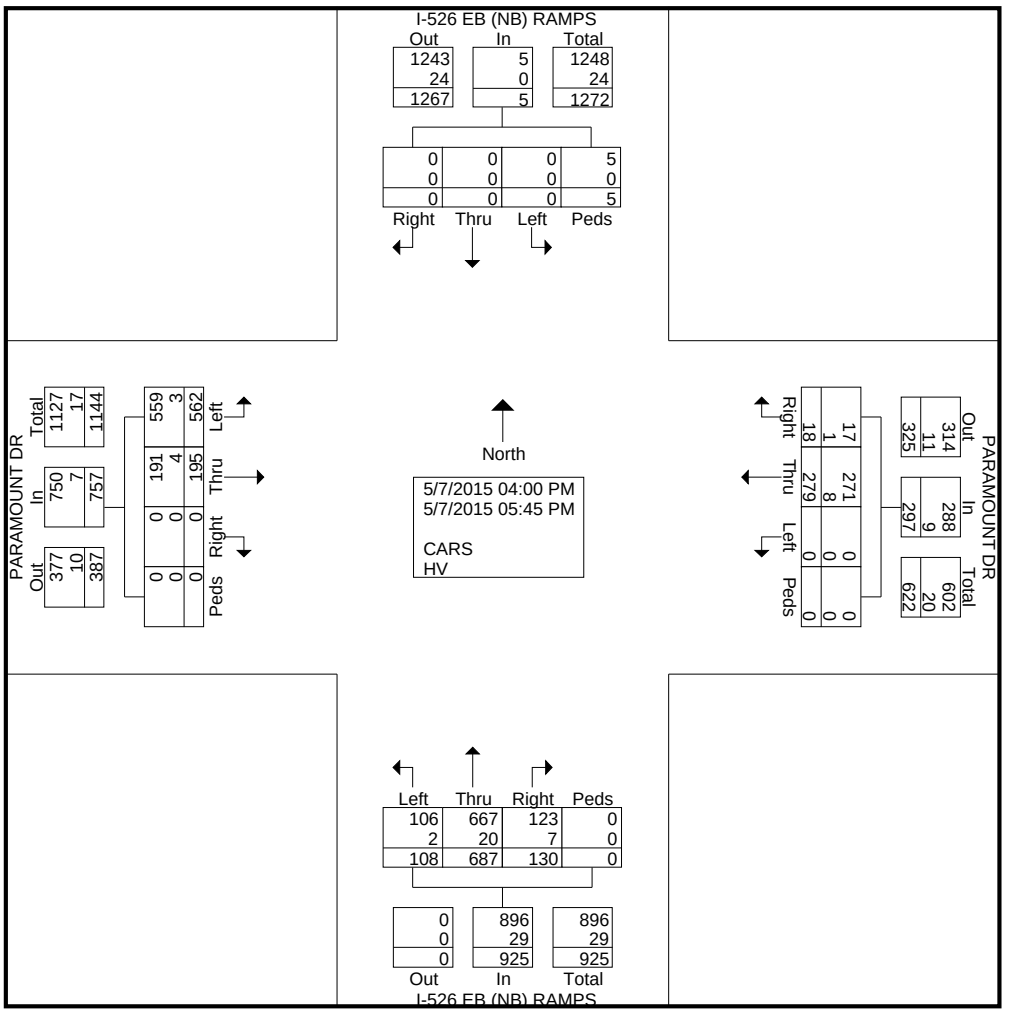
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #13 I526EBNB&PARAMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 EB (NB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	30	0	0	31	21	84	15	0	120	0	19	58	0	77	228
04:15 PM	0	0	0	1	1	4	44	0	0	48	15	81	19	0	115	0	20	41	0	61	225
04:30 PM	0	0	0	0	0	3	33	0	0	36	16	78	6	0	100	0	24	92	0	116	252
04:45 PM	0	0	0	0	0	2	36	0	0	38	18	85	12	0	115	0	22	59	0	81	234
Total	0	0	0	1	1	10	143	0	0	153	70	328	52	0	450	0	85	250	0	335	939
05:00 PM	0	0	0	2	2	2	48	0	0	50	17	110	13	0	140	0	39	119	0	158	350
05:15 PM	0	0	0	0	0	4	32	0	0	36	19	126	17	0	162	0	35	69	0	104	302
05:30 PM	0	0	0	2	2	2	34	0	0	36	9	57	15	0	81	0	18	79	0	97	216
05:45 PM	0	0	0	0	0	0	22	0	0	22	15	66	11	0	92	0	18	45	0	63	177
Total	0	0	0	4	4	8	136	0	0	144	60	359	56	0	475	0	110	312	0	422	1045
Grand Total	0	0	0	5	5	18	279	0	0	297	130	687	108	0	925	0	195	562	0	757	1984
Apprch %	0	0	0	100		6.1	93.9	0	0		14.1	74.3	11.7	0		0	25.8	74.2	0		
Total %	0	0	0	0.3	0.3	0.9	14.1	0	0	15	6.6	34.6	5.4	0	46.6	0	9.8	28.3	0	38.2	
CARS	0	0	0	5	5	17	271	0	0	288	123	667	106	0	896	0	191	559	0	750	1939
% CARS	0	0	0	100	100	94.4	97.1	0	0	97	94.6	97.1	98.1	0	96.9	0	97.9	99.5	0	99.1	97.7
HV	0	0	0	0	0	1	8	0	0	9	7	20	2	0	29	0	4	3	0	7	45
% HV	0	0	0	0	0	5.6	2.9	0	0	3	5.4	2.9	1.9	0	3.1	0	2.1	0.5	0	0.9	2.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #13 I526EBNB&PARAMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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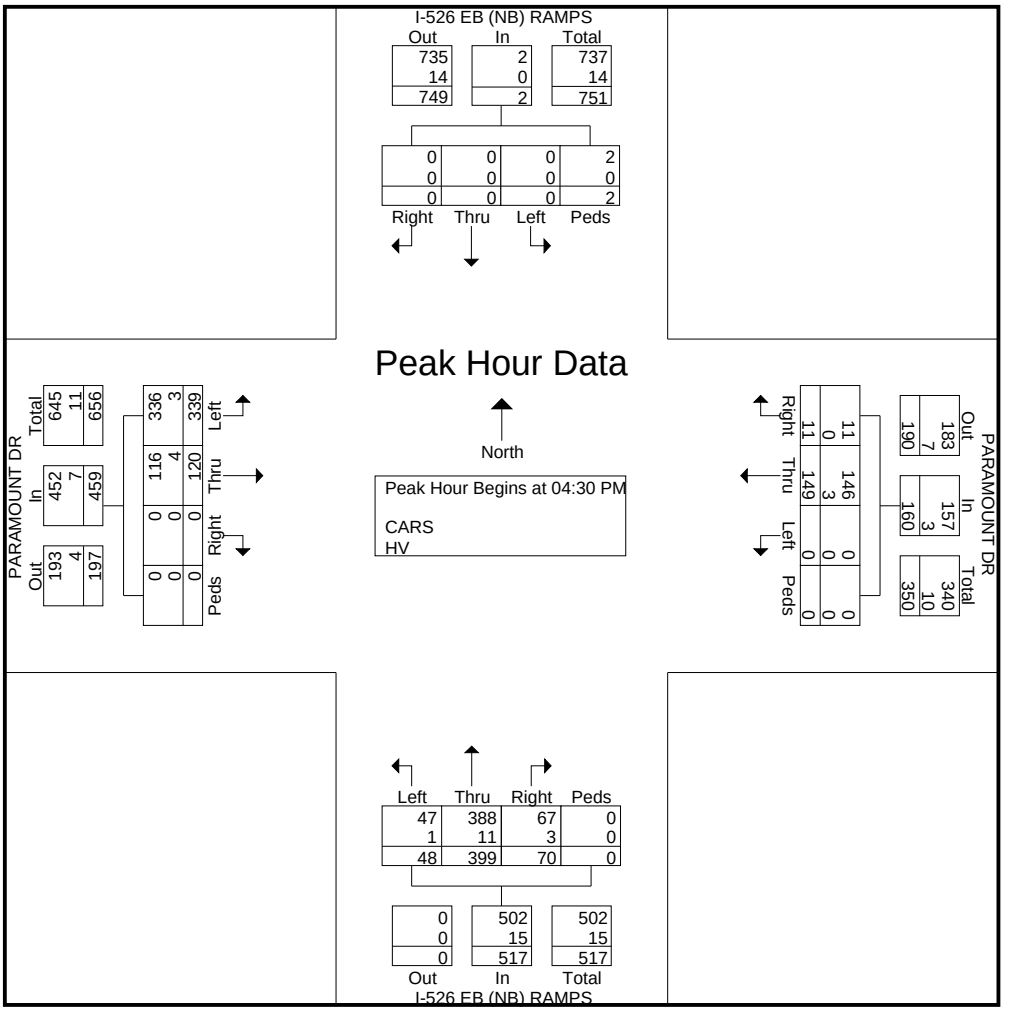
	I-526 EB (NB) RAMPS Southbound					PARAMOUNT DR Westbound					I-526 EB (NB) RAMPS Northbound					PARAMOUNT DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	3	33	0	0	36	16	78	6	0	100	0	24	92	0	116	252
04:45 PM	0	0	0	0	0	2	36	0	0	38	18	85	12	0	115	0	22	59	0	81	234
05:00 PM	0	0	0	**2**	**2**	2	**48**	0	0	**50**	17	110	13	0	140	0	**39**	**119**	0	**158**	**350**
05:15 PM	0	0	0	0	0	**4**	32	0	0	36	**19**	**126**	**17**	0	**162**	0	35	69	0	104	302
Total Volume	0	0	0	2	2	11	149	0	0	160	70	399	48	0	517	0	120	339	0	459	1138
% App. Total	0	0	0	100		6.9	93.1	0	0		13.5	77.2	9.3	0		0	26.1	73.9	0		
PHF	.000	.000	.000	.250	.250	.688	.776	.000	.000	.800	.921	.792	.706	.000	.798	.000	.769	.712	.000	.726	.813
CARS	0	0	0	2	2	11	146	0	0	157	67	388	47	0	502	0	116	336	0	452	1113
% CARS	0	0	0	100	100	100	98.0	0	0	98.1	95.7	97.2	97.9	0	97.1	0	96.7	99.1	0	98.5	97.8
HV	0	0	0	0	0	0	3	0	0	3	3	11	1	0	15	0	4	3	0	7	25
% HV	0	0	0	0	0	0	2.0	0	0	1.9	4.3	2.8	2.1	0	2.9	0	3.3	0.9	0	1.5	2.2



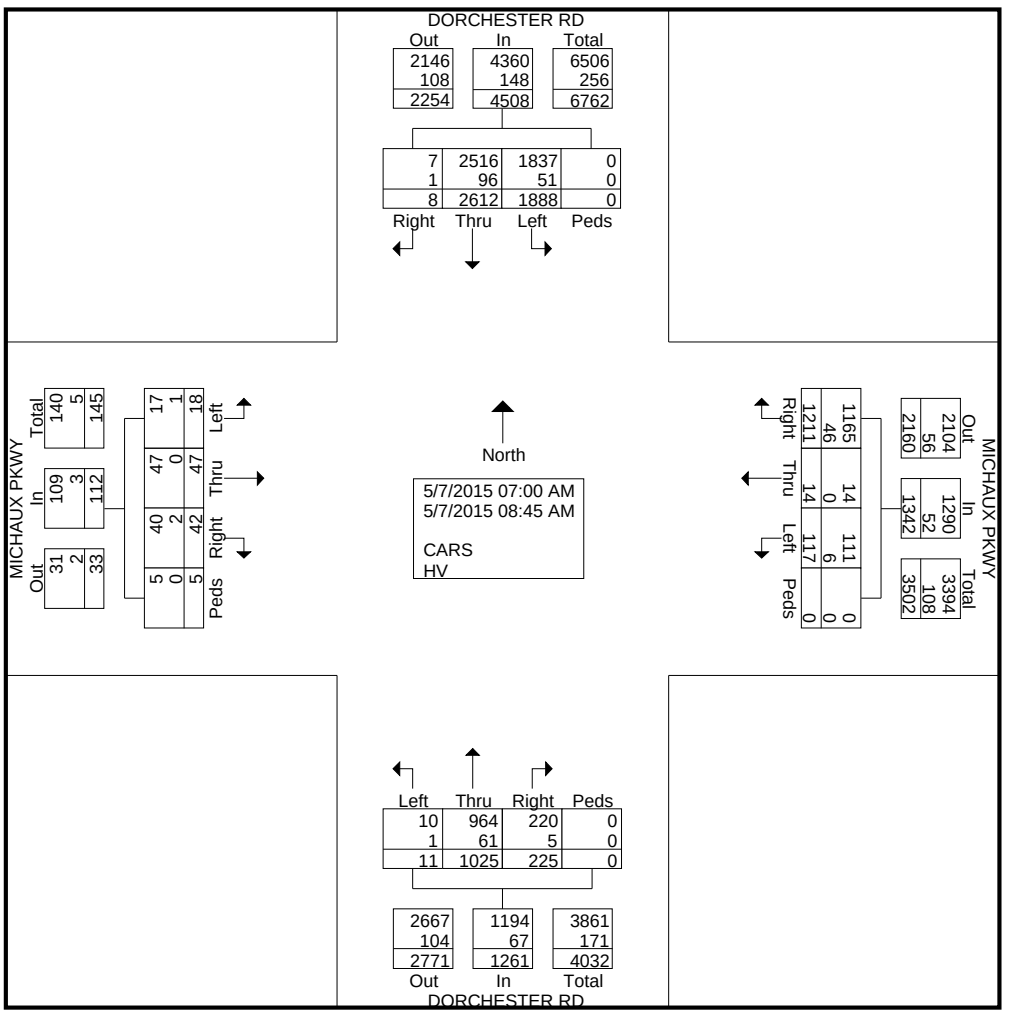
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #14 DORCHESTER&MICHAUXAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					MICHAUX PKWY Westbound					DORCHESTER RD Northbound					MICHAUX PKWY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	282	249	0	532	194	0	13	0	207	27	106	2	0	135	5	8	3	0	16	890
07:15 AM	1	347	277	0	625	173	3	10	0	186	32	135	0	0	167	13	6	2	0	21	999
07:30 AM	1	298	259	0	558	170	1	9	0	180	48	141	5	0	194	10	10	4	0	24	956
07:45 AM	1	392	263	0	656	176	2	23	0	201	30	146	1	0	177	1	5	4	2	12	1046
Total	4	1319	1048	0	2371	713	6	55	0	774	137	528	8	0	673	29	29	13	2	73	3891
08:00 AM	0	341	215	0	556	122	1	10	0	133	25	138	1	0	164	4	4	2	0	10	863
08:15 AM	2	338	231	0	571	129	2	13	0	144	20	100	0	0	120	3	6	2	3	14	849
08:30 AM	0	337	221	0	558	117	3	18	0	138	16	116	1	0	133	3	4	0	0	7	836
08:45 AM	2	277	173	0	452	130	2	21	0	153	27	143	1	0	171	3	4	1	0	8	784
Total	4	1293	840	0	2137	498	8	62	0	568	88	497	3	0	588	13	18	5	3	39	3332
Grand Total	8	2612	1888	0	4508	1211	14	117	0	1342	225	1025	11	0	1261	42	47	18	5	112	7223
Apprch %	0.2	57.9	41.9	0		90.2	1	8.7	0		17.8	81.3	0.9	0		37.5	42	16.1	4.5		
Total %	0.1	36.2	26.1	0	62.4	16.8	0.2	1.6	0	18.6	3.1	14.2	0.2	0	17.5	0.6	0.7	0.2	0.1	1.6	
CARS	7	2516	1837			1165															
% CARS	87.5	96.3	97.3	0	96.7	96.2	100	94.9	0	96.1	97.8	94	90.9	0	94.7	95.2	100	94.4	100	97.3	96.3
HV	1	96	51	0	148	46	0	6	0	52	5	61	1	0	67	2	0	1	0	3	270
% HV	12.5	3.7	2.7	0	3.3	3.8	0	5.1	0	3.9	2.2	6	9.1	0	5.3	4.8	0	5.6	0	2.7	3.7

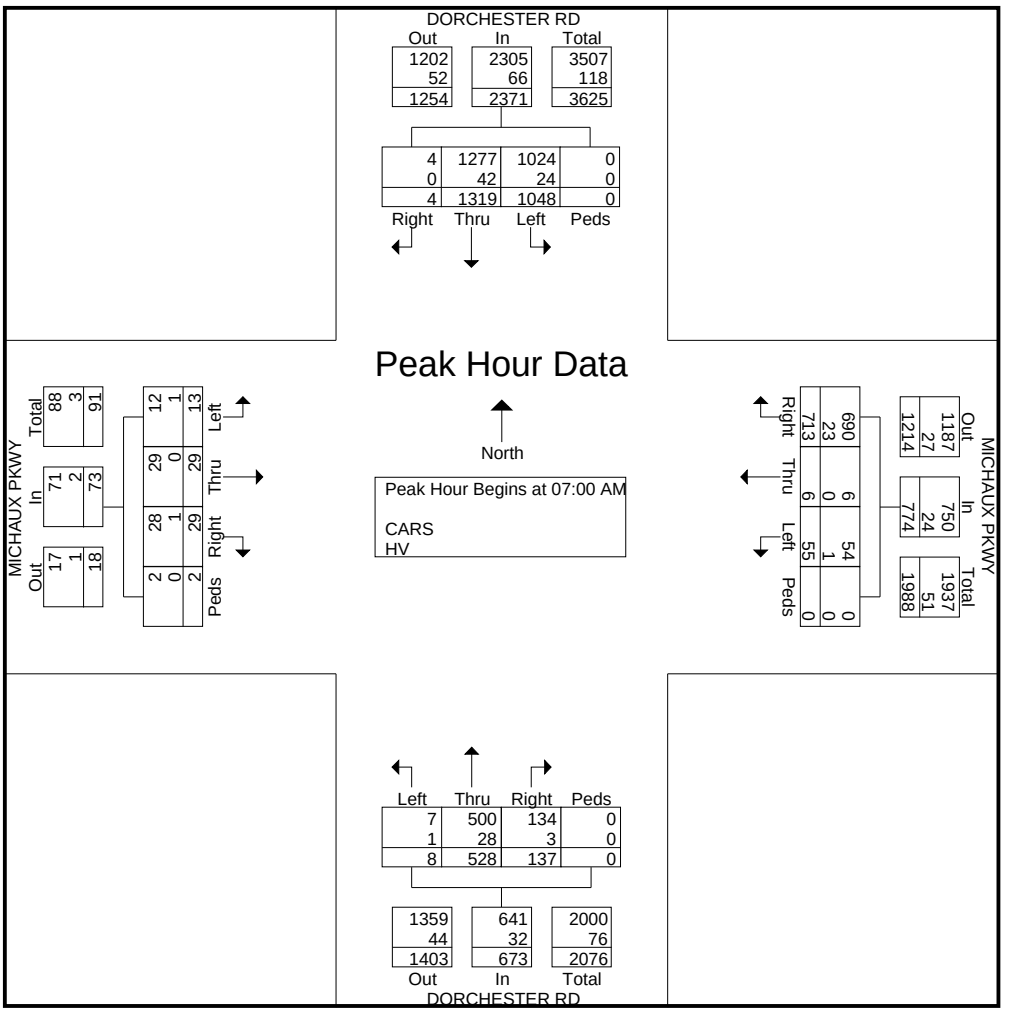


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #14 DORCHESTER&MICHAUXAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	DORCHESTER RD Southbound					MICHAUX PKWY Westbound					DORCHESTER RD Northbound					MICHAUX PKWY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**1**	282	249	0	532	**194**	0	13	0	**207**	27	106	2	0	135	5	8	3	0	16	890
07:15 AM	1	347	**277**	0	625	173	**3**	10	0	186	32	135	0	0	167	**13**	6	2	0	21	999
07:30 AM	1	298	259	0	558	170	1	9	0	180	**48**	141	**5**	0	**194**	10	**10**	**4**	0	**24**	956
07:45 AM	1	**392**	263	0	**656**	176	2	**23**	0	201	30	**146**	1	0	177	1	5	4	**2**	12	**1046**
Total Volume	4	1319	1048	0	2371	713	6	55	0	774	137	528	8	0	673	29	29	13	2	73	3891
% App. Total	0.2	55.6	44.2	0		92.1	0.8	7.1	0		20.4	78.5	1.2	0		39.7	39.7	17.8	2.7		
PHF	1.00	.841	.946	.000	.904	.919	.500	.598	.000	.935	.714	.904	.400	.000	.867	.558	.725	.813	.250	.760	.930
CARS	4	1277	1024																		
% CARS	100	96.8	97.7	0	97.2	96.8	100	98.2	0	96.9	97.8	94.7	87.5	0	95.2	96.6	100	92.3	100	97.3	96.8
HV	0	42	24	0	66	23	0	1	0	24	3	28	1	0	32	1	0	1	0	2	124
% HV	0	3.2	2.3	0	2.8	3.2	0	1.8	0	3.1	2.2	5.3	12.5	0	4.8	3.4	0	7.7	0	2.7	3.2



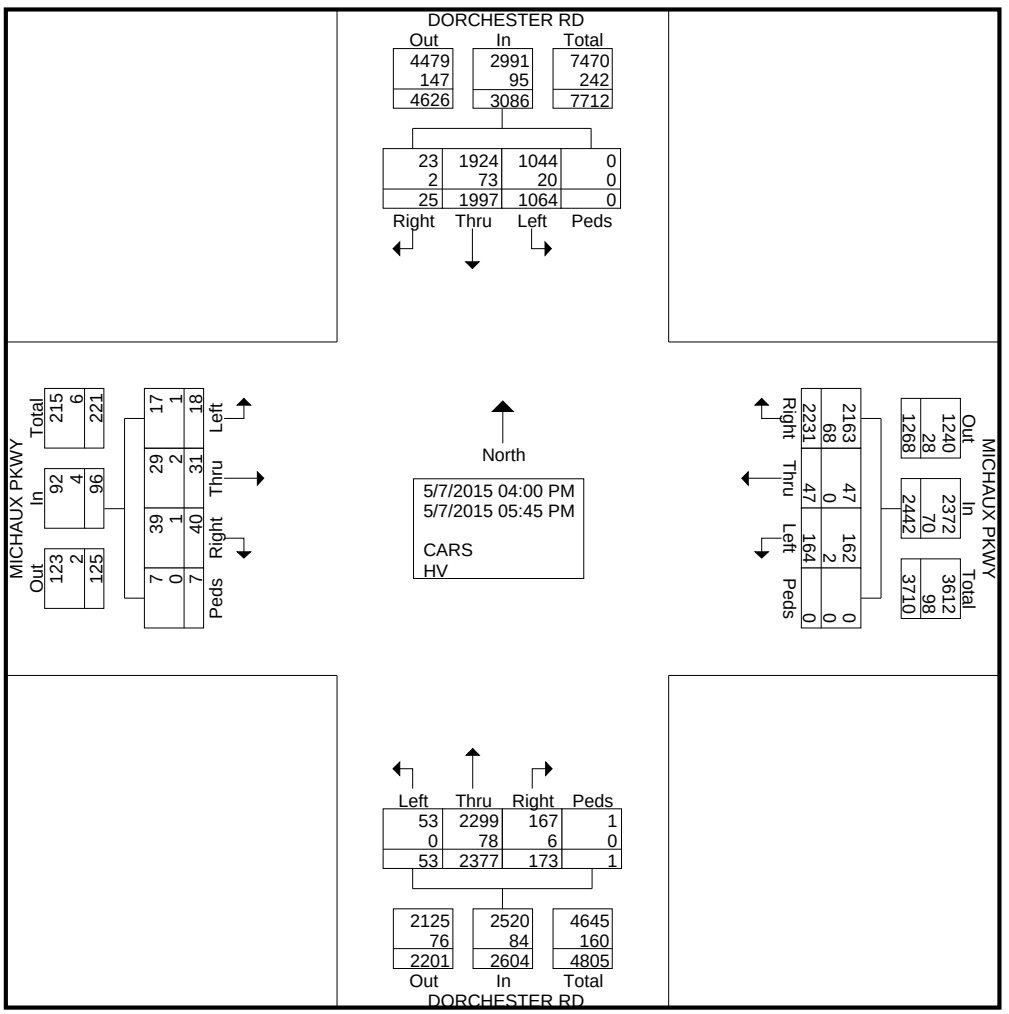
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #14 DORCHESTER&MICHAUXPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					MICHAUX PKWY Westbound					DORCHESTER RD Northbound					MICHAUX PKWY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	3	217	100	0	320	283	4	13	0	300	16	292	1	1	310	2	3	2	1	8	938
04:15 PM	6	309	167	0	482	288	3	19	0	310	24	230	4	0	258	3	4	2	1	10	1060
04:30 PM	2	257	138	0	397	259	6	33	0	298	23	307	11	0	341	6	5	2	0	13	1049
04:45 PM	5	285	132	0	422	282	6	22	0	310	24	326	8	0	358	7	4	1	1	13	1103
Total	16	1068	537	0	1621	1112	19	87	0	1218	87	1155	24	1	1267	18	16	7	3	44	4150
05:00 PM	0	261	118	0	379	282	8	18	0	308	21	292	9	0	322	7	3	3	1	14	1023
05:15 PM	5	255	150	0	410	270	4	19	0	293	22	296	8	0	326	1	4	5	1	11	1040
05:30 PM	3	205	126	0	334	279	7	15	0	301	16	313	3	0	332	5	4	1	1	11	978
05:45 PM	1	208	133	0	342	288	9	25	0	322	27	321	9	0	357	9	4	2	1	16	1037
Total	9	929	527	0	1465	1119	28	77	0	1224	86	1222	29	0	1337	22	15	11	4	52	4078
Grand Total	25	1997	1064	0	3086	2231	47	164	0	2442	173	2377	53	1	2604	40	31	18	7	96	8228
Apprch %	0.8	64.7	34.5	0		91.4	1.9	6.7	0		6.6	91.3	2	0		41.7	32.3	18.8	7.3		
Total %	0.3	24.3	12.9	0	37.5	27.1	0.6	2	0	29.7	2.1	28.9	0.6	0	31.6	0.5	0.4	0.2	0.1	1.2	
CARS	23	1924	1044			2163						2299									
% CARS	92	96.3	98.1	0	96.9	97	100	98.8	0	97.1	96.5	96.7	100	100	96.8	97.5	93.5	94.4	100	95.8	96.9
HV	2	73	20	0	95	68	0	2	0	70	6	78	0	0	84	1	2	1	0	4	253
% HV	8	3.7	1.9	0	3.1	3	0	1.2	0	2.9	3.5	3.3	0	0	3.2	2.5	6.5	5.6	0	4.2	3.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #14 DORCHESTER&MICHAUXPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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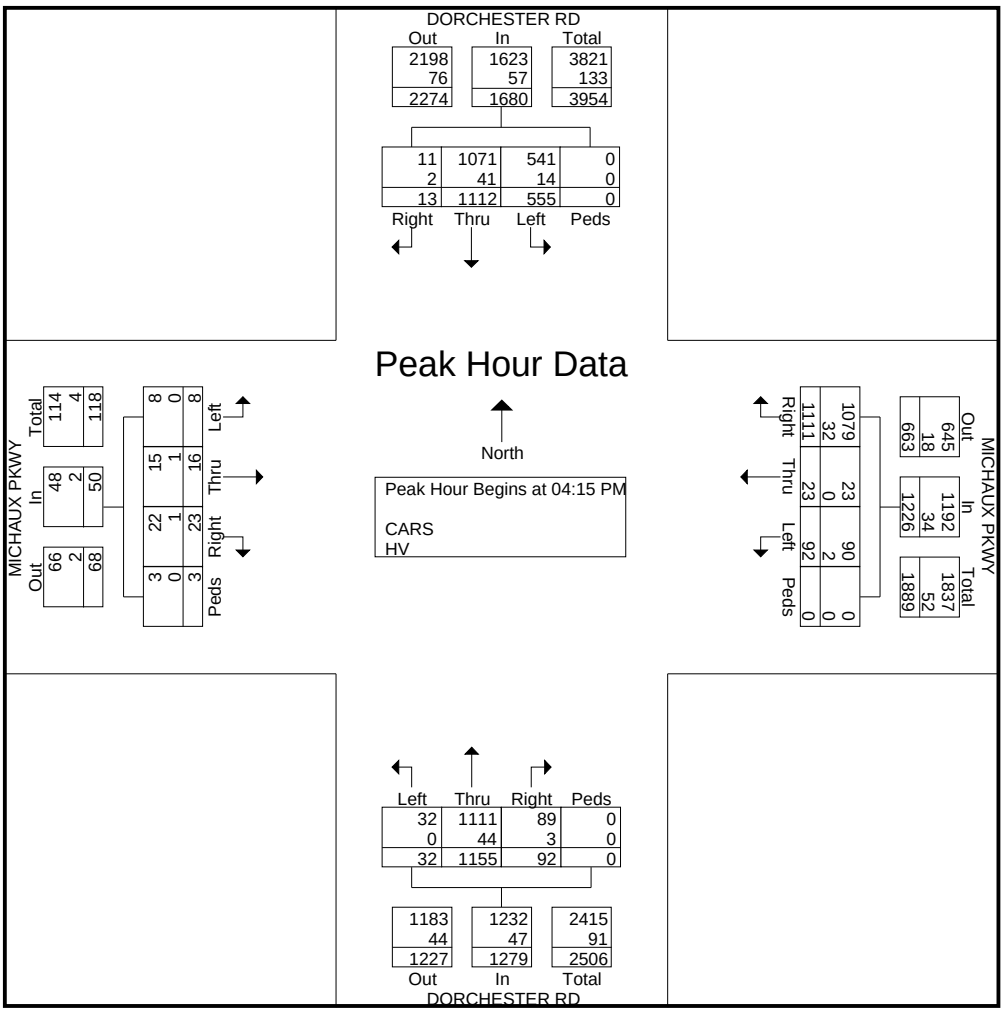
	DORCHESTER RD Southbound					MICHAUX PKWY Westbound					DORCHESTER RD Northbound					MICHAUX PKWY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**6**	**309**	**167**	0	**482**	**288**	3	19	0	**310**	**24**	230	4	0	258	3	4	2	**1**	10	1060
04:30 PM	2	257	138	0	397	259	6	**33**	0	298	23	307	**11**	0	341	6	**5**	2	0	13	1049
04:45 PM	5	285	132	0	422	282	6	22	0	310	24	**326**	8	0	**358**	**7**	4	1	1	13	**1103**
05:00 PM	0	261	118	0	379	282	**8**	18	0	308	21	292	9	0	322	7	3	**3**	1	**14**	1023
Total Volume	13	1112	555	0	1680	1111	23	92	0	1226	92	1155	32	0	1279	23	16	8	3	50	4235
% App. Total	0.8	66.2	33	0		90.6	1.9	7.5	0		7.2	90.3	2.5	0		46	32	16	6		
PHF	.542	.900	.831	.000	.871	.964	.719	.697	.000	.989	.958	.886	.727	.000	.893	.821	.800	.667	.750	.893	.960
CARS	11	1071				1079						1111									
% CARS	84.6	96.3	97.5	0	96.6	97.1	100	97.8	0	97.2	96.7	96.2	100	0	96.3	95.7	93.8	100	100	96.0	96.7
HV	2	41	14	0	57	32	0	2	0	34	3	44	0	0	47	1	1	0	0	2	140
% HV	15.4	3.7	2.5	0	3.4	2.9	0	2.2	0	2.8	3.3	3.8	0	0	3.7	4.3	6.3	0	0	4.0	3.3



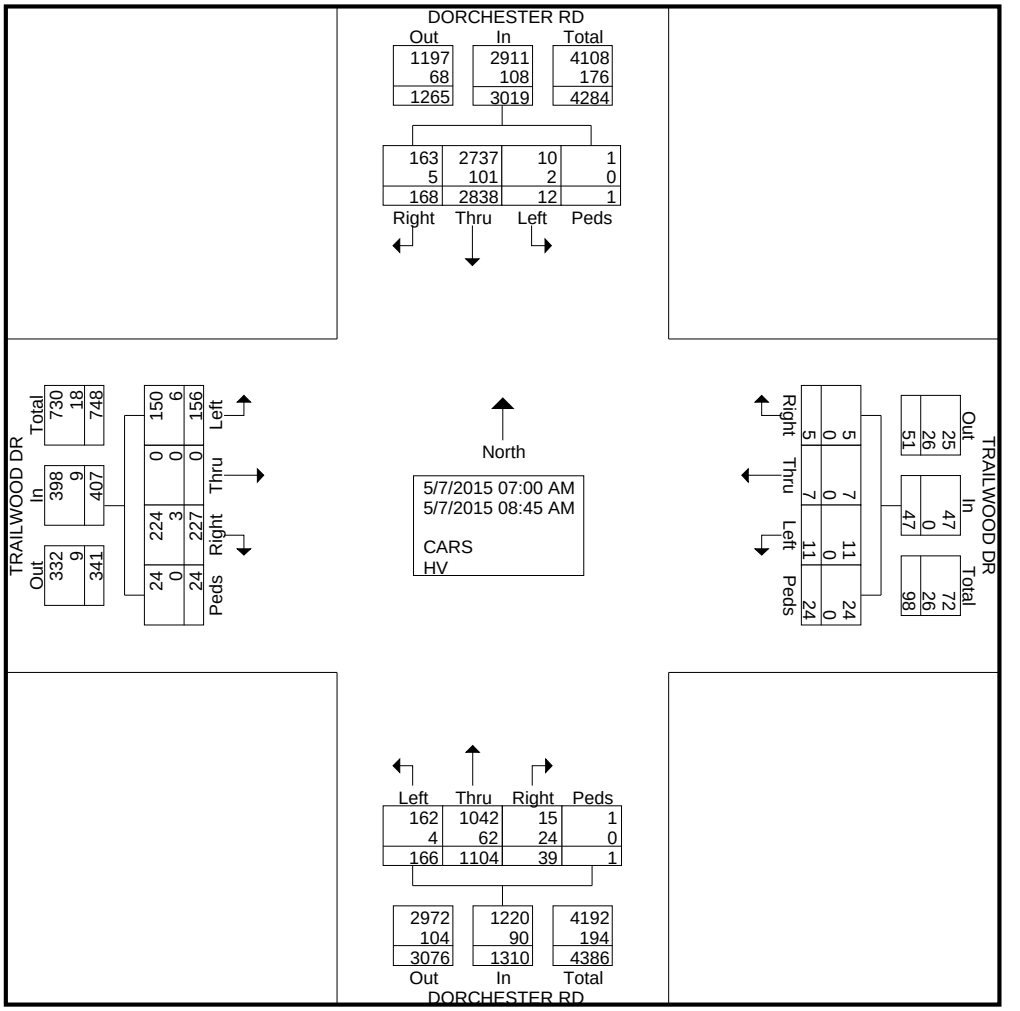
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #15 DORCHESTER&TRAILWOODAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					TRAILWOOD DR Westbound					DORCHESTER RD Northbound					TRAILWOOD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	43	313	3	0	359	0	4	4	6	14	12	114	50	1	177	42	0	18	3	63	613
07:15 AM	59	268	1	0	328	0	3	2	9	14	3	136	46	0	185	61	0	45	9	115	642
07:30 AM	34	385	1	0	420	2	0	1	2	5	11	145	27	0	183	58	0	51	5	114	722
07:45 AM	11	450	3	0	464	0	0	0	3	3	1	165	12	0	178	16	0	11	4	31	676
Total	147	1416	8	0	1571	2	7	7	20	36	27	560	135	1	723	177	0	125	21	323	2653
08:00 AM	1	379	1	1	382	0	0	0	2	2	6	146	11	0	163	17	0	5	1	23	570
08:15 AM	4	384	2	0	390	1	0	0	1	2	1	124	8	0	133	11	0	7	0	18	543
08:30 AM	10	327	0	0	337	1	0	2	0	3	3	132	6	0	141	5	0	9	1	15	496
08:45 AM	6	332	1	0	339	1	0	2	1	4	2	142	6	0	150	17	0	10	1	28	521
Total	21	1422	4	1	1448	3	0	4	4	11	12	544	31	0	587	50	0	31	3	84	2130
Grand Total	168	2838	12	1	3019	5	7	11	24	47	39	1104	166	1	1310	227	0	156	24	407	4783
Apprch %	5.6	94	0.4	0		10.6	14.9	23.4	51.1		3	84.3	12.7	0.1		55.8	0	38.3	5.9		
Total %	3.5	59.3	0.3	0	63.1	0.1	0.1	0.2	0.5	1	0.8	23.1	3.5	0	27.4	4.7	0	3.3	0.5	8.5	
CARS	163	2737										1042									
% CARS	97	96.4	83.3	100	96.4	100	100	100	100	100	38.5	94.4	97.6	100	93.1	98.7	0	96.2	100	97.8	95.7
HV	5	101	2	0	108	0	0	0	0	0	24	62	4	0	90	3	0	6	0	9	207
% HV	3	3.6	16.7	0	3.6	0	0	0	0	0	61.5	5.6	2.4	0	6.9	1.3	0	3.8	0	2.2	4.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #15 DORCHESTER&TRAILWOODAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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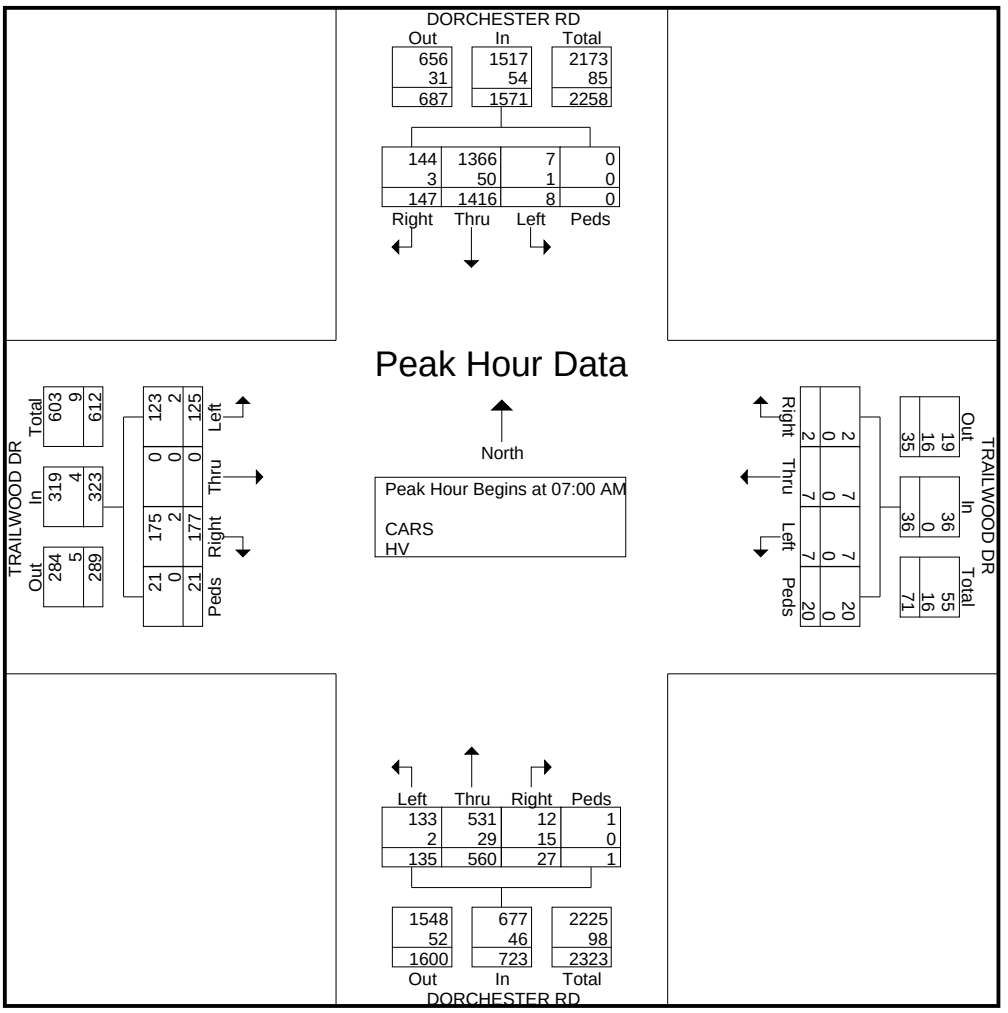
	DORCHESTER RD Southbound					TRAILWOOD DR Westbound					DORCHESTER RD Northbound					TRAILWOOD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	43	313	**3**	0	359	0	**4**	**4**	6	**14**	**12**	114	**50**	**1**	177	42	0	18	3	63	613
07:15 AM	**59**	268	1	0	328	0	3	2	**9**	14	3	136	46	0	**185**	**61**	0	45	**9**	**115**	642
07:30 AM	34	385	1	0	420	**2**	0	1	2	5	11	145	27	0	183	58	0	**51**	5	114	**722**
07:45 AM	11	**450**	3	0	**464**	0	0	0	3	3	1	**165**	12	0	178	16	0	11	4	31	676
Total Volume	147	1416	8	0	1571	2	7	7	20	36	27	560	135	1	723	177	0	125	21	323	2653
% App. Total	9.4	90.1	0.5	0		5.6	19.4	19.4	55.6		3.7	77.5	18.7	0.1		54.8	0	38.7	6.5		
PHF	.623	.787	.667	.000	.846	.250	.438	.438	.556	.643	.563	.848	.675	.250	.977	.725	.000	.613	.583	.702	.919
CARS	144	1366																			
% CARS	98.0	96.5	87.5	0	96.6	100	100	100	100	100	44.4	94.8	98.5	100	93.6	98.9	0	98.4	100	98.8	96.1
HV	3	50	1	0	54	0	0	0	0	0	15	29	2	0	46	2	0	2	0	4	104
% HV	2.0	3.5	12.5	0	3.4	0	0	0	0	0	55.6	5.2	1.5	0	6.4	1.1	0	1.6	0	1.2	3.9



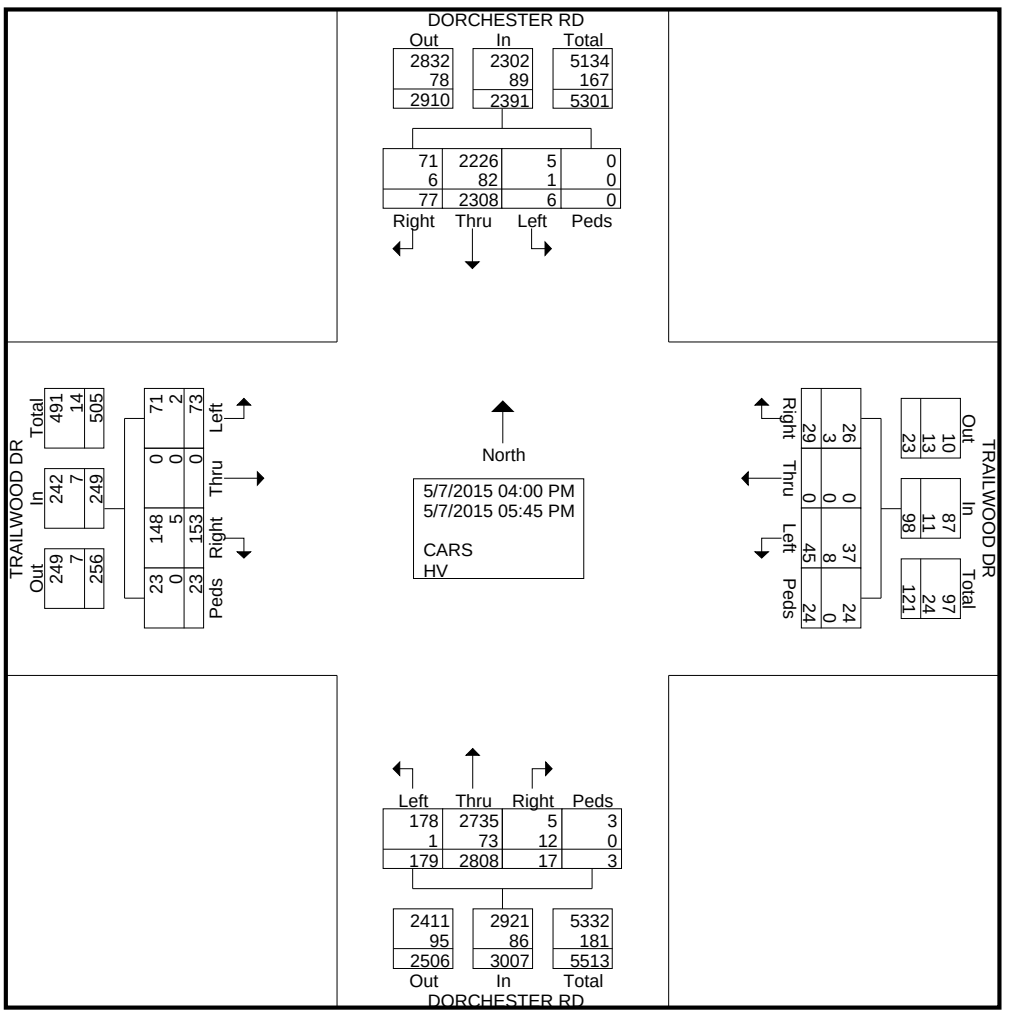
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #15 DORCHESTER&TRAILWOODPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					TRAILWOOD DR Westbound					DORCHESTER RD Northbound					TRAILWOOD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	12	262	2	0	276	1	0	1	5	7	8	306	22	1	337	28	0	12	1	41	661
04:15 PM	14	303	0	0	317	1	0	0	4	5	1	280	29	0	310	16	0	8	1	25	657
04:30 PM	10	318	1	0	329	5	0	2	2	9	1	351	17	0	369	23	0	12	3	38	745
04:45 PM	9	327	1	0	337	7	0	12	3	22	5	365	20	2	392	10	0	8	4	22	773
Total	45	1210	4	0	1259	14	0	15	14	43	15	1302	88	3	1408	77	0	40	9	126	2836
05:00 PM	10	300	1	0	311	9	0	19	1	29	0	382	19	0	401	20	0	13	3	36	777
05:15 PM	8	313	1	0	322	1	0	4	6	11	0	387	23	0	410	18	0	6	6	30	773
05:30 PM	10	244	0	0	254	4	0	7	2	13	2	373	21	0	396	18	0	5	0	23	686
05:45 PM	4	241	0	0	245	1	0	0	1	2	0	364	28	0	392	20	0	9	5	34	673
Total	32	1098	2	0	1132	15	0	30	10	55	2	1506	91	0	1599	76	0	33	14	123	2909
Grand Total	77	2308	6	0	2391	29	0	45	24	98	17	2808	179	3	3007	153	0	73	23	249	5745
Apprch %	3.2	96.5	0.3	0		29.6	0	45.9	24.5		0.6	93.4	6	0.1		61.4	0	29.3	9.2		
Total %	1.3	40.2	0.1	0	41.6	0.5	0	0.8	0.4	1.7	0.3	48.9	3.1	0.1	52.3	2.7	0	1.3	0.4	4.3	
CARS	71	2226										2735									
% CARS	92.2	96.4	83.3	0	96.3	89.7	0	82.2	100	88.8	29.4	97.4	99.4	100	97.1	96.7	0	97.3	100	97.2	96.6
HV	6	82	1	0	89	3	0	8	0	11	12	73	1	0	86	5	0	2	0	7	193
% HV	7.8	3.6	16.7	0	3.7	10.3	0	17.8	0	11.2	70.6	2.6	0.6	0	2.9	3.3	0	2.7	0	2.8	3.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #15 DORCHESTER&TRAILWOODPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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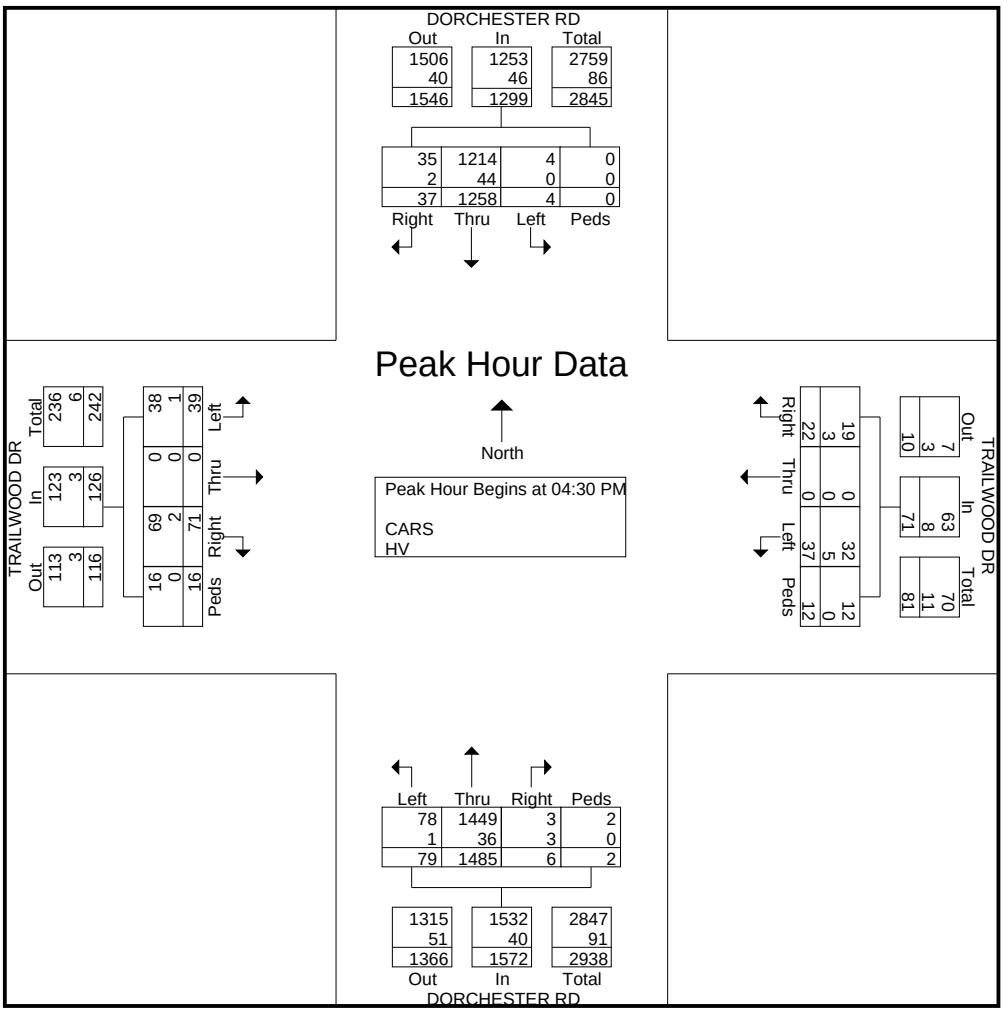
	DORCHESTER RD Southbound					TRAILWOOD DR Westbound					DORCHESTER RD Northbound					TRAILWOOD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**10**	318	**1**	0	329	5	0	2	2	9	1	351	17	0	369	**23**	0	12	3	**38**	745
04:45 PM	9	**327**	1	0	**337**	7	0	12	3	22	**5**	365	20	**2**	392	10	0	8	4	22	773
05:00 PM	10	300	1	0	311	**9**	0	**19**	1	**29**	0	382	19	0	401	20	0	**13**	3	36	**777**
05:15 PM	8	313	1	0	322	1	0	4	**6**	11	0	**387**	**23**	0	**410**	18	0	6	**6**	30	773
Total Volume	37	1258	4	0	1299	22	0	37	12	71	6	1485	79	2	1572	71	0	39	16	126	3068
% App. Total	2.8	96.8	0.3	0		31	0	52.1	16.9		0.4	94.5	5	0.1		56.3	0	31	12.7		
PHF	.925	.962	1.00	.000	.964	.611	.000	.487	.500	.612	.300	.959	.859	.250	.959	.772	.000	.750	.667	.829	.987
CARS	35	1214										1449									
% CARS	94.6	96.5	100	0	96.5	86.4	0	86.5	100	88.7	50.0	97.6	98.7	100	97.5	97.2	0	97.4	100	97.6	96.8
HV	2	44	0	0	46	3	0	5	0	8	3	36	1	0	40	2	0	1	0	3	97
% HV	5.4	3.5	0	0	3.5	13.6	0	13.5	0	11.3	50.0	2.4	1.3	0	2.5	2.8	0	2.6	0	2.4	3.2



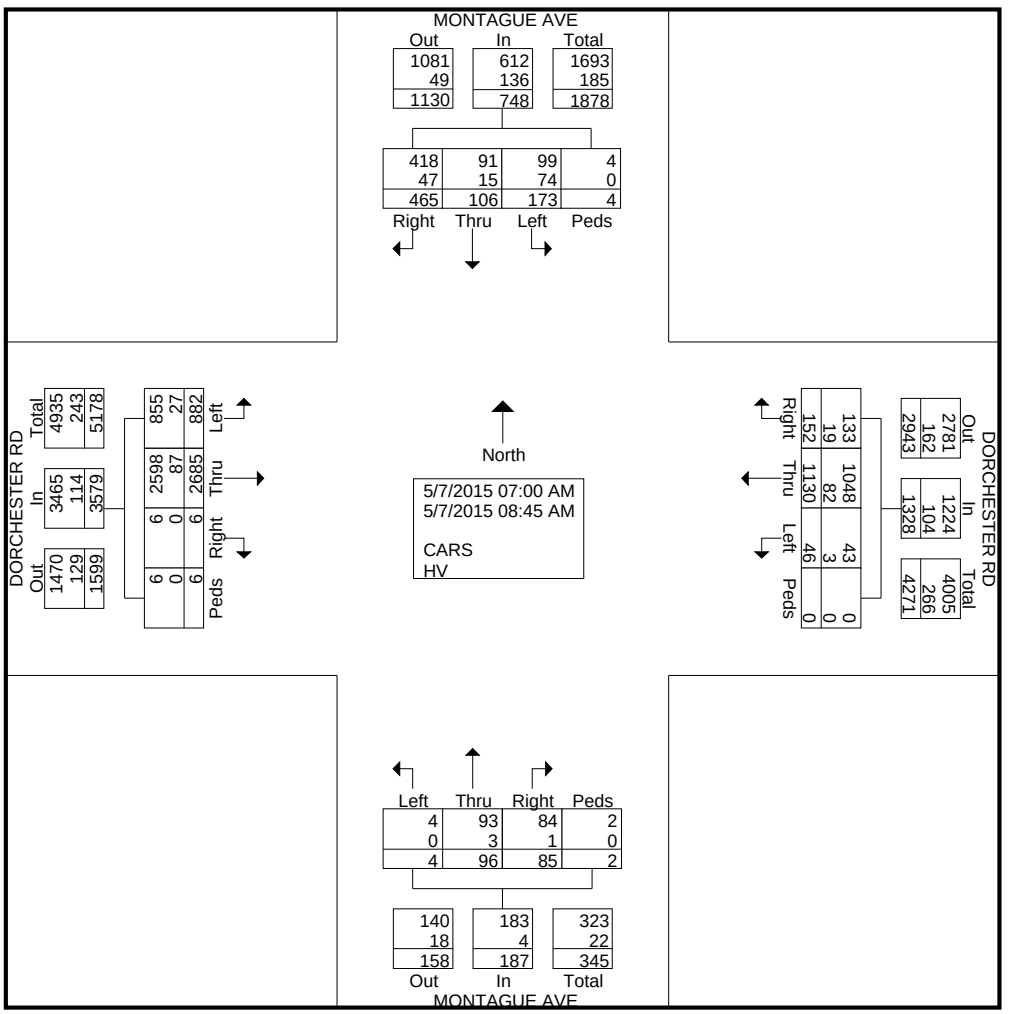
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #16 MONTAGUE&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MONTAGUE AVE Southbound					DORCHESTER RD Westbound					MONTAGUE AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	43	5	21	0	69	12	138	7	0	157	7	8	0	0	15	0	333	120	1	454	695
07:15 AM	63	13	24	0	100	13	158	8	0	179	10	10	1	1	22	0	314	110	0	424	725
07:30 AM	53	23	30	0	106	8	133	0	0	141	14	14	1	0	29	2	399	111	1	513	789
07:45 AM	72	17	18	2	109	7	144	7	0	158	21	12	0	0	33	1	385	101	0	487	787
Total	231	58	93	2	384	40	573	22	0	635	52	44	2	1	99	3	1431	442	2	1878	2996
08:00 AM	58	12	21	0	91	20	141	8	0	169	7	19	0	0	26	0	377	115	4	496	782
08:15 AM	52	13	21	0	86	28	154	6	0	188	7	14	0	1	22	0	317	124	0	441	737
08:30 AM	63	13	18	2	96	28	131	7	0	166	9	11	1	0	21	1	281	109	0	391	674
08:45 AM	61	10	20	0	91	36	131	3	0	170	10	8	1	0	19	2	279	92	0	373	653
Total	234	48	80	2	364	112	557	24	0	693	33	52	2	1	88	3	1254	440	4	1701	2846
Grand Total	465	106	173	4	748	152	1130	46	0	1328	85	96	4	2	187	6	2685	882	6	3579	5842
Apprch %	62.2	14.2	23.1	0.5		11.4	85.1	3.5	0		45.5	51.3	2.1	1.1		0.2	75	24.6	0.2		
Total %	8	1.8	3	0.1	12.8	2.6	19.3	0.8	0	22.7	1.5	1.6	0.1	0	3.2	0.1	46	15.1	0.1	61.3	
CARS	418	91	99	4	612	133	1048										2598				
% CARS	89.9	85.8	57.2	100	81.8	87.5	92.7	93.5	0	92.2	98.8	96.9	100	100	97.9	100	96.8	96.9	100	96.8	93.9
HV	47	15	74	0	136	19	82	3	0	104	1	3	0	0	4	0	87	27	0	114	358
% HV	10.1	14.2	42.8	0	18.2	12.5	7.3	6.5	0	7.8	1.2	3.1	0	0	2.1	0	3.2	3.1	0	3.2	6.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #16 MONTAGUE&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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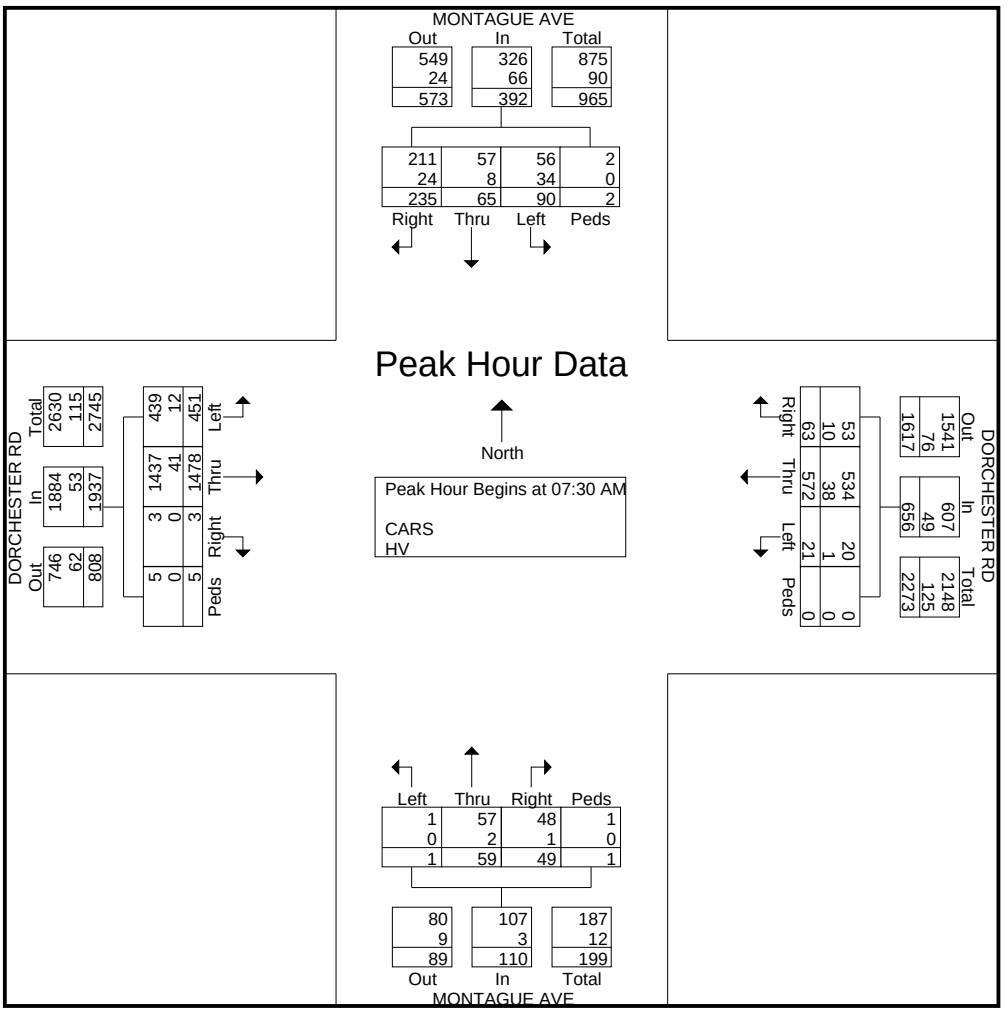
	MONTAGUE AVE Southbound					DORCHESTER RD Westbound					MONTAGUE AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	53	**23**	**30**	0	106	8	133	0	0	141	14	14	**1**	0	29	**2**	**399**	111	1	**513**	**789**
07:45 AM	**72**	17	18	**2**	**109**	7	144	7	0	158	**21**	12	0	0	**33**	1	385	101	0	487	787
08:00 AM	58	12	21	0	91	20	141	**8**	0	169	7	**19**	0	0	26	0	377	115	**4**	496	782
08:15 AM	52	13	21	0	86	**28**	**154**	6	0	**188**	7	14	0	**1**	22	0	317	**124**	0	441	737
Total Volume	235	65	90	2	392	63	572	21	0	656	49	59	1	1	110	3	1478	451	5	1937	3095
% App. Total	59.9	16.6	23	0.5		9.6	87.2	3.2	0		44.5	53.6	0.9	0.9		0.2	76.3	23.3	0.3		
PHF	.816	.707	.750	.250	.899	.563	.929	.656	.000	.872	.583	.776	.250	.250	.833	.375	.926	.909	.313	.944	.981
CARS	211	57	56	2	326	53	534	20	0	607	48	57	1	1	107	3	1437				
% CARS	89.8	87.7	62.2	100	83.2	84.1	93.4	95.2	0	92.5	98.0	96.6	100	100	97.3	100	97.2	97.3	100	97.3	94.5
HV	24	8	34	0	66	10	38	1	0	49	1	2	0	0	3	0	41	12	0	53	171
% HV	10.2	12.3	37.8	0	16.8	15.9	6.6	4.8	0	7.5	2.0	3.4	0	0	2.7	0	2.8	2.7	0	2.7	5.5



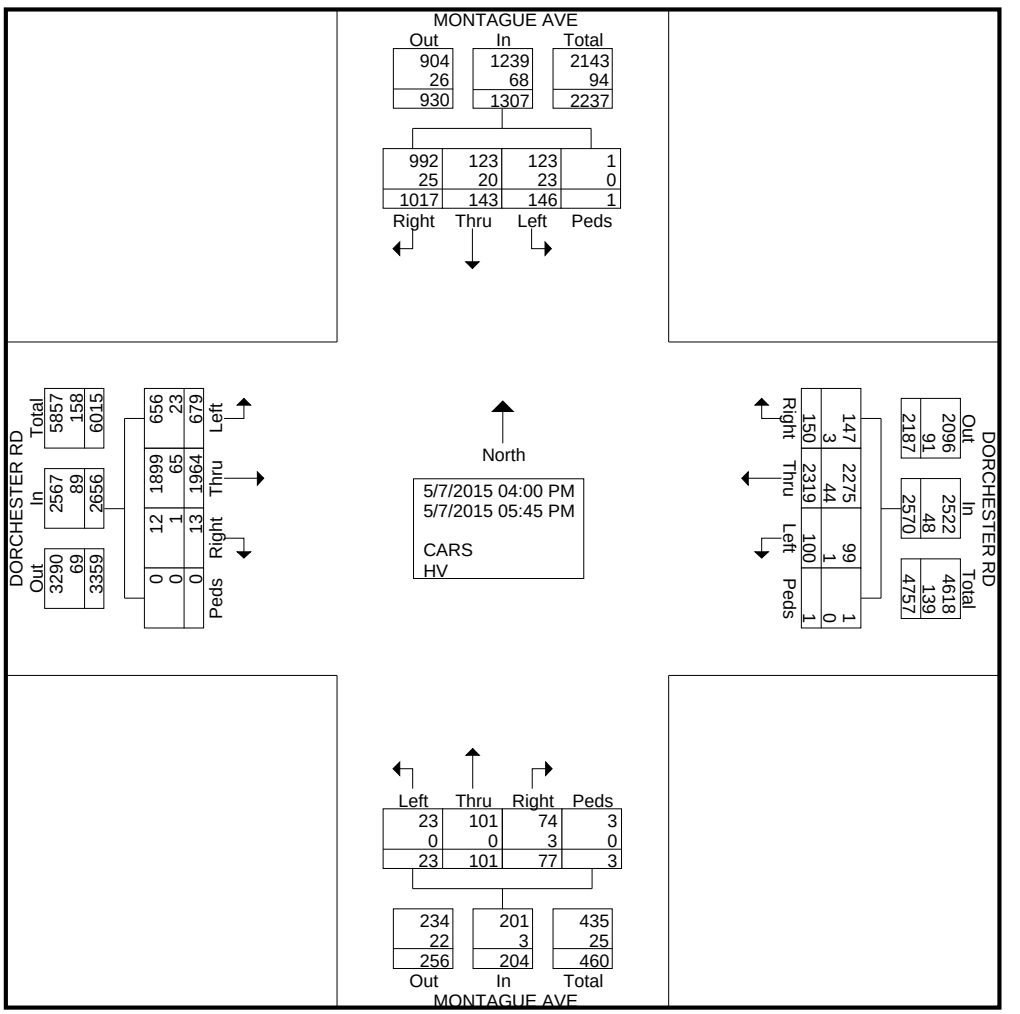
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #16 MONTAGUE&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MONTAGUE AVE Southbound					DORCHESTER RD Westbound					MONTAGUE AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	119	17	16	1	153	26	291	8	0	325	10	9	4	0	23	1	286	84	0	371	872
04:15 PM	136	20	22	0	178	11	292	15	1	319	7	19	6	0	32	3	232	85	0	320	849
04:30 PM	119	16	16	0	151	17	285	8	0	310	12	15	4	0	31	2	267	77	0	346	838
04:45 PM	150	10	17	0	177	20	276	3	0	299	11	15	5	0	31	3	274	78	0	355	862
Total	524	63	71	1	659	74	1144	34	1	1253	40	58	19	0	117	9	1059	324	0	1392	3421
05:00 PM	126	24	24	0	174	20	345	12	0	377	7	13	1	0	21	2	255	96	0	353	925
05:15 PM	137	10	23	0	170	19	326	16	0	361	10	9	2	1	22	2	264	103	0	369	922
05:30 PM	128	22	10	0	160	18	260	14	0	292	9	13	1	0	23	0	194	80	0	274	749
05:45 PM	102	24	18	0	144	19	244	24	0	287	11	8	0	2	21	0	192	76	0	268	720
Total	493	80	75	0	648	76	1175	66	0	1317	37	43	4	3	87	4	905	355	0	1264	3316
Grand Total	1017	143	146	1	1307	150	2319	100	1	2570	77	101	23	3	204	13	1964	679	0	2656	6737
Apprch %	77.8	10.9	11.2	0.1		5.8	90.2	3.9	0		37.7	49.5	11.3	1.5		0.5	73.9	25.6	0		
Total %	15.1	2.1	2.2	0	19.4	2.2	34.4	1.5	0	38.1	1.1	1.5	0.3	0	3	0.2	29.2	10.1	0	39.4	
CARS	992	123	123	1	1239	147	2275										1899				
% CARS	97.5	86	84.2	100	94.8	98	98.1	99	100	98.1	96.1	100	100	100	98.5	92.3	96.7	96.6	0	96.6	96.9
HV	25	20	23	0	68	3	44	1	0	48	3	0	0	0	3	1	65	23	0	89	208
% HV	2.5	14	15.8	0	5.2	2	1.9	1	0	1.9	3.9	0	0	0	1.5	7.7	3.3	3.4	0	3.4	3.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #16 MONTAGUE&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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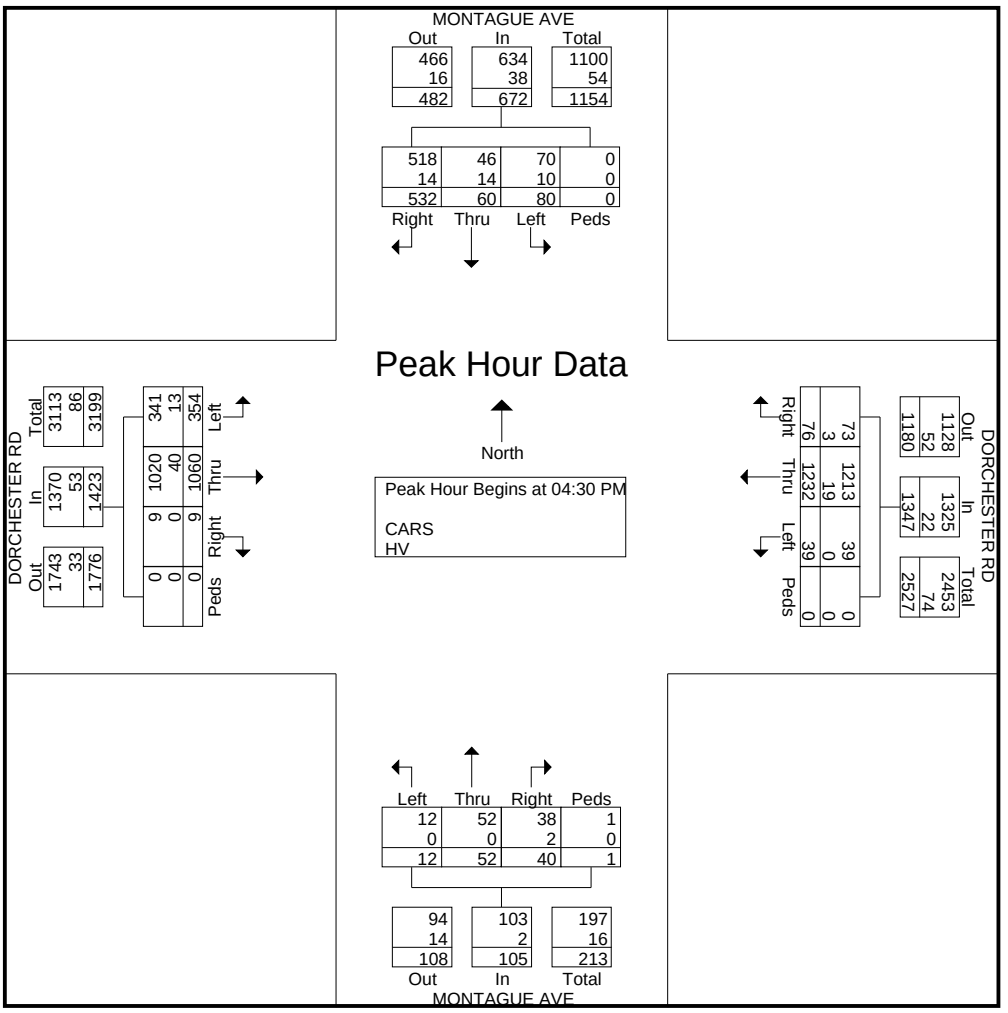
	MONTAGUE AVE Southbound					DORCHESTER RD Westbound					MONTAGUE AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	119	16	16	0	151	17	285	8	0	310	**12**	**15**	4	0	**31**	2	267	77	0	346	838
04:45 PM	**150**	10	17	0	**177**	**20**	276	3	0	299	11	15	**5**	0	31	**3**	**274**	78	0	355	862
05:00 PM	126	**24**	**24**	0	174	20	**345**	12	0	**377**	7	13	1	0	21	2	255	96	0	353	**925**
05:15 PM	137	10	23	0	170	19	326	**16**	0	361	10	9	2	**1**	22	2	264	**103**	0	**369**	922
Total Volume	532	60	80	0	672	76	1232	39	0	1347	40	52	12	1	105	9	1060	354	0	1423	3547
% App. Total	79.2	8.9	11.9	0		5.6	91.5	2.9	0		38.1	49.5	11.4	1		0.6	74.5	24.9	0		
PHF	.887	.625	.833	.000	.949	.950	.893	.609	.000	.893	.833	.867	.600	.250	.847	.750	.967	.859	.000	.964	.959
CARS	518	46	70	0	634	73	1213										1020				
% CARS	97.4	76.7	87.5	0	94.3	96.1	98.5	100	0	98.4	95.0	100	100	100	98.1	100	96.2	96.3	0	96.3	96.8
HV	14	14	10	0	38	3	19	0	0	22	2	0	0	0	2	0	40	13	0	53	115
% HV	2.6	23.3	12.5	0	5.7	3.9	1.5	0	0	1.6	5.0	0	0	0	1.9	0	3.8	3.7	0	3.7	3.2



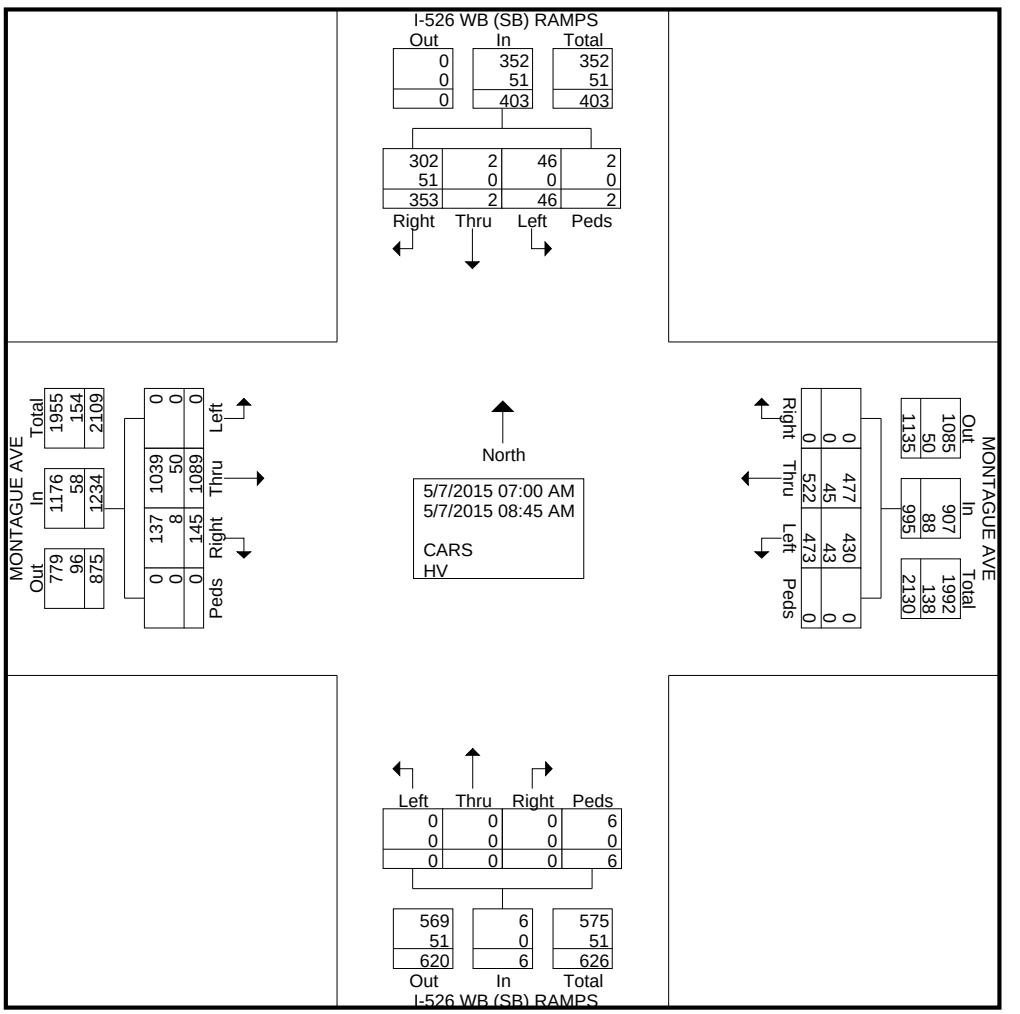
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #17 I526WBSB&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 WB (SB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	41	0	4	1	46	0	44	34	0	78	0	0	0	1	1	4	130	0	0	134	259
07:15 AM	56	1	8	1	66	0	68	52	0	120	0	0	0	2	2	11	145	0	0	156	344
07:30 AM	43	0	3	0	46	0	71	52	0	123	0	0	0	0	0	13	129	0	0	142	311
07:45 AM	47	0	5	0	52	0	81	86	0	167	0	0	0	1	1	12	137	0	0	149	369
Total	187	1	20	2	210	0	264	224	0	488	0	0	0	4	4	40	541	0	0	581	1283
08:00 AM	37	1	6	0	44	0	69	77	0	146	0	0	0	0	0	20	145	0	0	165	355
08:15 AM	41	0	7	0	48	0	52	58	0	110	0	0	0	0	0	34	131	0	0	165	323
08:30 AM	45	0	3	0	48	0	77	67	0	144	0	0	0	1	1	28	158	0	0	186	379
08:45 AM	43	0	10	0	53	0	60	47	0	107	0	0	0	1	1	23	114	0	0	137	298
Total	166	1	26	0	193	0	258	249	0	507	0	0	0	2	2	105	548	0	0	653	1355
Grand Total	353	2	46	2	403	0	522	473	0	995	0	0	0	6	6	145	1089	0	0	1234	2638
Apprch %	87.6	0.5	11.4	0.5		0	52.5	47.5	0		0	0	0	100		11.8	88.2	0	0		
Total %	13.4	0.1	1.7	0.1	15.3	0	19.8	17.9	0	37.7	0	0	0	0.2	0.2	5.5	41.3	0	0	46.8	
CARS	302	2	46	2	352	0	477	430	0	907	0	0	0	6	6	137	1039				
% CARS	85.6	100	100	100	87.3	0	91.4	90.9	0	91.2	0	0	0	100	100	94.5	95.4	0	0	95.3	92.5
HV	51	0	0	0	51	0	45	43	0	88	0	0	0	0	0	8	50	0	0	58	197
% HV	14.4	0	0	0	12.7	0	8.6	9.1	0	8.8	0	0	0	0	0	5.5	4.6	0	0	4.7	7.5



All Traffic Data Services, Inc.

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File Name : #17 I526WBSB&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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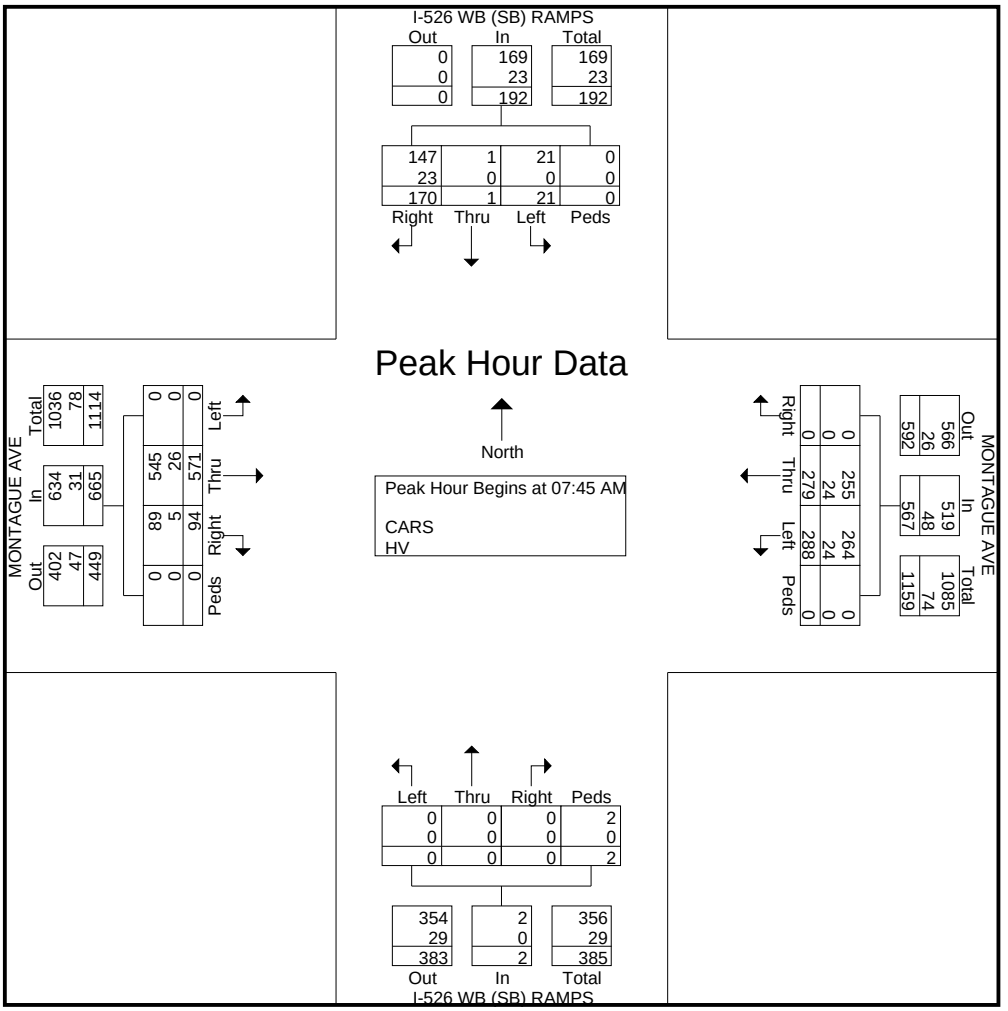
	I-526 WB (SB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 WB (SB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**47**	0	5	0	**52**	0	**81**	**86**	0	**167**	0	0	0	**1**	**1**	12	137	0	0	149	369
08:00 AM	37	**1**	6	0	44	0	69	77	0	146	0	0	0	0	0	20	145	0	0	165	355
08:15 AM	41	0	**7**	0	48	0	52	58	0	110	0	0	0	0	0	**34**	131	0	0	165	323
08:30 AM	45	0	3	0	48	0	77	67	0	144	0	0	0	1	1	28	**158**	0	0	**186**	**379**
Total Volume	170	1	21	0	192	0	279	288	0	567	0	0	0	2	2	94	571	0	0	665	1426
% App. Total	88.5	0.5	10.9	0		0	49.2	50.8	0		0	0	0	100		14.1	85.9	0	0		
PHF	.904	.250	.750	.000	.923	.000	.861	.837	.000	.849	.000	.000	.000	.500	.500	.691	.903	.000	.000	.894	.941
CARS	147	1	21	0	169	0	255	264	0	519	0	0	0	2	2	89	545	0	0	634	1324
% CARS	86.5	100	100	0	88.0	0	91.4	91.7	0	91.5	0	0	0	100	100	94.7	95.4	0	0	95.3	92.8
HV	23	0	0	0	23	0	24	24	0	48	0	0	0	0	0	5	26	0	0	31	102
% HV	13.5	0	0	0	12.0	0	8.6	8.3	0	8.5	0	0	0	0	0	5.3	4.6	0	0	4.7	7.2



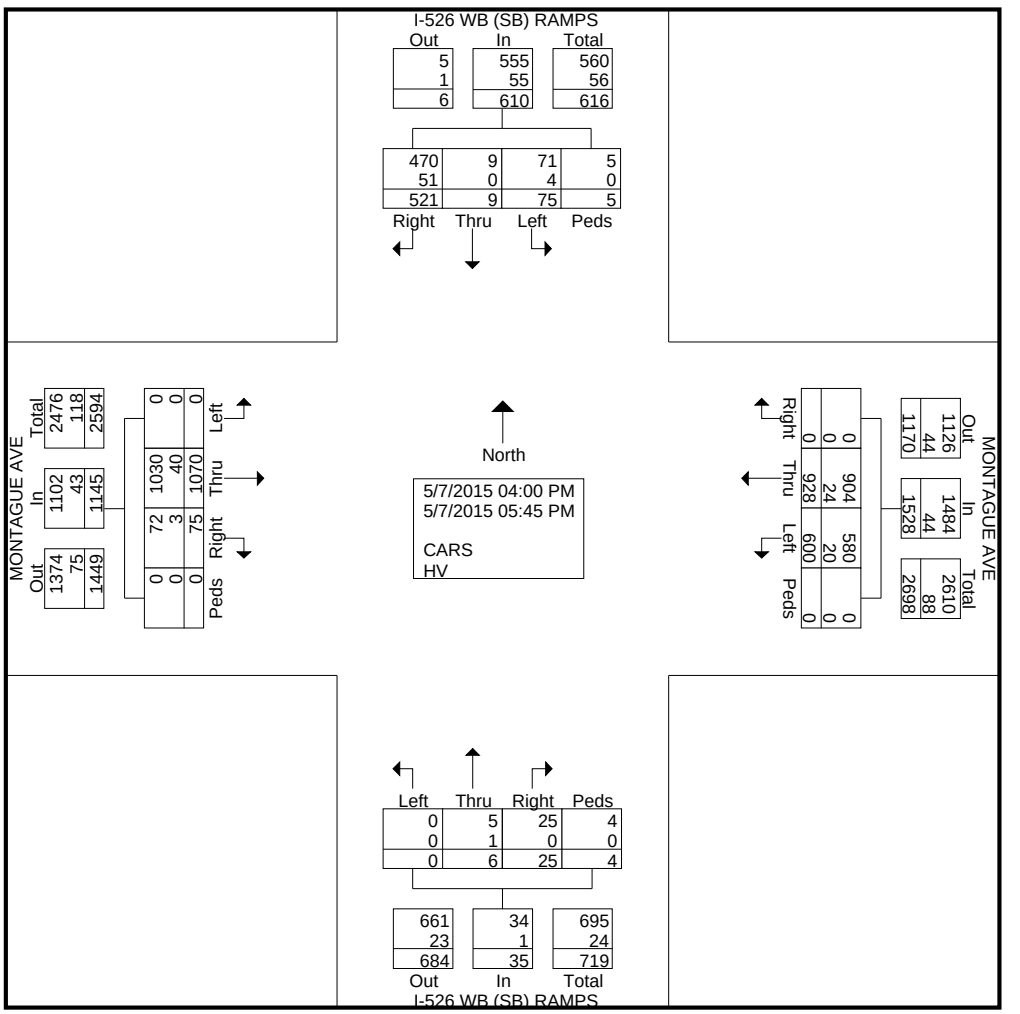
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #17 I526WBSB&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 WB (SB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	68	0	10	0	78	0	102	75	0	177	0	5	0	1	6	9	131	0	0	140	401
04:15 PM	77	3	8	1	89	0	119	63	0	182	0	1	0	0	1	10	143	0	0	153	425
04:30 PM	60	1	10	1	72	0	118	83	0	201	0	0	0	0	0	8	149	0	0	157	430
04:45 PM	64	2	13	0	79	0	103	70	0	173	25	0	0	2	27	8	113	0	0	121	400
Total	269	6	41	2	318	0	442	291	0	733	25	6	0	3	34	35	536	0	0	571	1656
05:00 PM	66	0	9	1	76	0	123	93	0	216	0	0	0	0	0	5	149	0	0	154	446
05:15 PM	68	3	9	1	81	0	120	71	0	191	0	0	0	0	0	7	119	0	0	126	398
05:30 PM	61	0	7	1	69	0	127	79	0	206	0	0	0	0	0	16	139	0	0	155	430
05:45 PM	57	0	9	0	66	0	116	66	0	182	0	0	0	1	1	12	127	0	0	139	388
Total	252	3	34	3	292	0	486	309	0	795	0	0	0	1	1	40	534	0	0	574	1662
Grand Total	521	9	75	5	610	0	928	600	0	1528	25	6	0	4	35	75	1070	0	0	1145	3318
Apprch %	85.4	1.5	12.3	0.8		0	60.7	39.3	0		71.4	17.1	0	11.4		6.6	93.4	0	0		
Total %	15.7	0.3	2.3	0.2	18.4	0	28	18.1	0	46.1	0.8	0.2	0	0.1	1.1	2.3	32.2	0	0	34.5	
CARS	470	9	71	5	555	0	904	580	0	1484	25	5	0	4	34	72	1030				
% CARS	90.2	100	94.7	100	91	0	97.4	96.7	0	97.1	100	83.3	0	100	97.1	96	96.3	0	0	96.2	95.7
HV	51	0	4	0	55	0	24	20	0	44	0	1	0	0	1	3	40	0	0	43	143
% HV	9.8	0	5.3	0	9	0	2.6	3.3	0	2.9	0	16.7	0	0	2.9	4	3.7	0	0	3.8	4.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #17 I526WBSB&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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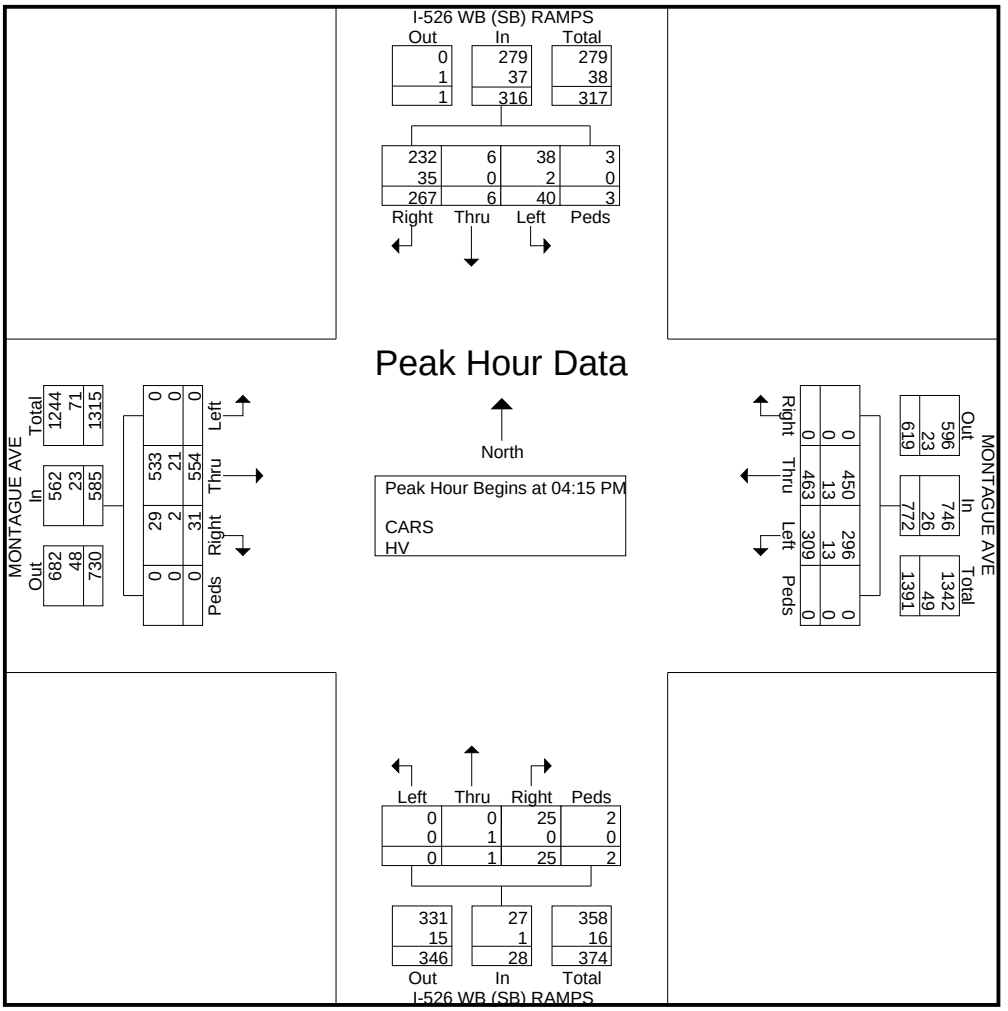
	I-526 WB (SB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 WB (SB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**77**	**3**	8	**1**	**89**	0	119	63	0	182	0	**1**	0	0	1	**10**	143	0	0	153	425
04:30 PM	60	1	10	1	72	0	118	83	0	201	0	0	0	0	0	8	**149**	0	0	**157**	430
04:45 PM	64	2	**13**	0	79	0	103	70	0	173	**25**	0	0	**2**	**27**	8	113	0	0	121	400
05:00 PM	66	0	9	1	76	0	**123**	**93**	0	**216**	0	0	0	0	0	5	149	0	0	154	**446**
Total Volume	267	6	40	3	316	0	463	309	0	772	25	1	0	2	28	31	554	0	0	585	1701
% App. Total	84.5	1.9	12.7	0.9		0	60	40	0		89.3	3.6	0	7.1		5.3	94.7	0	0		
PHF	.867	.500	.769	.750	.888	.000	.941	.831	.000	.894	.250	.250	.000	.250	.259	.775	.930	.000	.000	.932	.953
CARS	232	6	38	3	279	0	450	296	0	746	25	0	0	2	27	29	533	0	0	562	1614
% CARS	86.9	100	95.0	100	88.3	0	97.2	95.8	0	96.6	100	0	0	100	96.4	93.5	96.2	0	0	96.1	94.9
HV	35	0	2	0	37	0	13	13	0	26	0	1	0	0	1	2	21	0	0	23	87
% HV	13.1	0	5.0	0	11.7	0	2.8	4.2	0	3.4	0	100	0	0	3.6	6.5	3.8	0	0	3.9	5.1



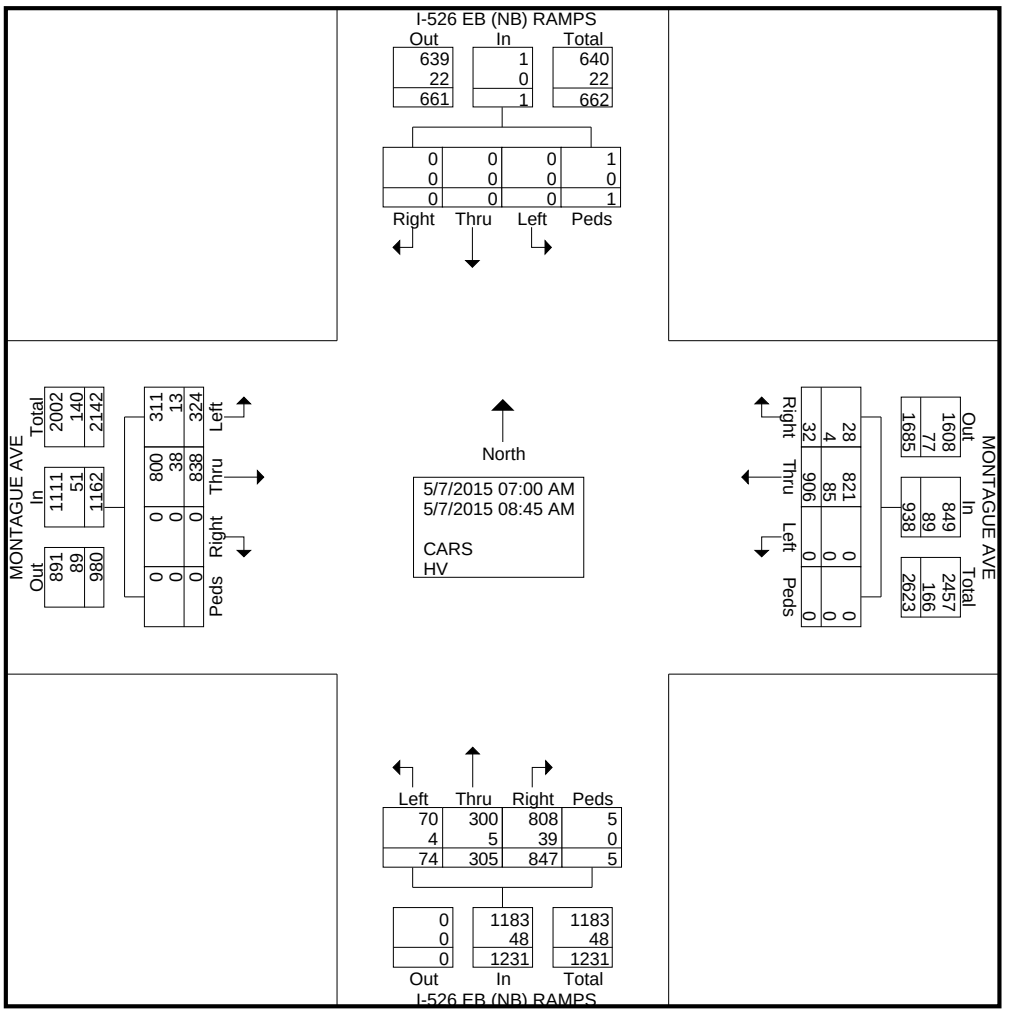
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #18 I526EBNB&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 EB (NB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	5	62	0	0	67	97	32	8	1	138	0	101	31	0	132	337
07:15 AM	0	0	0	1	1	2	114	0	0	116	120	35	12	1	168	0	115	49	0	164	449
07:30 AM	0	0	0	0	0	4	117	0	0	121	121	37	7	0	165	0	88	44	0	132	418
07:45 AM	0	0	0	0	0	4	140	0	0	144	120	46	12	1	179	0	100	40	0	140	463
Total	0	0	0	1	1	15	433	0	0	448	458	150	39	3	650	0	404	164	0	568	1667
08:00 AM	0	0	0	0	0	2	129	0	0	131	116	41	9	0	166	0	111	35	0	146	443
08:15 AM	0	0	0	0	0	5	109	0	0	114	121	38	12	0	171	0	101	48	0	149	434
08:30 AM	0	0	0	0	0	4	137	0	0	141	75	35	7	1	118	0	121	43	0	164	423
08:45 AM	0	0	0	0	0	6	98	0	0	104	77	41	7	1	126	0	101	34	0	135	365
Total	0	0	0	0	0	17	473	0	0	490	389	155	35	2	581	0	434	160	0	594	1665
Grand Total	0	0	0	1	1	32	906	0	0	938	847	305	74	5	1231	0	838	324	0	1162	3332
Apprch %	0	0	0	100		3.4	96.6	0	0		68.8	24.8	6	0.4		0	72.1	27.9	0		
Total %	0	0	0	0	0	1	27.2	0	0	28.2	25.4	9.2	2.2	0.2	36.9	0	25.2	9.7	0	34.9	
CARS	0	0	0	1	1	28	821	0	0	849	808	300	70	5	1183	0	800	311	0	1111	3144
% CARS	0	0	0	100	100	87.5	90.6	0	0	90.5	95.4	98.4	94.6	100	96.1	0	95.5	96	0	95.6	94.4
HV	0	0	0	0	0	4	85	0	0	89	39	5	4	0	48	0	38	13	0	51	188
% HV	0	0	0	0	0	12.5	9.4	0	0	9.5	4.6	1.6	5.4	0	3.9	0	4.5	4	0	4.4	5.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #18 I526EBNB&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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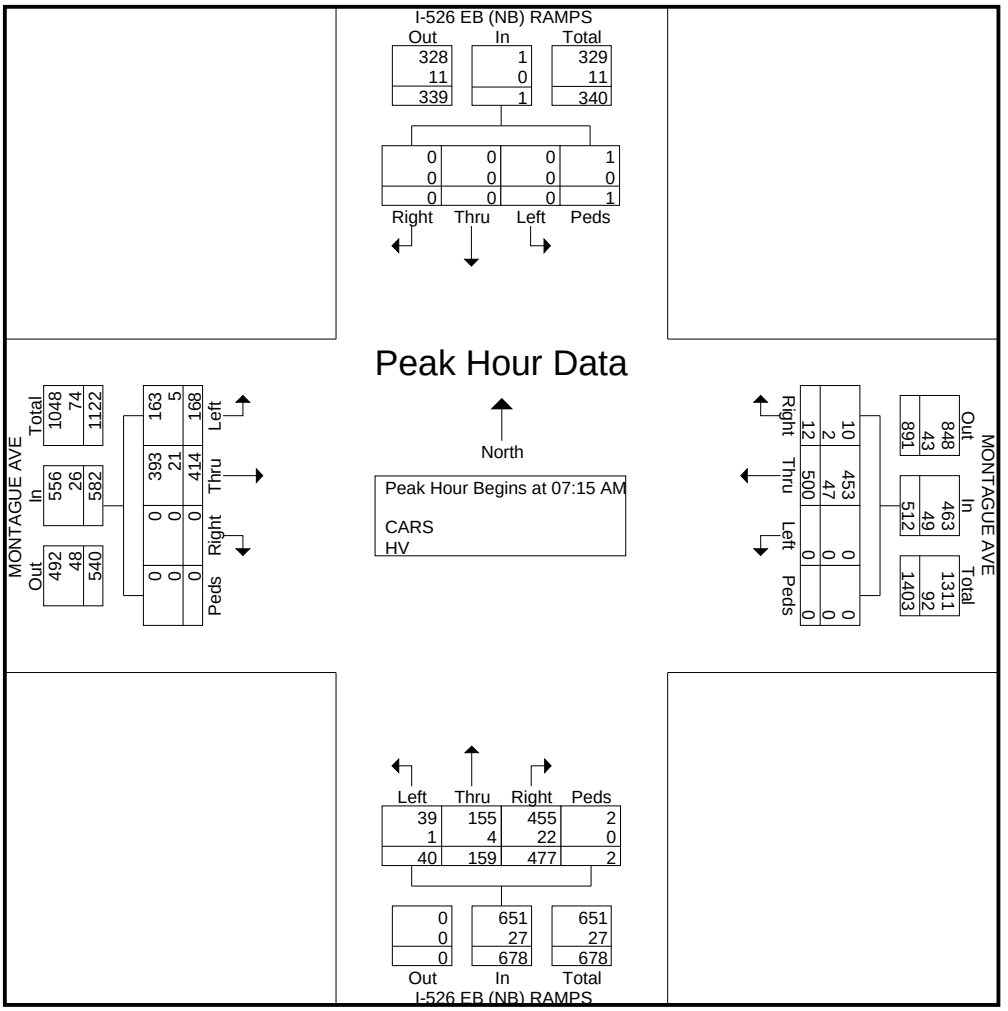
	I-526 EB (NB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 EB (NB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	**1**	**1**	2	114	0	0	116	120	35	**12**	**1**	168	0	**115**	**49**	0	**164**	449
07:30 AM	0	0	0	0	0	**4**	117	0	0	121	**121**	37	7	0	165	0	88	44	0	132	418
07:45 AM	0	0	0	0	0	4	**140**	0	0	**144**	120	**46**	12	1	**179**	0	100	40	0	140	**463**
08:00 AM	0	0	0	0	0	2	129	0	0	131	116	41	9	0	166	0	111	35	0	146	443
Total Volume	0	0	0	1	1	12	500	0	0	512	477	159	40	2	678	0	414	168	0	582	1773
% App. Total	0	0	0	100		2.3	97.7	0	0		70.4	23.5	5.9	0.3		0	71.1	28.9	0		
PHF	.000	.000	.000	.250	.250	.750	.893	.000	.000	.889	.986	.864	.833	.500	.947	.000	.900	.857	.000	.887	.957
CARS	0	0	0	1	1	10	453	0	0	463	455	155	39	2	651	0	393	163	0	556	1671
% CARS	0	0	0	100	100	83.3	90.6	0	0	90.4	95.4	97.5	97.5	100	96.0	0	94.9	97.0	0	95.5	94.2
HV	0	0	0	0	0	2	47	0	0	49	22	4	1	0	27	0	21	5	0	26	102
% HV	0	0	0	0	0	16.7	9.4	0	0	9.6	4.6	2.5	2.5	0	4.0	0	5.1	3.0	0	4.5	5.8



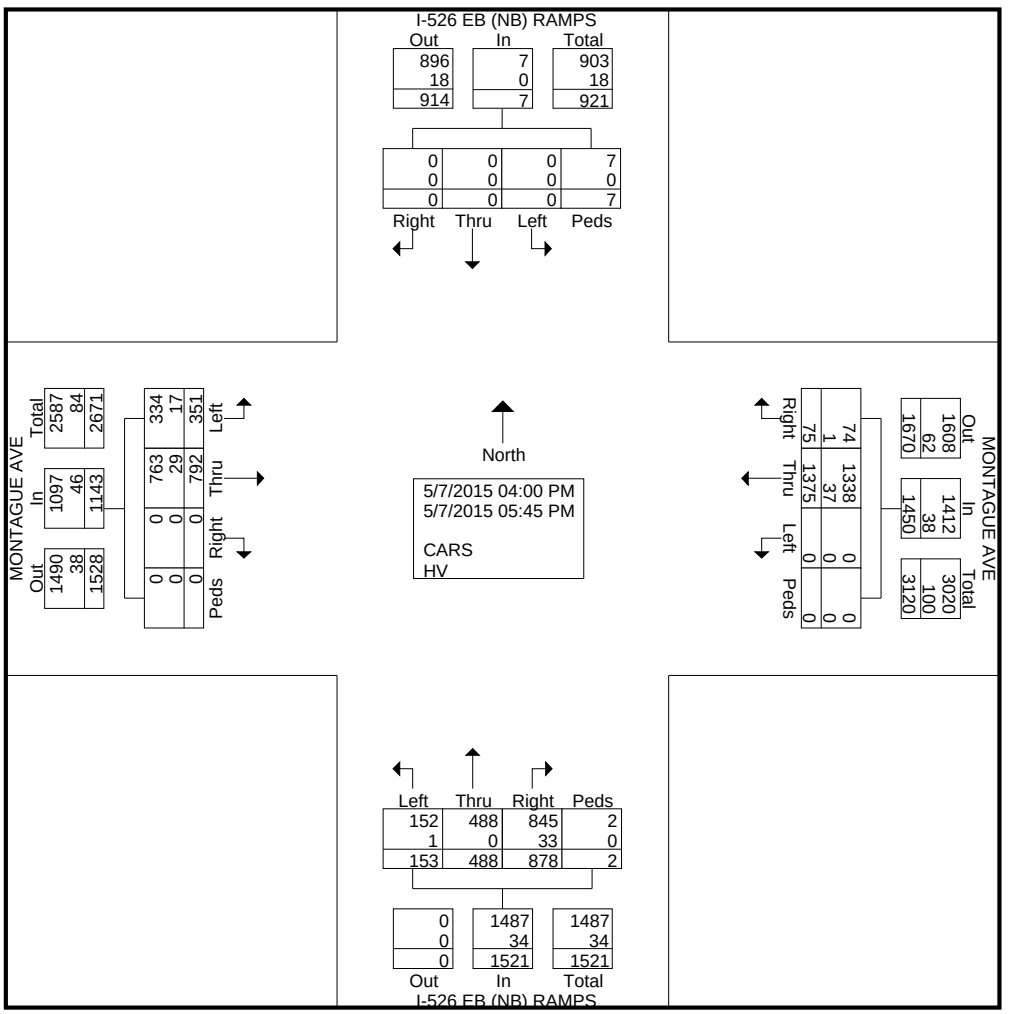
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #18 I526EBNB&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 EB (NB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	8	140	0	0	148	102	44	20	0	166	0	94	47	0	141	455
04:15 PM	0	0	0	1	1	12	173	0	0	185	87	56	22	0	165	0	84	58	0	142	493
04:30 PM	0	0	0	1	1	19	177	0	0	196	105	47	13	0	165	0	110	50	0	160	522
04:45 PM	0	0	0	0	0	9	166	0	0	175	100	69	19	0	188	0	92	40	0	132	495
Total	0	0	0	2	2	48	656	0	0	704	394	216	74	0	684	0	380	195	0	575	1965
05:00 PM	0	0	0	1	1	6	202	0	0	208	133	70	15	2	220	0	115	45	0	160	589
05:15 PM	0	0	0	1	1	8	163	0	0	171	151	80	25	0	256	0	104	32	0	136	564
05:30 PM	0	0	0	1	1	8	192	0	0	200	107	62	21	0	190	0	91	44	0	135	526
05:45 PM	0	0	0	2	2	5	162	0	0	167	93	60	18	0	171	0	102	35	0	137	477
Total	0	0	0	5	5	27	719	0	0	746	484	272	79	2	837	0	412	156	0	568	2156
Grand Total	0	0	0	7	7	75	1375	0	0	1450	878	488	153	2	1521	0	792	351	0	1143	4121
Apprch %	0	0	0	100		5.2	94.8	0	0		57.7	32.1	10.1	0.1		0	69.3	30.7	0		
Total %	0	0	0	0.2	0.2	1.8	33.4	0	0	35.2	21.3	11.8	3.7	0	36.9	0	19.2	8.5	0	27.7	
CARS	0	0	0	7	7	74	1338														
% CARS	0	0	0	100	100	98.7	97.3	0	0	97.4	96.2	100	99.3	100	97.8	0	96.3	95.2	0	96	97.1
HV	0	0	0	0	0	1	37	0	0	38	33	0	1	0	34	0	29	17	0	46	118
% HV	0	0	0	0	0	1.3	2.7	0	0	2.6	3.8	0	0.7	0	2.2	0	3.7	4.8	0	4	2.9



All Traffic Data Services, Inc.

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Conyers, GA 30012

File Name : #18 I526EBNB&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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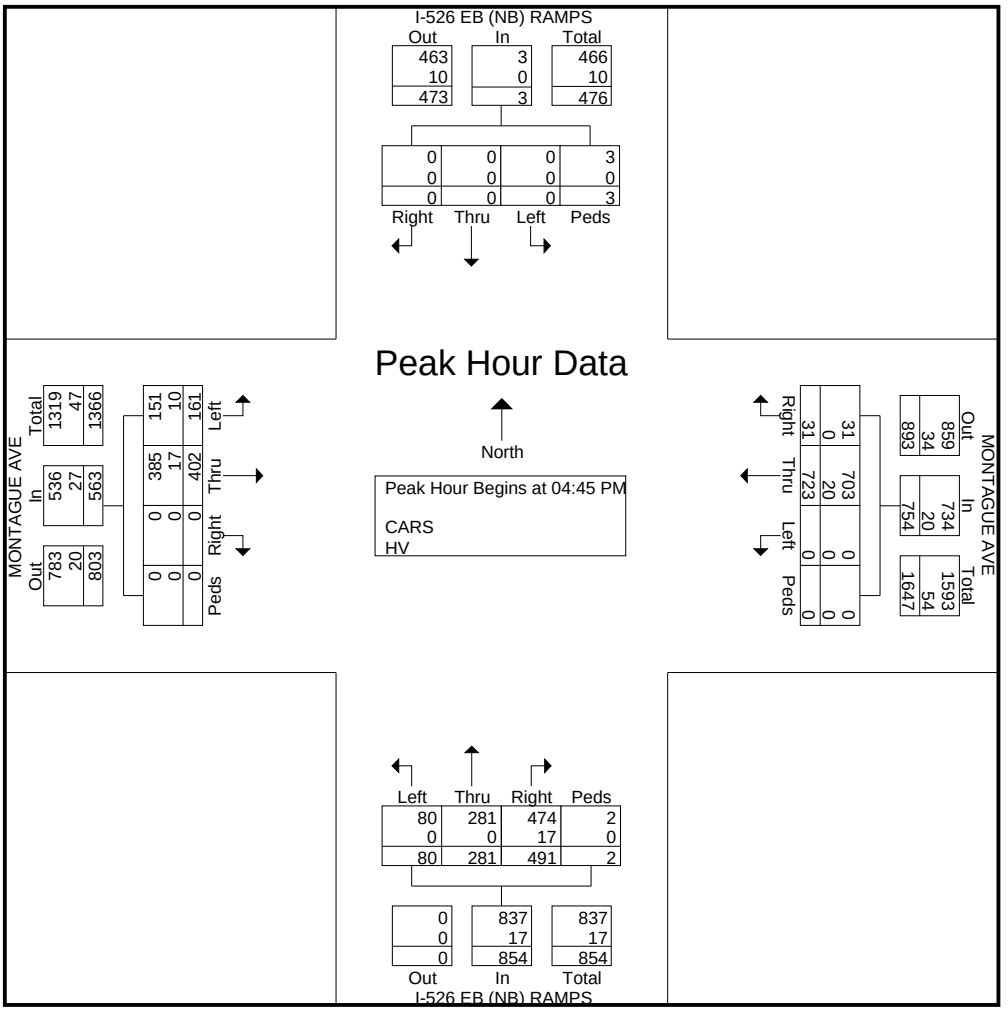
	I-526 EB (NB) RAMPS Southbound					MONTAGUE AVE Westbound					I-526 EB (NB) RAMPS Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	**9**	166	0	0	175	100	69	19	0	188	0	92	40	0	132	495
05:00 PM	0	0	0	**1**	**1**	6	**202**	0	0	**208**	133	70	15	**2**	220	0	**115**	**45**	0	**160**	**589**
05:15 PM	0	0	0	1	1	8	163	0	0	171	**151**	**80**	**25**	0	**256**	0	104	32	0	136	564
05:30 PM	0	0	0	1	1	8	192	0	0	200	107	62	21	0	190	0	91	44	0	135	526
Total Volume	0	0	0	3	3	31	723	0	0	754	491	281	80	2	854	0	402	161	0	563	2174
% App. Total	0	0	0	100		4.1	95.9	0	0		57.5	32.9	9.4	0.2		0	71.4	28.6	0		
PHF	.000	.000	.000	.750	.750	.861	.895	.000	.000	.906	.813	.878	.800	.250	.834	.000	.874	.894	.000	.880	.923
CARS	0	0	0	3	3	31	703	0	0	734	474	281	80	2	837	0	385	151	0	536	2110
% CARS	0	0	0	100	100	100	97.2	0	0	97.3	96.5	100	100	100	98.0	0	95.8	93.8	0	95.2	97.1
HV	0	0	0	0	0	0	20	0	0	20	17	0	0	0	17	0	17	10	0	27	64
% HV	0	0	0	0	0	0	2.8	0	0	2.7	3.5	0	0	0	2.0	0	4.2	6.2	0	4.8	2.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #19 EMMETT&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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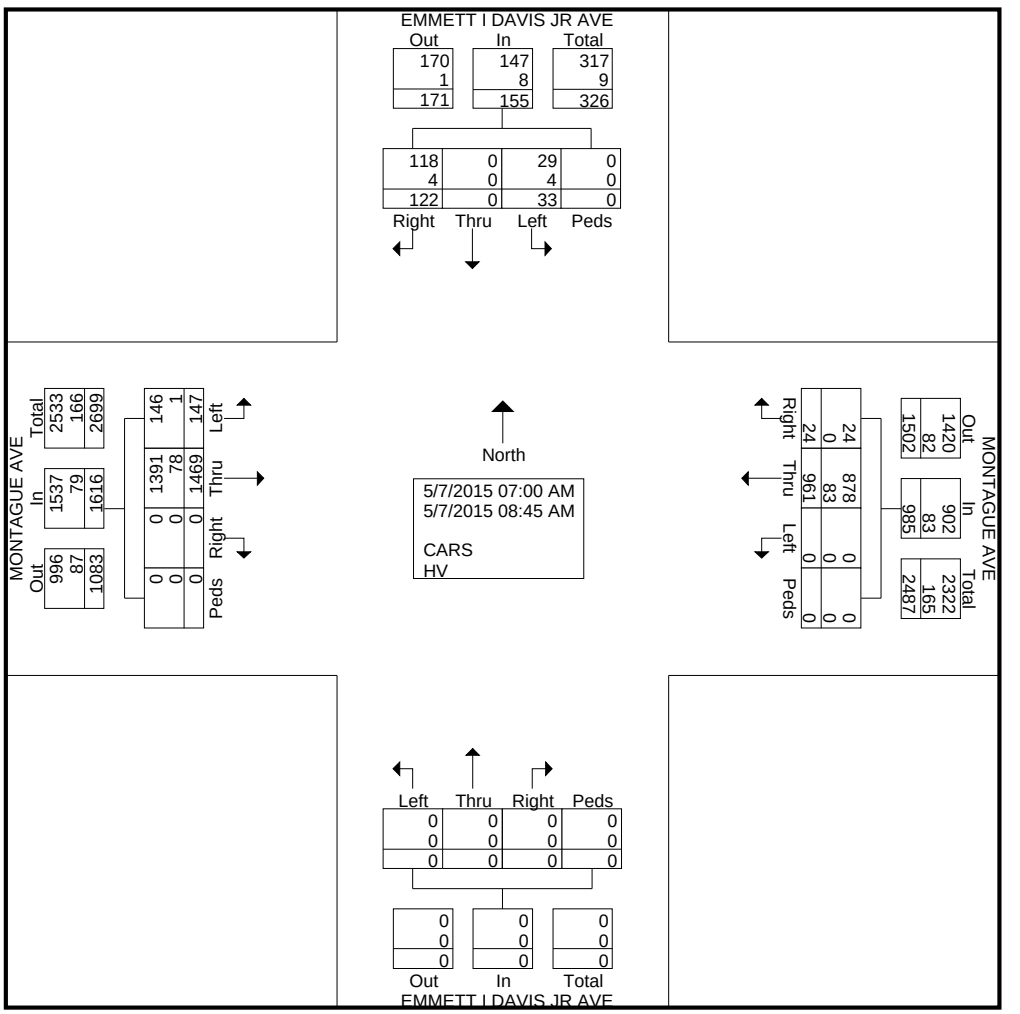
Groups Printed- CARS - HV

	EMMETT I DAVIS JR AVE Southbound					MONTAGUE AVE Westbound					EMMETT I DAVIS JR AVE Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	8	0	2	0	10	2	69	0	0	71	0	0	0	0	0	0	162	16	0	178	259
07:15 AM	16	0	7	0	23	1	109	0	0	110	0	0	0	0	0	0	215	25	0	240	373
07:30 AM	13	0	1	0	14	2	144	0	0	146	0	0	0	0	0	0	181	14	0	195	355
07:45 AM	12	0	4	0	16	4	159	0	0	163	0	0	0	0	0	0	194	14	0	208	387
Total	49	0	14	0	63	9	481	0	0	490	0	0	0	0	0	0	752	69	0	821	1374
08:00 AM	10	0	4	0	14	5	145	0	0	150	0	0	0	0	0	0	198	17	0	215	379
08:15 AM	19	0	4	0	23	5	99	0	0	104	0	0	0	0	0	0	194	25	0	219	346
08:30 AM	27	0	5	0	32	3	142	0	0	145	0	0	0	0	0	0	182	14	0	196	373
08:45 AM	17	0	6	0	23	2	94	0	0	96	0	0	0	0	0	0	143	22	0	165	284
Total	73	0	19	0	92	15	480	0	0	495	0	0	0	0	0	0	717	78	0	795	1382
Grand Total	122	0	33	0	155	24	961	0	0	985	0	0	0	0	0	0	1469	147	0	1616	2756
Apprch %	78.7	0	21.3	0		2.4	97.6	0	0		0	0	0	0		0	90.9	9.1	0		
Total %	4.4	0	1.2	0	5.6	0.9	34.9	0	0	35.7	0	0	0	0	0	0	53.3	5.3	0	58.6	
CARS	118	0	29	0	147	24	878	0	0	902	0	0	0	0	0	0	1391				
% CARS	96.7	0	87.9	0	94.8	100	91.4	0	0	91.6	0	0	0	0	0	0	94.7	99.3	0	95.1	93.8
HV	4	0	4	0	8	0	83	0	0	83	0	0	0	0	0	0	78	1	0	79	170
% HV	3.3	0	12.1	0	5.2	0	8.6	0	0	8.4	0	0	0	0	0	0	5.3	0.7	0	4.9	6.2



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File Name : #19 EMMETT&MONTAGUEAM
Site Code : 9513 - CHARLESTON 1
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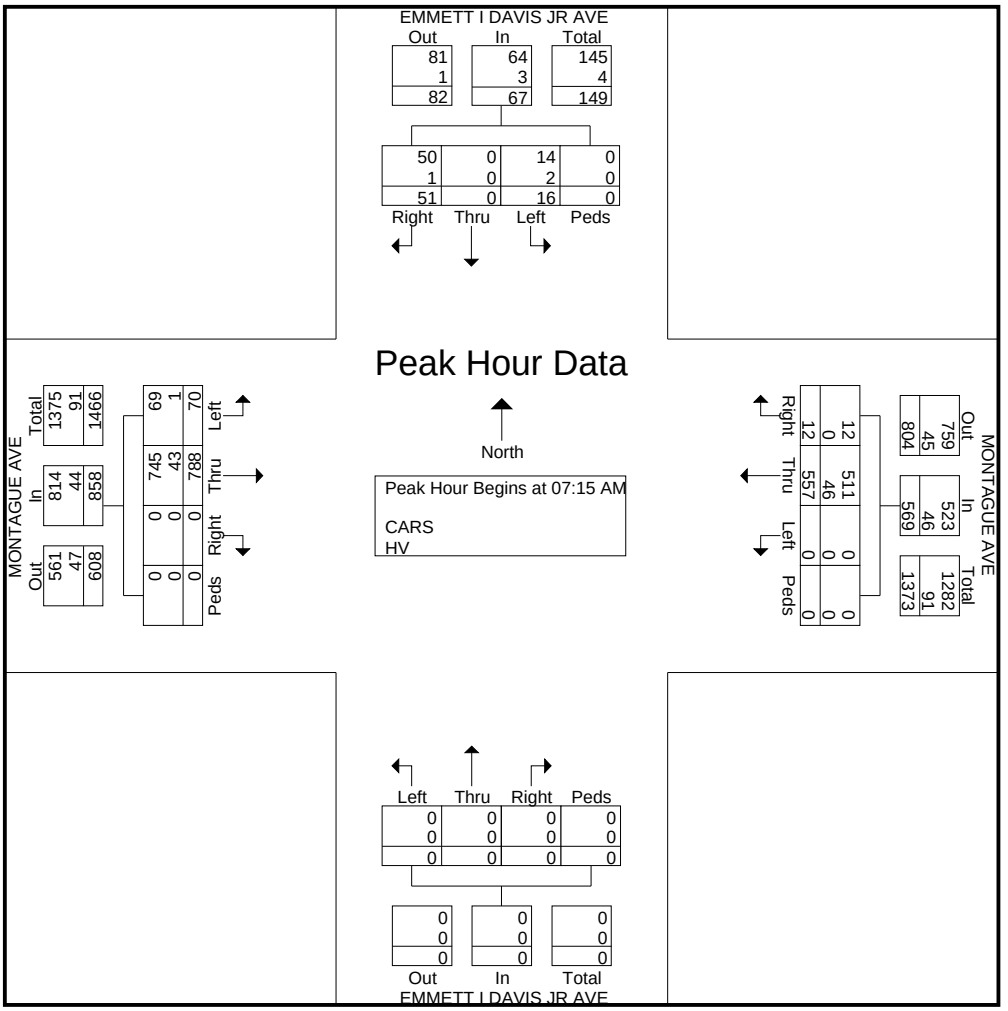
	EMMETT I DAVIS JR AVE Southbound					MONTAGUE AVE Westbound					EMMETT I DAVIS JR AVE Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**16**	0	**7**	0	**23**	1	109	0	0	110	0	0	0	0	0	0	**215**	**25**	0	**240**	373
07:30 AM	13	0	1	0	14	2	144	0	0	146	0	0	0	0	0	0	181	14	0	195	355
07:45 AM	12	0	4	0	16	4	**159**	0	0	**163**	0	0	0	0	0	0	194	14	0	208	**387**
08:00 AM	10	0	4	0	14	**5**	145	0	0	150	0	0	0	0	0	0	198	17	0	215	379
Total Volume	51	0	16	0	67	12	557	0	0	569	0	0	0	0	0	0	788	70	0	858	1494
% App. Total	76.1	0	23.9	0		2.1	97.9	0	0		0	0	0	0		0	91.8	8.2	0		
PHF	.797	.000	.571	.000	.728	.600	.876	.000	.000	.873	.000	.000	.000	.000	.000	.000	.916	.700	.000	.894	.965
CARS	50	0	14	0	64	12	511	0	0	523	0	0	0	0	0	0	745	69	0	814	1401
% CARS	98.0	0	87.5	0	95.5	100	91.7	0	0	91.9	0	0	0	0	0	0	94.5	98.6	0	94.9	93.8
HV	1	0	2	0	3	0	46	0	0	46	0	0	0	0	0	0	43	1	0	44	93
% HV	2.0	0	12.5	0	4.5	0	8.3	0	0	8.1	0	0	0	0	0	0	5.5	1.4	0	5.1	6.2



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1336 Farmer Rd
Conyers, GA 30012

File Name : #19 EMMETT&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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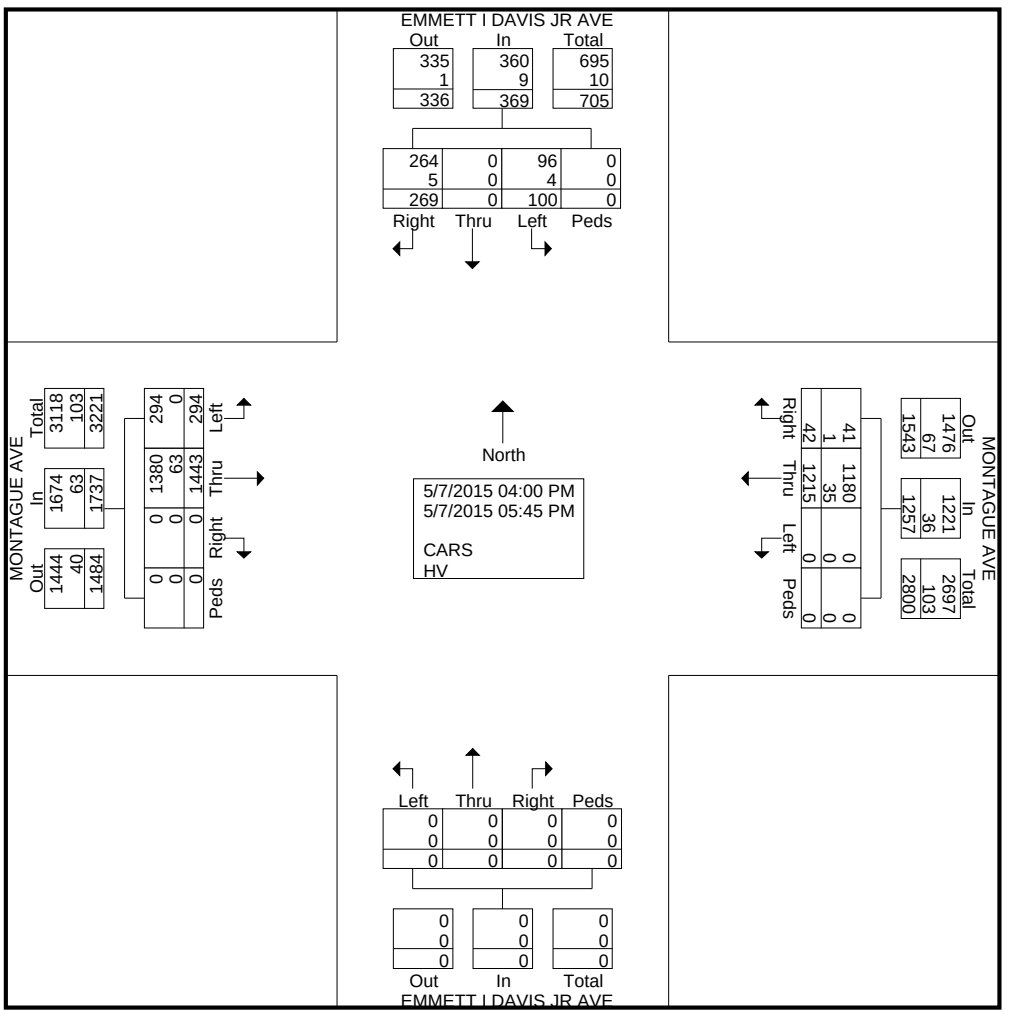
Groups Printed- CARS - HV

	EMMETT I DAVIS JR AVE Southbound					MONTAGUE AVE Westbound					EMMETT I DAVIS JR AVE Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	31	0	7	0	38	2	132	0	0	134	0	0	0	0	0	0	161	30	0	191	363
04:15 PM	26	0	11	0	37	4	138	0	0	142	0	0	0	0	0	0	156	39	0	195	374
04:30 PM	47	0	22	0	69	6	164	0	0	170	0	0	0	0	0	0	179	44	0	223	462
04:45 PM	38	0	13	0	51	4	113	0	0	117	0	0	0	0	0	0	164	32	0	196	364
Total	142	0	53	0	195	16	547	0	0	563	0	0	0	0	0	0	660	145	0	805	1563
05:00 PM	34	0	8	0	42	10	187	0	0	197	0	0	0	0	0	0	236	33	0	269	508
05:15 PM	31	0	15	0	46	6	152	0	0	158	0	0	0	0	0	0	208	40	0	248	452
05:30 PM	35	0	11	0	46	5	168	0	0	173	0	0	0	0	0	0	176	49	0	225	444
05:45 PM	27	0	13	0	40	5	161	0	0	166	0	0	0	0	0	0	163	27	0	190	396
Total	127	0	47	0	174	26	668	0	0	694	0	0	0	0	0	0	783	149	0	932	1800
Grand Total	269	0	100	0	369	42	1215	0	0	1257	0	0	0	0	0	0	1443	294	0	1737	3363
Apprch %	72.9	0	27.1	0		3.3	96.7	0	0		0	0	0	0		0	83.1	16.9	0		
Total %	8	0	3	0	11	1.2	36.1	0	0	37.4	0	0	0	0	0	0	42.9	8.7	0	51.7	
CARS	264	0	96	0	360	41	1180										1380				
% CARS	98.1	0	96	0	97.6	97.6	97.1	0	0	97.1	0	0	0	0	0	0	95.6	100	0	96.4	96.8
HV	5	0	4	0	9	1	35	0	0	36	0	0	0	0	0	0	63	0	0	63	108
% HV	1.9	0	4	0	2.4	2.4	2.9	0	0	2.9	0	0	0	0	0	0	4.4	0	0	3.6	3.2

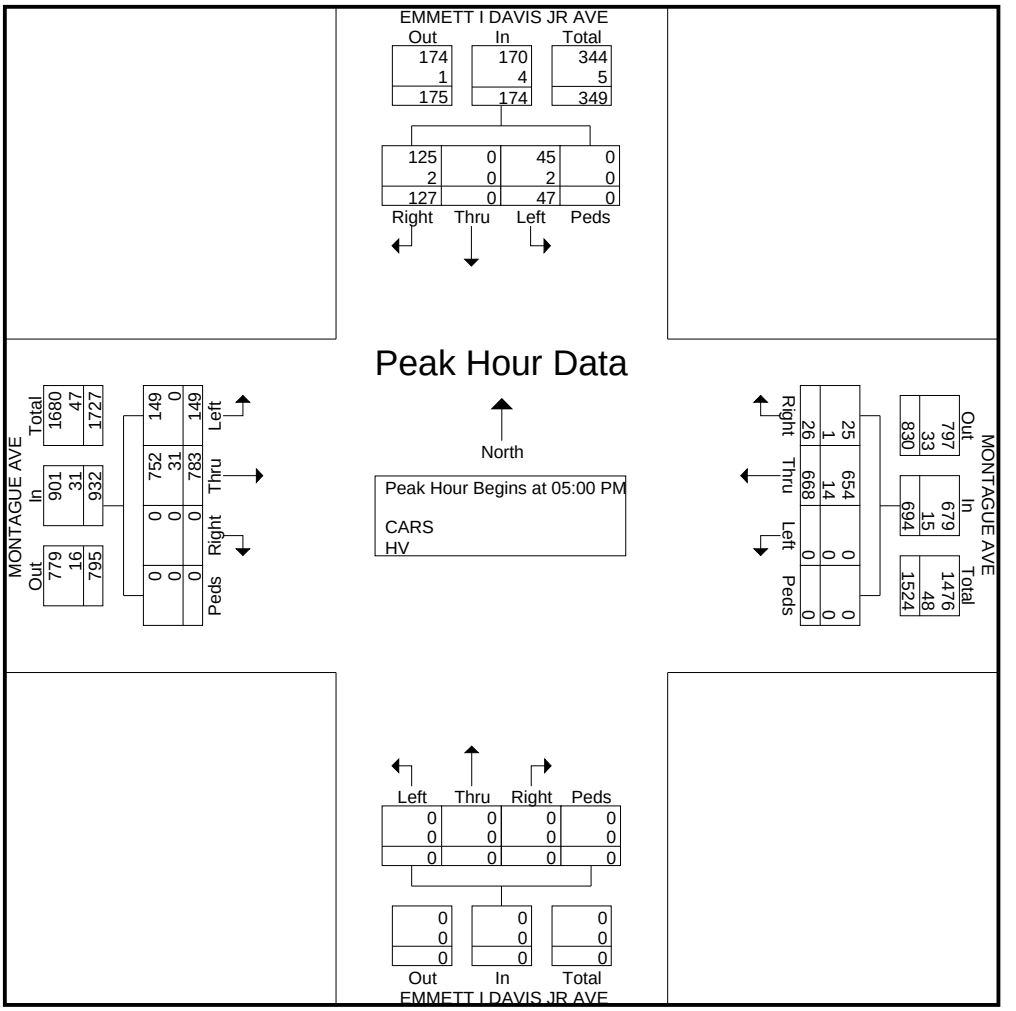


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #19 EMMETT&MONTAGUEPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	EMMETT I DAVIS JR AVE Southbound					MONTAGUE AVE Westbound					EMMETT I DAVIS JR AVE Northbound					MONTAGUE AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	34	0	8	0	42	**10**	**187**	0	0	**197**	0	0	0	0	0	0	**236**	33	0	**269**	**508**
05:15 PM	31	0	**15**	0	**46**	6	152	0	0	158	0	0	0	0	0	0	208	40	0	248	452
05:30 PM	**35**	0	11	0	46	5	168	0	0	173	0	0	0	0	0	0	176	**49**	0	225	444
05:45 PM	27	0	13	0	40	5	161	0	0	166	0	0	0	0	0	0	163	27	0	190	396
Total Volume	127	0	47	0	174	26	668	0	0	694	0	0	0	0	0	0	783	149	0	932	1800
% App. Total	73	0	27	0		3.7	96.3	0	0		0	0	0	0		0	84	16	0		
PHF	.907	.000	.783	.000	.946	.650	.893	.000	.000	.881	.000	.000	.000	.000	.000	.000	.829	.760	.000	.866	.886
CARS	125	0	45	0	170	25	654	0	0	679	0	0	0	0	0	0	752	149	0	901	1750
% CARS	98.4	0	95.7	0	97.7	96.2	97.9	0	0	97.8	0	0	0	0	0	0	96.0	100	0	96.7	97.2
HV	2	0	2	0	4	1	14	0	0	15	0	0	0	0	0	0	31	0	0	31	50
% HV	1.6	0	4.3	0	2.3	3.8	2.1	0	0	2.2	0	0	0	0	0	0	4.0	0	0	3.3	2.8



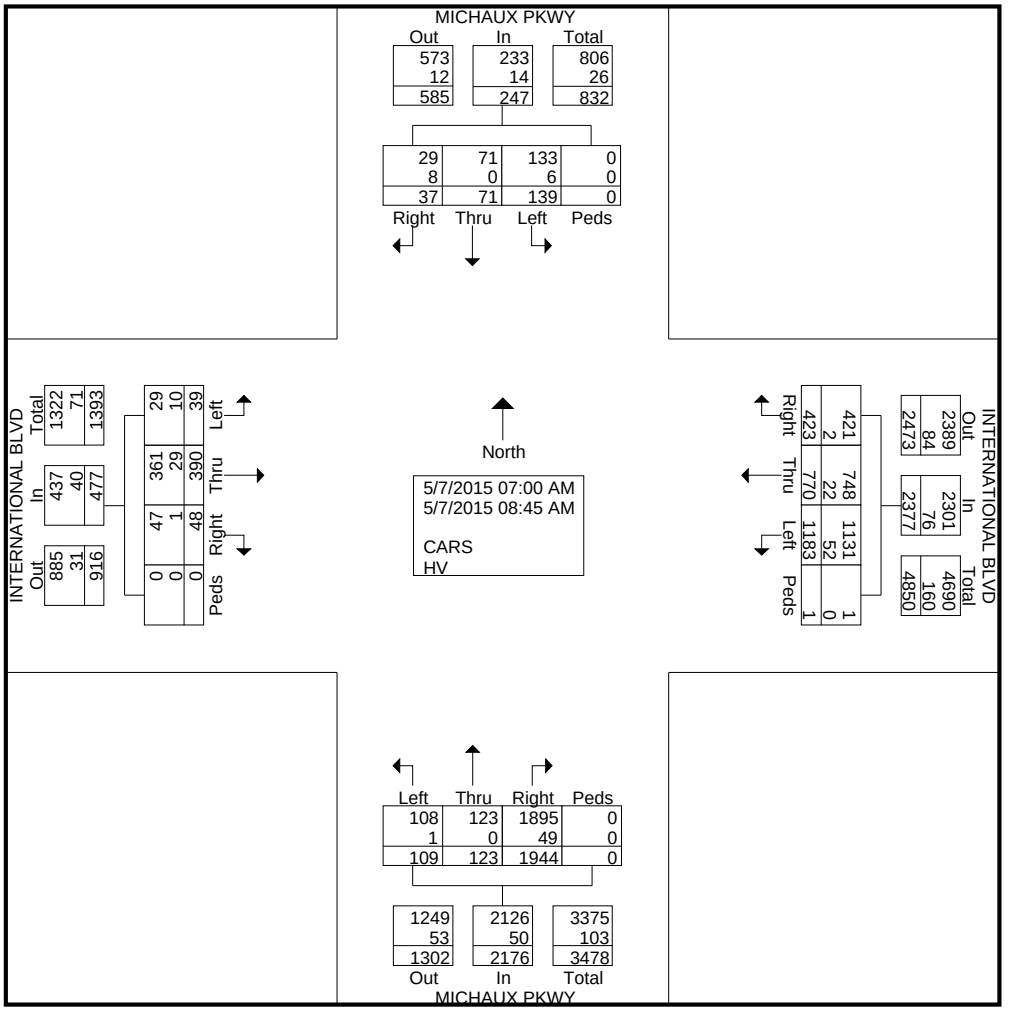
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #20 MICHAUX&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MICHAUX PKWY Southbound					INTERNATIONAL BLVD Westbound					MICHAUX PKWY Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	20	37	0	60	86	75	167	0	328	251	19	15	0	285	8	31	3	0	42	715
07:15 AM	1	9	15	0	25	78	55	183	0	316	286	16	13	0	315	4	41	2	0	47	703
07:30 AM	2	11	18	0	31	61	86	158	1	306	295	16	10	0	321	3	38	3	0	44	702
07:45 AM	7	8	14	0	29	61	87	160	0	308	268	18	17	0	303	1	33	5	0	39	679
Total	13	48	84	0	145	286	303	668	1	1258	1100	69	55	0	1224	16	143	13	0	172	2799
08:00 AM	10	9	19	0	38	43	107	132	0	282	226	11	7	0	244	9	54	8	0	71	635
08:15 AM	5	5	16	0	26	43	109	128	0	280	223	19	15	0	257	6	61	10	0	77	640
08:30 AM	7	5	12	0	24	33	117	121	0	271	212	10	18	0	240	7	58	5	0	70	605
08:45 AM	2	4	8	0	14	18	134	134	0	286	183	14	14	0	211	10	74	3	0	87	598
Total	24	23	55	0	102	137	467	515	0	1119	844	54	54	0	952	32	247	26	0	305	2478
Grand Total	37	71	139	0	247	423	770	1183	1	2377	1944	123	109	0	2176	48	390	39	0	477	5277
Apprch %	15	28.7	56.3	0		17.8	32.4	49.8	0		89.3	5.7	5	0		10.1	81.8	8.2	0		
Total %	0.7	1.3	2.6	0	4.7	8	14.6	22.4	0	45	36.8	2.3	2.1	0	41.2	0.9	7.4	0.7	0	9	
CARS	29	71	133	0	233	421	748	1131			1895										
% CARS	78.4	100	95.7	0	94.3	99.5	97.1	95.6	100	96.8	97.5	100	99.1	0	97.7	97.9	92.6	74.4	0	91.6	96.6
HV	8	0	6	0	14	2	22	52	0	76	49	0	1	0	50	1	29	10	0	40	180
% HV	21.6	0	4.3	0	5.7	0.5	2.9	4.4	0	3.2	2.5	0	0.9	0	2.3	2.1	7.4	25.6	0	8.4	3.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #20 MICHAUX&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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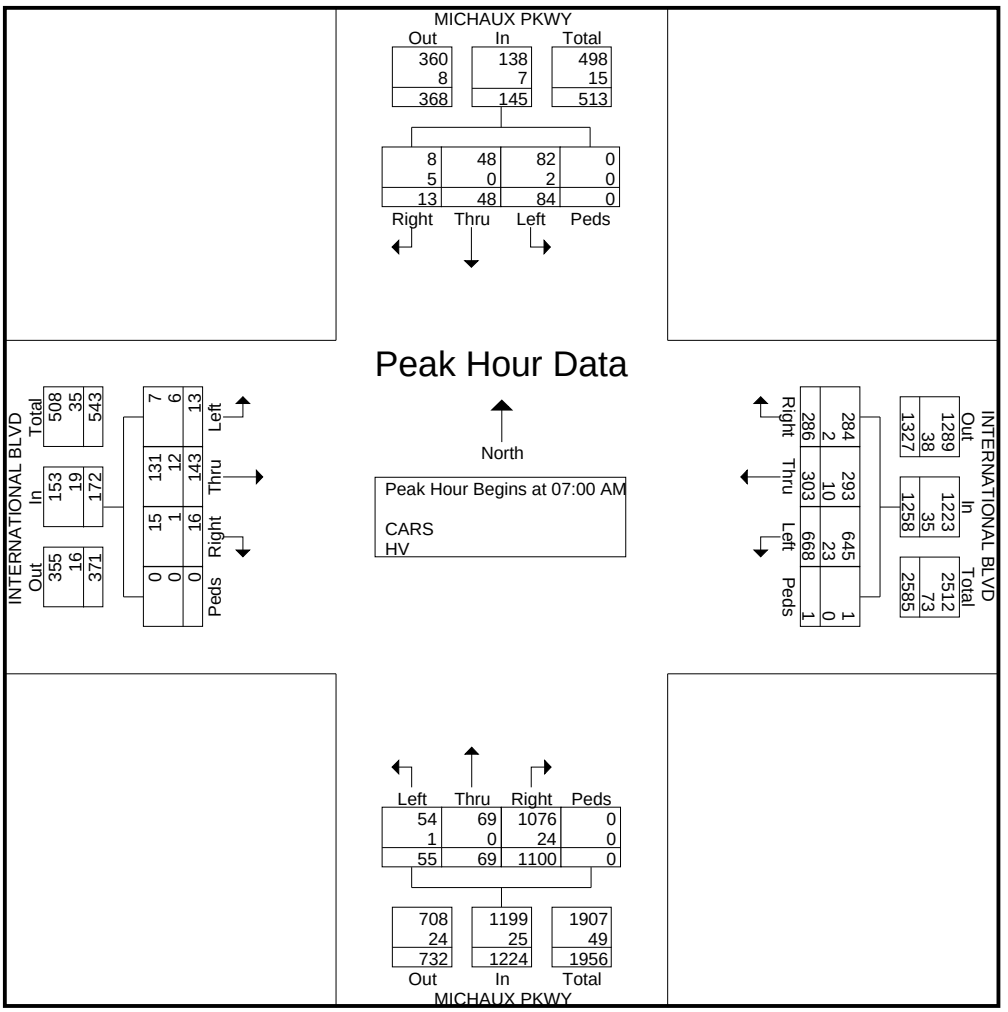
	MICHAUX PKWY Southbound					INTERNATIONAL BLVD Westbound					MICHAUX PKWY Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	3	**20**	**37**	0	**60**	**86**	75	167	0	**328**	251	**19**	15	0	285	**8**	31	3	0	42	**715**
07:15 AM	1	9	15	0	25	78	55	**183**	0	316	286	16	13	0	315	4	**41**	2	0	**47**	703
07:30 AM	2	11	18	0	31	61	86	158	**1**	306	**295**	16	10	0	**321**	3	38	3	0	44	702
07:45 AM	**7**	8	14	0	29	61	**87**	160	0	308	268	18	**17**	0	303	1	33	**5**	0	39	679
Total Volume	13	48	84	0	145	286	303	668	1	1258	1100	69	55	0	1224	16	143	13	0	172	2799
% App. Total	9	33.1	57.9	0		22.7	24.1	53.1	0.1		89.9	5.6	4.5	0		9.3	83.1	7.6	0		
PHF	.464	.600	.568	.000	.604	.831	.871	.913	.250	.959	.932	.908	.809	.000	.953	.500	.872	.650	.000	.915	.979
CARS	8	48	82	0	138	284	293	645	1	1223	1076										
% CARS	61.5	100	97.6	0	95.2	99.3	96.7	96.6	100	97.2	97.8	100	98.2	0	98.0	93.8	91.6	53.8	0	89.0	96.9
HV	5	0	2	0	7	2	10	23	0	35	24	0	1	0	25	1	12	6	0	19	86
% HV	38.5	0	2.4	0	4.8	0.7	3.3	3.4	0	2.8	2.2	0	1.8	0	2.0	6.3	8.4	46.2	0	11.0	3.1



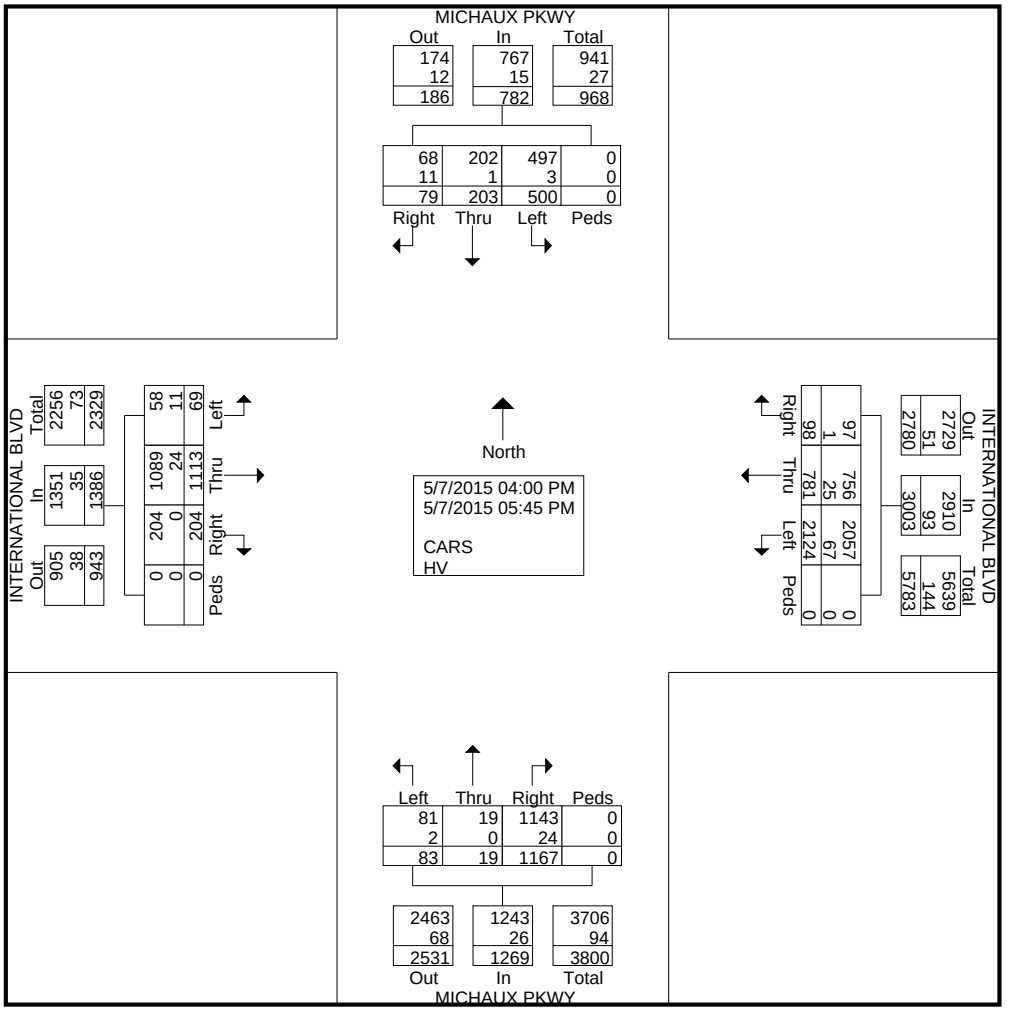
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #20 MICHAUX&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	MICHAUX PKWY Southbound					INTERNATIONAL BLVD Westbound					MICHAUX PKWY Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	7	35	74	0	116	10	115	261	0	386	127	3	10	0	140	20	141	8	0	169	811
04:15 PM	8	38	87	0	133	16	101	261	0	378	171	3	11	0	185	27	132	4	0	163	859
04:30 PM	2	33	67	0	102	13	117	265	0	395	144	0	13	0	157	22	174	6	0	202	856
04:45 PM	8	27	61	0	96	10	104	266	0	380	149	3	10	0	162	16	133	5	0	154	792
Total	25	133	289	0	447	49	437	1053	0	1539	591	9	44	0	644	85	580	23	0	688	3318
05:00 PM	12	25	63	0	100	8	79	283	0	370	137	1	15	0	153	19	119	13	0	151	774
05:15 PM	19	16	29	0	64	9	87	288	0	384	159	2	7	0	168	26	144	11	0	181	797
05:30 PM	15	19	74	0	108	20	84	211	0	315	133	0	7	0	140	50	149	13	0	212	775
05:45 PM	8	10	45	0	63	12	94	289	0	395	147	7	10	0	164	24	121	9	0	154	776
Total	54	70	211	0	335	49	344	1071	0	1464	576	10	39	0	625	119	533	46	0	698	3122
Grand Total	79	203	500	0	782	98	781	2124	0	3003	1167	19	83	0	1269	204	1113	69	0	1386	6440
Apprch %	10.1	26	63.9	0		3.3	26	70.7	0		92	1.5	6.5	0		14.7	80.3	5	0		
Total %	1.2	3.2	7.8	0	12.1	1.5	12.1	33	0	46.6	18.1	0.3	1.3	0	19.7	3.2	17.3	1.1	0	21.5	
CARS	68	202	497	0	767	97	756	2057			1143						1089				
% CARS	86.1	99.5	99.4	0	98.1	99	96.8	96.8	0	96.9	97.9	100	97.6	0	98	100	97.8	84.1	0	97.5	97.4
HV	11	1	3	0	15	1	25	67	0	93	24	0	2	0	26	0	24	11	0	35	169
% HV	13.9	0.5	0.6	0	1.9	1	3.2	3.2	0	3.1	2.1	0	2.4	0	2	0	2.2	15.9	0	2.5	2.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #20 MICHAUX&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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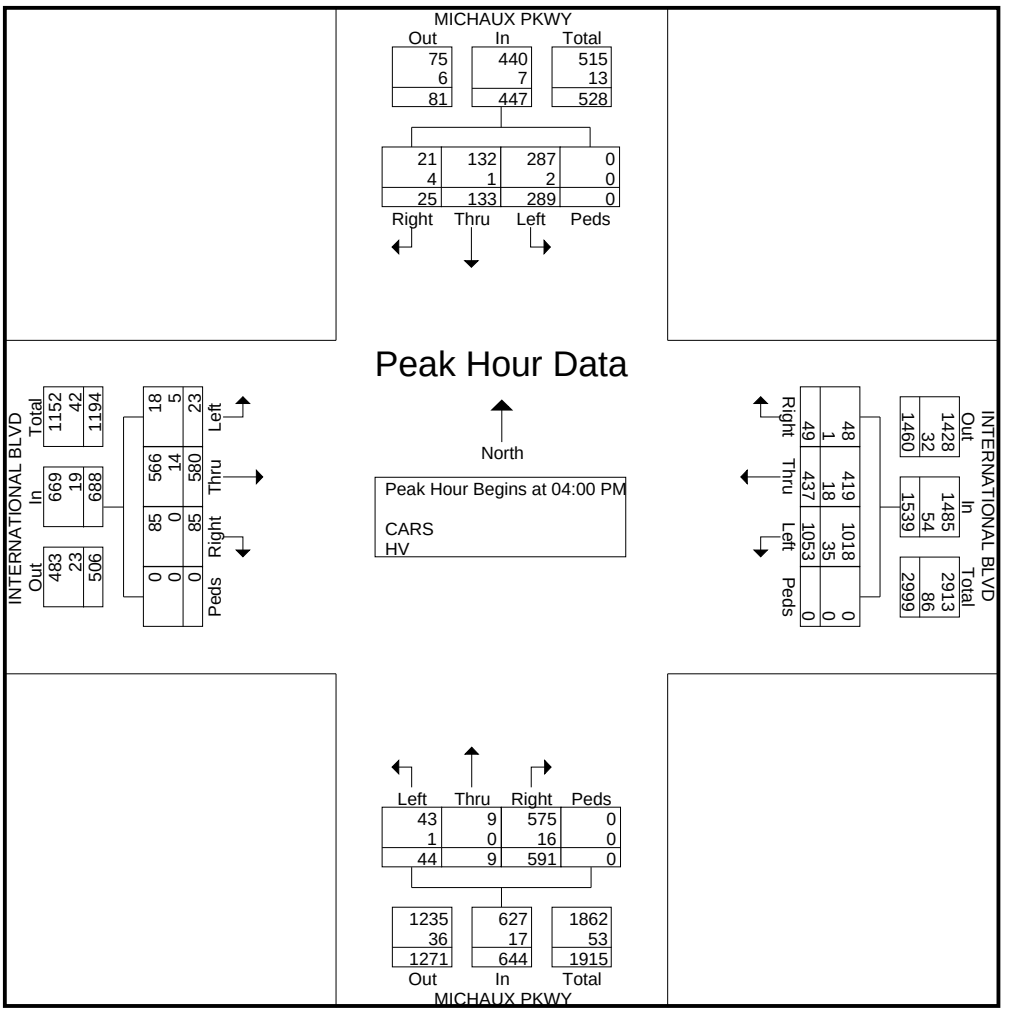
	MICHAUX PKWY Southbound					INTERNATIONAL BLVD Westbound					MICHAUX PKWY Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	7	35	74	0	116	10	115	261	0	386	127	**3**	10	0	140	20	141	**8**	0	169	811
04:15 PM	**8**	**38**	**87**	0	**133**	**16**	101	261	0	378	**171**	3	11	0	**185**	**27**	132	4	0	163	**859**
04:30 PM	2	33	67	0	102	13	**117**	265	0	**395**	144	0	**13**	0	157	22	**174**	6	0	**202**	856
04:45 PM	8	27	61	0	96	10	104	**266**	0	380	149	3	10	0	162	16	133	5	0	154	792
Total Volume	25	133	289	0	447	49	437	1053	0	1539	591	9	44	0	644	85	580	23	0	688	3318
% App. Total	5.6	29.8	64.7	0		3.2	28.4	68.4	0		91.8	1.4	6.8	0		12.4	84.3	3.3	0		
PHF	.781	.875	.830	.000	.840	.766	.934	.990	.000	.974	.864	.750	.846	.000	.870	.787	.833	.719	.000	.851	.966
CARS	21	132	287	0	440	48	419	1018													
% CARS	84.0	99.2	99.3	0	98.4	98.0	95.9	96.7	0	96.5	97.3	100	97.7	0	97.4	100	97.6	78.3	0	97.2	97.1
HV	4	1	2	0	7	1	18	35	0	54	16	0	1	0	17	0	14	5	0	19	97
% HV	16.0	0.8	0.7	0	1.6	2.0	4.1	3.3	0	3.5	2.7	0	2.3	0	2.6	0	2.4	21.7	0	2.8	2.9



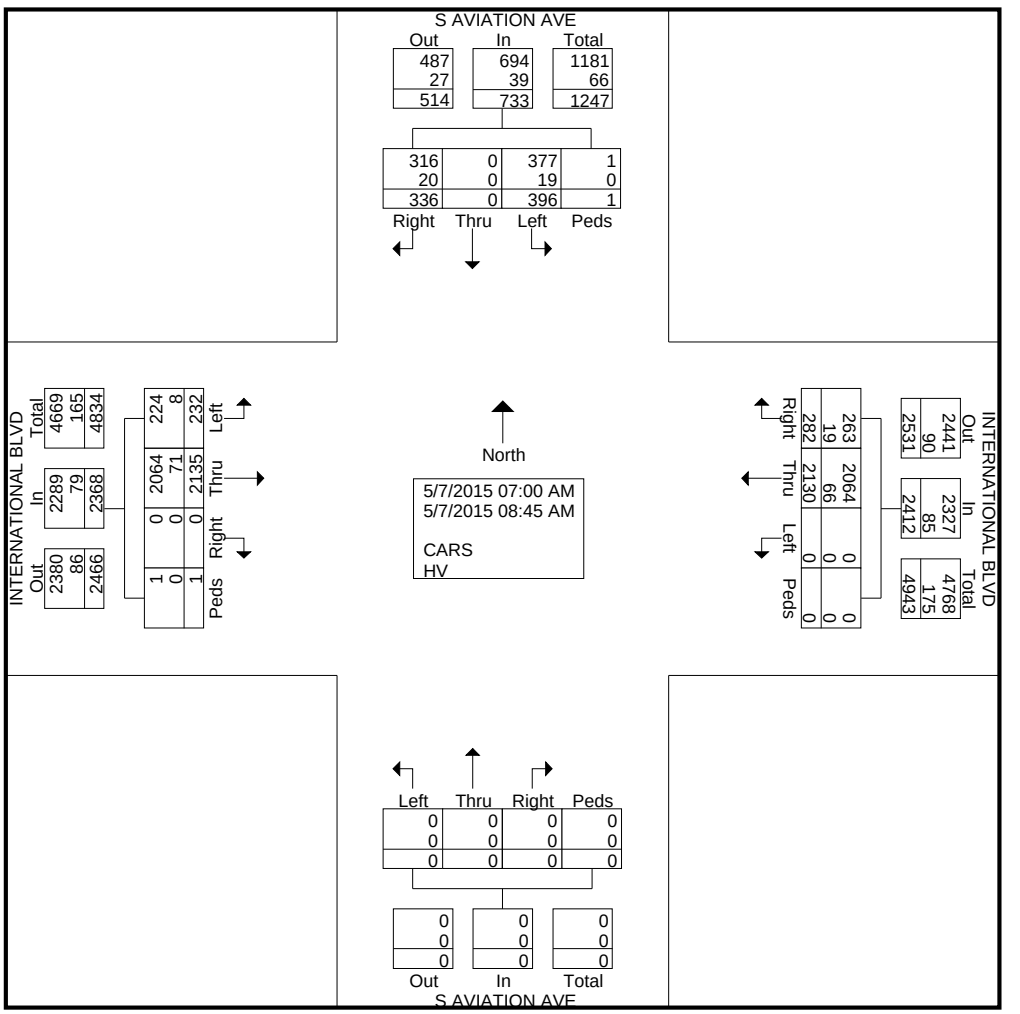
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #21 SAVIATION&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	S AVIATION AVE Southbound					INTERNATIONAL BLVD Westbound					S AVIATION AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	41	0	29	0	70	44	305	0	0	349	0	0	0	0	0	0	277	24	0	301	720
07:15 AM	34	0	32	0	66	36	301	0	0	337	0	0	0	0	0	0	275	32	0	307	710
07:30 AM	44	0	46	0	90	43	277	0	0	320	0	0	0	0	0	0	310	34	0	344	754
07:45 AM	48	0	60	0	108	56	265	0	0	321	0	0	0	0	0	0	277	30	0	307	736
Total	167	0	167	0	334	179	1148	0	0	1327	0	0	0	0	0	0	1139	120	0	1259	2920
08:00 AM	38	0	51	0	89	21	251	0	0	272	0	0	0	0	0	0	253	38	0	291	652
08:15 AM	44	0	67	0	111	28	250	0	0	278	0	0	0	0	0	0	267	21	0	288	677
08:30 AM	43	0	54	0	97	23	243	0	0	266	0	0	0	0	0	0	232	23	0	255	618
08:45 AM	44	0	57	1	102	31	238	0	0	269	0	0	0	0	0	0	244	30	1	275	646
Total	169	0	229	1	399	103	982	0	0	1085	0	0	0	0	0	0	996	112	1	1109	2593
Grand Total	336	0	396	1	733	282	2130	0	0	2412	0	0	0	0	0	0	2135	232	1	2368	5513
Apprch %	45.8	0	54	0.1		11.7	88.3	0	0		0	0	0	0		0	90.2	9.8	0		
Total %	6.1	0	7.2	0	13.3	5.1	38.6	0	0	43.8	0	0	0	0	0	0	38.7	4.2	0	43	
CARS	316	0	377	1	694	263	2064										2064				
% CARS	94	0	95.2	100	94.7	93.3	96.9	0	0	96.5	0	0	0	0	0	0	96.7	96.6	100	96.7	96.3
HV	20	0	19	0	39	19	66	0	0	85	0	0	0	0	0	0	71	8	0	79	203
% HV	6	0	4.8	0	5.3	6.7	3.1	0	0	3.5	0	0	0	0	0	0	3.3	3.4	0	3.3	3.7



All Traffic Data Services, Inc.

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File Name : #21 SAVIATION&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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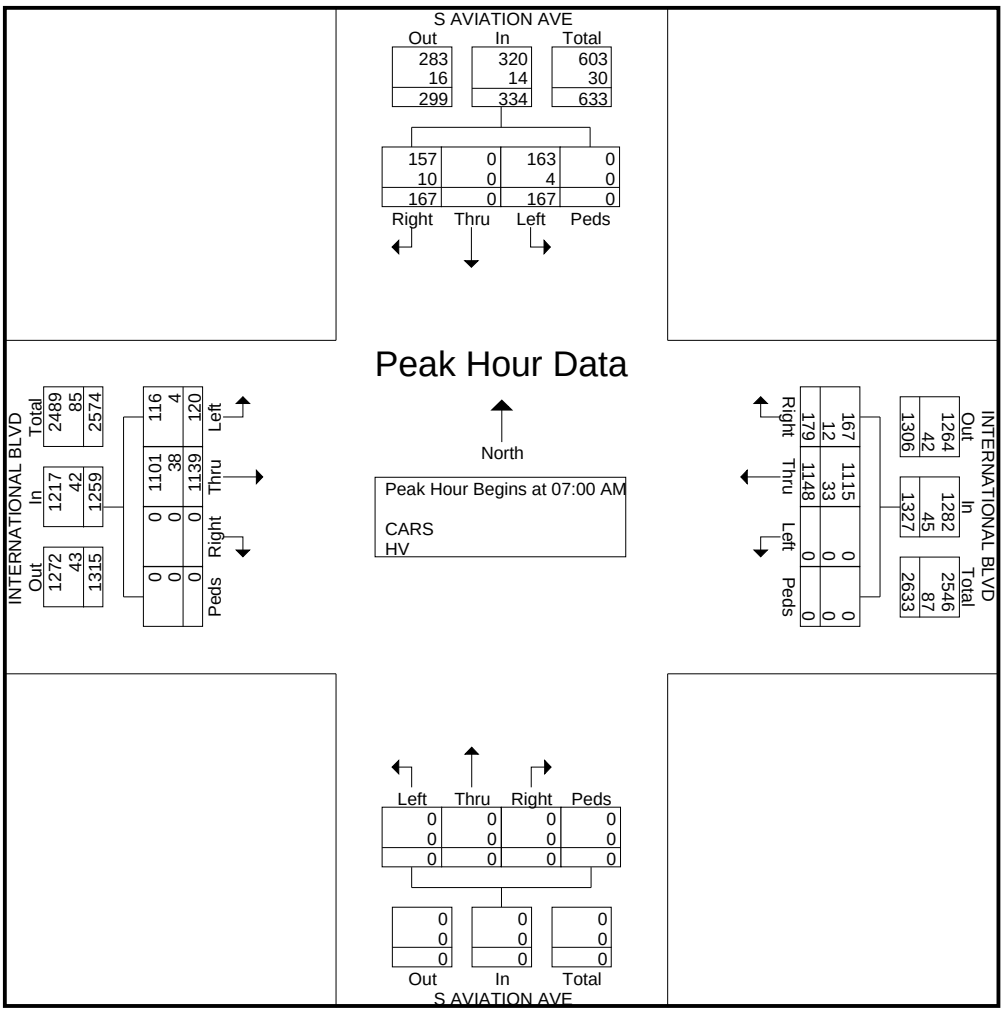
	S AVIATION AVE Southbound					INTERNATIONAL BLVD Westbound					S AVIATION AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	41	0	29	0	70	44	**305**	0	0	**349**	0	0	0	0	0	0	277	24	0	301	720
07:15 AM	34	0	32	0	66	36	301	0	0	337	0	0	0	0	0	0	275	32	0	307	710
07:30 AM	44	0	46	0	90	43	277	0	0	320	0	0	0	0	0	0	**310**	**34**	0	**344**	**754**
07:45 AM	**48**	0	**60**	0	**108**	**56**	265	0	0	321	0	0	0	0	0	0	277	30	0	307	736
Total Volume	167	0	167	0	334	179	1148	0	0	1327	0	0	0	0	0	0	1139	120	0	1259	2920
% App. Total	50	0	50	0		13.5	86.5	0	0		0	0	0	0		0	90.5	9.5	0		
PHF	.870	.000	.696	.000	.773	.799	.941	.000	.000	.951	.000	.000	.000	.000	.000	.000	.919	.882	.000	.915	.968
CARS	157	0	163	0	320	167	1115										1101				
% CARS	94.0	0	97.6	0	95.8	93.3	97.1	0	0	96.6	0	0	0	0	0	0	96.7	96.7	0	96.7	96.5
HV	10	0	4	0	14	12	33	0	0	45	0	0	0	0	0	0	38	4	0	42	101
% HV	6.0	0	2.4	0	4.2	6.7	2.9	0	0	3.4	0	0	0	0	0	0	3.3	3.3	0	3.3	3.5



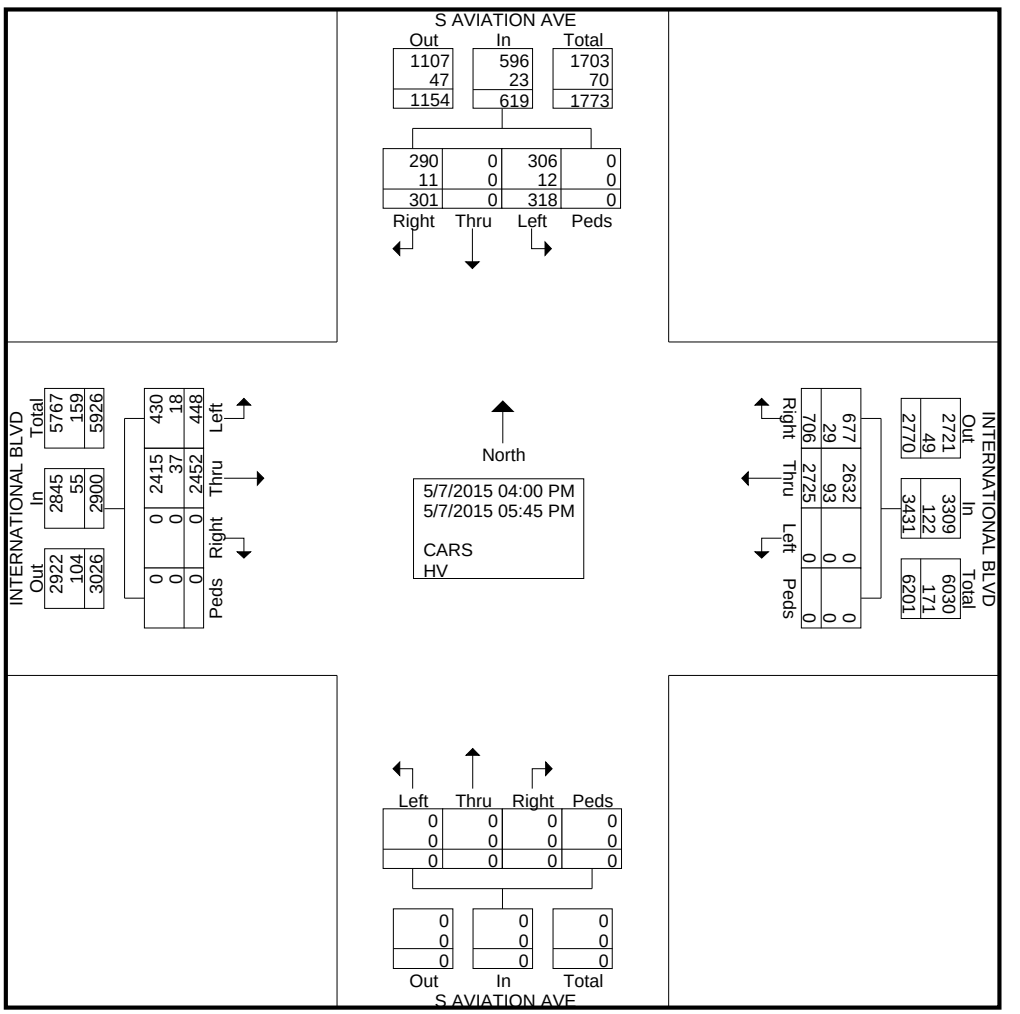
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #21 SAVIATION&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	S AVIATION AVE Southbound					INTERNATIONAL BLVD Westbound					S AVIATION AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	26	0	39	0	65	57	348	0	0	405	0	0	0	0	0	0	331	45	0	376	846
04:15 PM	29	0	61	0	90	56	344	0	0	400	0	0	0	0	0	0	296	66	0	362	852
04:30 PM	39	0	39	0	78	85	374	0	0	459	0	0	0	0	0	0	342	52	0	394	931
04:45 PM	36	0	48	0	84	84	335	0	0	419	0	0	0	0	0	0	274	49	0	323	826
Total	130	0	187	0	317	282	1401	0	0	1683	0	0	0	0	0	0	1243	212	0	1455	3455
05:00 PM	52	0	31	0	83	120	346	0	0	466	0	0	0	0	0	0	311	63	0	374	923
05:15 PM	36	0	37	0	73	126	351	0	0	477	0	0	0	0	0	0	319	69	0	388	938
05:30 PM	44	0	41	0	85	104	306	0	0	410	0	0	0	0	0	0	291	57	0	348	843
05:45 PM	39	0	22	0	61	74	321	0	0	395	0	0	0	0	0	0	288	47	0	335	791
Total	171	0	131	0	302	424	1324	0	0	1748	0	0	0	0	0	0	1209	236	0	1445	3495
Grand Total	301	0	318	0	619	706	2725	0	0	3431	0	0	0	0	0	0	2452	448	0	2900	6950
Apprch %	48.6	0	51.4	0		20.6	79.4	0	0		0	0	0	0		0	84.6	15.4	0		
Total %	4.3	0	4.6	0	8.9	10.2	39.2	0	0	49.4	0	0	0	0	0	0	35.3	6.4	0	41.7	
CARS	290	0	306	0	596	677	2632										2415				
% CARS	96.3	0	96.2	0	96.3	95.9	96.6	0	0	96.4	0	0	0	0	0	0	98.5	96	0	98.1	97.1
HV	11	0	12	0	23	29	93	0	0	122	0	0	0	0	0	0	37	18	0	55	200
% HV	3.7	0	3.8	0	3.7	4.1	3.4	0	0	3.6	0	0	0	0	0	0	1.5	4	0	1.9	2.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #21 SAVIATION&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
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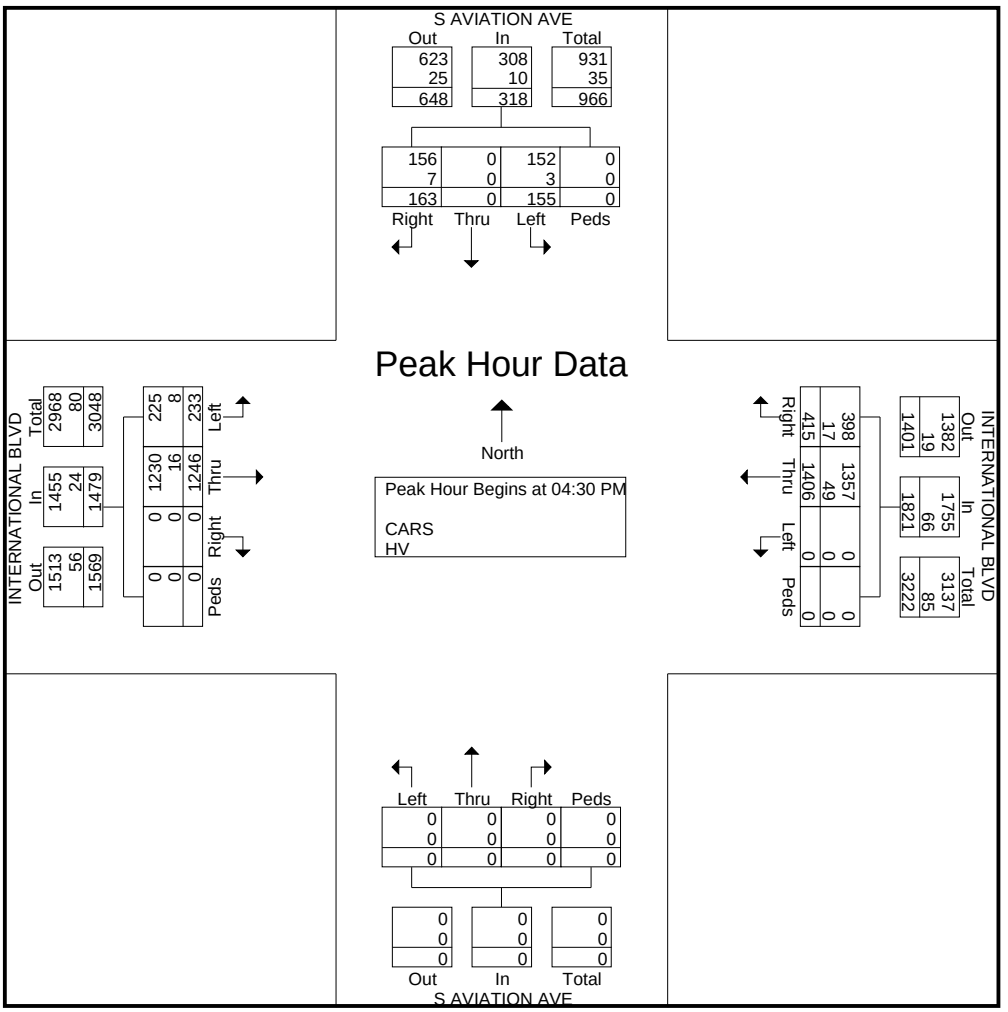
	S AVIATION AVE Southbound					INTERNATIONAL BLVD Westbound					S AVIATION AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	39	0	39	0	78	85	**374**	0	0	459	0	0	0	0	0	0	**342**	52	0	**394**	931
04:45 PM	36	0	**48**	0	**84**	84	335	0	0	419	0	0	0	0	0	0	274	49	0	323	826
05:00 PM	**52**	0	31	0	83	120	346	0	0	466	0	0	0	0	0	0	311	63	0	374	923
05:15 PM	36	0	37	0	73	**126**	351	0	0	**477**	0	0	0	0	0	0	319	**69**	0	388	**938**
Total Volume	163	0	155	0	318	415	1406	0	0	1821	0	0	0	0	0	0	1246	233	0	1479	3618
% App. Total	51.3	0	48.7	0		22.8	77.2	0	0		0	0	0	0		0	84.2	15.8	0		
PHF	.784	.000	.807	.000	.946	.823	.940	.000	.000	.954	.000	.000	.000	.000	.000	.000	.911	.844	.000	.938	.964
CARS	156	0	152	0	308	398	1357										1230				
% CARS	95.7	0	98.1	0	96.9	95.9	96.5	0	0	96.4	0	0	0	0	0	0	98.7	96.6	0	98.4	97.2
HV	7	0	3	0	10	17	49	0	0	66	0	0	0	0	0	0	16	8	0	24	100
% HV	4.3	0	1.9	0	3.1	4.1	3.5	0	0	3.6	0	0	0	0	0	0	1.3	3.4	0	1.6	2.8



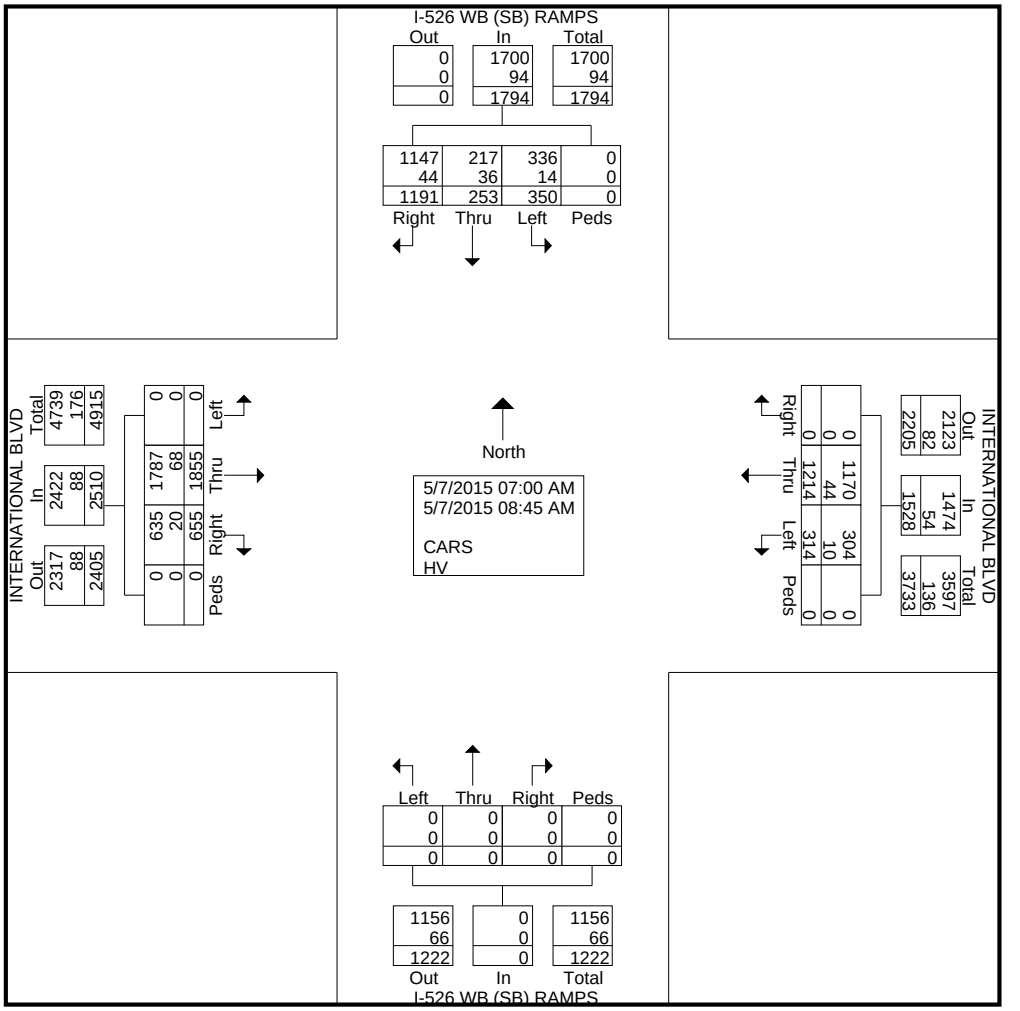
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #22 I526WBRAMPS&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 WB (SB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	206	48	35	0	289	0	153	15	0	168	0	0	0	0	0	71	245	0	0	316	773
07:15 AM	166	37	45	0	248	0	163	33	0	196	0	0	0	0	0	72	231	0	0	303	747
07:30 AM	151	33	33	0	217	0	163	38	0	201	0	0	0	0	0	84	266	0	0	350	768
07:45 AM	139	25	32	0	196	0	182	38	0	220	0	0	0	0	0	97	217	0	0	314	730
Total	662	143	145	0	950	0	661	124	0	785	0	0	0	0	0	324	959	0	0	1283	3018
08:00 AM	127	35	38	0	200	0	149	51	0	200	0	0	0	0	0	87	213	0	0	300	700
08:15 AM	134	25	50	0	209	0	130	42	0	172	0	0	0	0	0	93	239	0	0	332	713
08:30 AM	137	30	57	0	224	0	140	37	0	177	0	0	0	0	0	68	219	0	0	287	688
08:45 AM	131	20	60	0	211	0	134	60	0	194	0	0	0	0	0	83	225	0	0	308	713
Total	529	110	205	0	844	0	553	190	0	743	0	0	0	0	0	331	896	0	0	1227	2814
Grand Total	1191	253	350	0	1794	0	1214	314	0	1528	0	0	0	0	0	655	1855	0	0	2510	5832
Apprch %	66.4	14.1	19.5	0		0	79.5	20.5	0		0	0	0	0		26.1	73.9	0	0		
Total %	20.4	4.3	6	0	30.8	0	20.8	5.4	0	26.2	0	0	0	0	0	11.2	31.8	0	0	43	
CARS	1147						1170										1787				
% CARS	96.3	85.8	96	0	94.8	0	96.4	96.8	0	96.5	0	0	0	0	0	96.9	96.3	0	0	96.5	96
HV	44	36	14	0	94	0	44	10	0	54	0	0	0	0	0	20	68	0	0	88	236
% HV	3.7	14.2	4	0	5.2	0	3.6	3.2	0	3.5	0	0	0	0	0	3.1	3.7	0	0	3.5	4



All Traffic Data Services, Inc.

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File Name : #22 I526WBRAMPS&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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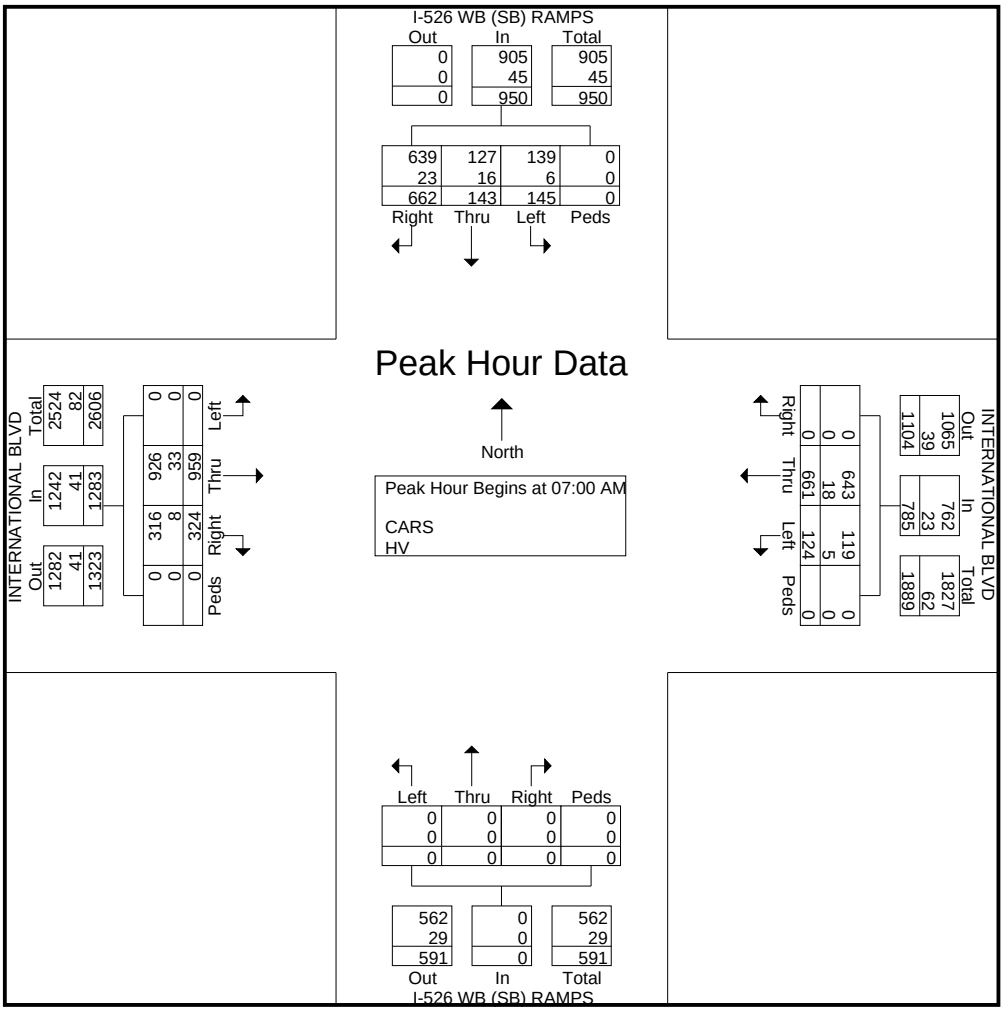
	I-526 WB (SB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 WB (SB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**206**	**48**	35	0	**289**	0	153	15	0	168	0	0	0	0	0	71	245	0	0	316	**773**
07:15 AM	166	37	**45**	0	248	0	163	33	0	196	0	0	0	0	0	72	231	0	0	303	747
07:30 AM	151	33	33	0	217	0	163	**38**	0	201	0	0	0	0	0	84	**266**	0	0	**350**	768
07:45 AM	139	25	32	0	196	0	**182**	38	0	**220**	0	0	0	0	0	**97**	217	0	0	314	730
Total Volume	662	143	145	0	950	0	661	124	0	785	0	0	0	0	0	324	959	0	0	1283	3018
% App. Total	69.7	15.1	15.3	0		0	84.2	15.8	0		0	0	0	0		25.3	74.7	0	0		
PHF	.803	.745	.806	.000	.822	.000	.908	.816	.000	.892	.000	.000	.000	.000	.000	.835	.901	.000	.000	.916	.976
CARS	639	127	139	0	905	0	643	119	0	762	0	0	0	0	0	316	926	0	0	1242	2909
% CARS	96.5	88.8	95.9	0	95.3	0	97.3	96.0	0	97.1	0	0	0	0	0	97.5	96.6	0	0	96.8	96.4
HV	23	16	6	0	45	0	18	5	0	23	0	0	0	0	0	8	33	0	0	41	109
% HV	3.5	11.2	4.1	0	4.7	0	2.7	4.0	0	2.9	0	0	0	0	0	2.5	3.4	0	0	3.2	3.6



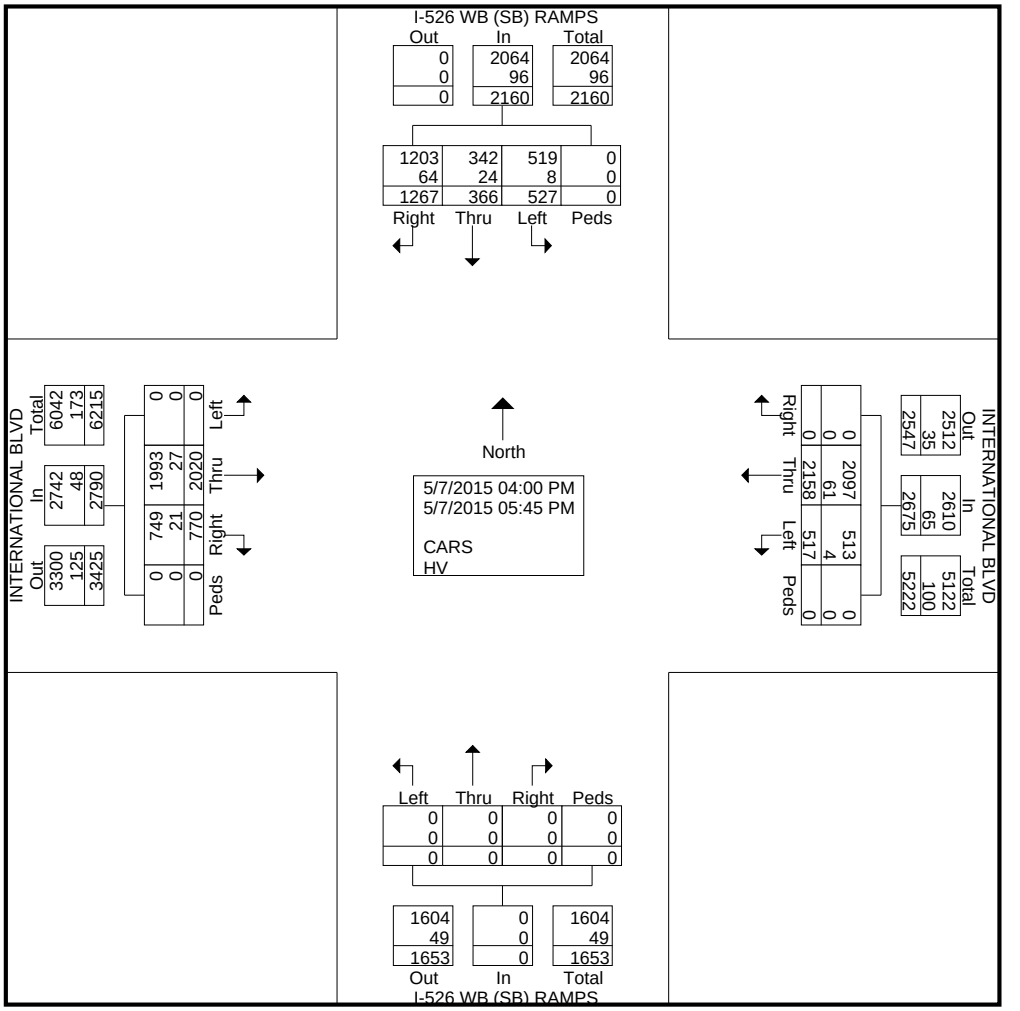
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #22 I526WBRAMPS&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 WB (SB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 WB (SB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	181	37	51	0	269	0	240	51	0	291	0	0	0	0	0	110	257	0	0	367	927
04:15 PM	179	41	53	0	273	0	227	65	0	292	0	0	0	0	0	102	249	0	0	351	916
04:30 PM	185	58	68	0	311	0	266	70	0	336	0	0	0	0	0	122	260	0	0	382	1029
04:45 PM	159	40	74	0	273	0	256	62	0	318	0	0	0	0	0	95	235	0	0	330	921
Total	704	176	246	0	1126	0	989	248	0	1237	0	0	0	0	0	429	1001	0	0	1430	3793
05:00 PM	149	46	67	0	262	0	300	72	0	372	0	0	0	0	0	82	264	0	0	346	980
05:15 PM	144	58	51	0	253	0	344	71	0	415	0	0	0	0	0	106	257	0	0	363	1031
05:30 PM	125	48	88	0	261	0	291	48	0	339	0	0	0	0	0	91	247	0	0	338	938
05:45 PM	145	38	75	0	258	0	234	78	0	312	0	0	0	0	0	62	251	0	0	313	883
Total	563	190	281	0	1034	0	1169	269	0	1438	0	0	0	0	0	341	1019	0	0	1360	3832
Grand Total	1267	366	527	0	2160	0	2158	517	0	2675	0	0	0	0	0	770	2020	0	0	2790	7625
Apprch %	58.7	16.9	24.4	0		0	80.7	19.3	0		0	0	0	0		27.6	72.4	0	0		
Total %	16.6	4.8	6.9	0	28.3	0	28.3	6.8	0	35.1	0	0	0	0	0	10.1	26.5	0	0	36.6	
CARS	1203						2097										1993				
% CARS	94.9	93.4	98.5	0	95.6	0	97.2	99.2	0	97.6	0	0	0	0	0	97.3	98.7	0	0	98.3	97.3
HV	64	24	8	0	96	0	61	4	0	65	0	0	0	0	0	21	27	0	0	48	209
% HV	5.1	6.6	1.5	0	4.4	0	2.8	0.8	0	2.4	0	0	0	0	0	2.7	1.3	0	0	1.7	2.7



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #22 I526WBRAMPS&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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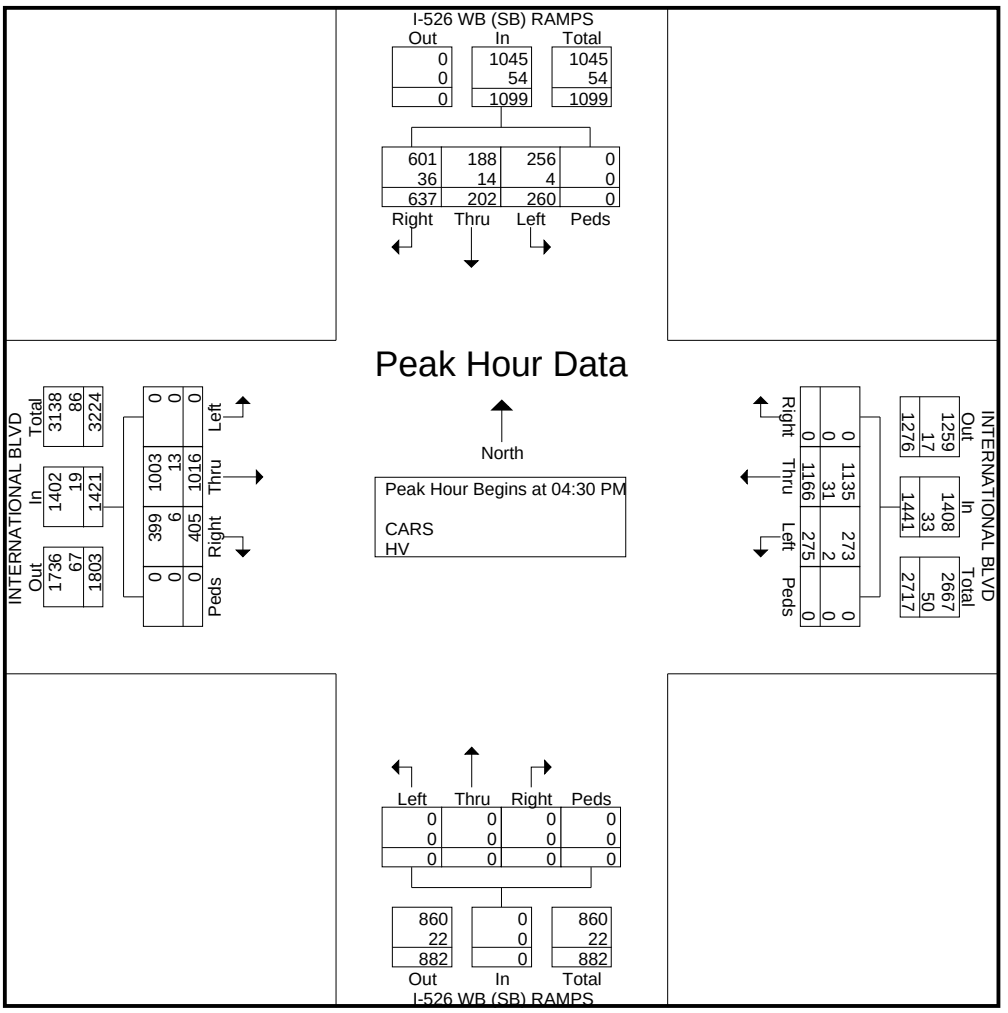
	I-526 WB (SB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 WB (SB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**185**	**58**	68	0	**311**	0	266	70	0	336	0	0	0	0	0	**122**	260	0	0	**382**	1029
04:45 PM	159	40	**74**	0	273	0	256	62	0	318	0	0	0	0	0	95	235	0	0	330	921
05:00 PM	149	46	67	0	262	0	300	**72**	0	372	0	0	0	0	0	82	**264**	0	0	346	980
05:15 PM	144	58	51	0	253	0	**344**	71	0	**415**	0	0	0	0	0	106	257	0	0	363	**1031**
Total Volume	637	202	260	0	1099	0	1166	275	0	1441	0	0	0	0	0	405	1016	0	0	1421	3961
% App. Total	58	18.4	23.7	0		0	80.9	19.1	0		0	0	0	0		28.5	71.5	0	0		
PHF	.861	.871	.878	.000	.883	.000	.847	.955	.000	.868	.000	.000	.000	.000	.000	.830	.962	.000	.000	.930	.960
CARS	601	188	256	0	1045	0	1135										1003				
% CARS	94.3	93.1	98.5	0	95.1	0	97.3	99.3	0	97.7	0	0	0	0	0	98.5	98.7	0	0	98.7	97.3
HV	36	14	4	0	54	0	31	2	0	33	0	0	0	0	0	6	13	0	0	19	106
% HV	5.7	6.9	1.5	0	4.9	0	2.7	0.7	0	2.3	0	0	0	0	0	1.5	1.3	0	0	1.3	2.7



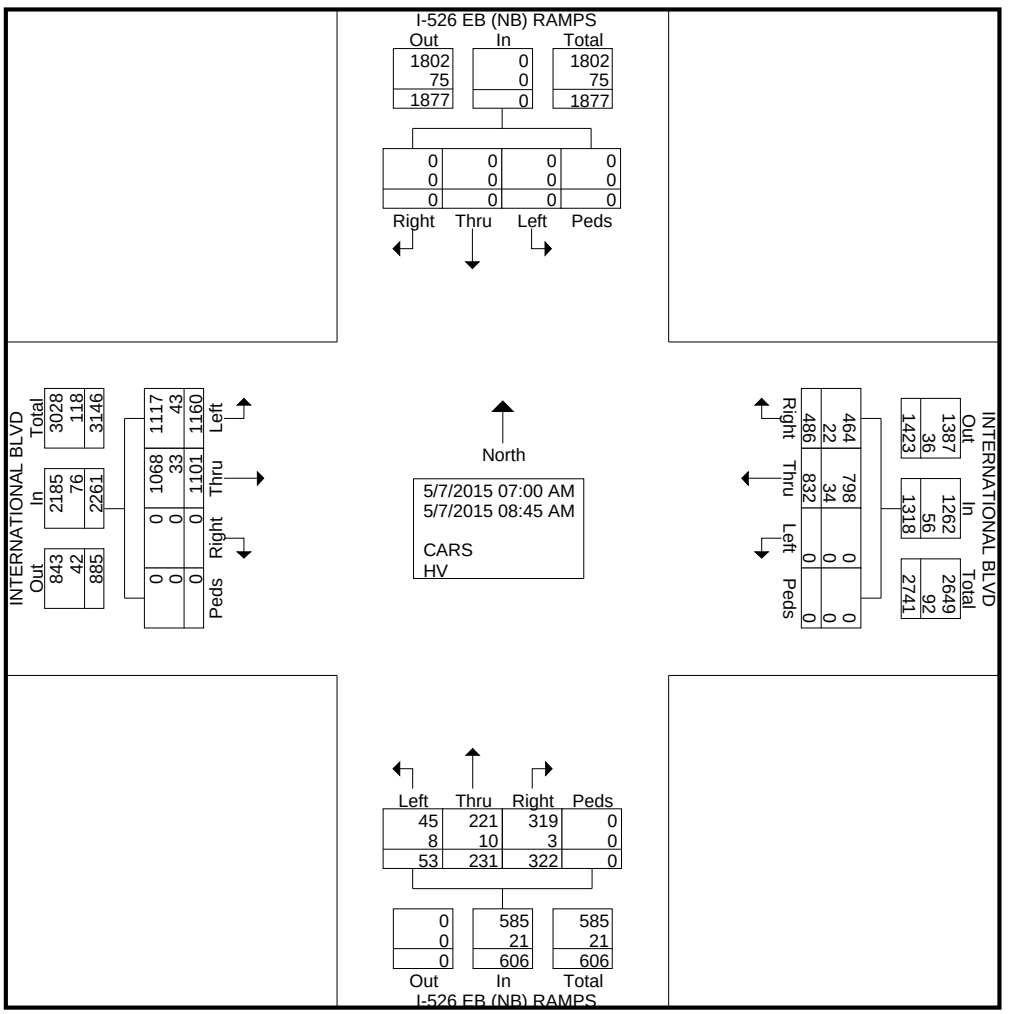
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #23 I526EBRAMPS&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 EB (NB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	59	73	0	0	132	31	27	6	0	64	0	108	151	0	259	455
07:15 AM	0	0	0	0	0	64	98	0	0	162	35	36	2	0	73	0	118	161	0	279	514
07:30 AM	0	0	0	0	0	55	103	0	0	158	31	48	8	0	87	0	134	183	0	317	562
07:45 AM	0	0	0	0	0	59	110	0	0	169	46	30	9	0	85	0	144	138	0	282	536
Total	0	0	0	0	0	237	384	0	0	621	143	141	25	0	309	0	504	633	0	1137	2067
08:00 AM	0	0	0	0	0	45	114	0	0	159	37	24	10	0	71	0	132	131	0	263	493
08:15 AM	0	0	0	0	0	45	104	0	0	149	43	20	9	0	72	0	140	142	0	282	503
08:30 AM	0	0	0	0	0	70	107	0	0	177	48	23	6	0	77	0	160	128	0	288	542
08:45 AM	0	0	0	0	0	89	123	0	0	212	51	23	3	0	77	0	165	126	0	291	580
Total	0	0	0	0	0	249	448	0	0	697	179	90	28	0	297	0	597	527	0	1124	2118
Grand Total	0	0	0	0	0	486	832	0	0	1318	322	231	53	0	606	0	1101	1160	0	2261	4185
Apprch %	0	0	0	0		36.9	63.1	0	0		53.1	38.1	8.7	0		0	48.7	51.3	0		
Total %	0	0	0	0	0	11.6	19.9	0	0	31.5	7.7	5.5	1.3	0	14.5	0	26.3	27.7	0	54	
CARS	0	0	0	0	0	464	798	0	0	1262	319	221	45	0	585	0	1068	1117			
% CARS	0	0	0	0	0	95.5	95.9	0	0	95.8	99.1	95.7	84.9	0	96.5	0	97	96.3	0	96.6	96.3
HV	0	0	0	0	0	22	34	0	0	56	3	10	8	0	21	0	33	43	0	76	153
% HV	0	0	0	0	0	4.5	4.1	0	0	4.2	0.9	4.3	15.1	0	3.5	0	3	3.7	0	3.4	3.7



All Traffic Data Services, Inc.

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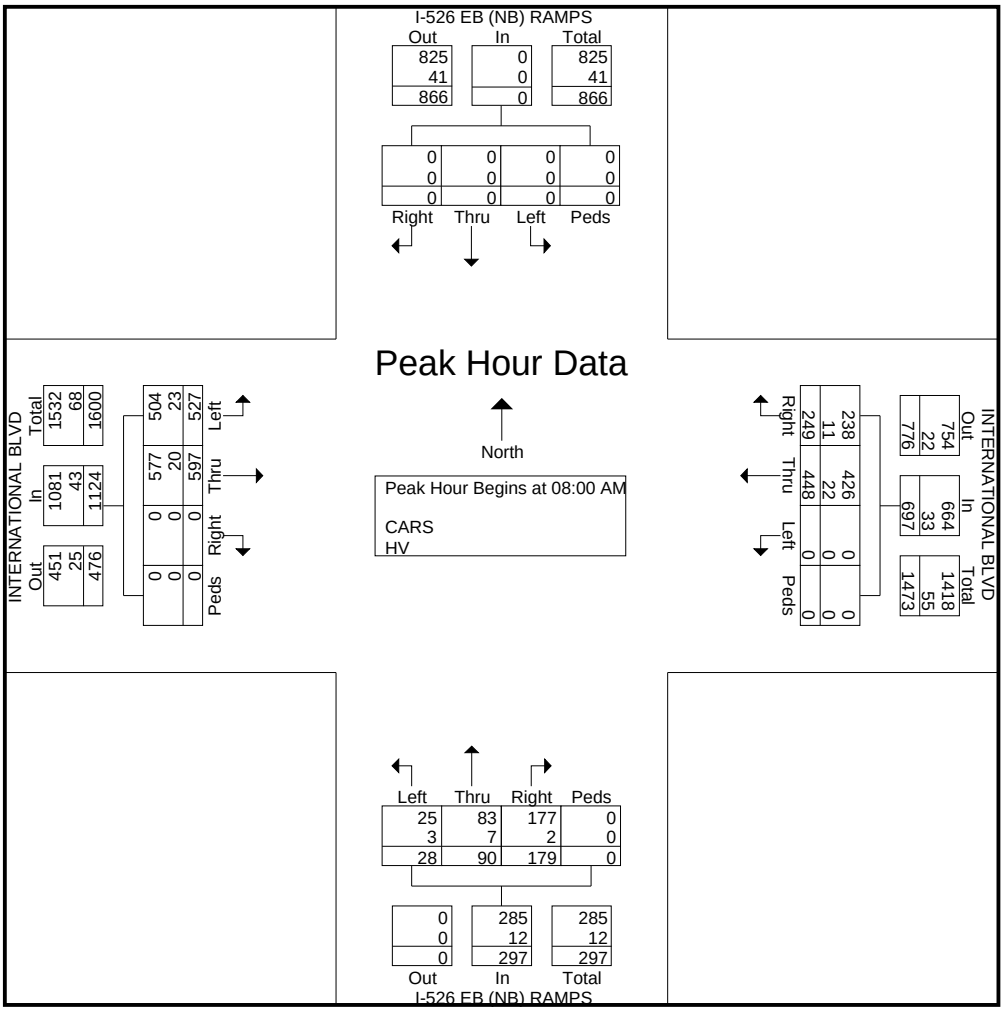
Conyers, GA 30012

File Name : #23 I526EBRAMPS&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-526 EB (NB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 EB (NB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	45	114	0	0	159	37	**24**	**10**	0	71	0	132	131	0	263	493
08:15 AM	0	0	0	0	0	45	104	0	0	149	43	20	9	0	72	0	140	**142**	0	282	503
08:30 AM	0	0	0	0	0	70	107	0	0	177	48	23	6	0	**77**	0	160	128	0	288	542
08:45 AM	0	0	0	0	0	**89**	**123**	0	0	**212**	**51**	23	3	0	77	0	**165**	126	0	**291**	**580**
Total Volume	0	0	0	0	0	249	448	0	0	697	179	90	28	0	297	0	597	527	0	1124	2118
% App. Total	0	0	0	0		35.7	64.3	0	0		60.3	30.3	9.4	0		0	53.1	46.9	0		
PHF	.000	.000	.000	.000	.000	.699	.911	.000	.000	.822	.877	.938	.700	.000	.964	.000	.905	.928	.000	.966	.913
CARS	0	0	0	0	0	238	426	0	0	664	177	83	25	0	285	0	577	504	0	1081	2030
% CARS	0	0	0	0	0	95.6	95.1	0	0	95.3	98.9	92.2	89.3	0	96.0	0	96.6	95.6	0	96.2	95.8
HV	0	0	0	0	0	11	22	0	0	33	2	7	3	0	12	0	20	23	0	43	88
% HV	0	0	0	0	0	4.4	4.9	0	0	4.7	1.1	7.8	10.7	0	4.0	0	3.4	4.4	0	3.8	4.2



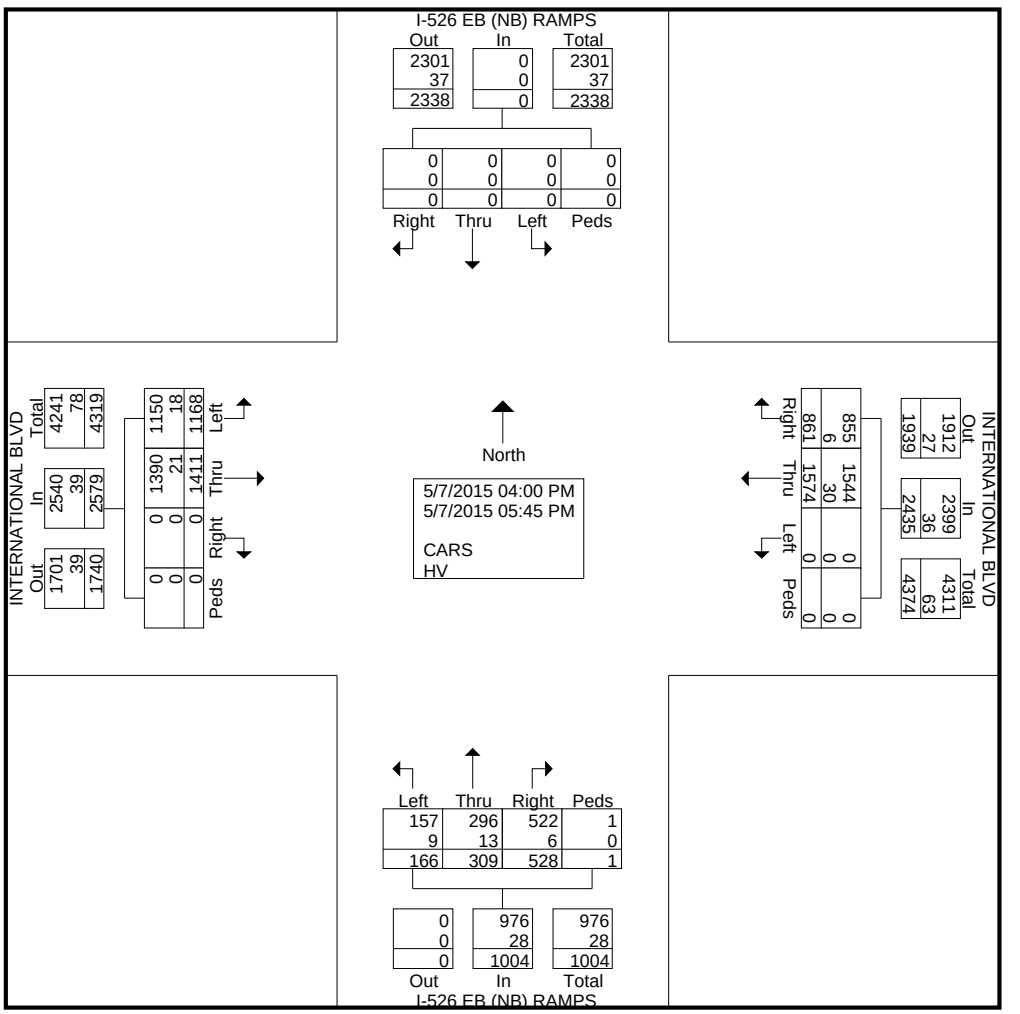
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #23 I526EBRAMPS&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-526 EB (NB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 EB (NB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	137	192	0	0	329	52	41	17	0	110	0	162	142	0	304	743
04:15 PM	0	0	0	0	0	105	175	0	0	280	58	39	15	0	112	0	147	168	0	315	707
04:30 PM	0	0	0	0	0	120	208	0	0	328	59	32	9	0	100	0	180	150	0	330	758
04:45 PM	0	0	0	0	0	90	181	0	0	271	86	46	23	0	155	0	177	156	0	333	759
Total	0	0	0	0	0	452	756	0	0	1208	255	158	64	0	477	0	666	616	0	1282	2967
05:00 PM	0	0	0	0	0	128	225	0	0	353	59	39	21	0	119	0	187	122	0	309	781
05:15 PM	0	0	0	0	0	80	203	0	0	283	85	46	39	0	170	0	187	132	0	319	772
05:30 PM	0	0	0	0	0	97	196	0	0	293	64	35	26	0	125	0	188	142	0	330	748
05:45 PM	0	0	0	0	0	104	194	0	0	298	65	31	16	1	113	0	183	156	0	339	750
Total	0	0	0	0	0	409	818	0	0	1227	273	151	102	1	527	0	745	552	0	1297	3051
Grand Total	0	0	0	0	0	861	1574	0	0	2435	528	309	166	1	1004	0	1411	1168	0	2579	6018
Apprch %	0	0	0	0		35.4	64.6	0	0		52.6	30.8	16.5	0.1		0	54.7	45.3	0		
Total %	0	0	0	0	0	14.3	26.2	0	0	40.5	8.8	5.1	2.8	0	16.7	0	23.4	19.4	0	42.9	
CARS	0	0	0	0	0	855	1544										1390	1150			
% CARS	0	0	0	0	0	99.3	98.1	0	0	98.5	98.9	95.8	94.6	100	97.2	0	98.5	98.5	0	98.5	98.3
HV	0	0	0	0	0	6	30	0	0	36	6	13	9	0	28	0	21	18	0	39	103
% HV	0	0	0	0	0	0.7	1.9	0	0	1.5	1.1	4.2	5.4	0	2.8	0	1.5	1.5	0	1.5	1.7



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #23 I526EBRAMPS&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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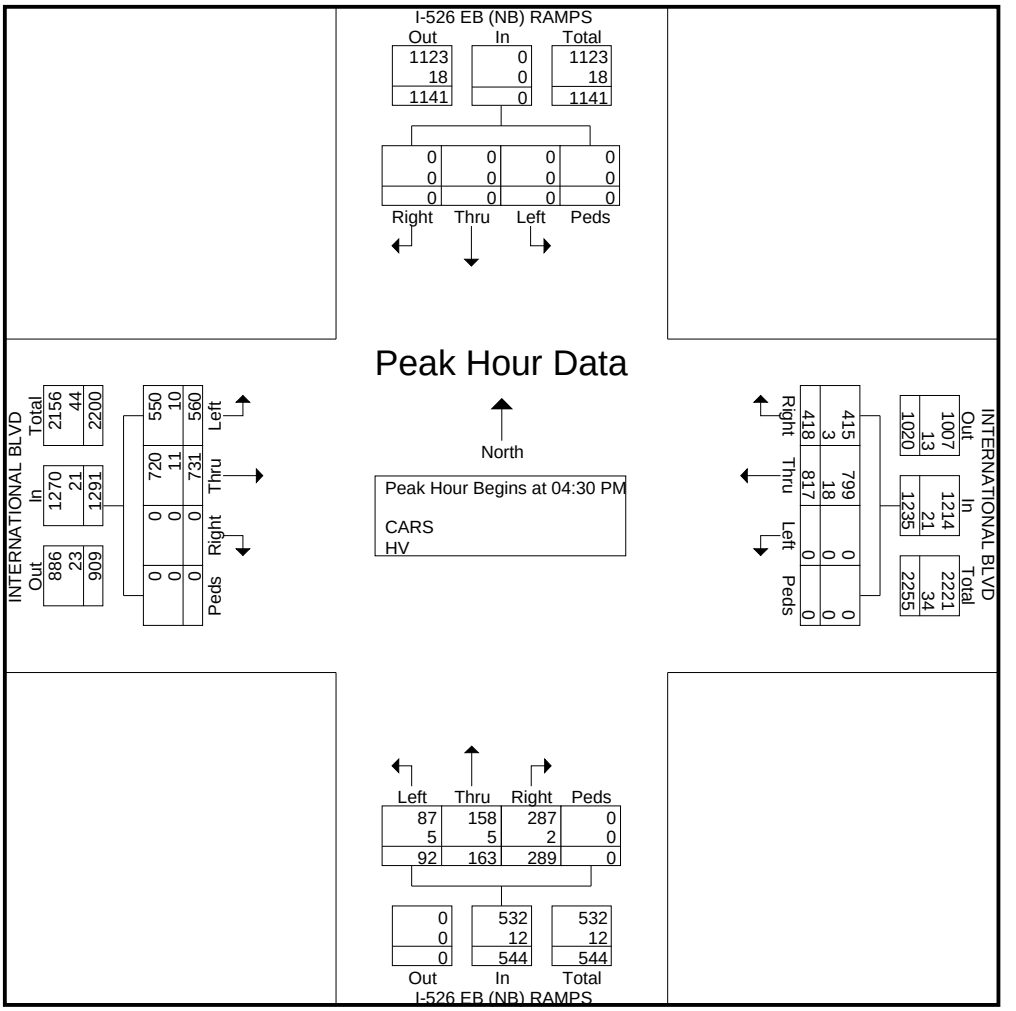
	I-526 EB (NB) RAMPS Southbound					INTERNATIONAL BLVD Westbound					I-526 EB (NB) RAMPS Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	120	208	0	0	328	59	32	9	0	100	0	180	150	0	330	758
04:45 PM	0	0	0	0	0	90	181	0	0	271	**86**	**46**	23	0	155	0	177	**156**	0	**333**	759
05:00 PM	0	0	0	0	0	**128**	**225**	0	0	**353**	59	39	21	0	119	0	**187**	122	0	309	**781**
05:15 PM	0	0	0	0	0	80	203	0	0	283	85	46	**39**	0	**170**	0	187	132	0	319	772
Total Volume	0	0	0	0	0	418	817	0	0	1235	289	163	92	0	544	0	731	560	0	1291	3070
% App. Total	0	0	0	0		33.8	66.2	0	0		53.1	30	16.9	0		0	56.6	43.4	0		
PHF	.000	.000	.000	.000	.000	.816	.908	.000	.000	.875	.840	.886	.590	.000	.800	.000	.977	.897	.000	.969	.983
CARS	0	0	0	0	0	415	799	0	0	1214	287	158	87	0	532	0	720	550	0	1270	3016
% CARS	0	0	0	0	0	99.3	97.8	0	0	98.3	99.3	96.9	94.6	0	97.8	0	98.5	98.2	0	98.4	98.2
HV	0	0	0	0	0	3	18	0	0	21	2	5	5	0	12	0	11	10	0	21	54
% HV	0	0	0	0	0	0.7	2.2	0	0	1.7	0.7	3.1	5.4	0	2.2	0	1.5	1.8	0	1.6	1.8



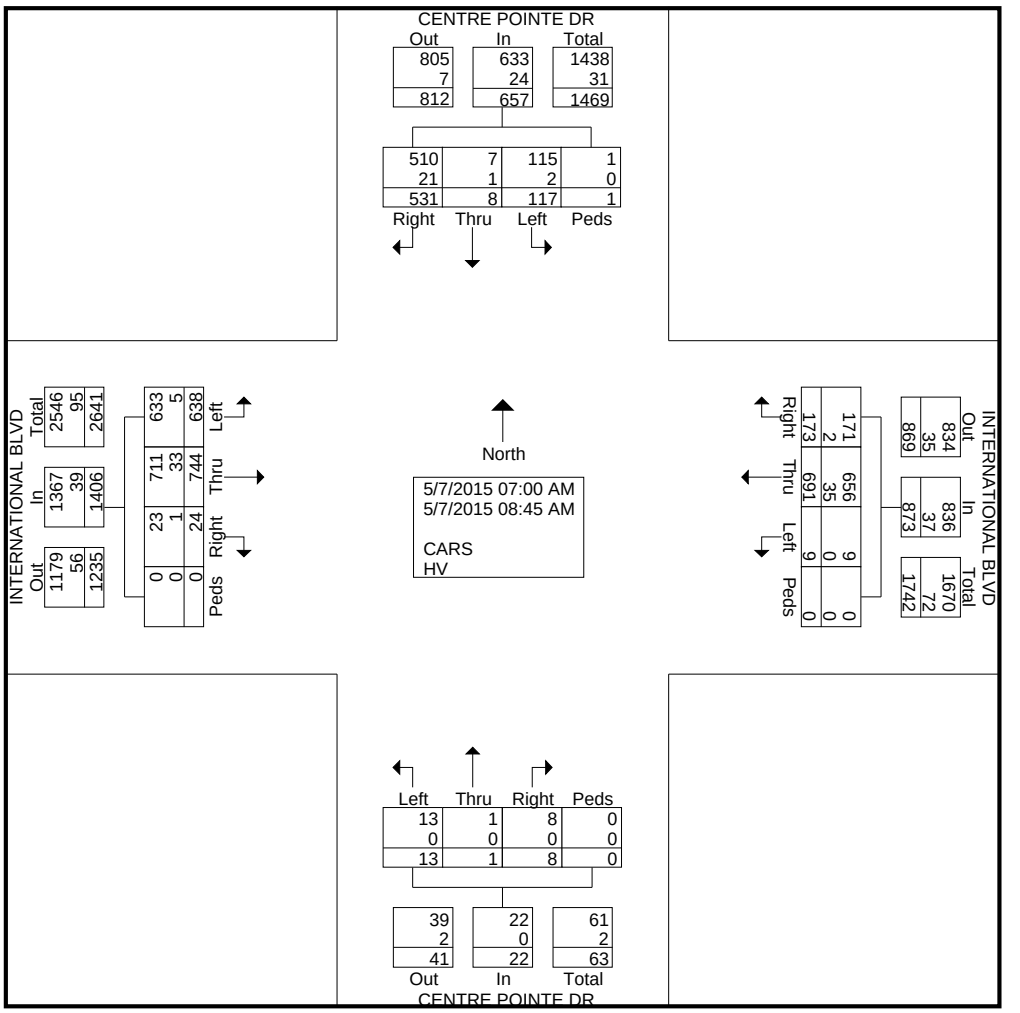
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #24 CENTREPOINTE&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CENTRE POINTE DR Southbound					INTERNATIONAL BLVD Westbound					CENTRE POINTE DR Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	52	1	12	0	65	10	72	0	0	82	2	0	2	0	4	3	83	60	0	146	297
07:15 AM	62	0	10	0	72	5	87	0	0	92	1	0	1	0	2	5	93	67	0	165	331
07:30 AM	61	0	14	0	75	20	98	1	0	119	1	0	2	0	3	5	97	50	0	152	349
07:45 AM	66	1	19	0	86	26	88	0	0	114	1	0	0	0	1	2	105	73	0	180	381
Total	241	2	55	0	298	61	345	1	0	407	5	0	5	0	10	15	378	250	0	643	1358
08:00 AM	69	2	8	0	79	19	75	1	0	95	0	1	1	0	2	0	91	73	0	164	340
08:15 AM	73	0	24	1	98	26	72	6	0	104	1	0	2	0	3	2	98	81	0	181	386
08:30 AM	67	1	13	0	81	36	93	0	0	129	0	0	2	0	2	5	87	118	0	210	422
08:45 AM	81	3	17	0	101	31	106	1	0	138	2	0	3	0	5	2	90	116	0	208	452
Total	290	6	62	1	359	112	346	8	0	466	3	1	8	0	12	9	366	388	0	763	1600
Grand Total	531	8	117	1	657	173	691	9	0	873	8	1	13	0	22	24	744	638	0	1406	2958
Apprch %	80.8	1.2	17.8	0.2		19.8	79.2	1	0		36.4	4.5	59.1	0		1.7	52.9	45.4	0		
Total %	18	0.3	4	0	22.2	5.8	23.4	0.3	0	29.5	0.3	0	0.4	0	0.7	0.8	25.2	21.6	0	47.5	
CARS	510	7	115	1	633	171	656	9	0	836	8	1	13	0	22	23	711	633	0	1367	2858
% CARS	96	87.5	98.3	100	96.3	98.8	94.9	100	0	95.8	100	100	100	0	100	95.8	95.6	99.2	0	97.2	96.6
HV	21	1	2	0	24	2	35	0	0	37	0	0	0	0	0	1	33	5	0	39	100
% HV	4	12.5	1.7	0	3.7	1.2	5.1	0	0	4.2	0	0	0	0	0	4.2	4.4	0.8	0	2.8	3.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #24 CENTREPOINTE&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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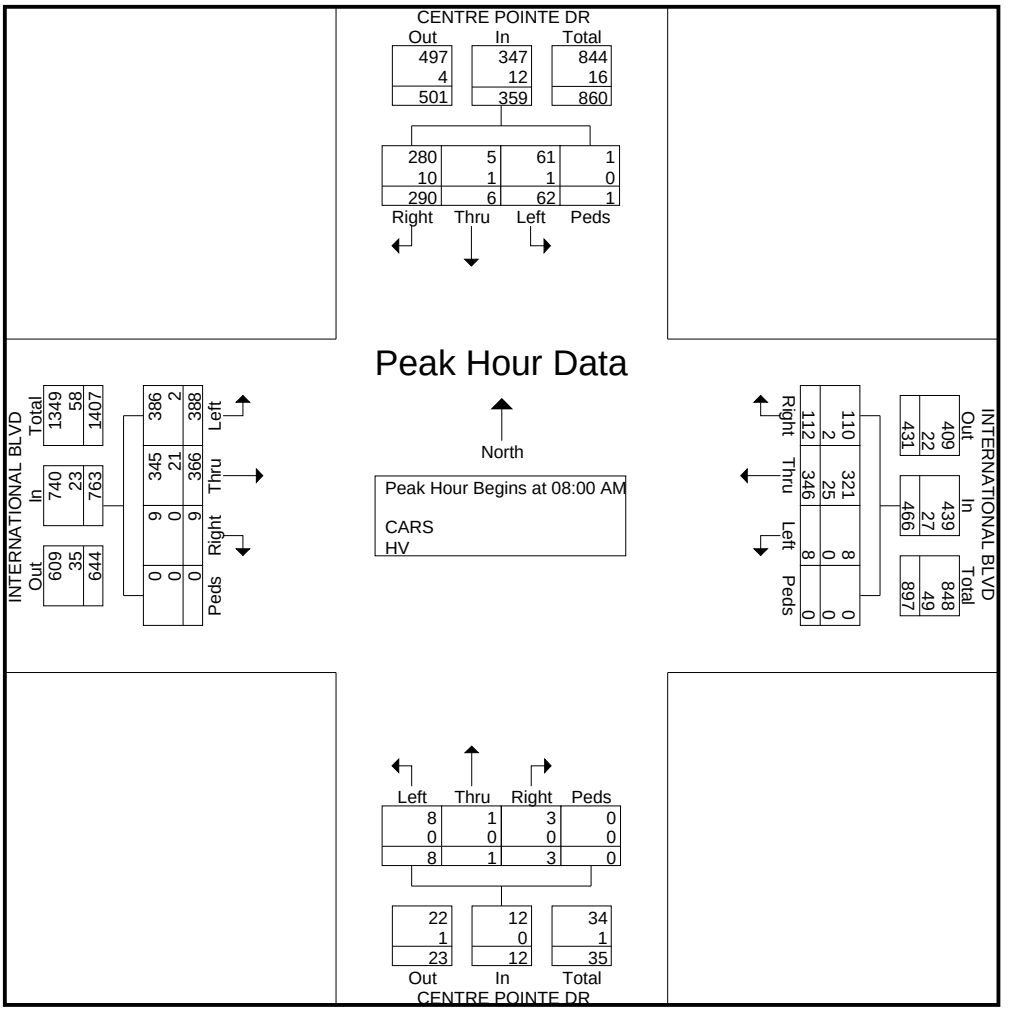
	CENTRE POINTE DR Southbound					INTERNATIONAL BLVD Westbound					CENTRE POINTE DR Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	69	2	8	0	79	19	75	1	0	95	0	**1**	1	0	2	0	91	73	0	164	340
08:15 AM	73	0	**24**	**1**	98	26	72	**6**	0	104	1	0	2	0	3	2	**98**	81	0	181	386
08:30 AM	67	1	13	0	81	**36**	93	0	0	129	0	0	2	0	2	**5**	87	**118**	0	**210**	422
08:45 AM	**81**	**3**	17	0	**101**	31	**106**	1	0	**138**	**2**	0	**3**	0	**5**	2	90	116	0	208	**452**
Total Volume	290	6	62	1	359	112	346	8	0	466	3	1	8	0	12	9	366	388	0	763	1600
% App. Total	80.8	1.7	17.3	0.3		24	74.2	1.7	0		25	8.3	66.7	0		1.2	48	50.9	0		
PHF	.895	.500	.646	.250	.889	.778	.816	.333	.000	.844	.375	.250	.667	.000	.600	.450	.934	.822	.000	.908	.885
CARS	280	5	61	1	347	110	321	8	0	439	3	1	8	0	12	9	345	386	0	740	1538
% CARS	96.6	83.3	98.4	100	96.7	98.2	92.8	100	0	94.2	100	100	100	0	100	100	94.3	99.5	0	97.0	96.1
HV	10	1	1	0	12	2	25	0	0	27	0	0	0	0	0	0	21	2	0	23	62
% HV	3.4	16.7	1.6	0	3.3	1.8	7.2	0	0	5.8	0	0	0	0	0	0	5.7	0.5	0	3.0	3.9



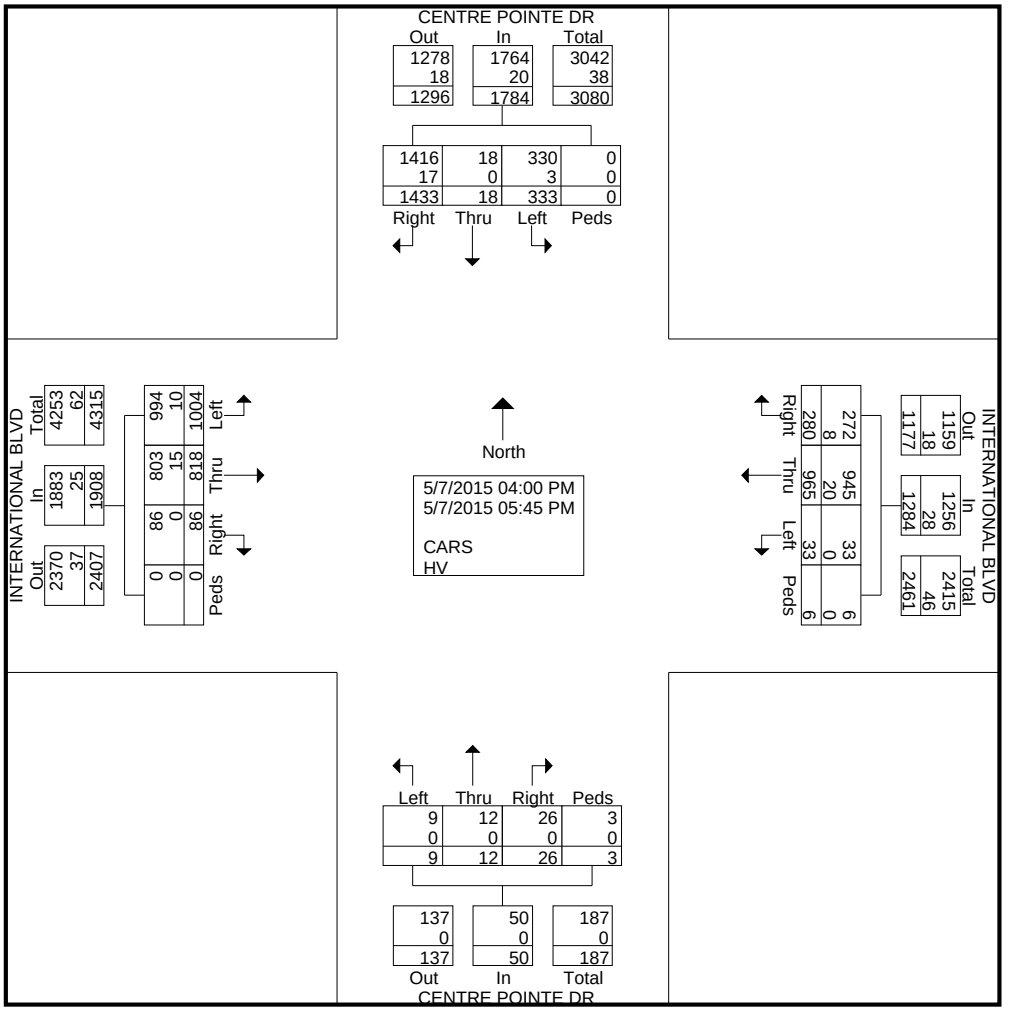
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #24 CENTREPOINTE&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CENTRE POINTE DR Southbound					INTERNATIONAL BLVD Westbound					CENTRE POINTE DR Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	194	2	34	0	230	24	112	1	2	139	3	2	0	0	5	2	82	127	0	211	585
04:15 PM	157	1	32	0	190	29	137	3	0	169	1	1	1	0	3	3	100	88	0	191	553
04:30 PM	210	7	37	0	254	43	110	6	1	160	6	4	4	0	14	14	103	134	0	251	679
04:45 PM	181	2	44	0	227	46	113	1	0	160	6	2	1	0	9	7	94	151	0	252	648
Total	742	12	147	0	901	142	472	11	3	628	16	9	6	0	31	26	379	500	0	905	2465
05:00 PM	196	1	48	0	245	31	127	6	1	165	2	1	2	0	5	6	106	128	0	240	655
05:15 PM	162	2	54	0	218	40	122	4	1	167	1	1	1	0	3	10	103	138	0	251	639
05:30 PM	154	1	29	0	184	36	105	2	1	144	3	0	0	2	5	15	122	130	0	267	600
05:45 PM	179	2	55	0	236	31	139	10	0	180	4	1	0	1	6	29	108	108	0	245	667
Total	691	6	186	0	883	138	493	22	3	656	10	3	3	3	19	60	439	504	0	1003	2561
Grand Total	1433	18	333	0	1784	280	965	33	6	1284	26	12	9	3	50	86	818	1004	0	1908	5026
Apprch %	80.3	1	18.7	0		21.8	75.2	2.6	0.5		52	24	18	6		4.5	42.9	52.6	0		
Total %	28.5	0.4	6.6	0	35.5	5.6	19.2	0.7	0.1	25.5	0.5	0.2	0.2	0.1	1	1.7	16.3	20	0	38	
CARS	1416																				
% CARS	98.8	100	99.1	0	98.9	97.1	97.9	100	100	97.8	100	100	100	100	100	100	98.2	99	0	98.7	98.5
HV	17	0	3	0	20	8	20	0	0	28	0	0	0	0	0	0	15	10	0	25	73
% HV	1.2	0	0.9	0	1.1	2.9	2.1	0	0	2.2	0	0	0	0	0	0	1.8	1	0	1.3	1.5



All Traffic Data Services, Inc.

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Conyers, GA 30012

File Name : #24 CENTREPOINTE&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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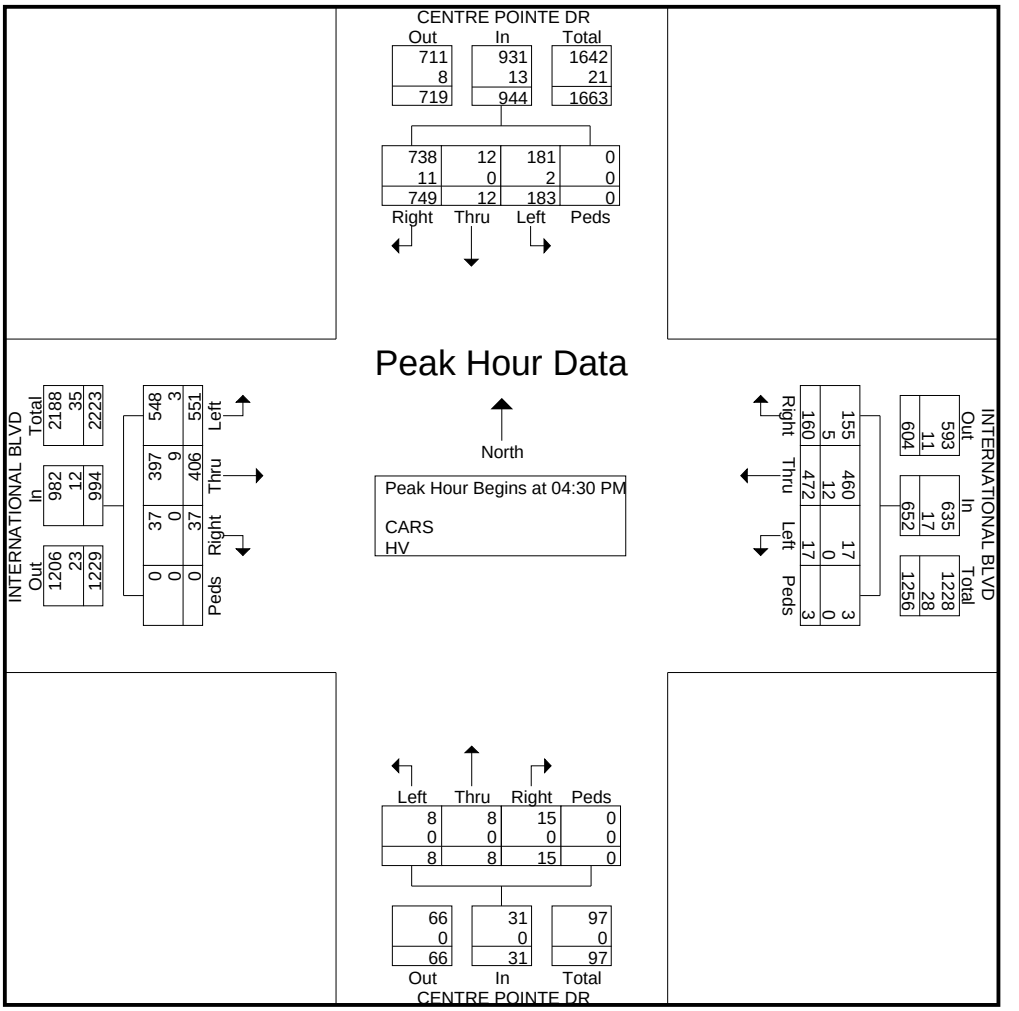
	CENTRE POINTE DR Southbound					INTERNATIONAL BLVD Westbound					CENTRE POINTE DR Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**210**	**7**	37	0	**254**	43	110	**6**	**1**	160	**6**	**4**	**4**	0	**14**	**14**	103	134	0	251	**679**
04:45 PM	181	2	44	0	227	**46**	113	1	0	160	6	2	1	0	9	7	94	**151**	0	**252**	648
05:00 PM	196	1	48	0	245	31	**127**	6	1	165	2	1	2	0	5	6	**106**	128	0	240	655
05:15 PM	162	2	**54**	0	218	40	122	4	1	**167**	1	1	1	0	3	10	103	138	0	251	639
Total Volume	749	12	183	0	944	160	472	17	3	652	15	8	8	0	31	37	406	551	0	994	2621
% App. Total	79.3	1.3	19.4	0		24.5	72.4	2.6	0.5		48.4	25.8	25.8	0		3.7	40.8	55.4	0		
PHF	.892	.429	.847	.000	.929	.870	.929	.708	.750	.976	.625	.500	.500	.000	.554	.661	.958	.912	.000	.986	.965
CARS	738	12	181	0	931	155	460	17	3	635	15	8	8	0	31	37	397	548	0	982	2579
% CARS	98.5	100	98.9	0	98.6	96.9	97.5	100	100	97.4	100	100	100	0	100	100	97.8	99.5	0	98.8	98.4
HV	11	0	2	0	13	5	12	0	0	17	0	0	0	0	0	0	9	3	0	12	42
% HV	1.5	0	1.1	0	1.4	3.1	2.5	0	0	2.6	0	0	0	0	0	0	2.2	0.5	0	1.2	1.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #25 TANGEROUTLET&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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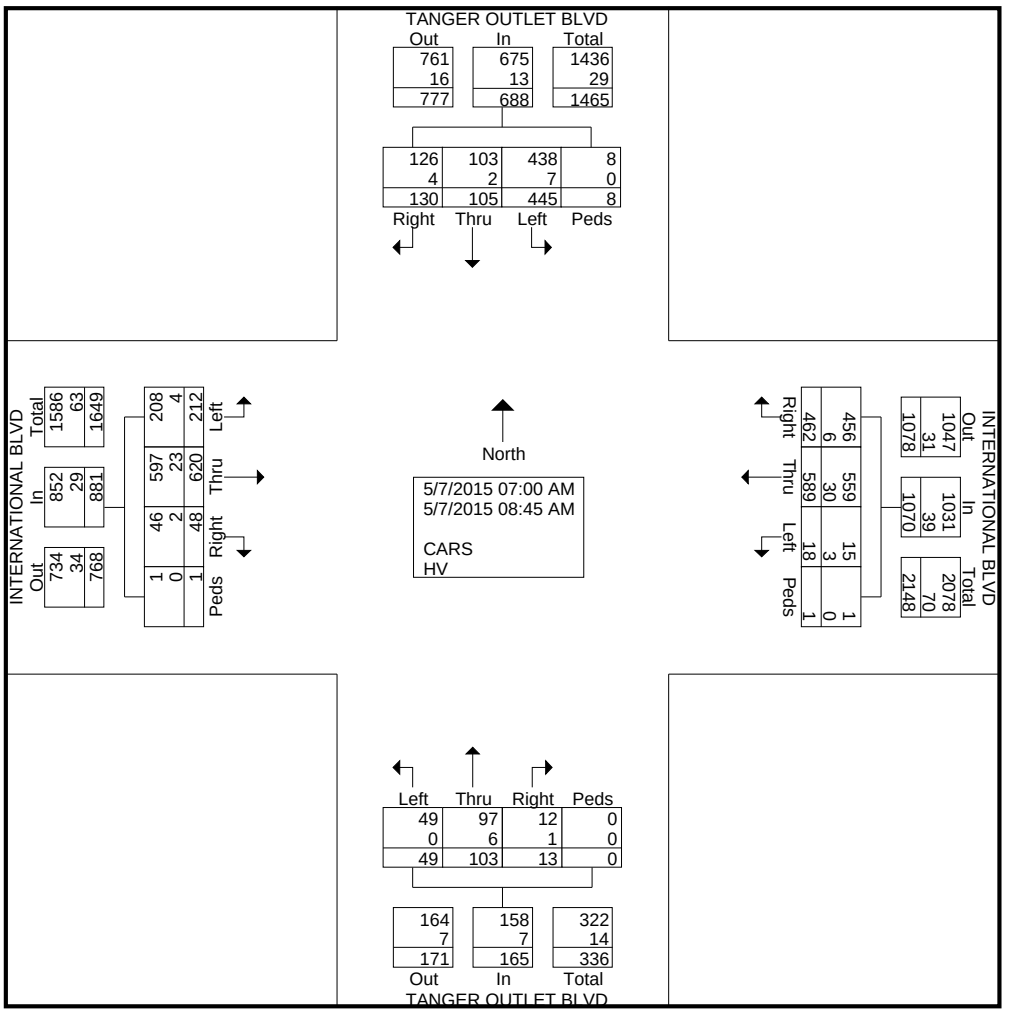
Groups Printed- CARS - HV

	TANGER OUTLET BLVD Southbound					INTERNATIONAL BLVD Westbound					TANGER OUTLET BLVD Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	12	10	49	1	72	37	42	1	1	81	1	8	3	0	12	6	76	25	0	107	272
07:15 AM	17	15	47	1	80	55	71	3	0	129	1	12	8	0	21	3	69	32	1	105	335
07:30 AM	19	18	70	1	108	55	67	2	0	124	0	18	5	0	23	5	86	23	0	114	369
07:45 AM	16	14	57	0	87	68	64	2	0	134	0	15	6	0	21	8	81	36	0	125	367
Total	64	57	223	3	347	215	244	8	1	468	2	53	22	0	77	22	312	116	1	451	1343
08:00 AM	17	21	63	0	101	68	68	0	0	136	1	13	4	0	18	6	69	19	0	94	349
08:15 AM	12	7	66	3	88	63	76	2	0	141	1	19	9	0	29	5	92	26	0	123	381
08:30 AM	15	10	52	1	78	52	104	3	0	159	3	8	8	0	19	9	77	24	0	110	366
08:45 AM	22	10	41	1	74	64	97	5	0	166	6	10	6	0	22	6	70	27	0	103	365
Total	66	48	222	5	341	247	345	10	0	602	11	50	27	0	88	26	308	96	0	430	1461
Grand Total	130	105	445	8	688	462	589	18	1	1070	13	103	49	0	165	48	620	212	1	881	2804
Apprch %	18.9	15.3	64.7	1.2		43.2	55	1.7	0.1		7.9	62.4	29.7	0		5.4	70.4	24.1	0.1		
Total %	4.6	3.7	15.9	0.3	24.5	16.5	21	0.6	0	38.2	0.5	3.7	1.7	0	5.9	1.7	22.1	7.6	0	31.4	
CARS	126	103	438	8	675	456	559	15	1	1031	12	97	49	0	158	46	597	208	1	852	2716
% CARS	96.9	98.1	98.4	100	98.1	98.7	94.9	83.3	100	96.4	92.3	94.2	100	0	95.8	95.8	96.3	98.1	100	96.7	96.9
HV	4	2	7	0	13	6	30	3	0	39	1	6	0	0	7	2	23	4	0	29	88
% HV	3.1	1.9	1.6	0	1.9	1.3	5.1	16.7	0	3.6	7.7	5.8	0	0	4.2	4.2	3.7	1.9	0	3.3	3.1



All Traffic Data Services, Inc.

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File Name : #25 TANGEROUTLET&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
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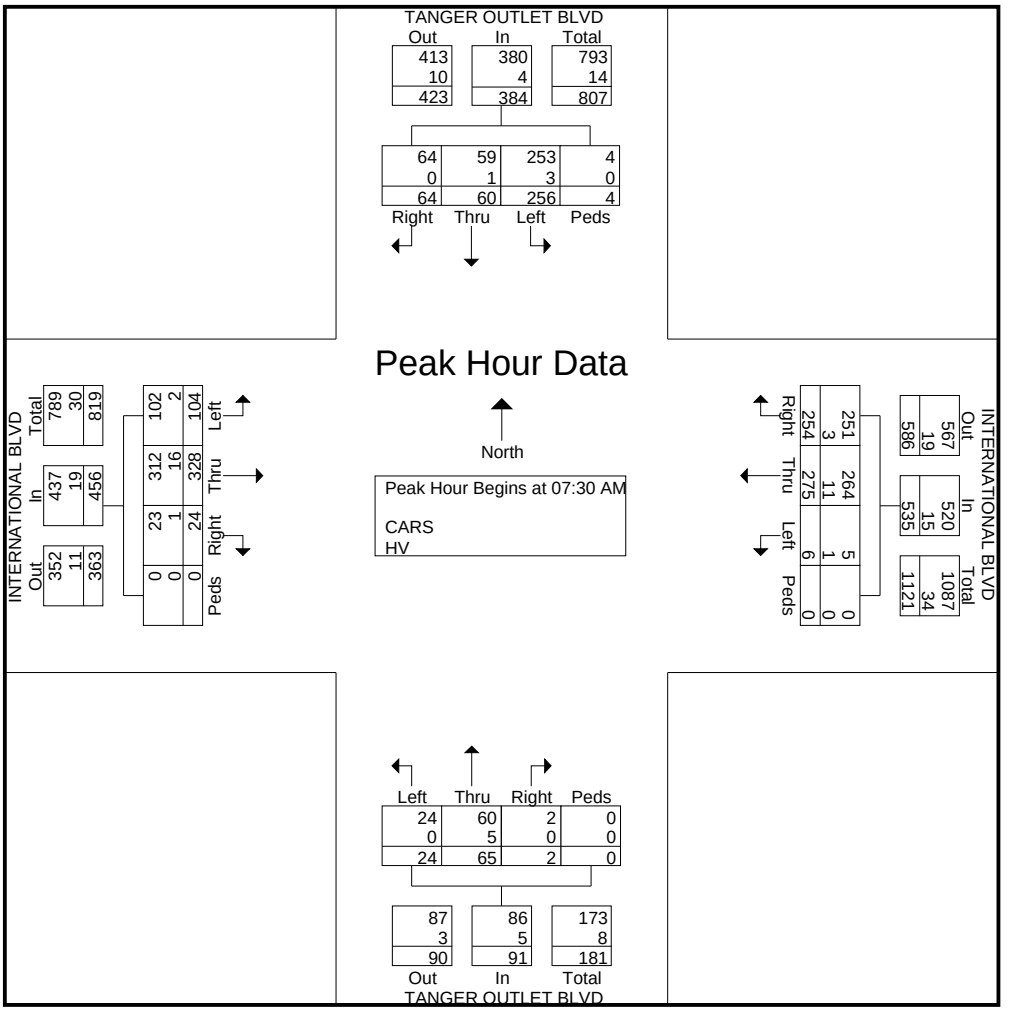
	TANGER OUTLET BLVD Southbound					INTERNATIONAL BLVD Westbound					TANGER OUTLET BLVD Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**19**	18	**70**	1	**108**	55	67	**2**	0	124	0	18	5	0	23	5	86	23	0	114	369
07:45 AM	16	14	57	0	87	**68**	64	2	0	134	0	15	6	0	21	**8**	81	**36**	0	**125**	367
08:00 AM	17	**21**	63	0	101	68	68	0	0	136	**1**	13	4	0	18	6	69	19	0	94	349
08:15 AM	12	7	66	**3**	88	63	**76**	2	0	**141**	1	**19**	**9**	0	**29**	5	**92**	26	0	123	**381**
Total Volume	64	60	256	4	384	254	275	6	0	535	2	65	24	0	91	24	328	104	0	456	1466
% App. Total	16.7	15.6	66.7	1		47.5	51.4	1.1	0		2.2	71.4	26.4	0		5.3	71.9	22.8	0		
PHF	.842	.714	.914	.333	.889	.934	.905	.750	.000	.949	.500	.855	.667	.000	.784	.750	.891	.722	.000	.912	.962
CARS	64	59	253	4	380	251	264	5	0	520	2	60	24	0	86	23	312	102	0	437	1423
% CARS	100	98.3	98.8	100	99.0	98.8	96.0	83.3	0	97.2	100	92.3	100	0	94.5	95.8	95.1	98.1	0	95.8	97.1
HV	0	1	3	0	4	3	11	1	0	15	0	5	0	0	5	1	16	2	0	19	43
% HV	0	1.7	1.2	0	1.0	1.2	4.0	16.7	0	2.8	0	7.7	0	0	5.5	4.2	4.9	1.9	0	4.2	2.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #25 TANGEROUTLET&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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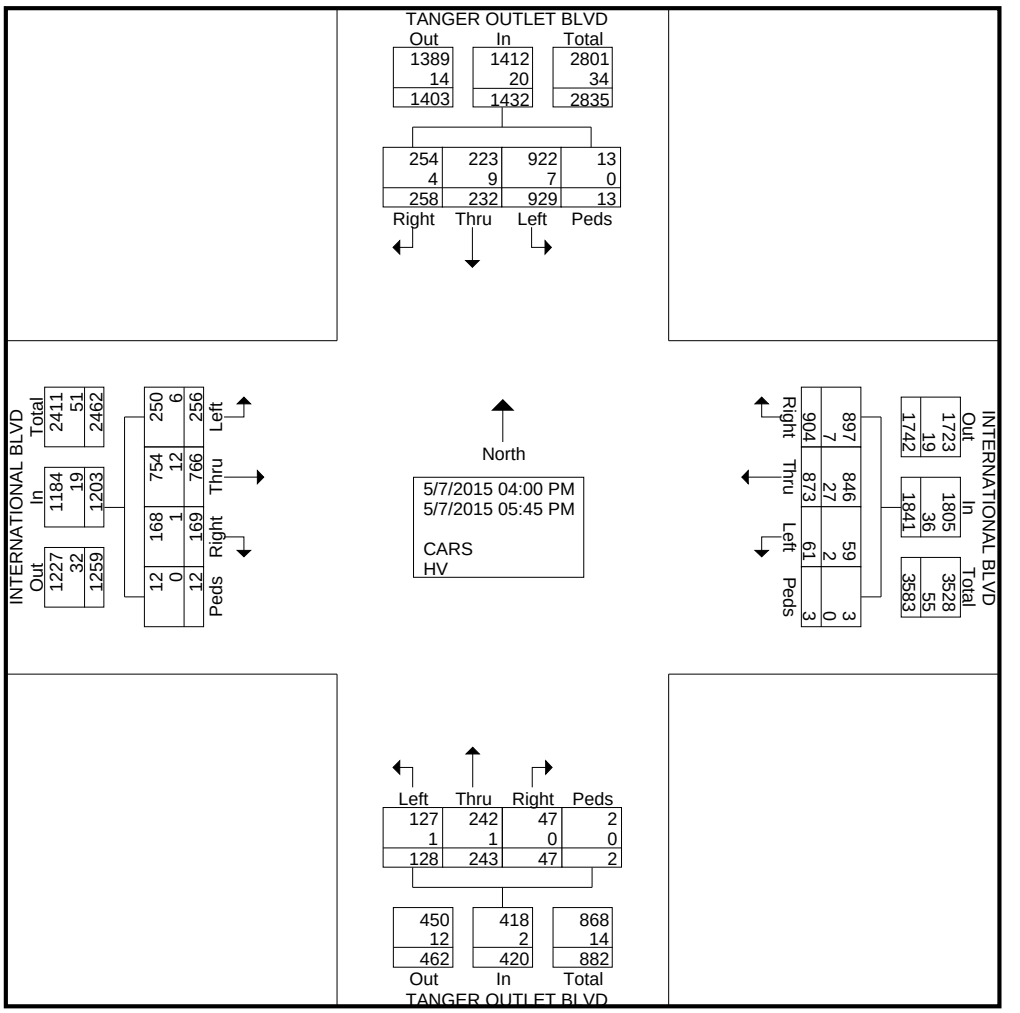
Groups Printed- CARS - HV

	TANGER OUTLET BLVD Southbound					INTERNATIONAL BLVD Westbound					TANGER OUTLET BLVD Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	31	26	96	2	155	96	83	3	0	182	4	34	15	0	53	22	74	26	1	123	513
04:15 PM	29	28	114	1	172	132	114	8	1	255	7	23	11	0	41	18	101	29	1	149	617
04:30 PM	32	32	146	2	212	106	88	4	0	198	8	26	14	0	48	17	91	25	0	133	591
04:45 PM	31	23	134	4	192	98	111	8	0	217	6	27	17	1	51	19	102	33	2	156	616
Total	123	109	490	9	731	432	396	23	1	852	25	110	57	1	193	76	368	113	4	561	2337
05:00 PM	40	25	98	0	163	125	121	13	0	259	5	30	15	0	50	25	108	37	2	172	644
05:15 PM	30	32	111	0	173	119	139	8	0	266	7	38	24	0	69	24	107	26	0	157	665
05:30 PM	31	26	116	1	174	113	111	11	0	235	5	44	15	0	64	15	85	44	4	148	621
05:45 PM	34	40	114	3	191	115	106	6	2	229	5	21	17	1	44	29	98	36	2	165	629
Total	135	123	439	4	701	472	477	38	2	989	22	133	71	1	227	93	398	143	8	642	2559
Grand Total	258	232	929	13	1432	904	873	61	3	1841	47	243	128	2	420	169	766	256	12	1203	4896
Apprch %	18	16.2	64.9	0.9		49.1	47.4	3.3	0.2		11.2	57.9	30.5	0.5		14	63.7	21.3	1		
Total %	5.3	4.7	19	0.3	29.2	18.5	17.8	1.2	0.1	37.6	1	5	2.6	0	8.6	3.5	15.6	5.2	0.2	24.6	
CARS	254	223	922	13	1412	897	846	59	3	1805	47	242	127	2	418	168	754	250	12	1184	4819
% CARS	98.4	96.1	99.2	100	98.6	99.2	96.9	96.7	100	98	100	99.6	99.2	100	99.5	99.4	98.4	97.7	100	98.4	98.4
HV	4	9	7	0	20	7	27	2	0	36	0	1	1	0	2	1	12	6	0	19	77
% HV	1.6	3.9	0.8	0	1.4	0.8	3.1	3.3	0	2	0	0.4	0.8	0	0.5	0.6	1.6	2.3	0	1.6	1.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #25 TANGEROUTLET&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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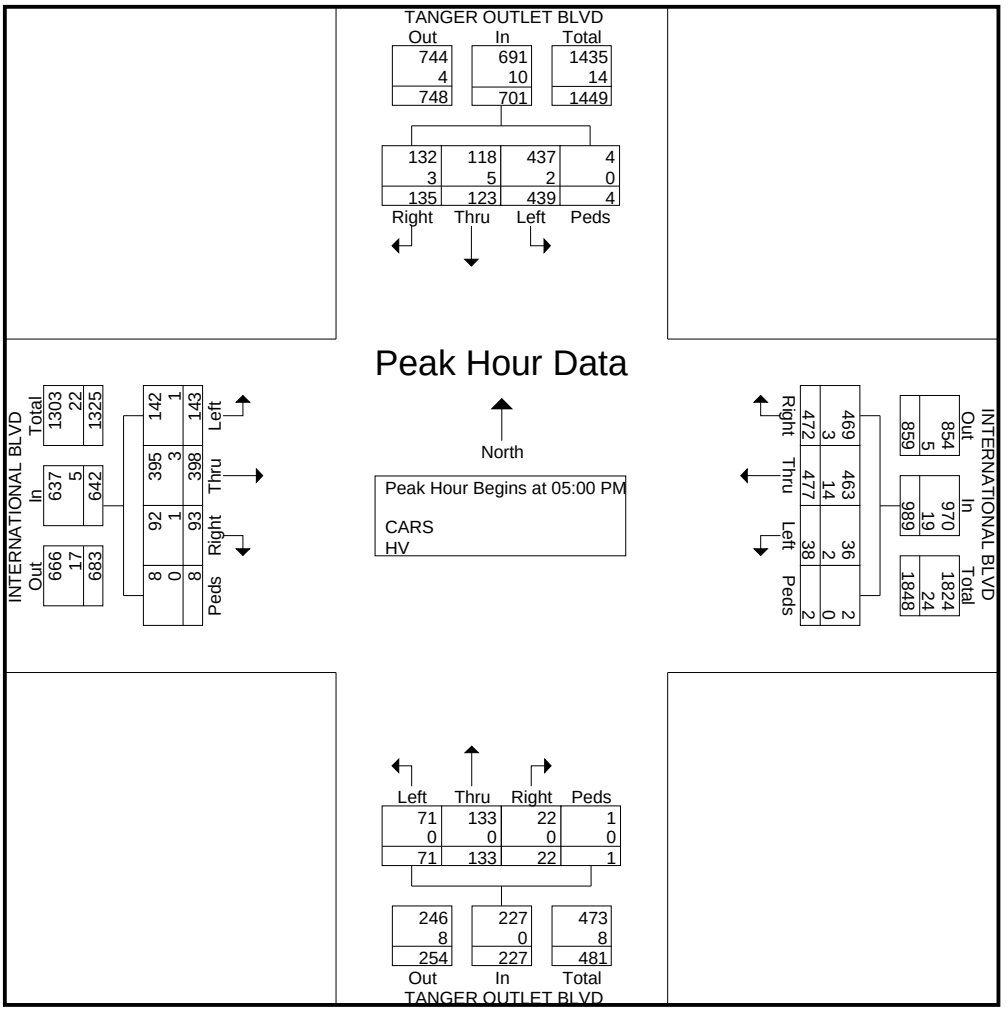
	TANGER OUTLET BLVD Southbound					INTERNATIONAL BLVD Westbound					TANGER OUTLET BLVD Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**40**	25	98	0	163	**125**	121	**13**	0	259	5	30	15	0	50	25	**108**	37	2	**172**	644
05:15 PM	30	32	111	0	173	119	**139**	8	0	**266**	**7**	38	**24**	0	**69**	24	107	26	0	157	**665**
05:30 PM	31	26	**116**	1	174	113	111	11	0	235	5	**44**	15	0	64	15	85	**44**	**4**	148	621
05:45 PM	34	**40**	114	**3**	**191**	115	106	6	**2**	229	5	21	17	**1**	44	**29**	98	36	2	165	629
Total Volume	135	123	439	4	701	472	477	38	2	989	22	133	71	1	227	93	398	143	8	642	2559
% App. Total	19.3	17.5	62.6	0.6		47.7	48.2	3.8	0.2		9.7	58.6	31.3	0.4		14.5	62	22.3	1.2		
PHF	.844	.769	.946	.333	.918	.944	.858	.731	.250	.930	.786	.756	.740	.250	.822	.802	.921	.813	.500	.933	.962
CARS	132	118	437	4	691	469	463	36	2	970	22	133	71	1	227	92	395	142	8	637	2525
% CARS	97.8	95.9	99.5	100	98.6	99.4	97.1	94.7	100	98.1	100	100	100	100	100	98.9	99.2	99.3	100	99.2	98.7
HV	3	5	2	0	10	3	14	2	0	19	0	0	0	0	0	1	3	1	0	5	34
% HV	2.2	4.1	0.5	0	1.4	0.6	2.9	5.3	0	1.9	0	0	0	0	0	1.1	0.8	0.7	0	0.8	1.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #26 RIVERSNB&HARLEYAM
Site Code : 9513 - CHARLESTON 1
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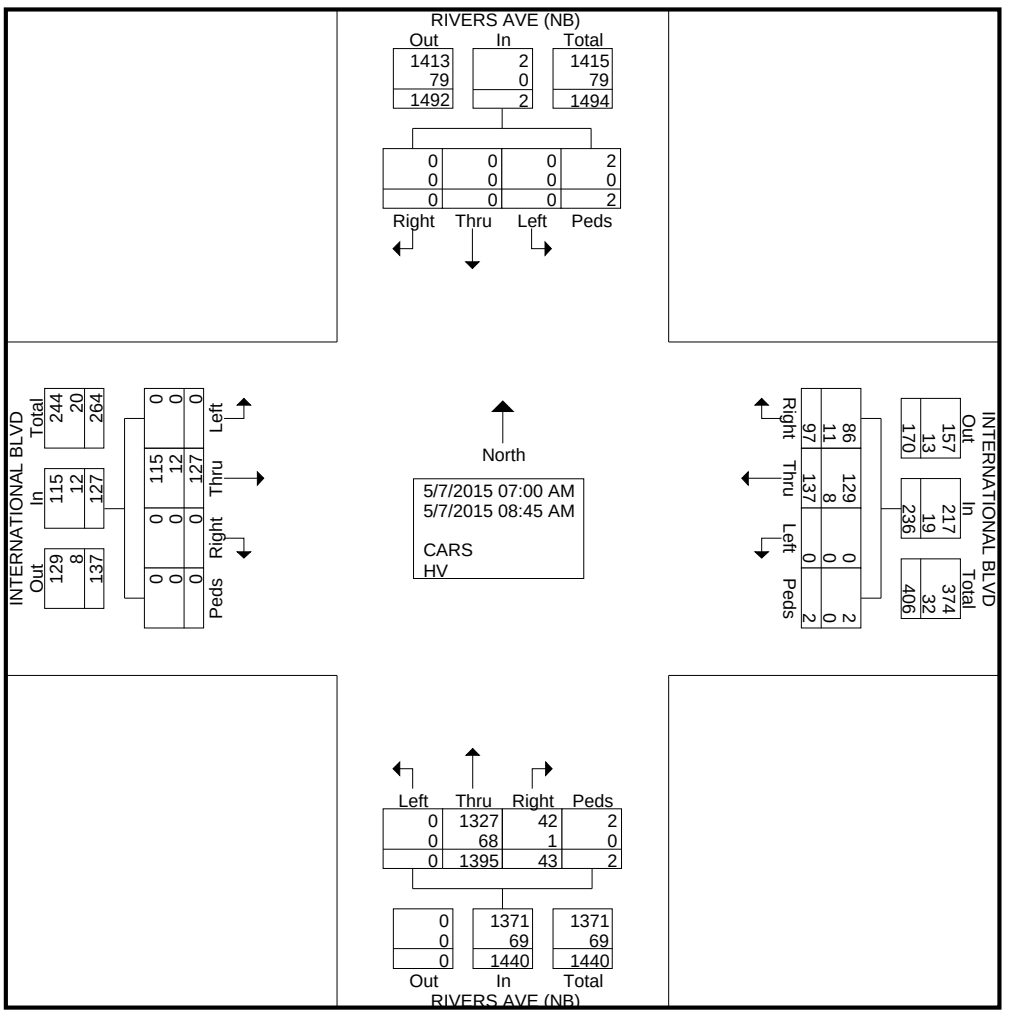
Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					INTERNATIONAL BLVD Westbound					RIVERS AVE (NB) Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	12	14	0	0	26	4	110	0	0	114	0	19	0	0	19	159
07:15 AM	0	0	0	0	0	11	19	0	0	30	6	151	0	0	157	0	18	0	0	18	205
07:30 AM	0	0	0	0	0	16	12	0	1	29	5	183	0	0	188	0	17	0	0	17	234
07:45 AM	0	0	0	0	0	13	21	0	0	34	8	183	0	0	191	0	23	0	0	23	248
Total	0	0	0	0	0	52	66	0	1	119	23	627	0	0	650	0	77	0	0	77	846
08:00 AM	0	0	0	0	0	12	15	0	1	28	8	190	0	2	200	0	23	0	0	23	251
08:15 AM	0	0	0	0	0	12	22	0	0	34	4	206	0	0	210	0	8	0	0	8	252
08:30 AM	0	0	0	1	1	9	19	0	0	28	3	190	0	0	193	0	11	0	0	11	233
08:45 AM	0	0	0	1	1	12	15	0	0	27	5	182	0	0	187	0	8	0	0	8	223
Total	0	0	0	2	2	45	71	0	1	117	20	768	0	2	790	0	50	0	0	50	959
Grand Total	0	0	0	2	2	97	137	0	2	236	43	1395	0	2	1440	0	127	0	0	127	1805
Apprch %	0	0	0	100		41.1	58.1	0	0.8		3	96.9	0	0.1		0	100	0	0		
Total %	0	0	0	0.1	0.1	5.4	7.6	0	0.1	13.1	2.4	77.3	0	0.1	79.8	0	7	0	0	7	
CARS	0	0	0	2	2	86	129	0	2	217	42	1327									
% CARS	0	0	0	100	100	88.7	94.2	0	100	91.9	97.7	95.1	0	100	95.2	0	90.6	0	0	90.6	94.5
HV	0	0	0	0	0	11	8	0	0	19	1	68	0	0	69	0	12	0	0	12	100
% HV	0	0	0	0	0	11.3	5.8	0	0	8.1	2.3	4.9	0	0	4.8	0	9.4	0	0	9.4	5.5



All Traffic Data Services, Inc.

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File Name : #26 RIVERSNB&HARLEYAM
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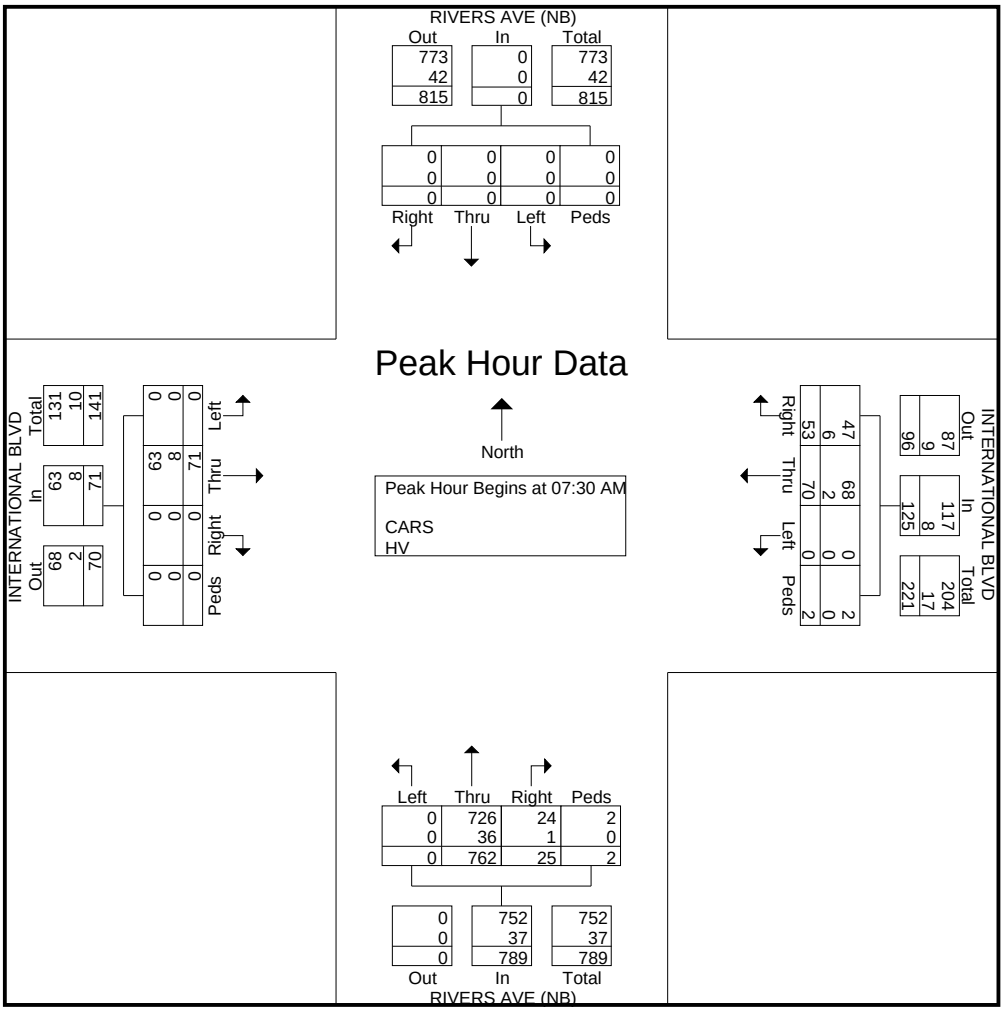
	RIVERS AVE (NB) Southbound					INTERNATIONAL BLVD Westbound					RIVERS AVE (NB) Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	**16**	12	0	**1**	29	5	183	0	0	188	0	17	0	0	17	234
07:45 AM	0	0	0	0	0	13	21	0	0	**34**	**8**	183	0	0	191	0	**23**	0	0	**23**	248
08:00 AM	0	0	0	0	0	12	15	0	1	28	8	190	0	**2**	200	0	23	0	0	23	251
08:15 AM	0	0	0	0	0	12	**22**	0	0	34	4	**206**	0	0	**210**	0	8	0	0	8	**252**
Total Volume	0	0	0	0	0	53	70	0	2	125	25	762	0	2	789	0	71	0	0	71	985
% App. Total	0	0	0	0		42.4	56	0	1.6		3.2	96.6	0	0.3		0	100	0	0		
PHF	.000	.000	.000	.000	.000	.828	.795	.000	.500	.919	.781	.925	.000	.250	.939	.000	.772	.000	.000	.772	.977
CARS	0	0	0	0	0	47	68	0	2	117	24	726	0	2	752	0	63	0	0	63	932
% CARS	0	0	0	0	0	88.7	97.1	0	100	93.6	96.0	95.3	0	100	95.3	0	88.7	0	0	88.7	94.6
HV	0	0	0	0	0	6	2	0	0	8	1	36	0	0	37	0	8	0	0	8	53
% HV	0	0	0	0	0	11.3	2.9	0	0	6.4	4.0	4.7	0	0	4.7	0	11.3	0	0	11.3	5.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #26 RIVERSNB&HARLEYPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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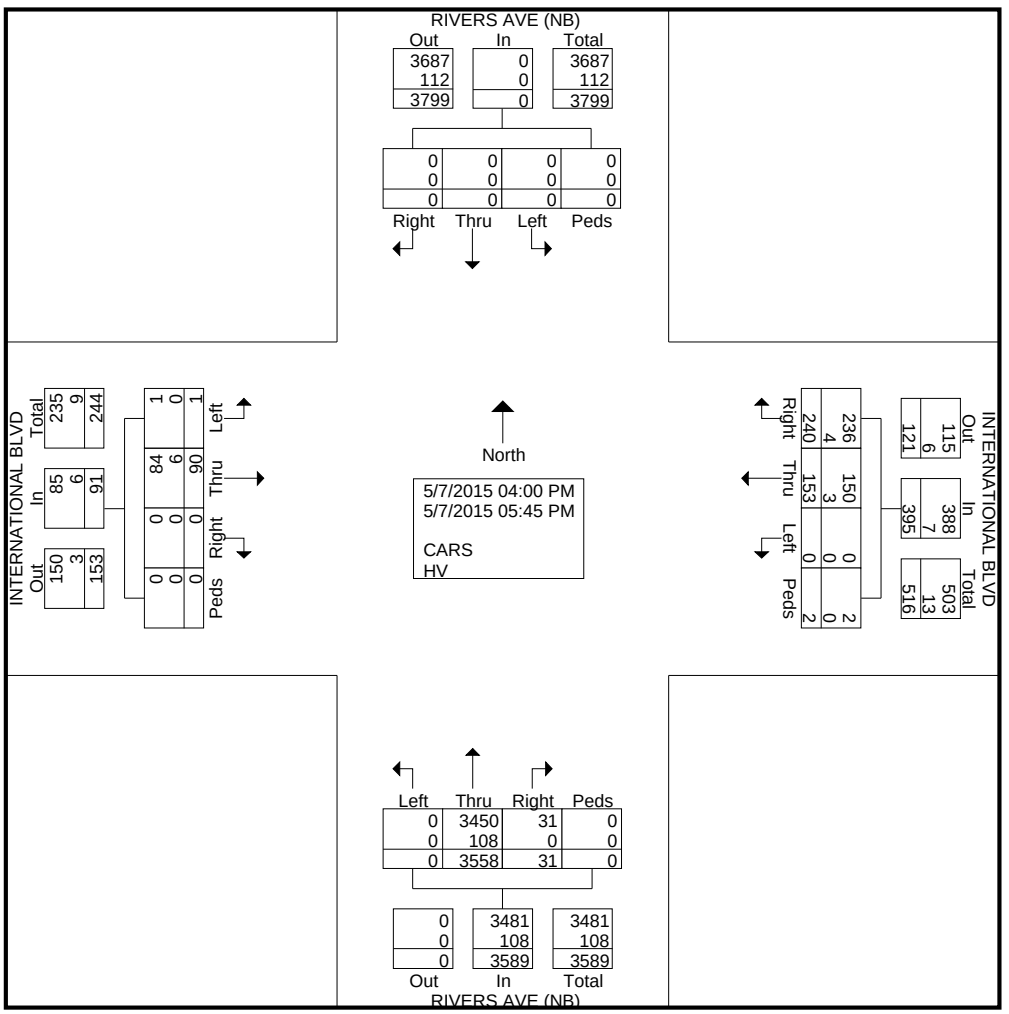
Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					INTERNATIONAL BLVD Westbound					RIVERS AVE (NB) Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	29	20	0	0	49	2	361	0	0	363	0	8	0	0	8	420
04:15 PM	0	0	0	0	0	30	14	0	0	44	2	391	0	0	393	0	9	0	0	9	446
04:30 PM	0	0	0	0	0	28	21	0	0	49	2	475	0	0	477	0	12	1	0	13	539
04:45 PM	0	0	0	0	0	33	21	0	0	54	5	454	0	0	459	0	19	0	0	19	532
Total	0	0	0	0	0	120	76	0	0	196	11	1681	0	0	1692	0	48	1	0	49	1937
05:00 PM	0	0	0	0	0	29	23	0	0	52	1	515	0	0	516	0	11	0	0	11	579
05:15 PM	0	0	0	0	0	34	25	0	1	60	3	473	0	0	476	0	9	0	0	9	545
05:30 PM	0	0	0	0	0	23	17	0	0	40	7	457	0	0	464	0	12	0	0	12	516
05:45 PM	0	0	0	0	0	34	12	0	1	47	9	432	0	0	441	0	10	0	0	10	498
Total	0	0	0	0	0	120	77	0	2	199	20	1877	0	0	1897	0	42	0	0	42	2138
Grand Total	0	0	0	0	0	240	153	0	2	395	31	3558	0	0	3589	0	90	1	0	91	4075
Apprch %	0	0	0	0		60.8	38.7	0	0.5		0.9	99.1	0	0		0	98.9	1.1	0		
Total %	0	0	0	0	0	5.9	3.8	0	0	9.7	0.8	87.3	0	0	88.1	0	2.2	0	0	2.2	
CARS	0	0	0	0	0	236	150	0	2	388	31	3450									
% CARS	0	0	0	0	0	98.3	98	0	100	98.2	100	97	0	0	97	0	93.3	100	0	93.4	97
HV	0	0	0	0	0	4	3	0	0	7	0	108	0	0	108	0	6	0	0	6	121
% HV	0	0	0	0	0	1.7	2	0	0	1.8	0	3	0	0	3	0	6.7	0	0	6.6	3



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #26 RIVERSNB&HARLEYPM
Site Code : 9513 - CHARLESTON 1
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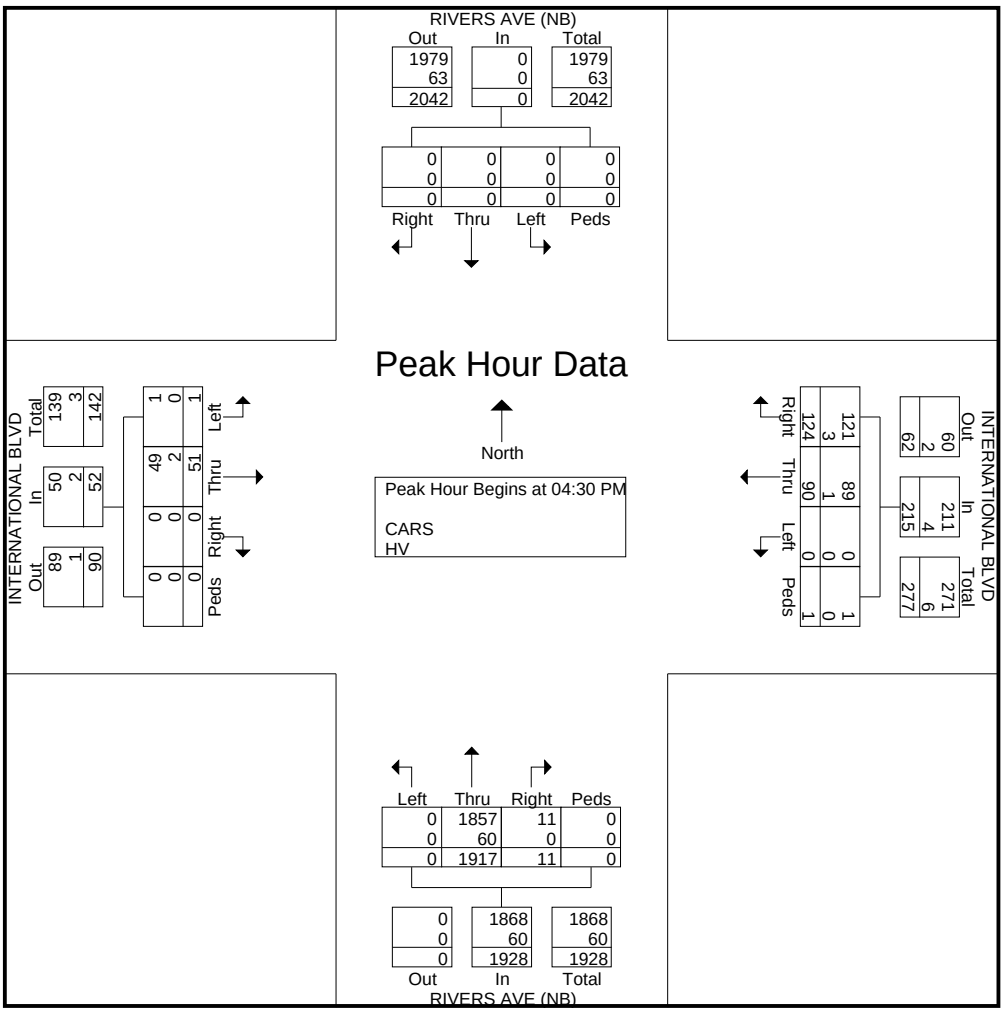
	RIVERS AVE (NB) Southbound					INTERNATIONAL BLVD Westbound					RIVERS AVE (NB) Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	28	21	0	0	49	2	475	0	0	477	0	12	**1**	0	13	539
04:45 PM	0	0	0	0	0	33	21	0	0	54	**5**	454	0	0	459	0	**19**	0	0	**19**	532
05:00 PM	0	0	0	0	0	29	23	0	0	52	1	**515**	0	0	**516**	0	11	0	0	11	**579**
05:15 PM	0	0	0	0	0	**34**	**25**	0	**1**	**60**	3	473	0	0	476	0	9	0	0	9	545
Total Volume	0	0	0	0	0	124	90	0	1	215	11	1917	0	0	1928	0	51	1	0	52	2195
% App. Total	0	0	0	0		57.7	41.9	0	0.5		0.6	99.4	0	0		0	98.1	1.9	0		
PHF	.000	.000	.000	.000	.000	.912	.900	.000	.250	.896	.550	.931	.000	.000	.934	.000	.671	.250	.000	.684	.948
CARS	0	0	0	0	0	121	89	0	1	211	11	1857									
% CARS	0	0	0	0	0	97.6	98.9	0	100	98.1	100	96.9	0	0	96.9	0	96.1	100	0	96.2	97.0
HV	0	0	0	0	0	3	1	0	0	4	0	60	0	0	60	0	2	0	0	2	66
% HV	0	0	0	0	0	2.4	1.1	0	0	1.9	0	3.1	0	0	3.1	0	3.9	0	0	3.8	3.0



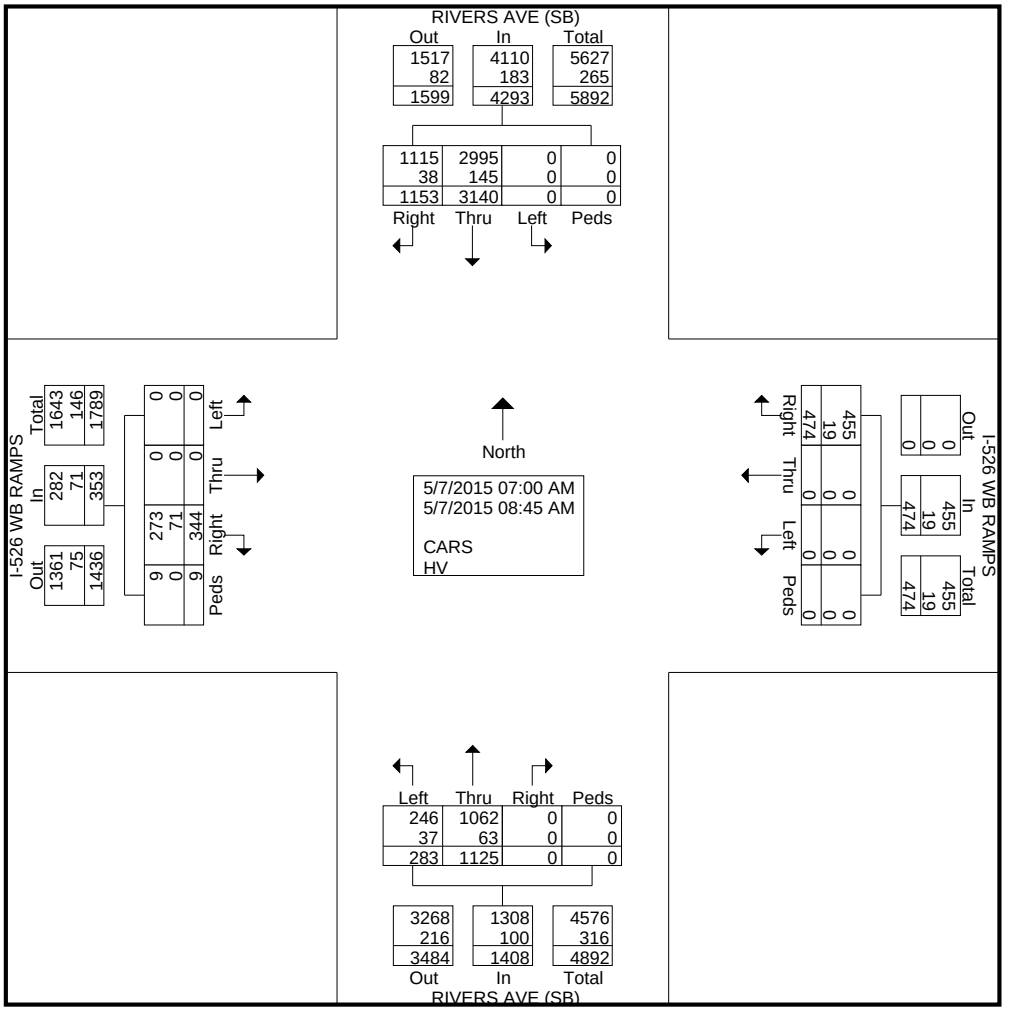
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #27 RIVERSSB&I526RAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE (SB) Southbound					I-526 WB RAMPS Westbound					RIVERS AVE (SB) Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	126	396	0	0	522	46	0	0	0	46	0	98	34	0	132	35	0	0	2	37	737
07:15 AM	155	446	0	0	601	49	0	0	0	49	0	121	35	0	156	39	0	0	2	41	847
07:30 AM	167	464	0	0	631	49	0	0	0	49	0	156	46	0	202	29	0	0	1	30	912
07:45 AM	241	458	0	0	699	79	0	0	0	79	0	147	31	0	178	43	0	0	1	44	1000
Total	689	1764	0	0	2453	223	0	0	0	223	0	522	146	0	668	146	0	0	6	152	3496
08:00 AM	162	374	0	0	536	68	0	0	0	68	0	162	26	0	188	54	0	0	3	57	849
08:15 AM	112	435	0	0	547	66	0	0	0	66	0	138	26	0	164	57	0	0	0	57	834
08:30 AM	116	314	0	0	430	68	0	0	0	68	0	152	29	0	181	47	0	0	0	47	726
08:45 AM	74	253	0	0	327	49	0	0	0	49	0	151	56	0	207	40	0	0	0	40	623
Total	464	1376	0	0	1840	251	0	0	0	251	0	603	137	0	740	198	0	0	3	201	3032
Grand Total	1153	3140	0	0	4293	474	0	0	0	474	0	1125	283	0	1408	344	0	0	9	353	6528
Apprch %	26.9	73.1	0	0		100	0	0	0		0	79.9	20.1	0		97.5	0	0	2.5		
Total %	17.7	48.1	0	0	65.8	7.3	0	0	0	7.3	0	17.2	4.3	0	21.6	5.3	0	0	0.1	5.4	
CARS	1115	2995										1062									
% CARS	96.7	95.4	0	0	95.7	96	0	0	0	96	0	94.4	86.9	0	92.9	79.4	0	0	100	79.9	94.3
HV	38	145	0	0	183	19	0	0	0	19	0	63	37	0	100	71	0	0	0	71	373
% HV	3.3	4.6	0	0	4.3	4	0	0	0	4	0	5.6	13.1	0	7.1	20.6	0	0	0	20.1	5.7

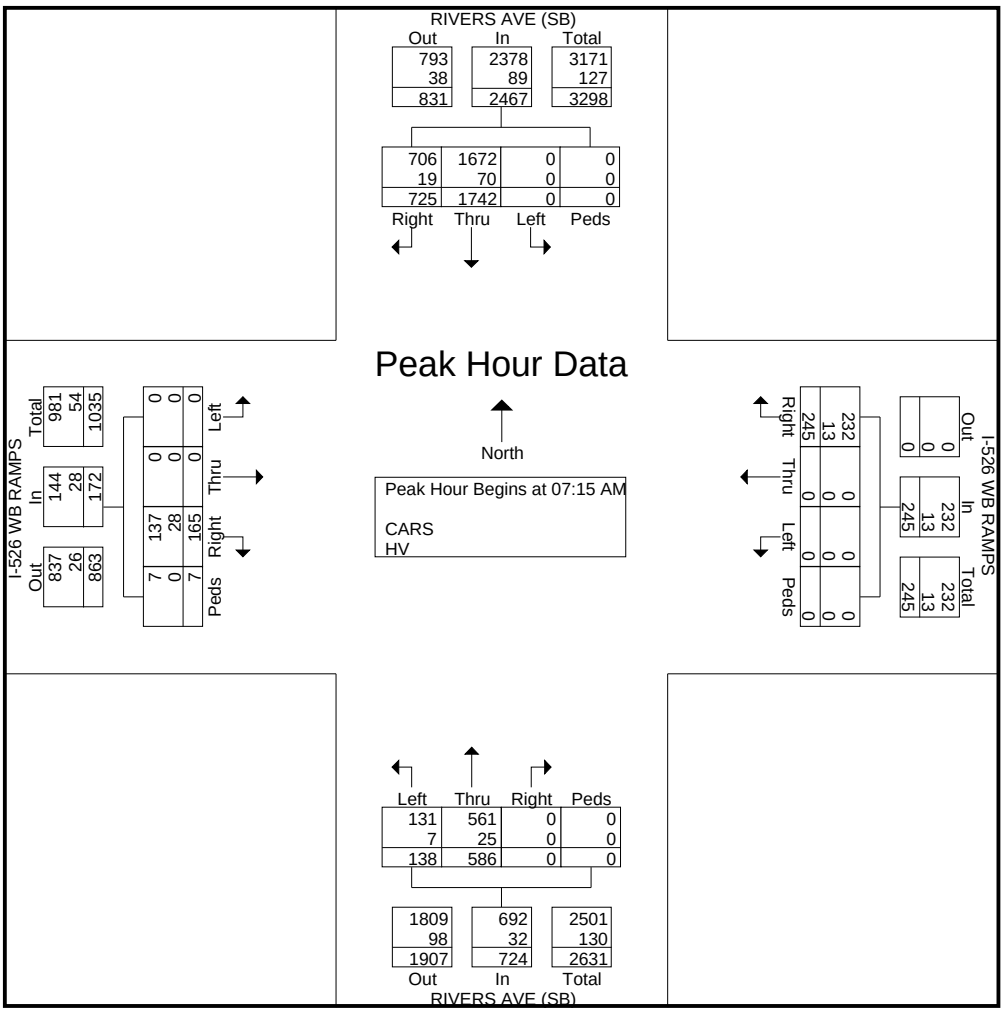


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #27 RIVERSSB&I526RAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	RIVERS AVE (SB) Southbound					I-526 WB RAMPS Westbound					RIVERS AVE (SB) Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	155	446	0	0	601	49	0	0	0	49	0	121	35	0	156	39	0	0	2	41	847
07:30 AM	167	**464**	0	0	631	49	0	0	0	49	0	156	**46**	0	**202**	29	0	0	1	30	912
07:45 AM	**241**	458	0	0	**699**	**79**	0	0	0	**79**	0	147	31	0	178	43	0	0	1	44	**1000**
08:00 AM	162	374	0	0	536	68	0	0	0	68	0	**162**	26	0	188	**54**	0	0	**3**	**57**	849
Total Volume	725	1742	0	0	2467	245	0	0	0	245	0	586	138	0	724	165	0	0	7	172	3608
% App. Total	29.4	70.6	0	0		100	0	0	0		0	80.9	19.1	0		95.9	0	0	4.1		
PHF	.752	.939	.000	.000	.882	.775	.000	.000	.000	.775	.000	.904	.750	.000	.896	.764	.000	.000	.583	.754	.902
CARS	706	1672																			
% CARS	97.4	96.0	0	0	96.4	94.7	0	0	0	94.7	0	95.7	94.9	0	95.6	83.0	0	0	100	83.7	95.5
HV	19	70	0	0	89	13	0	0	0	13	0	25	7	0	32	28	0	0	0	28	162
% HV	2.6	4.0	0	0	3.6	5.3	0	0	0	5.3	0	4.3	5.1	0	4.4	17.0	0	0	0	16.3	4.5



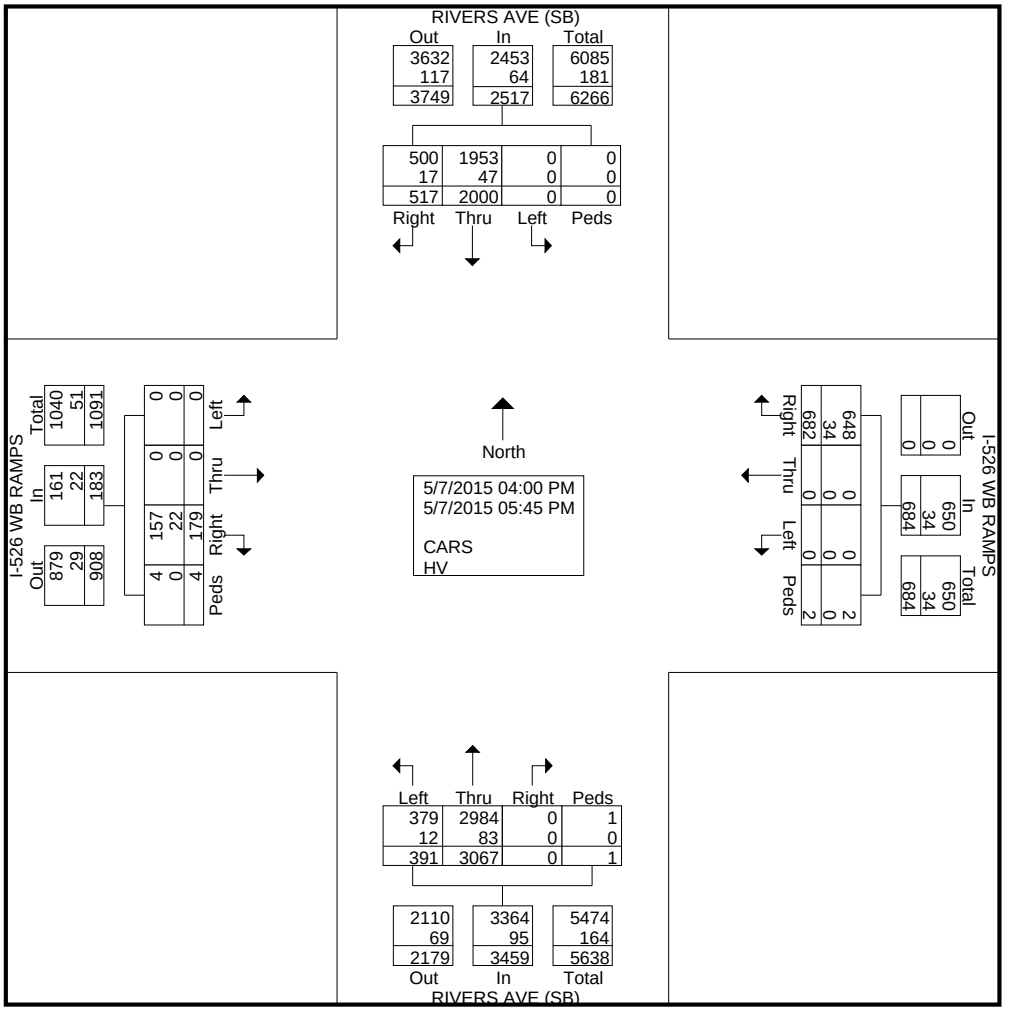
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #27 RIVERSSB&I526RAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE (SB) Southbound					I-526 WB RAMPS Westbound					RIVERS AVE (SB) Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	69	266	0	0	335	55	0	0	0	55	0	318	57	0	375	17	0	0	0	17	782
04:15 PM	68	240	0	0	308	70	0	0	0	70	0	328	44	0	372	25	0	0	0	25	775
04:30 PM	73	258	0	0	331	91	0	0	0	91	0	422	57	0	479	28	0	0	0	28	929
04:45 PM	56	255	0	0	311	94	0	0	0	94	0	401	40	0	441	34	0	0	0	34	880
Total	266	1019	0	0	1285	310	0	0	0	310	0	1469	198	0	1667	104	0	0	0	104	3366
05:00 PM	75	279	0	0	354	81	0	0	2	83	0	441	66	0	507	11	0	0	0	11	955
05:15 PM	63	249	0	0	312	92	0	0	0	92	0	420	46	0	466	11	0	0	4	15	885
05:30 PM	58	247	0	0	305	103	0	0	0	103	0	368	42	0	410	22	0	0	0	22	840
05:45 PM	55	206	0	0	261	96	0	0	0	96	0	369	39	1	409	31	0	0	0	31	797
Total	251	981	0	0	1232	372	0	0	2	374	0	1598	193	1	1792	75	0	0	4	79	3477
Grand Total	517	2000	0	0	2517	682	0	0	2	684	0	3067	391	1	3459	179	0	0	4	183	6843
Apprch %	20.5	79.5	0	0		99.7	0	0	0.3		0	88.7	11.3	0		97.8	0	0	2.2		
Total %	7.6	29.2	0	0	36.8	10	0	0	0	10	0	44.8	5.7	0	50.5	2.6	0	0	0.1	2.7	
CARS	500	1953										2984									
% CARS	96.7	97.7	0	0	97.5	95	0	0	100	95	0	97.3	96.9	100	97.3	87.7	0	0	100	88	96.9
HV	17	47	0	0	64	34	0	0	0	34	0	83	12	0	95	22	0	0	0	22	215
% HV	3.3	2.3	0	0	2.5	5	0	0	0	5	0	2.7	3.1	0	2.7	12.3	0	0	0	12	3.1



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #27 RIVERSSB&I526RAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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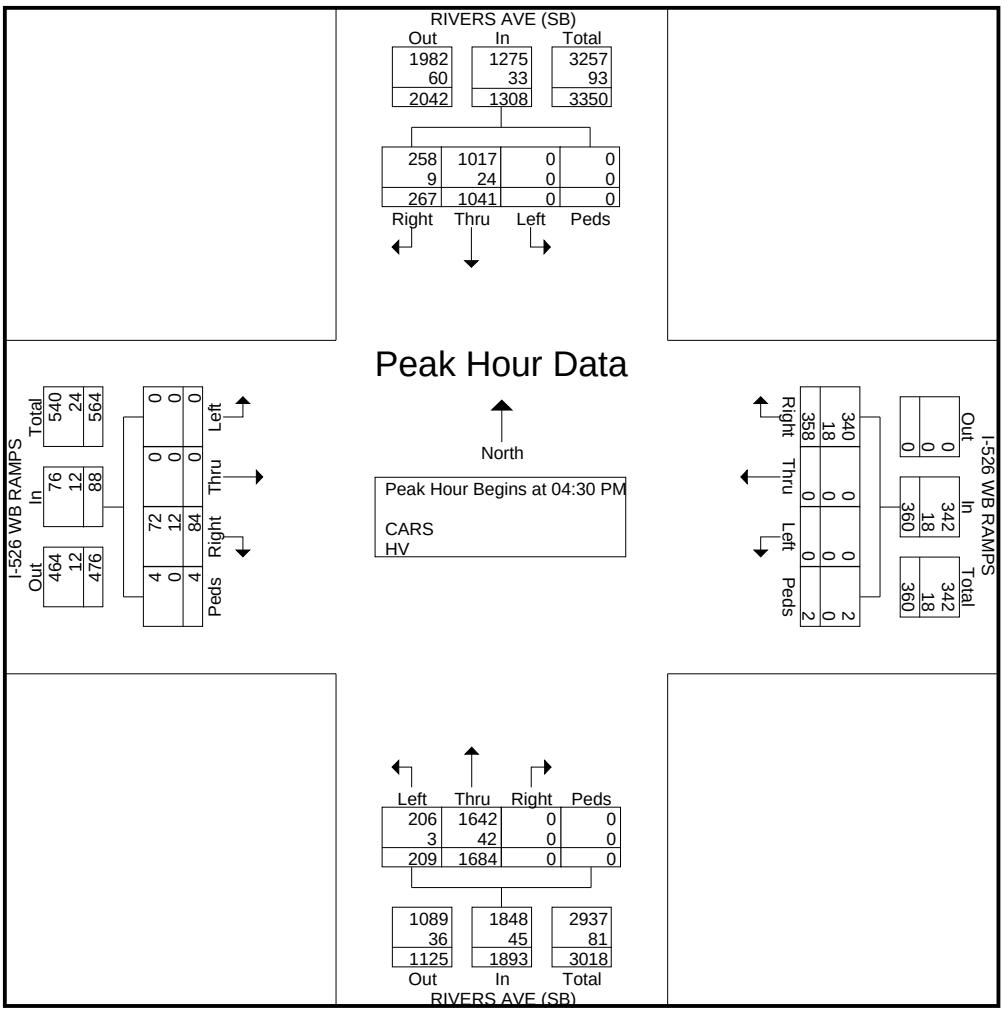
	RIVERS AVE (SB) Southbound					I-526 WB RAMPS Westbound					RIVERS AVE (SB) Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	73	258	0	0	331	91	0	0	0	91	0	422	57	0	479	28	0	0	0	28	929
04:45 PM	56	255	0	0	311	**94**	0	0	0	**94**	0	401	40	0	441	**34**	0	0	0	**34**	880
05:00 PM	**75**	**279**	0	0	**354**	81	0	0	**2**	83	0	**441**	**66**	0	**507**	11	0	0	0	11	**955**
05:15 PM	63	249	0	0	312	92	0	0	0	92	0	420	46	0	466	11	0	0	**4**	15	885
Total Volume	267	1041	0	0	1308	358	0	0	2	360	0	1684	209	0	1893	84	0	0	4	88	3649
% App. Total	20.4	79.6	0	0		99.4	0	0	0.6		0	89	11	0		95.5	0	0	4.5		
PHF	.890	.933	.000	.000	.924	.952	.000	.000	.250	.957	.000	.955	.792	.000	.933	.618	.000	.000	.250	.647	.955
CARS	258	1017										1642									
% CARS	96.6	97.7	0	0	97.5	95.0	0	0	100	95.0	0	97.5	98.6	0	97.6	85.7	0	0	100	86.4	97.0
HV	9	24	0	0	33	18	0	0	0	18	0	42	3	0	45	12	0	0	0	12	108
% HV	3.4	2.3	0	0	2.5	5.0	0	0	0	5.0	0	2.5	1.4	0	2.4	14.3	0	0	0	13.6	3.0



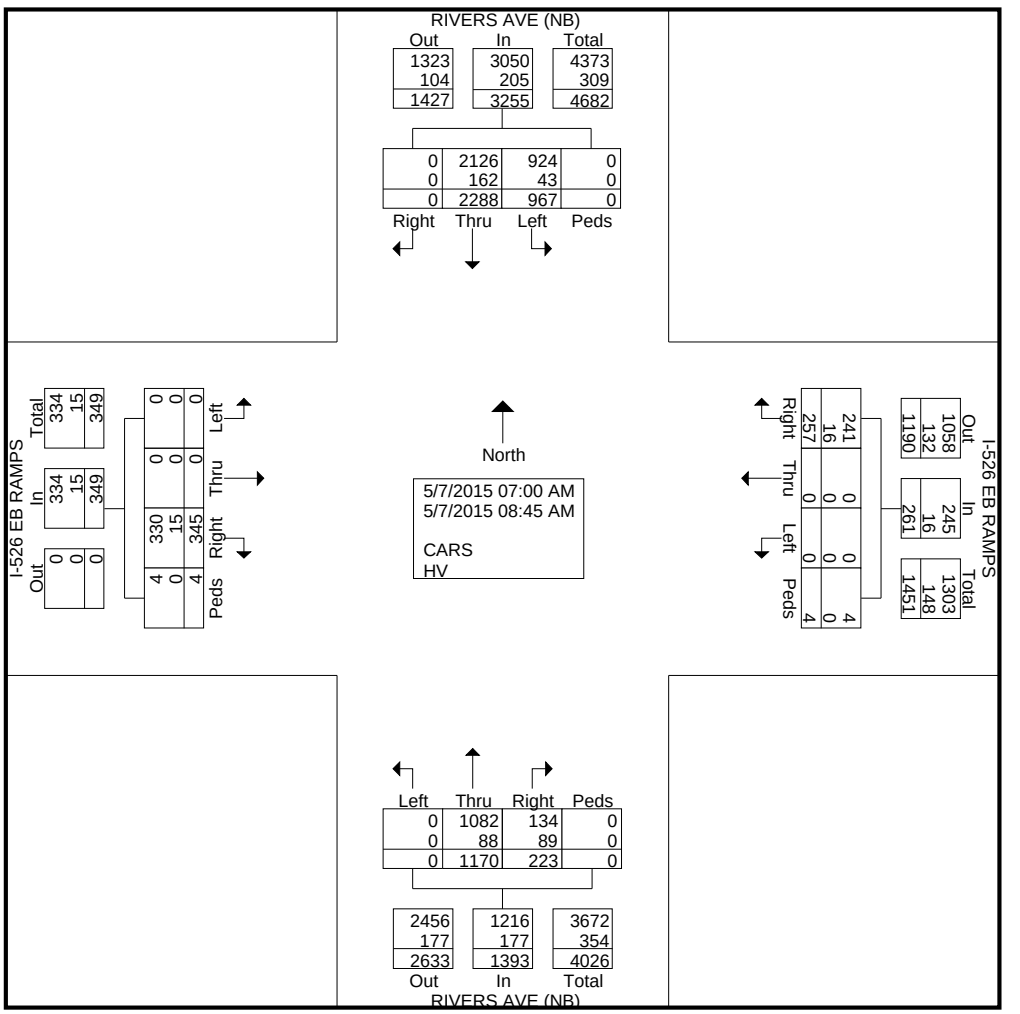
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #28 RIVERSNB&I526EBRAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					I-526 EB RAMPS Westbound					RIVERS AVE (NB) Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	279	123	0	402	34	0	0	0	34	22	94	0	0	116	36	0	0	2	38	590
07:15 AM	0	295	150	0	445	33	0	0	0	33	34	121	0	0	155	44	0	0	0	44	677
07:30 AM	0	279	175	0	454	39	0	0	0	39	29	167	0	0	196	50	0	0	2	52	741
07:45 AM	0	306	150	0	456	22	0	0	0	22	29	159	0	0	188	47	0	0	0	47	713
Total	0	1159	598	0	1757	128	0	0	0	128	114	541	0	0	655	177	0	0	4	181	2721
08:00 AM	0	309	87	0	396	35	0	0	0	35	19	160	0	0	179	42	0	0	0	42	652
08:15 AM	0	335	113	0	448	21	0	0	0	21	26	160	0	0	186	46	0	0	0	46	701
08:30 AM	0	265	87	0	352	36	0	0	2	38	30	156	0	0	186	37	0	0	0	37	613
08:45 AM	0	220	82	0	302	37	0	0	2	39	34	153	0	0	187	43	0	0	0	43	571
Total	0	1129	369	0	1498	129	0	0	4	133	109	629	0	0	738	168	0	0	0	168	2537
Grand Total	0	2288	967	0	3255	257	0	0	4	261	223	1170	0	0	1393	345	0	0	4	349	5258
Apprch %	0	70.3	29.7	0		98.5	0	0	1.5		16	84	0	0		98.9	0	0	1.1		
Total %	0	43.5	18.4	0	61.9	4.9	0	0	0.1	5	4.2	22.3	0	0	26.5	6.6	0	0	0.1	6.6	
CARS	0	2126										1082									
% CARS	0	92.9	95.6	0	93.7	93.8	0	0	100	93.9	60.1	92.5	0	0	87.3	95.7	0	0	100	95.7	92.1
HV	0	162	43	0	205	16	0	0	0	16	89	88	0	0	177	15	0	0	0	15	413
% HV	0	7.1	4.4	0	6.3	6.2	0	0	0	6.1	39.9	7.5	0	0	12.7	4.3	0	0	0	4.3	7.9



All Traffic Data Services, Inc.

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File Name : #28 RIVERSNB&I526EBRAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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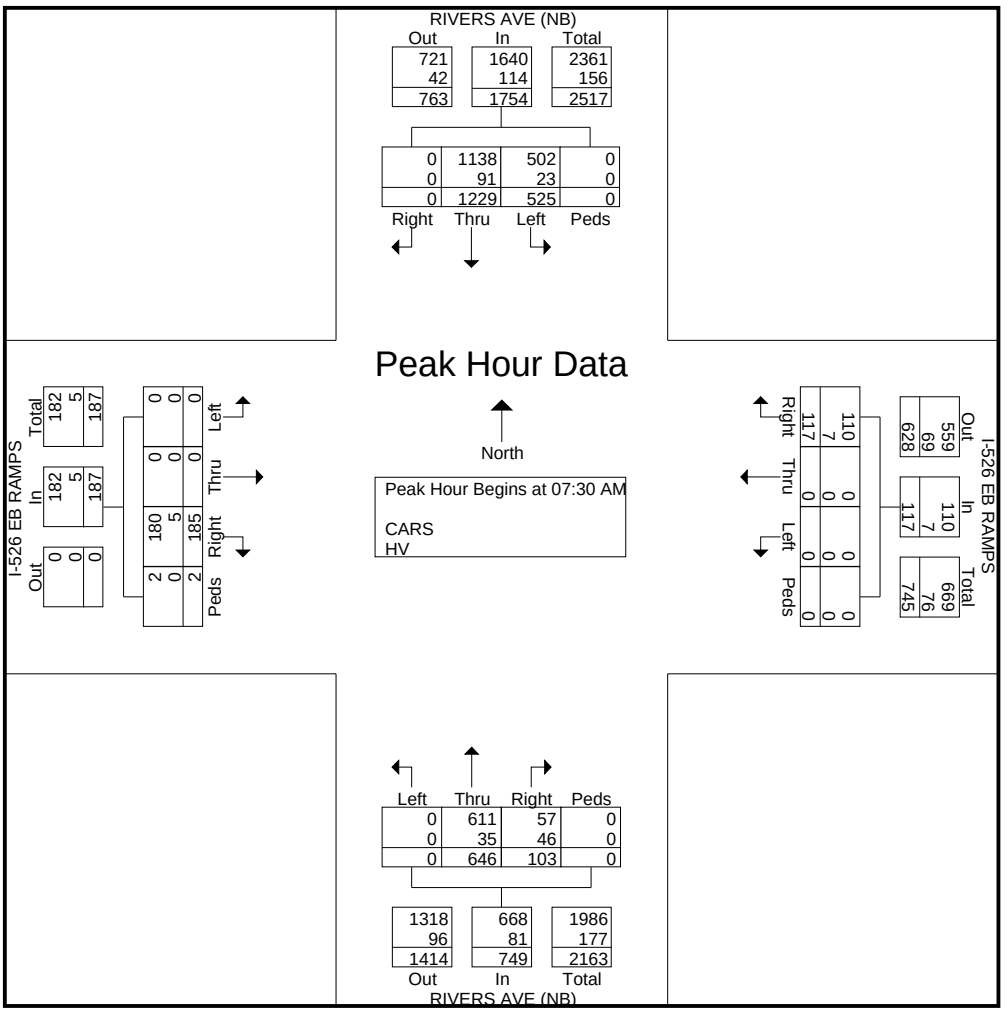
	RIVERS AVE (NB) Southbound					I-526 EB RAMPS Westbound					RIVERS AVE (NB) Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	279	**175**	0	454	**39**	0	0	0	**39**	**29**	**167**	0	0	**196**	**50**	0	0	**2**	**52**	**741**
07:45 AM	0	306	150	0	**456**	22	0	0	0	22	29	159	0	0	188	47	0	0	0	47	713
08:00 AM	0	309	87	0	396	35	0	0	0	35	19	160	0	0	179	42	0	0	0	42	652
08:15 AM	0	**335**	113	0	448	21	0	0	0	21	26	160	0	0	186	46	0	0	0	46	701
Total Volume	0	1229	525	0	1754	117	0	0	0	117	103	646	0	0	749	185	0	0	2	187	2807
% App. Total	0	70.1	29.9	0		100	0	0	0		13.8	86.2	0	0		98.9	0	0	1.1		
PHF	.000	.917	.750	.000	.962	.750	.000	.000	.000	.750	.888	.967	.000	.000	.955	.925	.000	.000	.250	.899	.947
CARS	0	1138																			
% CARS	0	92.6	95.6	0	93.5	94.0	0	0	0	94.0	55.3	94.6	0	0	89.2	97.3	0	0	100	97.3	92.6
HV	0	91	23	0	114	7	0	0	0	7	46	35	0	0	81	5	0	0	0	5	207
% HV	0	7.4	4.4	0	6.5	6.0	0	0	0	6.0	44.7	5.4	0	0	10.8	2.7	0	0	0	2.7	7.4



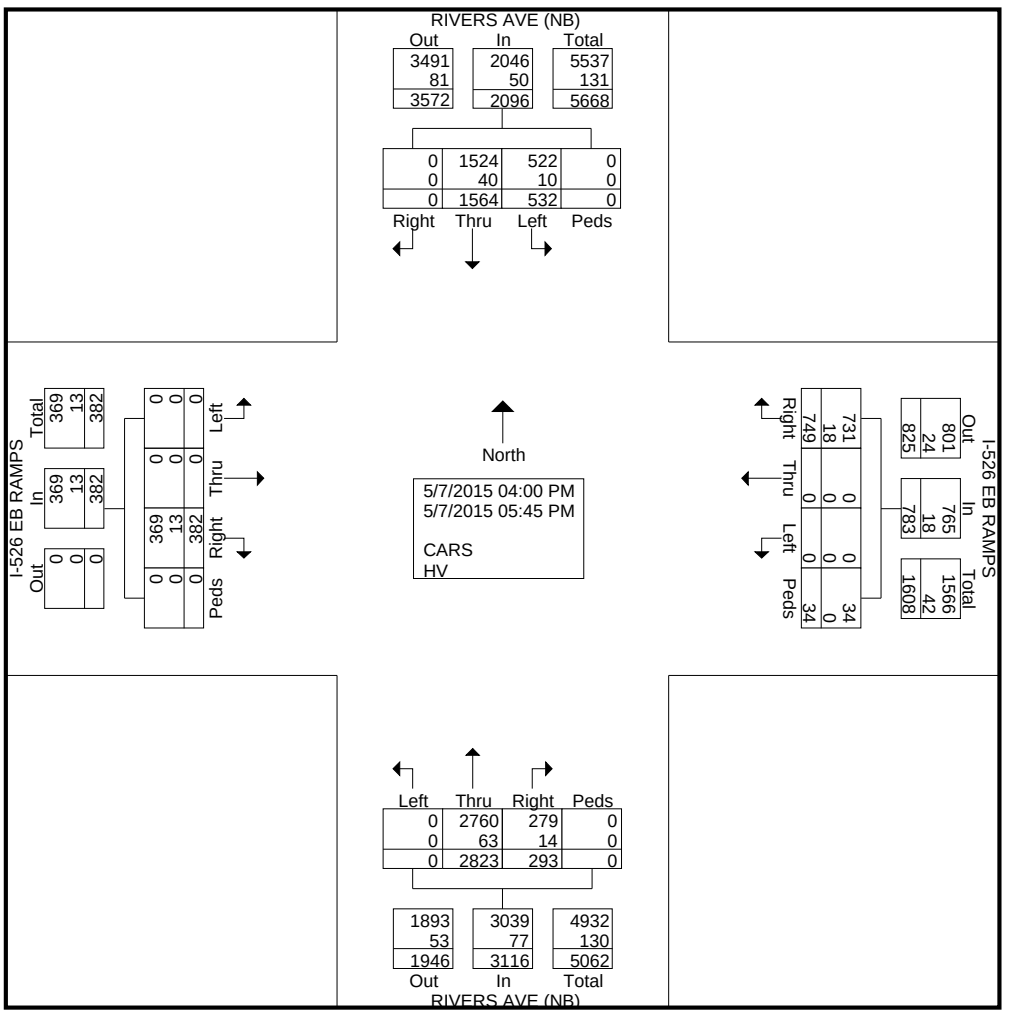
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #28 RIVERSNB&I526EBRAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					I-526 EB RAMPS Westbound					RIVERS AVE (NB) Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	207	51	0	258	91	0	0	2	93	42	302	0	0	344	64	0	0	0	64	759
04:15 PM	0	197	75	0	272	72	0	0	3	75	29	311	0	0	340	60	0	0	0	60	747
04:30 PM	0	214	50	0	264	134	0	0	4	138	35	345	0	0	380	43	0	0	0	43	825
04:45 PM	0	213	63	0	276	152	0	0	7	159	33	326	0	0	359	47	0	0	0	47	841
Total	0	831	239	0	1070	449	0	0	16	465	139	1284	0	0	1423	214	0	0	0	214	3172
05:00 PM	0	205	58	0	263	96	0	0	5	101	43	424	0	0	467	70	0	0	0	70	901
05:15 PM	0	169	86	0	255	85	0	0	2	87	38	386	0	0	424	30	0	0	0	30	796
05:30 PM	0	191	75	0	266	60	0	0	3	63	36	360	0	0	396	33	0	0	0	33	758
05:45 PM	0	168	74	0	242	59	0	0	8	67	37	369	0	0	406	35	0	0	0	35	750
Total	0	733	293	0	1026	300	0	0	18	318	154	1539	0	0	1693	168	0	0	0	168	3205
Grand Total	0	1564	532	0	2096	749	0	0	34	783	293	2823	0	0	3116	382	0	0	0	382	6377
Apprch %	0	74.6	25.4	0		95.7	0	0	4.3		9.4	90.6	0	0		100	0	0	0		
Total %	0	24.5	8.3	0	32.9	11.7	0	0	0.5	12.3	4.6	44.3	0	0	48.9	6	0	0	0	6	
CARS	0	1524										2760									
% CARS	0	97.4	98.1	0	97.6	97.6	0	0	100	97.7	95.2	97.8	0	0	97.5	96.6	0	0	0	96.6	97.5
HV	0	40	10	0	50	18	0	0	0	18	14	63	0	0	77	13	0	0	0	13	158
% HV	0	2.6	1.9	0	2.4	2.4	0	0	0	2.3	4.8	2.2	0	0	2.5	3.4	0	0	0	3.4	2.5



All Traffic Data Services, Inc.

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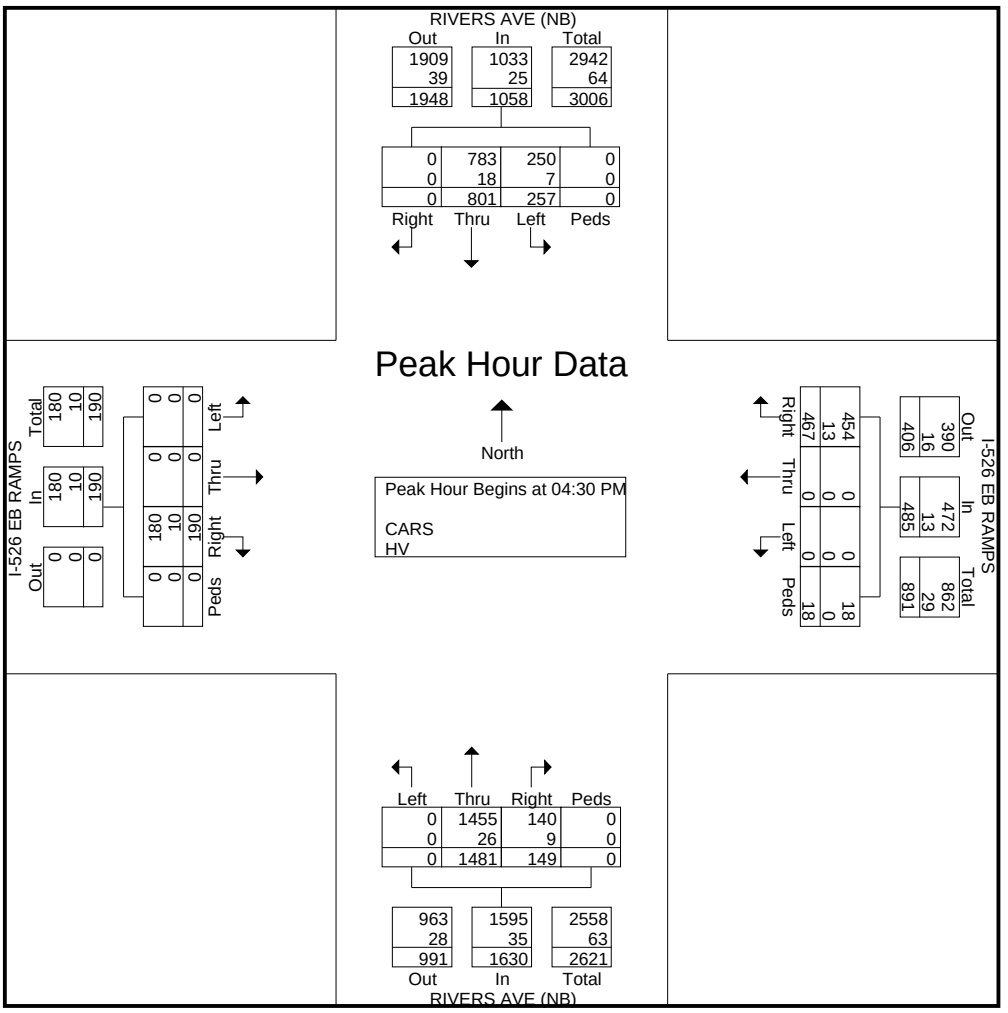
File Name : #28 RIVERSNB&I526EBRAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	RIVERS AVE (NB) Southbound					I-526 EB RAMPS Westbound					RIVERS AVE (NB) Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	**214**	50	0	264	134	0	0	4	138	35	345	0	0	380	43	0	0	0	43	825
04:45 PM	0	213	63	0	**276**	**152**	0	0	**7**	**159**	33	326	0	0	359	47	0	0	0	47	841
05:00 PM	0	205	58	0	263	96	0	0	5	101	**43**	**424**	0	0	**467**	**70**	0	0	0	**70**	**901**
05:15 PM	0	169	**86**	0	255	85	0	0	2	87	38	386	0	0	424	30	0	0	0	30	796
Total Volume	0	801	257	0	1058	467	0	0	18	485	149	1481	0	0	1630	190	0	0	0	190	3363
% App. Total	0	75.7	24.3	0		96.3	0	0	3.7		9.1	90.9	0	0		100	0	0	0		
PHF	.000	.936	.747	.000	.958	.768	.000	.000	.643	.763	.866	.873	.000	.000	.873	.679	.000	.000	.000	.679	.933
CARS	0	783	250	0	1033	454	0	0	18	472	140	1455									
% CARS	0	97.8	97.3	0	97.6	97.2	0	0	100	97.3	94.0	98.2	0	0	97.9	94.7	0	0	0	94.7	97.5
HV	0	18	7	0	25	13	0	0	0	13	9	26	0	0	35	10	0	0	0	10	83
% HV	0	2.2	2.7	0	2.4	2.8	0	0	0	2.7	6.0	1.8	0	0	2.1	5.3	0	0	0	5.3	2.5



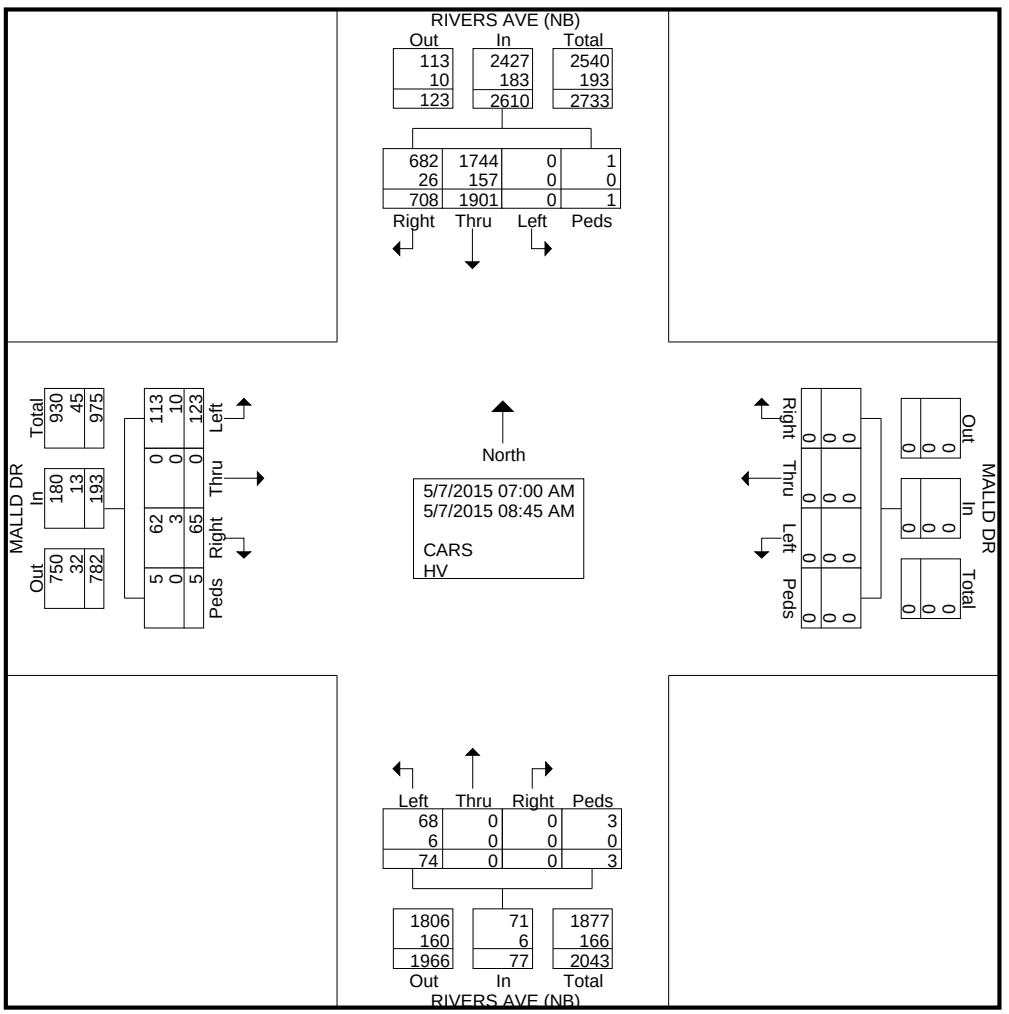
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #29 RIVERSSB&MALLDAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					MALLD DR Westbound					RIVERS AVE (NB) Northbound					MALLD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	81	252	0	0	333	0	0	0	0	0	0	0	6	0	6	7	0	5	1	13	352
07:15 AM	76	263	0	0	339	0	0	0	0	0	0	0	6	0	6	9	0	11	1	21	366
07:30 AM	81	256	0	0	337	0	0	0	0	0	0	0	12	1	13	11	0	15	0	26	376
07:45 AM	126	229	0	0	355	0	0	0	0	0	0	0	6	0	6	7	0	16	0	23	384
Total	364	1000	0	0	1364	0	0	0	0	0	0	0	30	1	31	34	0	47	2	83	1478
08:00 AM	105	226	0	1	332	0	0	0	0	0	0	0	14	0	14	9	0	17	3	29	375
08:15 AM	91	253	0	0	344	0	0	0	0	0	0	0	7	1	8	11	0	25	0	36	388
08:30 AM	83	234	0	0	317	0	0	0	0	0	0	0	6	0	6	7	0	15	0	22	345
08:45 AM	65	188	0	0	253	0	0	0	0	0	0	0	17	1	18	4	0	19	0	23	294
Total	344	901	0	1	1246	0	0	0	0	0	0	0	44	2	46	31	0	76	3	110	1402
Grand Total	708	1901	0	1	2610	0	0	0	0	0	0	0	74	3	77	65	0	123	5	193	2880
Apprch %	27.1	72.8	0	0		0	0	0	0		0	0	96.1	3.9		33.7	0	63.7	2.6		
Total %	24.6	66	0	0	90.6	0	0	0	0	0	0	0	2.6	0.1	2.7	2.3	0	4.3	0.2	6.7	
CARS	682	1744																			
% CARS	96.3	91.7	0	100	93	0	0	0	0	0	0	0	91.9	100	92.2	95.4	0	91.9	100	93.3	93
HV	26	157	0	0	183	0	0	0	0	0	0	0	6	0	6	3	0	10	0	13	202
% HV	3.7	8.3	0	0	7	0	0	0	0	0	0	0	8.1	0	7.8	4.6	0	8.1	0	6.7	7



All Traffic Data Services, Inc.

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File Name : #29 RIVERSSB&MALLDAM
Site Code : 9513 - CHARLESTON 1
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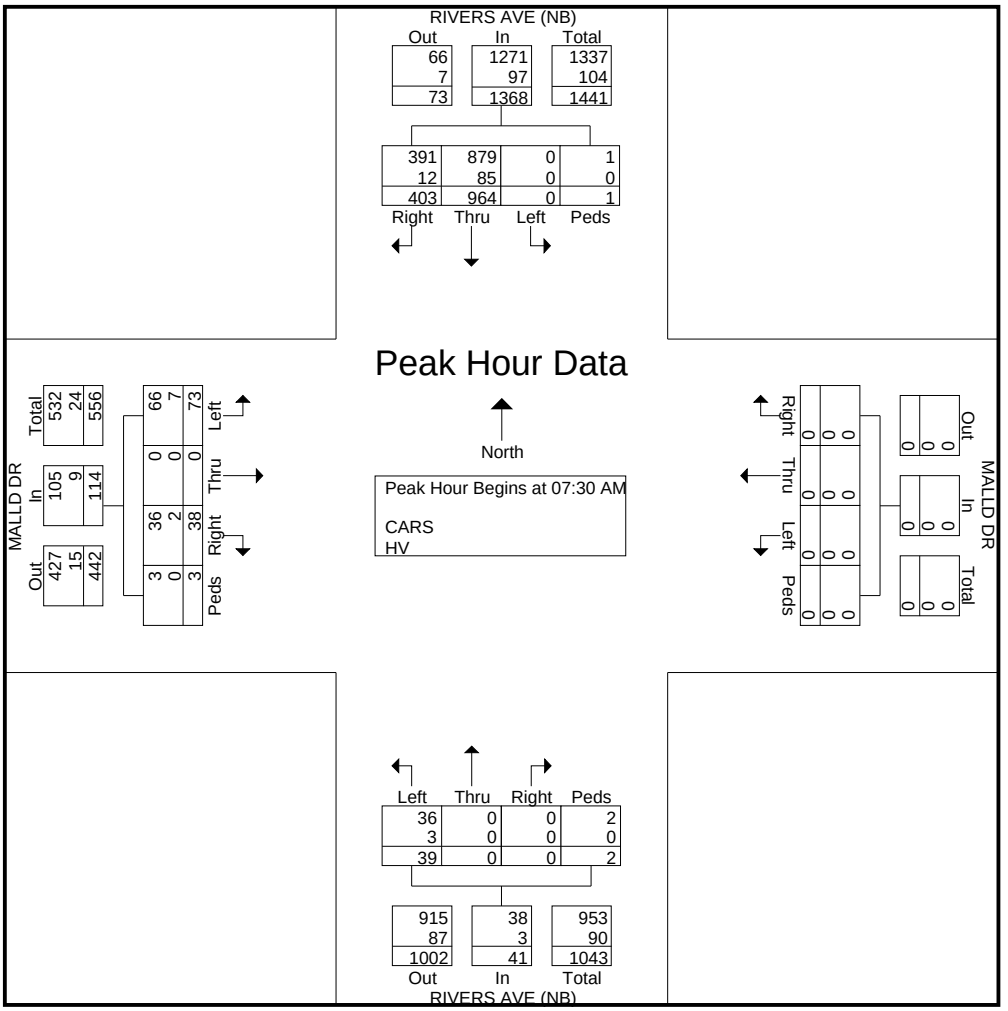
	RIVERS AVE (NB) Southbound					MALLD DR Westbound					RIVERS AVE (NB) Northbound					MALLD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	81	**256**	0	0	337	0	0	0	0	0	0	0	12	**1**	13	**11**	0	15	0	26	376
07:45 AM	**126**	229	0	0	**355**	0	0	0	0	0	0	0	6	0	6	7	0	16	0	23	384
08:00 AM	105	226	0	**1**	332	0	0	0	0	0	0	0	**14**	0	**14**	9	0	17	**3**	29	375
08:15 AM	91	253	0	0	344	0	0	0	0	0	0	0	7	1	8	11	0	**25**	0	**36**	**388**
Total Volume	403	964	0	1	1368	0	0	0	0	0	0	0	39	2	41	38	0	73	3	114	1523
% App. Total	29.5	70.5	0	0.1		0	0	0	0		0	0	95.1	4.9		33.3	0	64	2.6		
PHF	.800	.941	.000	.250	.963	.000	.000	.000	.000	.000	.000	.000	.696	.500	.732	.864	.000	.730	.250	.792	.981
CARS	391	879	0	1	1271	0	0	0	0	0	0	0	36	2	38	36	0	66	3	105	1414
% CARS	97.0	91.2	0	100	92.9	0	0	0	0	0	0	0	92.3	100	92.7	94.7	0	90.4	100	92.1	92.8
HV	12	85	0	0	97	0	0	0	0	0	0	0	3	0	3	2	0	7	0	9	109
% HV	3.0	8.8	0	0	7.1	0	0	0	0	0	0	0	7.7	0	7.3	5.3	0	9.6	0	7.9	7.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #29 RIVERSSB&MALLDPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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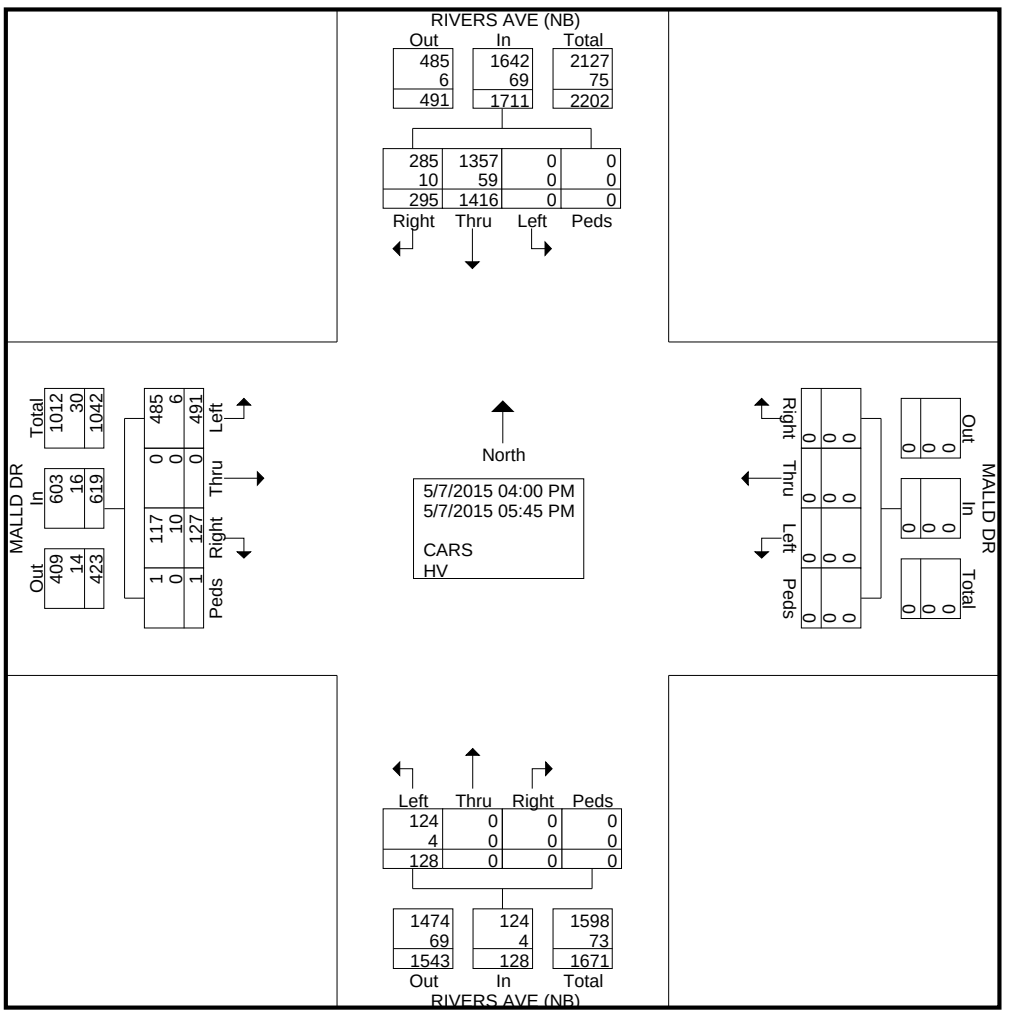
Groups Printed- CARS - HV

	RIVERS AVE (NB) Southbound					MALLD DR Westbound					RIVERS AVE (NB) Northbound					MALLD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	46	166	0	0	212	0	0	0	0	0	0	0	21	0	21	19	0	39	0	58	291
04:15 PM	37	190	0	0	227	0	0	0	0	0	0	0	16	0	16	14	0	44	0	58	301
04:30 PM	37	201	0	0	238	0	0	0	0	0	0	0	21	0	21	11	0	63	0	74	333
04:45 PM	45	197	0	0	242	0	0	0	0	0	0	0	15	0	15	19	0	61	0	80	337
Total	165	754	0	0	919	0	0	0	0	0	0	0	73	0	73	63	0	207	0	270	1262
05:00 PM	36	210	0	0	246	0	0	0	0	0	0	0	20	0	20	25	0	105	0	130	396
05:15 PM	28	136	0	0	164	0	0	0	0	0	0	0	11	0	11	16	0	78	1	95	270
05:30 PM	34	168	0	0	202	0	0	0	0	0	0	0	6	0	6	16	0	62	0	78	286
05:45 PM	32	148	0	0	180	0	0	0	0	0	0	0	18	0	18	7	0	39	0	46	244
Total	130	662	0	0	792	0	0	0	0	0	0	0	55	0	55	64	0	284	1	349	1196
Grand Total	295	1416	0	0	1711	0	0	0	0	0	0	0	128	0	128	127	0	491	1	619	2458
Apprch %	17.2	82.8	0	0		0	0	0	0		0	0	100	0		20.5	0	79.3	0.2		
Total %	12	57.6	0	0	69.6	0	0	0	0	0	0	0	5.2	0	5.2	5.2	0	20	0	25.2	
CARS	285	1357																			
% CARS	96.6	95.8	0	0	96	0	0	0	0	0	0	0	96.9	0	96.9	92.1	0	98.8	100	97.4	96.4
HV	10	59	0	0	69	0	0	0	0	0	0	0	4	0	4	10	0	6	0	16	89
% HV	3.4	4.2	0	0	4	0	0	0	0	0	0	0	3.1	0	3.1	7.9	0	1.2	0	2.6	3.6



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File Name : #29 RIVERSSB&MALLDPM
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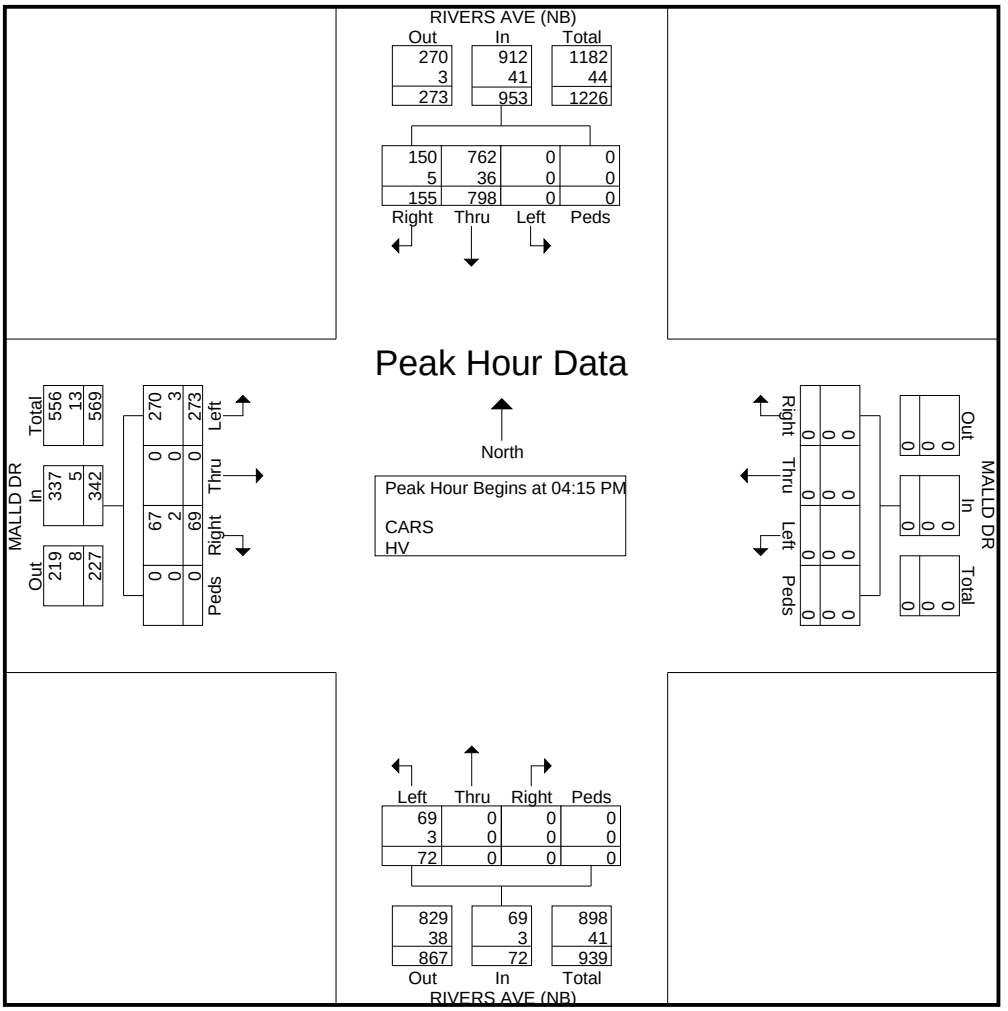
	RIVERS AVE (NB) Southbound					MALLD DR Westbound					RIVERS AVE (NB) Northbound					MALLD DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	37	190	0	0	227	0	0	0	0	0	0	0	16	0	16	14	0	44	0	58	301
04:30 PM	37	201	0	0	238	0	0	0	0	0	0	0	**21**	0	**21**	11	0	63	0	74	333
04:45 PM	**45**	197	0	0	242	0	0	0	0	0	0	0	15	0	15	19	0	61	0	80	337
05:00 PM	36	**210**	0	0	**246**	0	0	0	0	0	0	0	20	0	20	**25**	0	**105**	0	**130**	**396**
Total Volume	155	798	0	0	953	0	0	0	0	0	0	0	72	0	72	69	0	273	0	342	1367
% App. Total	16.3	83.7	0	0		0	0	0	0		0	0	100	0		20.2	0	79.8	0		
PHF	.861	.950	.000	.000	.968	.000	.000	.000	.000	.000	.000	.000	.857	.000	.857	.690	.000	.650	.000	.658	.863
CARS	150	762	0	0	912	0	0	0	0	0	0	0	69	0	69	67	0	270	0	337	1318
% CARS	96.8	95.5	0	0	95.7	0	0	0	0	0	0	0	95.8	0	95.8	97.1	0	98.9	0	98.5	96.4
HV	5	36	0	0	41	0	0	0	0	0	0	0	3	0	3	2	0	3	0	5	49
% HV	3.2	4.5	0	0	4.3	0	0	0	0	0	0	0	4.2	0	4.2	2.9	0	1.1	0	1.5	3.6



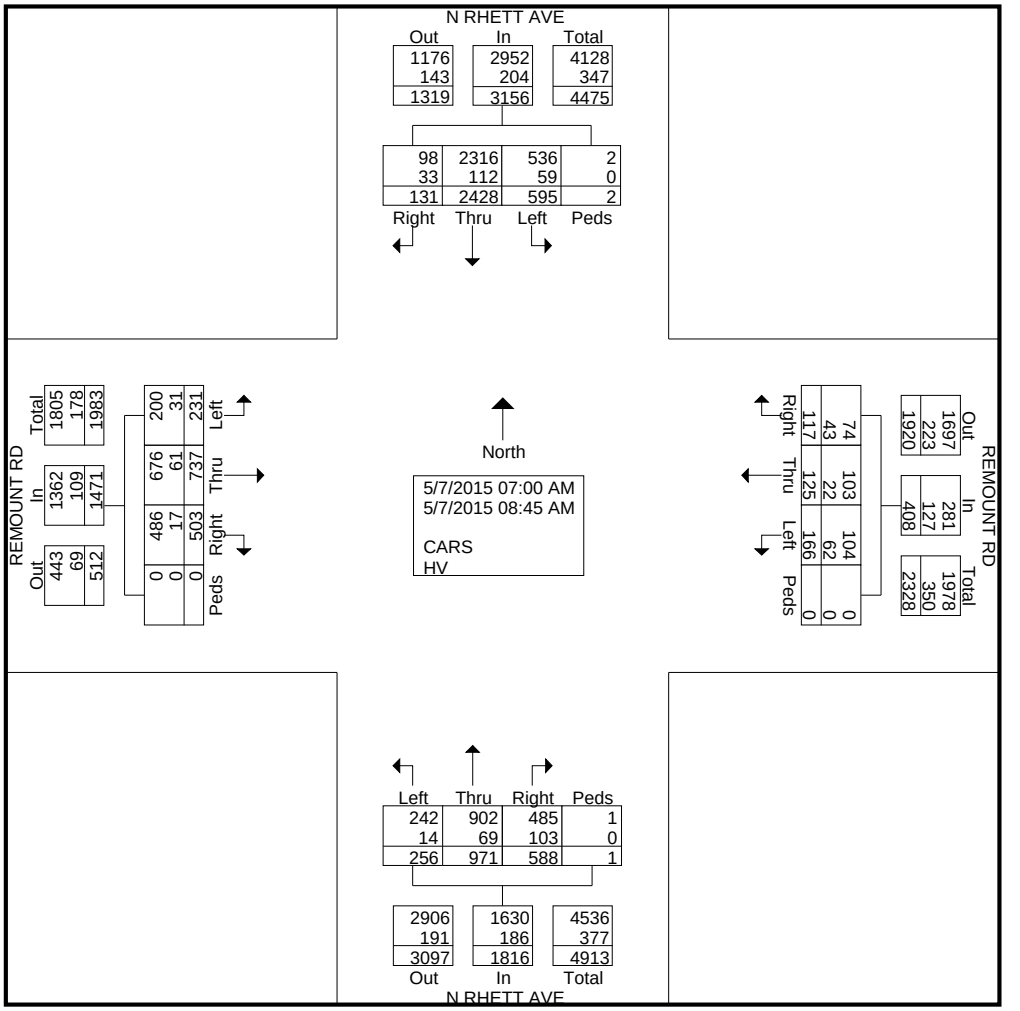
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #30 NRHETT&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	N RHETT AVE Southbound					REMOUNT RD Westbound					N RHETT AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	22	377	89	0	488	14	16	12	0	42	71	175	35	0	281	74	85	27	0	186	997
07:15 AM	14	355	66	0	435	10	8	17	0	35	72	147	30	0	249	84	101	30	0	215	934
07:30 AM	11	334	81	1	427	10	18	13	0	41	98	128	38	0	264	73	104	35	0	212	944
07:45 AM	17	279	73	1	370	11	20	17	0	48	77	113	33	1	224	68	109	36	0	213	855
Total	64	1345	309	2	1720	45	62	59	0	166	318	563	136	1	1018	299	399	128	0	826	3730
08:00 AM	17	295	98	0	410	18	18	16	0	52	78	114	32	0	224	49	104	40	0	193	879
08:15 AM	14	272	70	0	356	21	18	25	0	64	69	97	40	0	206	56	108	17	0	181	807
08:30 AM	19	309	64	0	392	12	12	34	0	58	57	106	22	0	185	56	69	21	0	146	781
08:45 AM	17	207	54	0	278	21	15	32	0	68	66	91	26	0	183	43	57	25	0	125	654
Total	67	1083	286	0	1436	72	63	107	0	242	270	408	120	0	798	204	338	103	0	645	3121
Grand Total	131	2428	595	2	3156	117	125	166	0	408	588	971	256	1	1816	503	737	231	0	1471	6851
Apprch %	4.2	76.9	18.9	0.1		28.7	30.6	40.7	0		32.4	53.5	14.1	0.1		34.2	50.1	15.7	0		
Total %	1.9	35.4	8.7	0	46.1	1.7	1.8	2.4	0	6	8.6	14.2	3.7	0	26.5	7.3	10.8	3.4	0	21.5	
CARS	98	2316																			
% CARS	74.8	95.4	90.1	100	93.5	63.2	82.4	62.7	0	68.9	82.5	92.9	94.5	100	89.8	96.6	91.7	86.6	0	92.6	90.9
HV	33	112	59	0	204	43	22	62	0	127	103	69	14	0	186	17	61	31	0	109	626
% HV	25.2	4.6	9.9	0	6.5	36.8	17.6	37.3	0	31.1	17.5	7.1	5.5	0	10.2	3.4	8.3	13.4	0	7.4	9.1



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File Name : #30 NRHETT&REMOUNTAM
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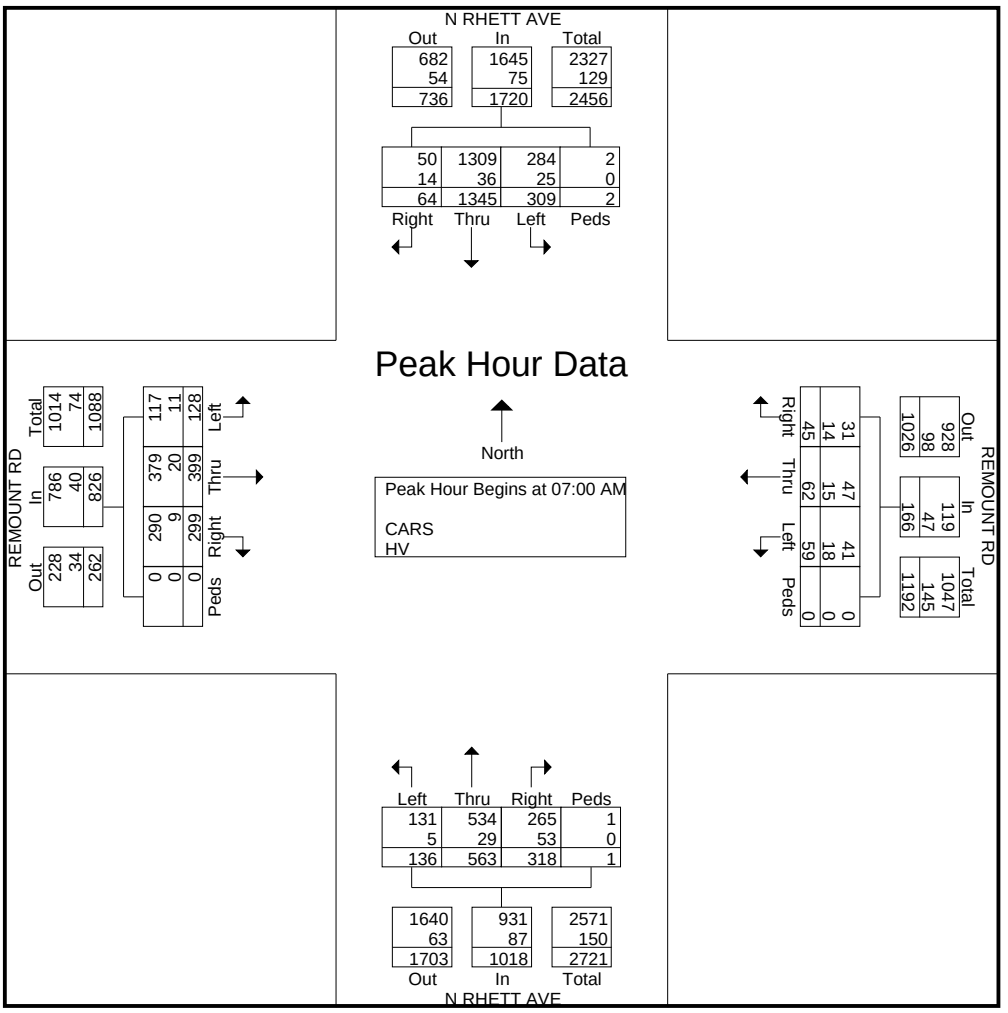
	N RHETT AVE Southbound					REMOUNT RD Westbound					N RHETT AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**22**	**377**	**89**	0	**488**	**14**	16	12	0	42	71	**175**	35	0	**281**	74	85	27	0	186	**997**
07:15 AM	14	355	66	0	435	10	8	**17**	0	35	72	147	30	0	249	**84**	101	30	0	**215**	934
07:30 AM	11	334	81	**1**	427	10	18	13	0	41	**98**	128	**38**	0	264	73	104	35	0	212	944
07:45 AM	17	279	73	1	370	11	**20**	17	0	**48**	77	113	33	**1**	224	68	**109**	**36**	0	213	855
Total Volume	64	1345	309	2	1720	45	62	59	0	166	318	563	136	1	1018	299	399	128	0	826	3730
% App. Total	3.7	78.2	18	0.1		27.1	37.3	35.5	0		31.2	55.3	13.4	0.1		36.2	48.3	15.5	0		
PHF	.727	.892	.868	.500	.881	.804	.775	.868	.000	.865	.811	.804	.895	.250	.906	.890	.915	.889	.000	.960	.935
CARS	50	1309																			
% CARS	78.1	97.3	91.9	100	95.6	68.9	75.8	69.5	0	71.7	83.3	94.8	96.3	100	91.5	97.0	95.0	91.4	0	95.2	93.3
HV	14	36	25	0	75	14	15	18	0	47	53	29	5	0	87	9	20	11	0	40	249
% HV	21.9	2.7	8.1	0	4.4	31.1	24.2	30.5	0	28.3	16.7	5.2	3.7	0	8.5	3.0	5.0	8.6	0	4.8	6.7



All Traffic Data Services, Inc.

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File Name : #30 NRHETT&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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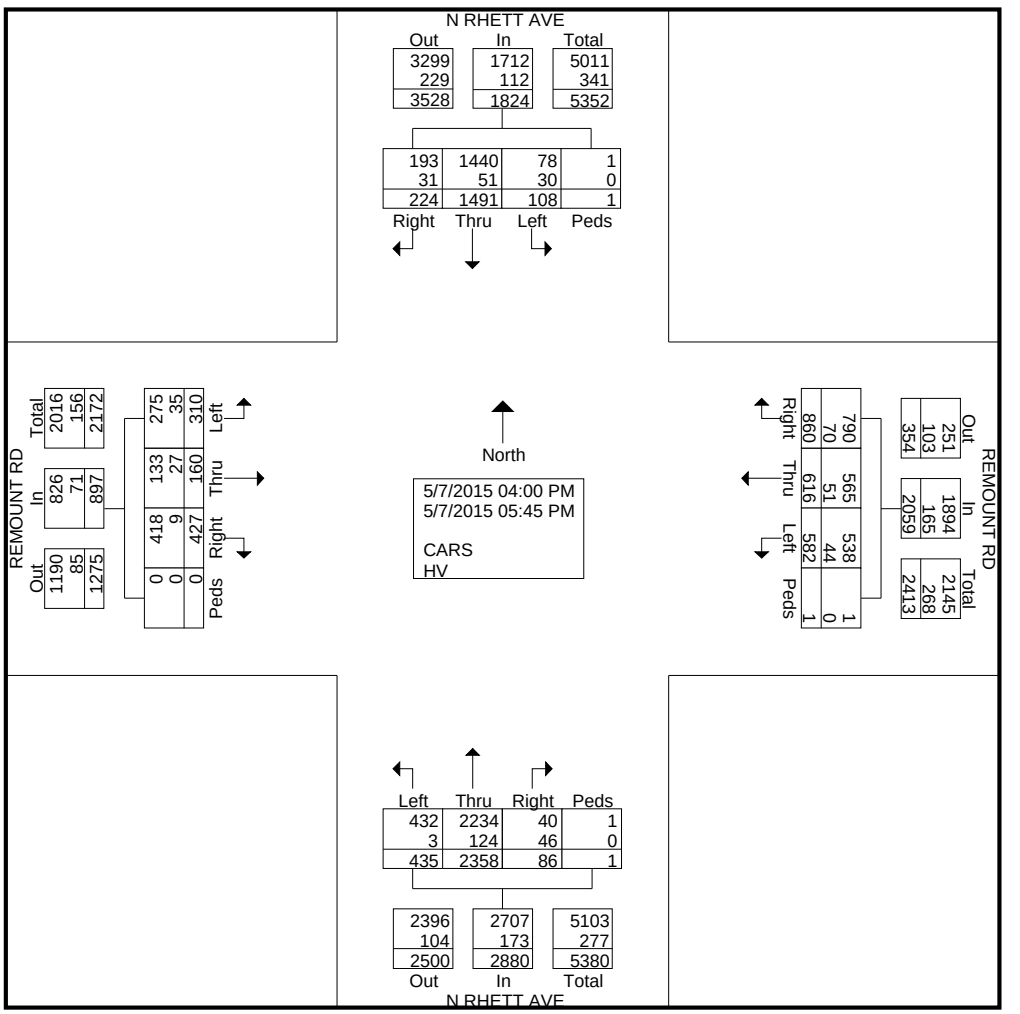
Groups Printed- CARS - HV

	N RHETT AVE Southbound					REMOUNT RD Westbound					N RHETT AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	34	219	22	0	275	120	87	81	0	288	13	209	50	0	272	54	12	35	0	101	936
04:15 PM	20	175	7	0	202	109	80	93	0	282	15	259	37	0	311	45	17	29	0	91	886
04:30 PM	27	193	12	0	232	120	86	77	0	283	18	305	45	0	368	58	25	32	0	115	998
04:45 PM	32	164	15	0	211	104	87	82	0	273	11	324	50	0	385	50	19	39	0	108	977
Total	113	751	56	0	920	453	340	333	0	1126	57	1097	182	0	1336	207	73	135	0	415	3797
05:00 PM	35	187	14	0	236	92	83	69	0	244	9	334	50	0	393	66	19	45	0	130	1003
05:15 PM	28	190	14	0	232	133	74	66	0	273	8	334	57	1	400	46	27	34	0	107	1012
05:30 PM	26	213	15	0	254	94	53	61	0	208	6	324	70	0	400	65	22	49	0	136	998
05:45 PM	22	150	9	1	182	88	66	53	1	208	6	269	76	0	351	43	19	47	0	109	850
Total	111	740	52	1	904	407	276	249	1	933	29	1261	253	1	1544	220	87	175	0	482	3863
Grand Total	224	1491	108	1	1824	860	616	582	1	2059	86	2358	435	1	2880	427	160	310	0	897	7660
Apprch %	12.3	81.7	5.9	0.1		41.8	29.9	28.3	0		3	81.9	15.1	0		47.6	17.8	34.6	0		
Total %	2.9	19.5	1.4	0	23.8	11.2	8	7.6	0	26.9	1.1	30.8	5.7	0	37.6	5.6	2.1	4	0	11.7	
CARS	193	1440										2234									
% CARS	86.2	96.6	72.2	100	93.9	91.9	91.7	92.4	100	92	46.5	94.7	99.3	100	94	97.9	83.1	88.7	0	92.1	93.2
HV	31	51	30	0	112	70	51	44	0	165	46	124	3	0	173	9	27	35	0	71	521
% HV	13.8	3.4	27.8	0	6.1	8.1	8.3	7.6	0	8	53.5	5.3	0.7	0	6	2.1	16.9	11.3	0	7.9	6.8



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File Name : #30 NRHETT&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
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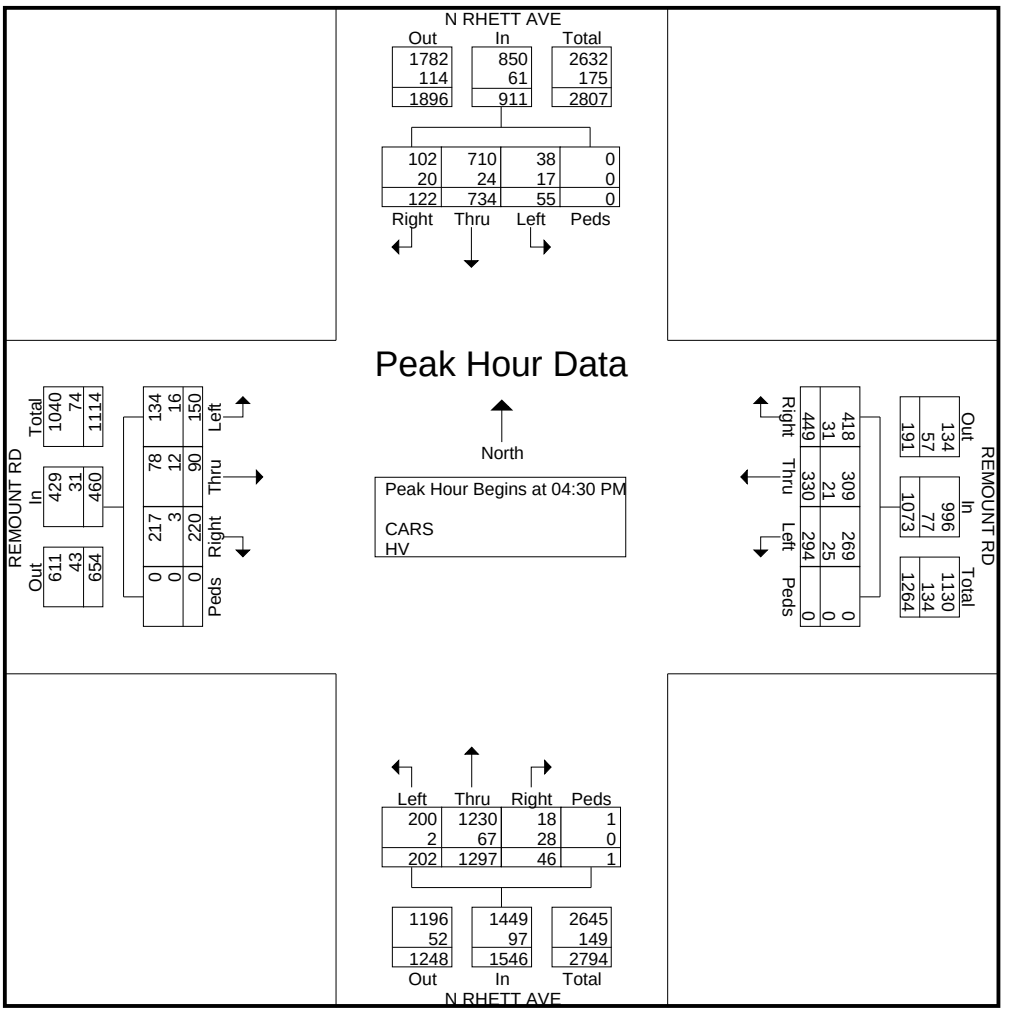
	N RHETT AVE Southbound					REMOUNT RD Westbound					N RHETT AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	27	**193**	12	0	232	120	86	77	0	**283**	**18**	305	45	0	368	58	25	32	0	115	998
04:45 PM	32	164	**15**	0	211	104	**87**	**82**	0	273	11	324	50	0	385	50	19	39	0	108	977
05:00 PM	**35**	187	14	0	**236**	92	83	69	0	244	9	**334**	50	0	393	**66**	19	**45**	0	**130**	1003
05:15 PM	28	190	14	0	232	**133**	74	66	0	273	8	334	**57**	**1**	**400**	46	**27**	34	0	107	**1012**
Total Volume	122	734	55	0	911	449	330	294	0	1073	46	1297	202	1	1546	220	90	150	0	460	3990
% App. Total	13.4	80.6	6	0		41.8	30.8	27.4	0		3	83.9	13.1	0.1		47.8	19.6	32.6	0		
PHF	.871	.951	.917	.000	.965	.844	.948	.896	.000	.948	.639	.971	.886	.250	.966	.833	.833	.833	.000	.885	.986
CARS	102	710	38	0	850	418	309	269	0	996	18	1230									
% CARS	83.6	96.7	69.1	0	93.3	93.1	93.6	91.5	0	92.8	39.1	94.8	99.0	100	93.7	98.6	86.7	89.3	0	93.3	93.3
HV	20	24	17	0	61	31	21	25	0	77	28	67	2	0	97	3	12	16	0	31	266
% HV	16.4	3.3	30.9	0	6.7	6.9	6.4	8.5	0	7.2	60.9	5.2	1.0	0	6.3	1.4	13.3	10.7	0	6.7	6.7



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #31 NRHETT&I526WBRAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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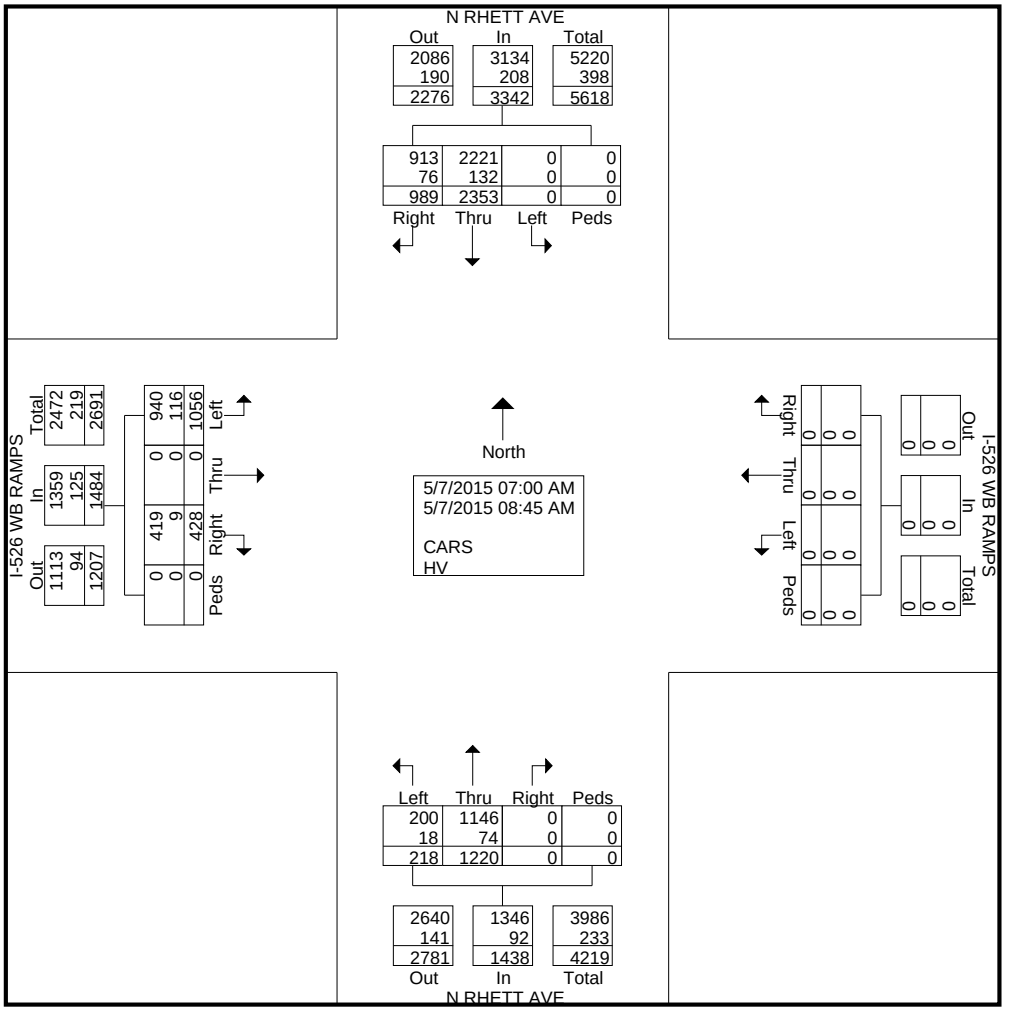
Groups Printed- CARS - HV

	N RHETT AVE Southbound					I-526 WB RAMPS Westbound					N RHETT AVE Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	151	328	0	0	479	0	0	0	0	0	0	167	29	0	196	49	0	146	0	195	870
07:15 AM	148	324	0	0	472	0	0	0	0	0	0	183	29	0	212	71	0	150	0	221	905
07:30 AM	122	309	0	0	431	0	0	0	0	0	0	156	39	0	195	102	0	140	0	242	868
07:45 AM	102	308	0	0	410	0	0	0	0	0	0	147	26	0	173	86	0	156	0	242	825
Total	523	1269	0	0	1792	0	0	0	0	0	0	653	123	0	776	308	0	592	0	900	3468
08:00 AM	83	297	0	0	380	0	0	0	0	0	0	155	23	0	178	48	0	138	0	186	744
08:15 AM	114	301	0	0	415	0	0	0	0	0	0	136	29	0	165	23	0	132	0	155	735
08:30 AM	156	287	0	0	443	0	0	0	0	0	0	119	26	0	145	20	0	96	0	116	704
08:45 AM	113	199	0	0	312	0	0	0	0	0	0	157	17	0	174	29	0	98	0	127	613
Total	466	1084	0	0	1550	0	0	0	0	0	0	567	95	0	662	120	0	464	0	584	2796
Grand Total	989	2353	0	0	3342	0	0	0	0	0	0	1220	218	0	1438	428	0	1056	0	1484	6264
Apprch %	29.6	70.4	0	0		0	0	0	0		0	84.8	15.2	0		28.8	0	71.2	0		
Total %	15.8	37.6	0	0	53.4	0	0	0	0	0	0	19.5	3.5	0	23	6.8	0	16.9	0	23.7	
CARS	913	2221										1146									
% CARS	92.3	94.4	0	0	93.8	0	0	0	0	0	0	93.9	91.7	0	93.6	97.9	0	89	0	91.6	93.2
HV	76	132	0	0	208	0	0	0	0	0	0	74	18	0	92	9	0	116	0	125	425
% HV	7.7	5.6	0	0	6.2	0	0	0	0	0	0	6.1	8.3	0	6.4	2.1	0	11	0	8.4	6.8



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File Name : #31 NRHETT&I526WBRAMPSAM
Site Code : 9513 - CHARLESTON 1
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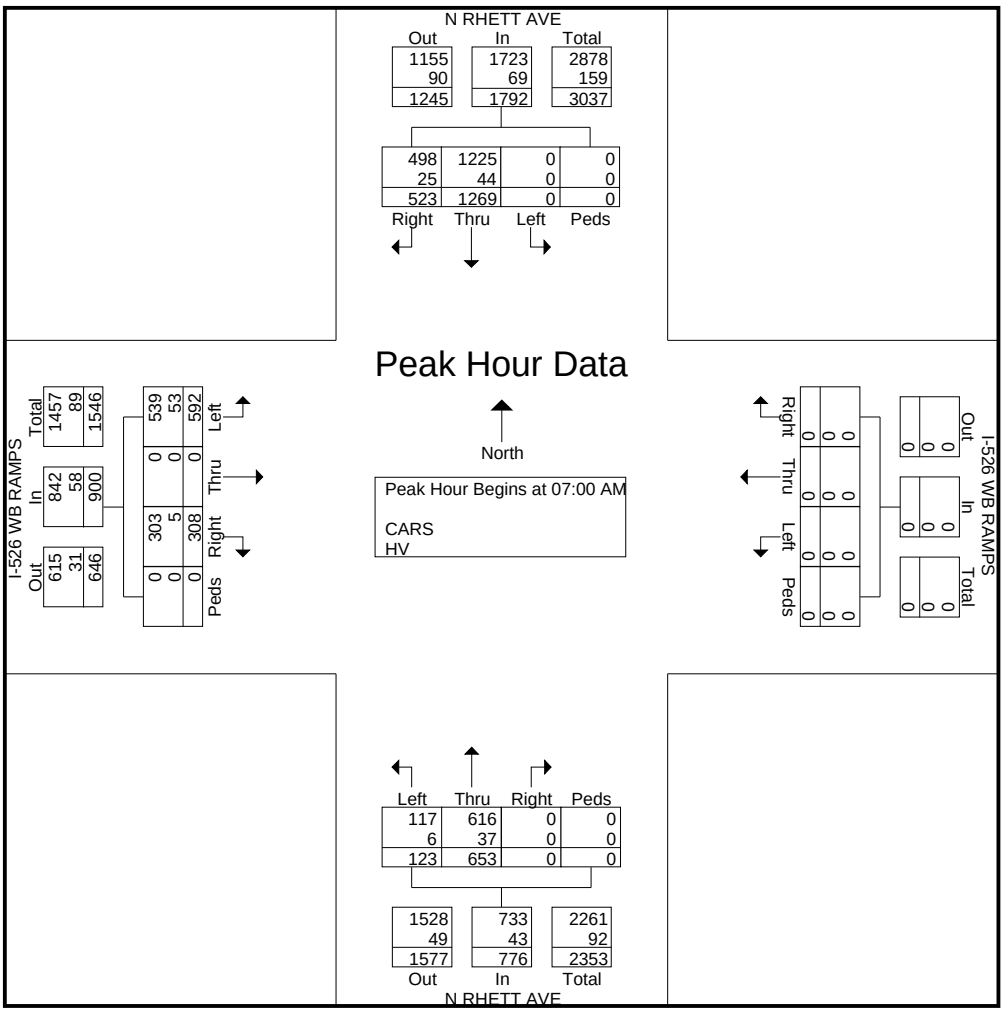
	N RHETT AVE Southbound					I-526 WB RAMPS Westbound					N RHETT AVE Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**151**	**328**	0	0	**479**	0	0	0	0	0	0	167	29	0	196	49	0	146	0	195	870
07:15 AM	148	324	0	0	472	0	0	0	0	0	0	**183**	29	0	**212**	71	0	150	0	221	**905**
07:30 AM	122	309	0	0	431	0	0	0	0	0	0	156	**39**	0	195	**102**	0	140	0	**242**	868
07:45 AM	102	308	0	0	410	0	0	0	0	0	0	147	26	0	173	86	0	**156**	0	242	825
Total Volume	523	1269	0	0	1792	0	0	0	0	0	0	653	123	0	776	308	0	592	0	900	3468
% App. Total	29.2	70.8	0	0		0	0	0	0		0	84.1	15.9	0		34.2	0	65.8	0		
PHF	.866	.967	.000	.000	.935	.000	.000	.000	.000	.000	.000	.892	.788	.000	.915	.755	.000	.949	.000	.930	.958
CARS	498	1225																			
% CARS	95.2	96.5	0	0	96.1	0	0	0	0	0	0	94.3	95.1	0	94.5	98.4	0	91.0	0	93.6	95.1
HV	25	44	0	0	69	0	0	0	0	0	0	37	6	0	43	5	0	53	0	58	170
% HV	4.8	3.5	0	0	3.9	0	0	0	0	0	0	5.7	4.9	0	5.5	1.6	0	9.0	0	6.4	4.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #31 NRHETT&I526WBRAMPSPM
Site Code : 9513 - CHARLESTON 1
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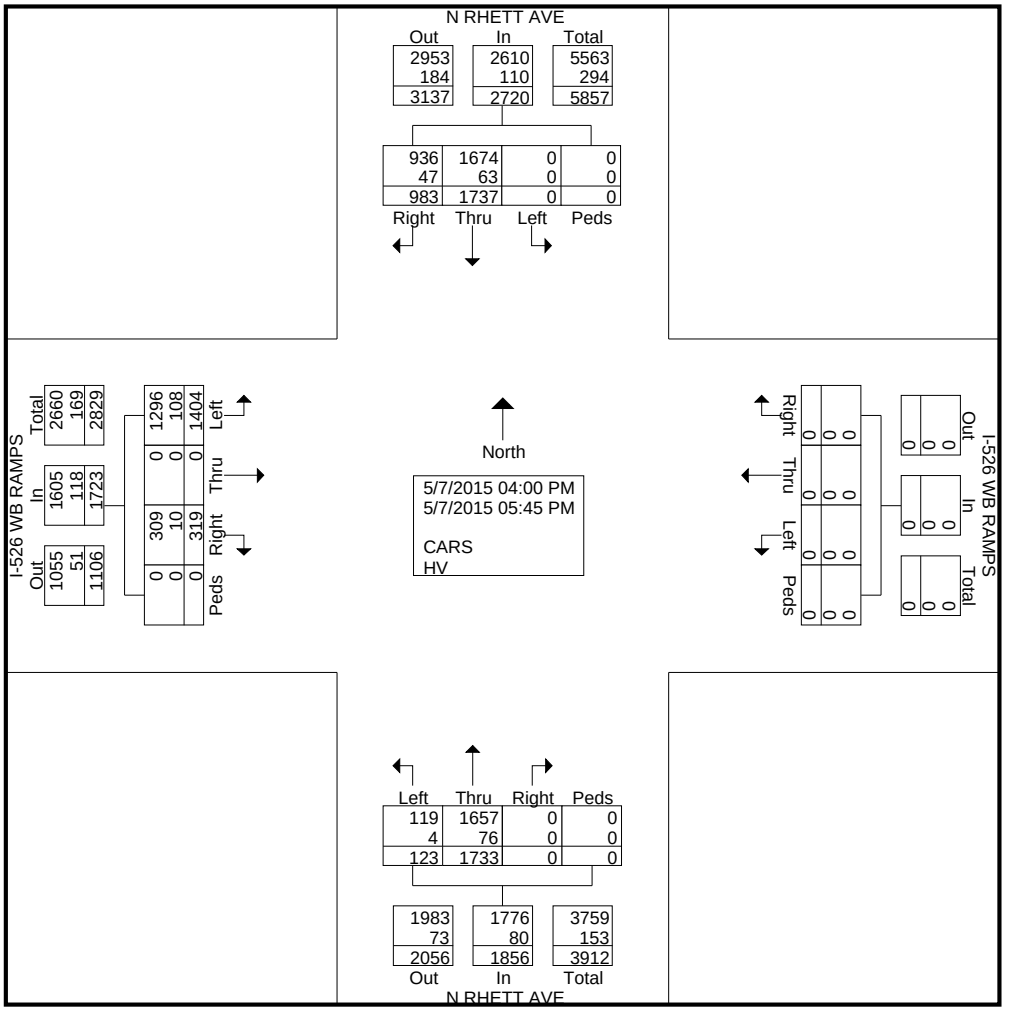
Groups Printed- CARS - HV

	N RHETT AVE Southbound					I-526 WB RAMPS Westbound					N RHETT AVE Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	154	228	0	0	382	0	0	0	0	0	0	210	28	0	238	24	0	83	0	107	727
04:15 PM	147	196	0	0	343	0	0	0	0	0	0	194	15	0	209	36	0	153	0	189	741
04:30 PM	128	240	0	0	368	0	0	0	0	0	0	237	17	0	254	35	0	197	0	232	854
04:45 PM	120	209	0	0	329	0	0	0	0	0	0	252	15	0	267	39	0	172	0	211	807
Total	549	873	0	0	1422	0	0	0	0	0	0	893	75	0	968	134	0	605	0	739	3129
05:00 PM	124	232	0	0	356	0	0	0	0	0	0	208	15	0	223	44	0	206	0	250	829
05:15 PM	110	209	0	0	319	0	0	0	0	0	0	217	11	0	228	46	0	219	0	265	812
05:30 PM	118	242	0	0	360	0	0	0	0	0	0	206	14	0	220	52	0	207	0	259	839
05:45 PM	82	181	0	0	263	0	0	0	0	0	0	209	8	0	217	43	0	167	0	210	690
Total	434	864	0	0	1298	0	0	0	0	0	0	840	48	0	888	185	0	799	0	984	3170
Grand Total	983	1737	0	0	2720	0	0	0	0	0	0	1733	123	0	1856	319	0	1404	0	1723	6299
Apprch %	36.1	63.9	0	0		0	0	0	0		0	93.4	6.6	0		18.5	0	81.5	0		
Total %	15.6	27.6	0	0	43.2	0	0	0	0	0	0	27.5	2	0	29.5	5.1	0	22.3	0	27.4	
CARS	936	1674										1657						1296			
% CARS	95.2	96.4	0	0	96	0	0	0	0	0	0	95.6	96.7	0	95.7	96.9	0	92.3	0	93.2	95.1
HV	47	63	0	0	110	0	0	0	0	0	0	76	4	0	80	10	0	108	0	118	308
% HV	4.8	3.6	0	0	4	0	0	0	0	0	0	4.4	3.3	0	4.3	3.1	0	7.7	0	6.8	4.9



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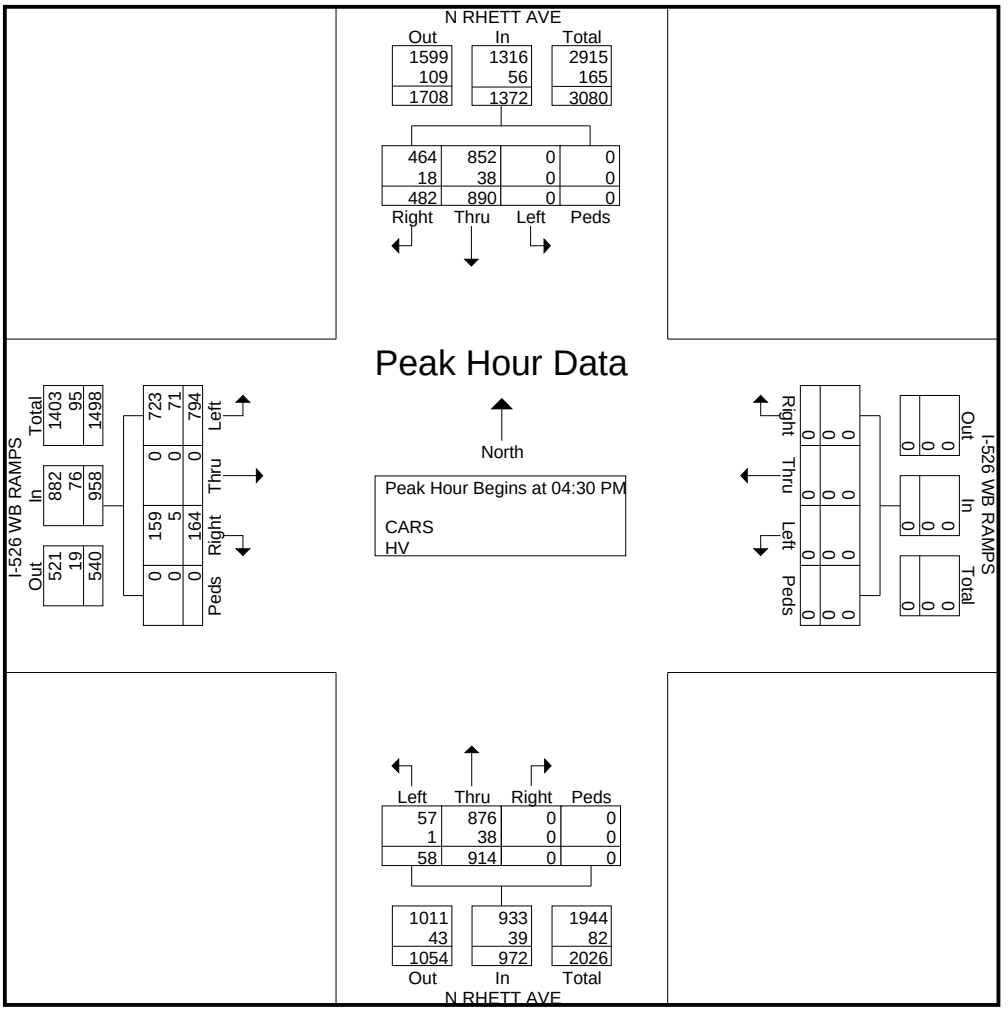
	N RHETT AVE Southbound					I-526 WB RAMPS Westbound					N RHETT AVE Northbound					I-526 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**128**	**240**	0	0	**368**	0	0	0	0	0	0	237	**17**	0	254	35	0	197	0	232	**854**
04:45 PM	120	209	0	0	329	0	0	0	0	0	0	**252**	15	0	**267**	39	0	172	0	211	807
05:00 PM	124	232	0	0	356	0	0	0	0	0	0	208	15	0	223	44	0	206	0	250	829
05:15 PM	110	209	0	0	319	0	0	0	0	0	0	217	11	0	228	**46**	0	**219**	0	**265**	812
Total Volume	482	890	0	0	1372	0	0	0	0	0	0	914	58	0	972	164	0	794	0	958	3302
% App. Total	35.1	64.9	0	0		0	0	0	0		0	94	6	0		17.1	0	82.9	0		
PHF	.941	.927	.000	.000	.932	.000	.000	.000	.000	.000	.000	.907	.853	.000	.910	.891	.000	.906	.000	.904	.967
CARS	464	852	0	0	1316	0	0	0	0	0	0	876	57	0	933	159	0	723	0	882	3131
% CARS	96.3	95.7	0	0	95.9	0	0	0	0	0	0	95.8	98.3	0	96.0	97.0	0	91.1	0	92.1	94.8
HV	18	38	0	0	56	0	0	0	0	0	0	38	1	0	39	5	0	71	0	76	171
% HV	3.7	4.3	0	0	4.1	0	0	0	0	0	0	4.2	1.7	0	4.0	3.0	0	8.9	0	7.9	5.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #32 NRHETT&I526EBRAMPSAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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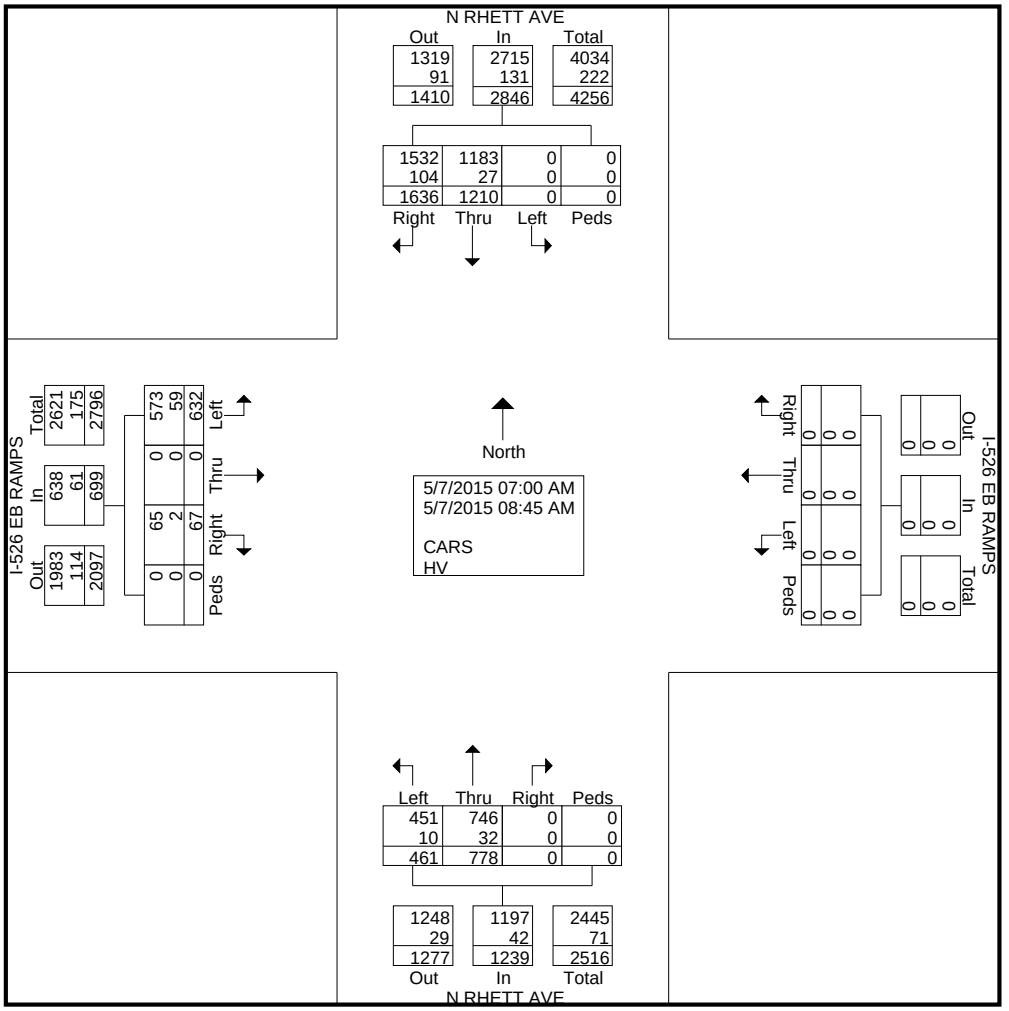
Groups Printed- CARS - HV

	N RHETT AVE Southbound					I-526 EB RAMPS Westbound					N RHETT AVE Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	209	135	0	0	344	0	0	0	0	0	0	79	27	0	106	13	0	110	0	123	573
07:15 AM	222	183	0	0	405	0	0	0	0	0	0	95	50	0	145	10	0	95	0	105	655
07:30 AM	215	181	0	0	396	0	0	0	0	0	0	121	60	0	181	11	0	85	0	96	673
07:45 AM	214	201	0	0	415	0	0	0	0	0	0	100	71	0	171	4	0	75	0	79	665
Total	860	700	0	0	1560	0	0	0	0	0	0	395	208	0	603	38	0	365	0	403	2566
08:00 AM	202	156	0	0	358	0	0	0	0	0	0	114	80	0	194	6	0	64	0	70	622
08:15 AM	201	126	0	0	327	0	0	0	0	0	0	109	66	0	175	6	0	52	0	58	560
08:30 AM	198	121	0	0	319	0	0	0	0	0	0	91	57	0	148	6	0	61	0	67	534
08:45 AM	175	107	0	0	282	0	0	0	0	0	0	69	50	0	119	11	0	90	0	101	502
Total	776	510	0	0	1286	0	0	0	0	0	0	383	253	0	636	29	0	267	0	296	2218
Grand Total	1636	1210	0	0	2846	0	0	0	0	0	0	778	461	0	1239	67	0	632	0	699	4784
Apprch %	57.5	42.5	0	0		0	0	0	0		0	62.8	37.2	0		9.6	0	90.4	0		
Total %	34.2	25.3	0	0	59.5	0	0	0	0	0	0	16.3	9.6	0	25.9	1.4	0	13.2	0	14.6	
CARS	1532	1183																			
% CARS	93.6	97.8	0	0	95.4	0	0	0	0	0	0	95.9	97.8	0	96.6	97	0	90.7	0	91.3	95.1
HV	104	27	0	0	131	0	0	0	0	0	0	32	10	0	42	2	0	59	0	61	234
% HV	6.4	2.2	0	0	4.6	0	0	0	0	0	0	4.1	2.2	0	3.4	3	0	9.3	0	8.7	4.9



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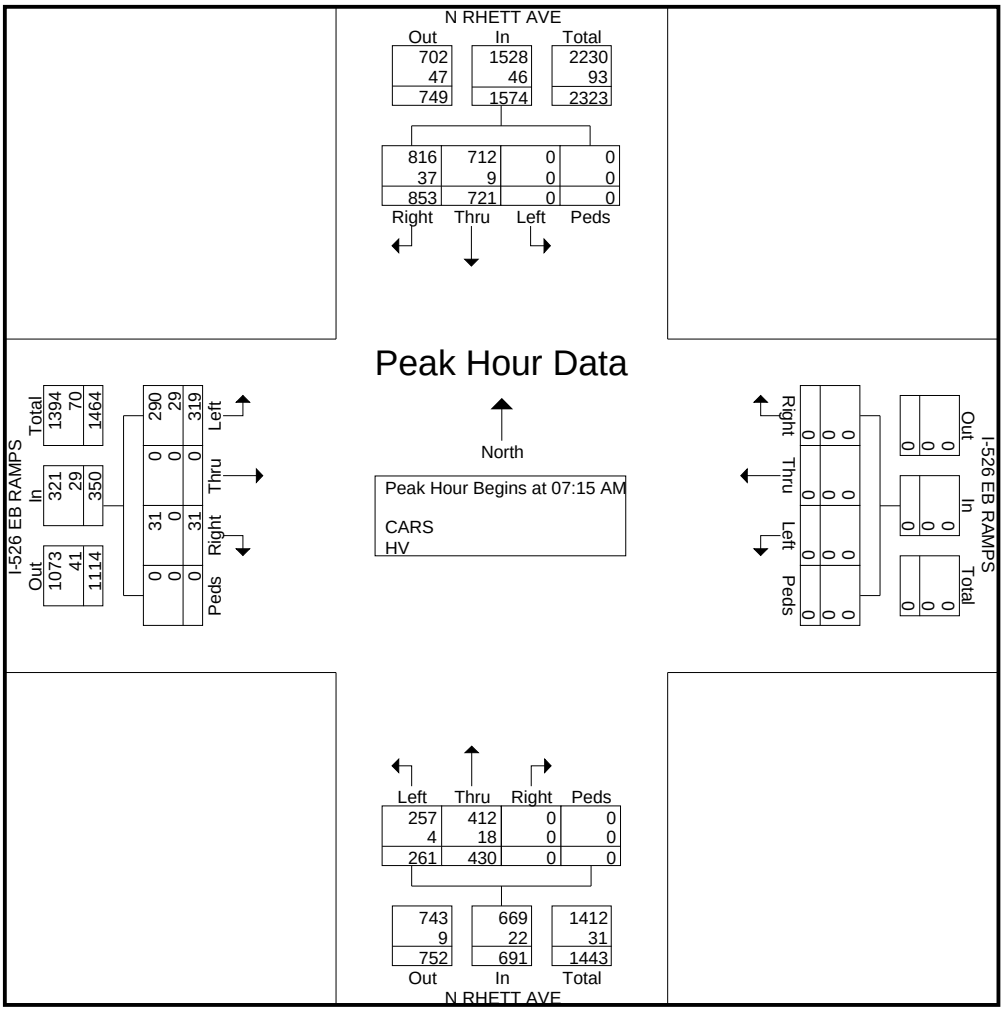
	N RHETT AVE Southbound					I-526 EB RAMPS Westbound					N RHETT AVE Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**222**	183	0	0	405	0	0	0	0	0	0	95	50	0	145	10	0	**95**	0	**105**	655
07:30 AM	215	181	0	0	396	0	0	0	0	0	0	**121**	60	0	181	**11**	0	85	0	96	**673**
07:45 AM	214	**201**	0	0	**415**	0	0	0	0	0	0	100	71	0	171	4	0	75	0	79	665
08:00 AM	202	156	0	0	358	0	0	0	0	0	0	114	**80**	0	**194**	6	0	64	0	70	622
Total Volume	853	721	0	0	1574	0	0	0	0	0	0	430	261	0	691	31	0	319	0	350	2615
% App. Total	54.2	45.8	0	0		0	0	0	0		0	62.2	37.8	0		8.9	0	91.1	0		
PHF	.961	.897	.000	.000	.948	.000	.000	.000	.000	.000	.000	.888	.816	.000	.890	.705	.000	.839	.000	.833	.971
CARS	816	712	0	0	1528	0	0	0	0	0	0	412	257	0	669	31	0	290	0	321	2518
% CARS	95.7	98.8	0	0	97.1	0	0	0	0	0	0	95.8	98.5	0	96.8	100	0	90.9	0	91.7	96.3
HV	37	9	0	0	46	0	0	0	0	0	0	18	4	0	22	0	0	29	0	29	97
% HV	4.3	1.2	0	0	2.9	0	0	0	0	0	0	4.2	1.5	0	3.2	0	0	9.1	0	8.3	3.7



All Traffic Data Services, Inc.

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File Name : #32 NRHETT&I526EBRAMPSPM
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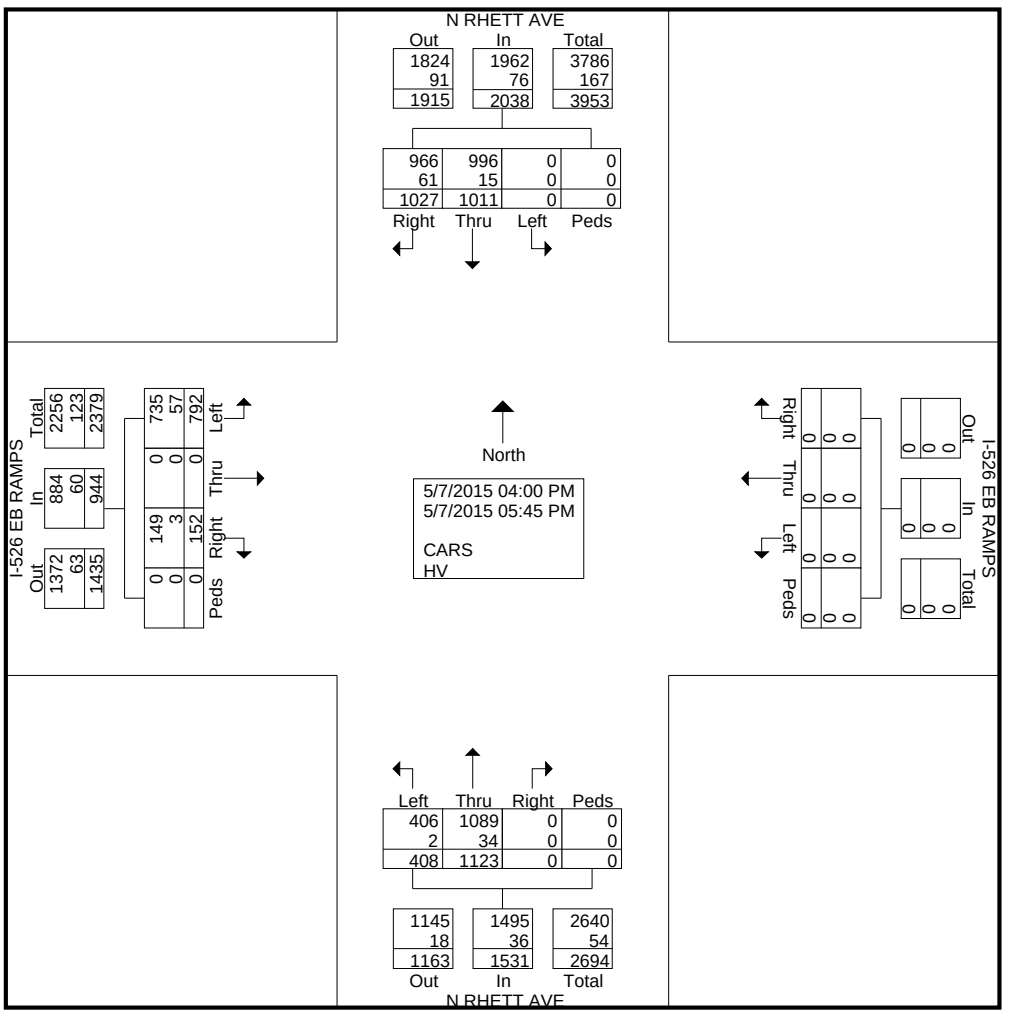
Groups Printed- CARS - HV

	N RHETT AVE Southbound					I-526 EB RAMPS Westbound					N RHETT AVE Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	133	89	0	0	222	0	0	0	0	0	0	138	46	0	184	31	0	95	0	126	532
04:15 PM	114	107	0	0	221	0	0	0	0	0	0	132	42	0	174	19	0	94	0	113	508
04:30 PM	126	125	0	0	251	0	0	0	0	0	0	140	49	0	189	18	0	113	0	131	571
04:45 PM	141	151	0	0	292	0	0	0	0	0	0	137	46	0	183	20	0	143	0	163	638
Total	514	472	0	0	986	0	0	0	0	0	0	547	183	0	730	88	0	445	0	533	2249
05:00 PM	141	126	0	0	267	0	0	0	0	0	0	145	42	0	187	19	0	54	0	73	527
05:15 PM	115	123	0	0	238	0	0	0	0	0	0	141	53	0	194	13	0	102	0	115	547
05:30 PM	155	147	0	0	302	0	0	0	0	0	0	144	61	0	205	13	0	96	0	109	616
05:45 PM	102	143	0	0	245	0	0	0	0	0	0	146	69	0	215	19	0	95	0	114	574
Total	513	539	0	0	1052	0	0	0	0	0	0	576	225	0	801	64	0	347	0	411	2264
Grand Total	1027	1011	0	0	2038	0	0	0	0	0	0	1123	408	0	1531	152	0	792	0	944	4513
Apprch %	50.4	49.6	0	0		0	0	0	0		0	73.4	26.6	0		16.1	0	83.9	0		
Total %	22.8	22.4	0	0	45.2	0	0	0	0	0	0	24.9	9	0	33.9	3.4	0	17.5	0	20.9	
CARS	966	996	0	0	1962	0	0	0	0	0	0	1089									
% CARS	94.1	98.5	0	0	96.3	0	0	0	0	0	0	97	99.5	0	97.6	98	0	92.8	0	93.6	96.2
HV	61	15	0	0	76	0	0	0	0	0	0	34	2	0	36	3	0	57	0	60	172
% HV	5.9	1.5	0	0	3.7	0	0	0	0	0	0	3	0.5	0	2.4	2	0	7.2	0	6.4	3.8



All Traffic Data Services, Inc.

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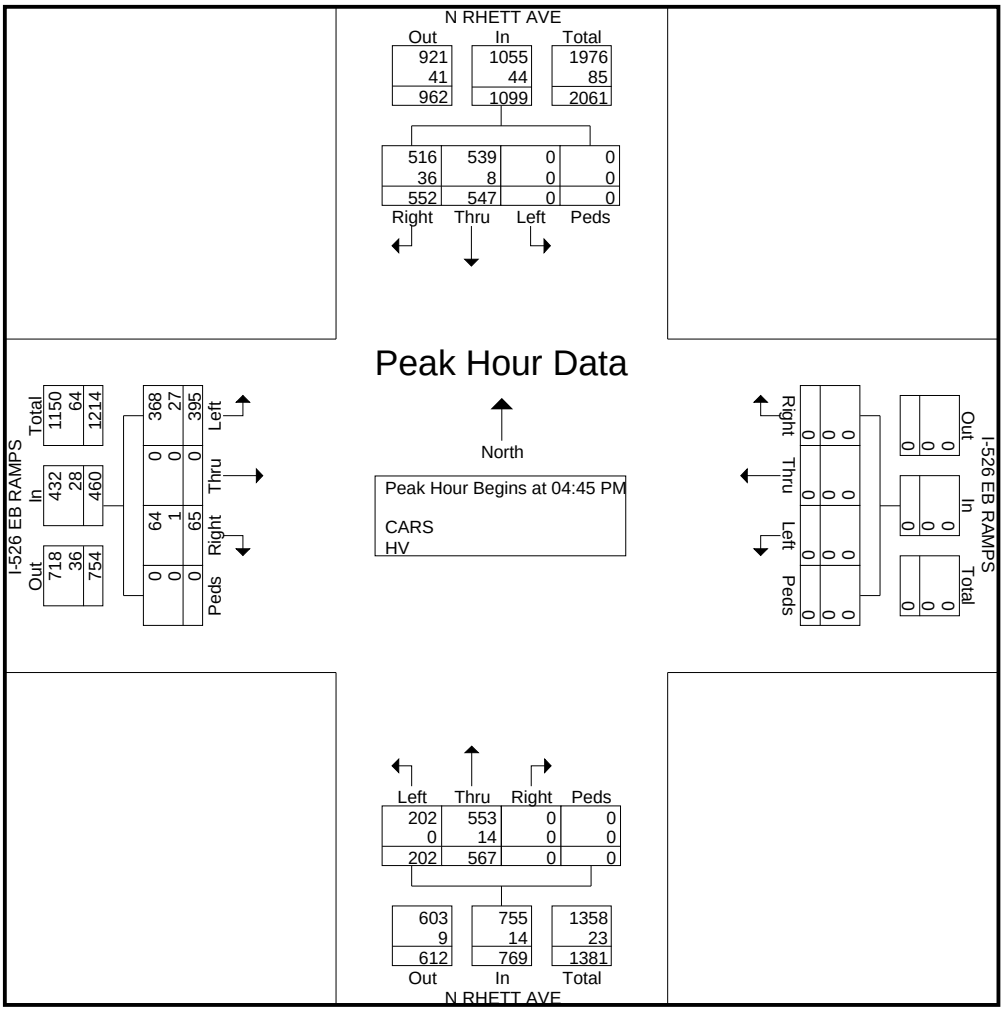
File Name : #32 NRHETT&I526EBRAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	N RHETT AVE Southbound					I-526 EB RAMPS Westbound					N RHETT AVE Northbound					I-526 EB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	141	**151**	0	0	292	0	0	0	0	0	0	137	46	0	183	**20**	0	**143**	0	**163**	**638**
05:00 PM	141	126	0	0	267	0	0	0	0	0	0	**145**	42	0	187	19	0	54	0	73	527
05:15 PM	115	123	0	0	238	0	0	0	0	0	0	141	53	0	194	13	0	102	0	115	547
05:30 PM	**155**	147	0	0	**302**	0	0	0	0	0	0	144	**61**	0	**205**	13	0	96	0	109	616
Total Volume	552	547	0	0	1099	0	0	0	0	0	0	567	202	0	769	65	0	395	0	460	2328
% App. Total	50.2	49.8	0	0		0	0	0	0		0	73.7	26.3	0		14.1	0	85.9	0		
PHF	.890	.906	.000	.000	.910	.000	.000	.000	.000	.000	.000	.978	.828	.000	.938	.813	.000	.691	.000	.706	.912
CARS	516	539	0	0	1055	0	0	0	0	0	0	553	202	0	755	64	0	368	0	432	2242
% CARS	93.5	98.5	0	0	96.0	0	0	0	0	0	0	97.5	100	0	98.2	98.5	0	93.2	0	93.9	96.3
HV	36	8	0	0	44	0	0	0	0	0	0	14	0	0	14	1	0	27	0	28	86
% HV	6.5	1.5	0	0	4.0	0	0	0	0	0	0	2.5	0	0	1.8	1.5	0	6.8	0	6.1	3.7



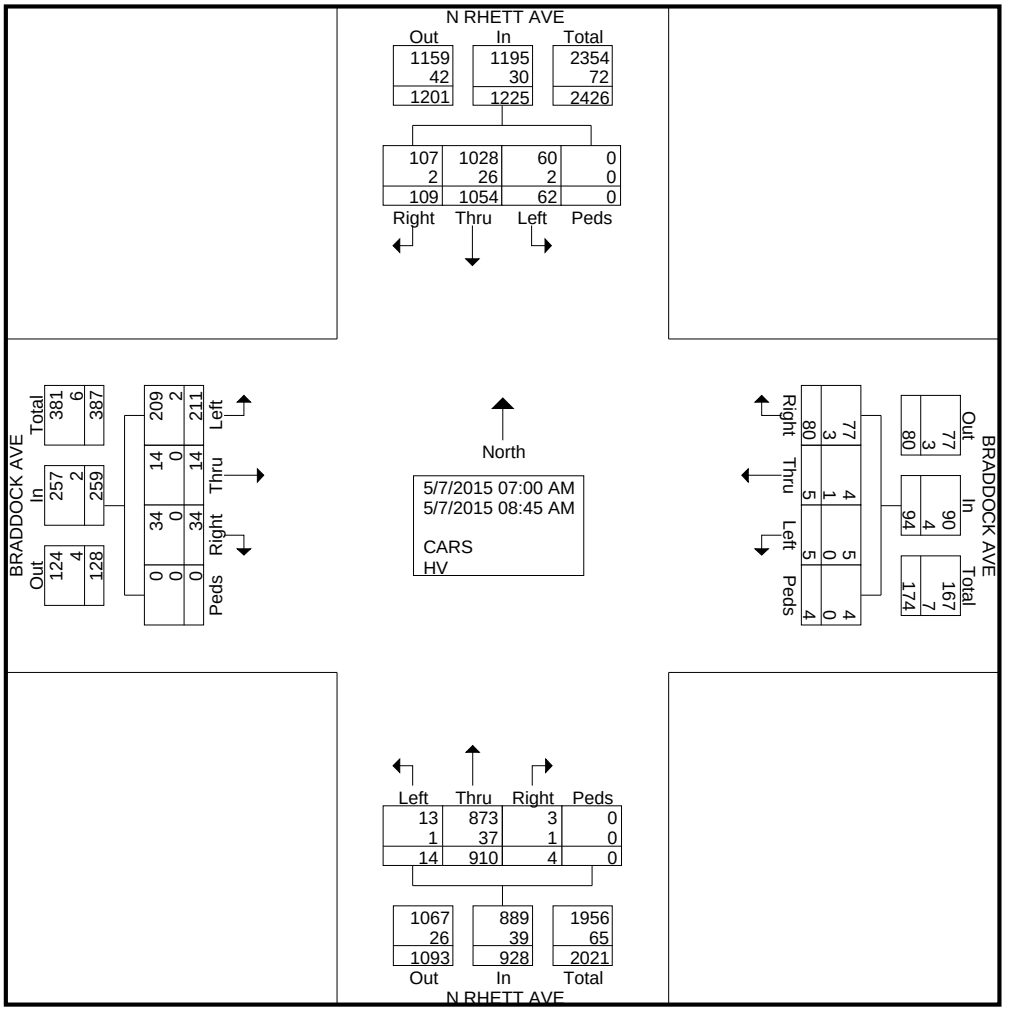
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #33 NRHETT&BRADDOCKAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	N RHETT AVE Southbound					BRADDOCK AVE Westbound					N RHETT AVE Northbound					BRADDOCK AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	9	140	9	0	158	9	1	2	0	12	0	90	1	0	91	5	4	26	0	35	296
07:15 AM	13	179	7	0	199	5	1	1	2	9	0	122	4	0	126	6	1	32	0	39	373
07:30 AM	16	168	9	0	193	11	1	2	0	14	1	123	0	0	124	5	1	41	0	47	378
07:45 AM	28	149	8	0	185	7	1	0	0	8	0	128	1	0	129	6	1	28	0	35	357
Total	66	636	33	0	735	32	4	5	2	43	1	463	6	0	470	22	7	127	0	156	1404
08:00 AM	21	116	6	0	143	9	0	0	1	10	2	134	4	0	140	4	2	25	0	31	324
08:15 AM	6	120	4	0	130	18	1	0	0	19	0	126	2	0	128	3	1	25	0	29	306
08:30 AM	8	104	11	0	123	10	0	0	1	11	1	100	1	0	102	3	2	18	0	23	259
08:45 AM	8	78	8	0	94	11	0	0	0	11	0	87	1	0	88	2	2	16	0	20	213
Total	43	418	29	0	490	48	1	0	2	51	3	447	8	0	458	12	7	84	0	103	1102
Grand Total	109	1054	62	0	1225	80	5	5	4	94	4	910	14	0	928	34	14	211	0	259	2506
Apprch %	8.9	86	5.1	0		85.1	5.3	5.3	4.3		0.4	98.1	1.5	0		13.1	5.4	81.5	0		
Total %	4.3	42.1	2.5	0	48.9	3.2	0.2	0.2	0.2	3.8	0.2	36.3	0.6	0	37	1.4	0.6	8.4	0	10.3	
CARS	107	1028																			
% CARS	98.2	97.5	96.8	0	97.6	96.2	80	100	100	95.7	75	95.9	92.9	0	95.8	100	100	99.1	0	99.2	97
HV	2	26	2	0	30	3	1	0	0	4	1	37	1	0	39	0	0	2	0	2	75
% HV	1.8	2.5	3.2	0	2.4	3.8	20	0	0	4.3	25	4.1	7.1	0	4.2	0	0	0.9	0	0.8	3

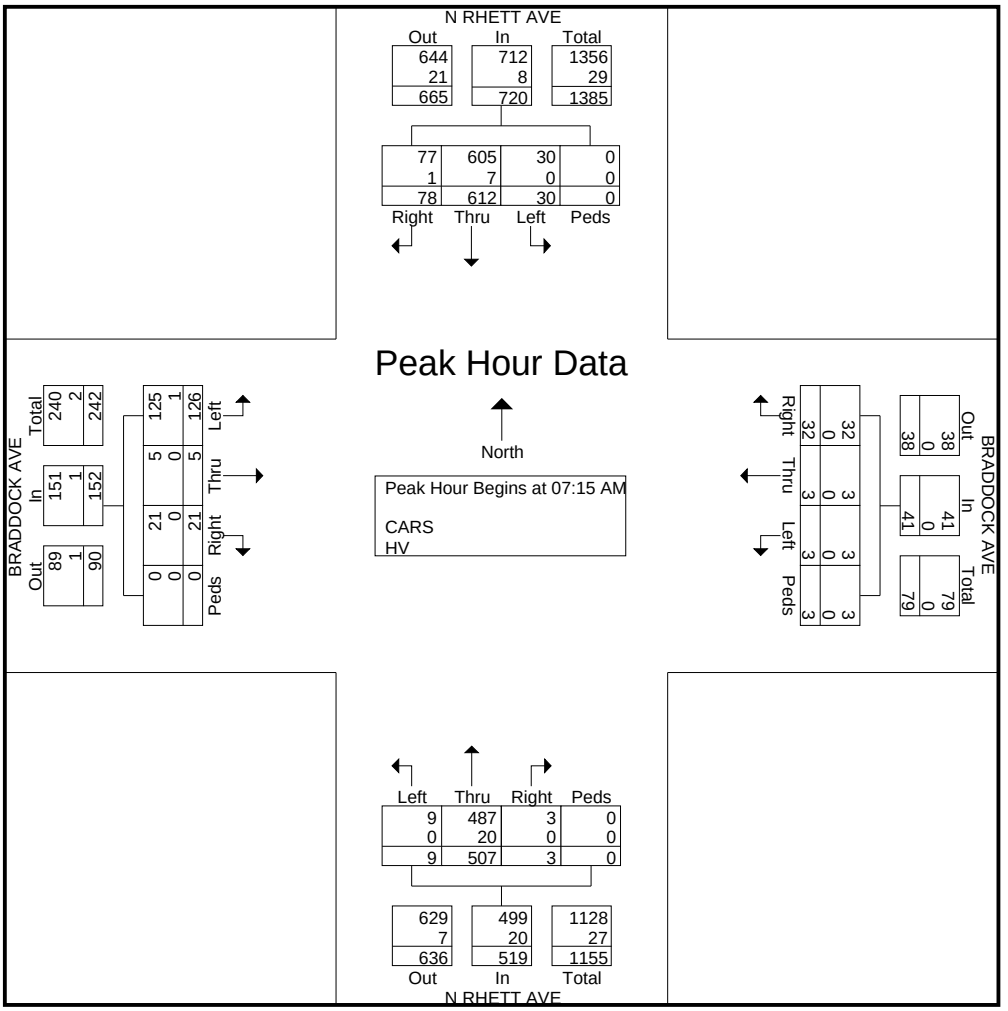


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #33 NRHETT&BRADDOCKAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	N RHETT AVE Southbound					BRADDOCK AVE Westbound					N RHETT AVE Northbound					BRADDOCK AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	13	**179**	7	0	**199**	5	**1**	1	**2**	9	0	122	**4**	0	126	**6**	1	32	0	39	373
07:30 AM	16	168	**9**	0	193	**11**	1	**2**	0	**14**	1	123	0	0	124	5	1	**41**	0	**47**	**378**
07:45 AM	**28**	149	8	0	185	7	1	0	0	8	0	128	1	0	129	6	1	28	0	35	357
08:00 AM	21	116	6	0	143	9	0	0	1	10	**2**	**134**	4	0	**140**	4	**2**	25	0	31	324
Total Volume	78	612	30	0	720	32	3	3	3	41	3	507	9	0	519	21	5	126	0	152	1432
% App. Total	10.8	85	4.2	0		78	7.3	7.3	7.3		0.6	97.7	1.7	0		13.8	3.3	82.9	0		
PHF	.696	.855	.833	.000	.905	.727	.750	.375	.375	.732	.375	.946	.563	.000	.927	.875	.625	.768	.000	.809	.947
CARS	77	605	30	0	712	32	3	3	3	41	3	487	9	0	499	21	5	125	0	151	1403
% CARS	98.7	98.9	100	0	98.9	100	100	100	100	100	100	96.1	100	0	96.1	100	100	99.2	0	99.3	98.0
HV	1	7	0	0	8	0	0	0	0	0	0	20	0	0	20	0	0	1	0	1	29
% HV	1.3	1.1	0	0	1.1	0	0	0	0	0	0	3.9	0	0	3.9	0	0	0.8	0	0.7	2.0



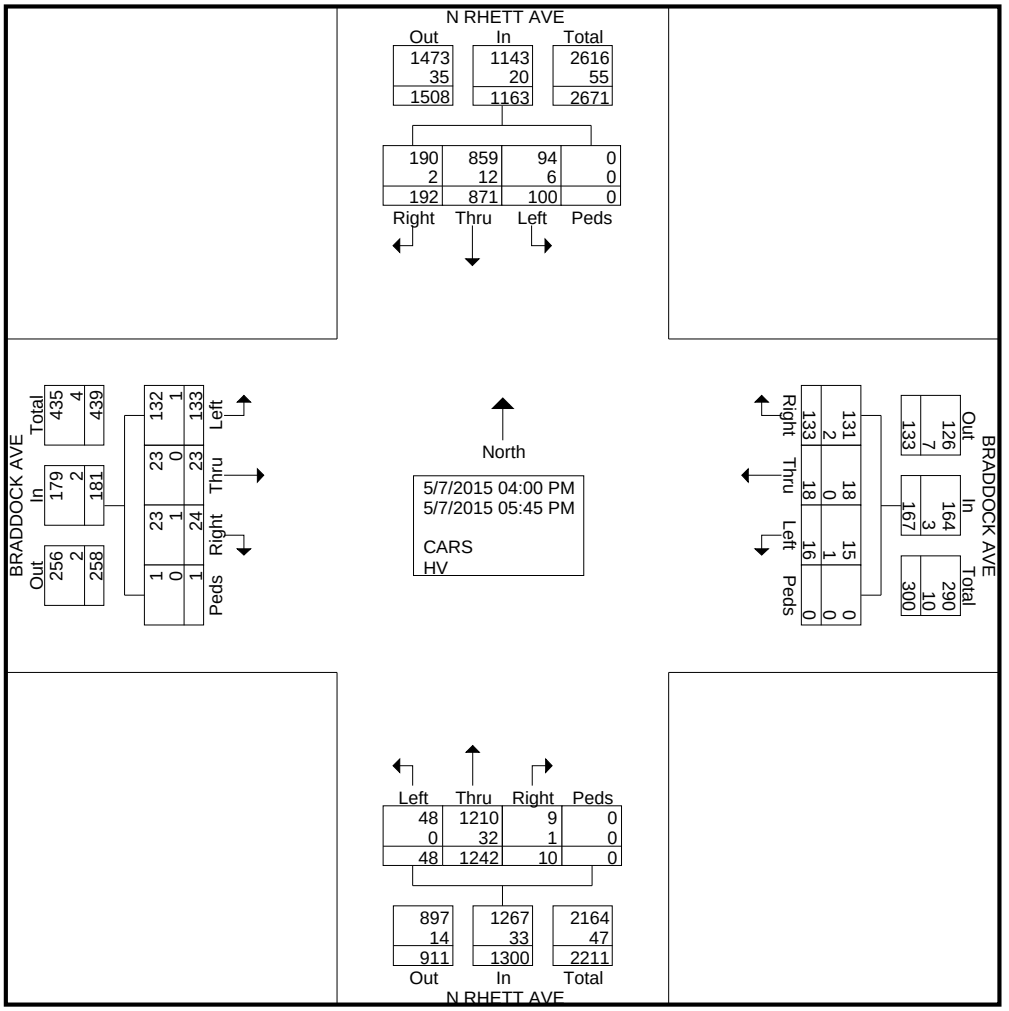
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #33 NRHETT&BRADDOCKPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	N RHETT AVE Southbound					BRADDOCK AVE Westbound					N RHETT AVE Northbound					BRADDOCK AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	19	93	12	0	124	15	2	3	0	20	2	141	2	0	145	1	0	18	0	19	308
04:15 PM	24	102	7	0	133	17	2	1	0	20	2	147	2	0	151	1	2	18	0	21	325
04:30 PM	22	116	19	0	157	25	3	4	0	32	0	142	3	0	145	3	3	16	0	22	356
04:45 PM	18	111	17	0	146	17	3	4	0	24	0	151	5	0	156	0	2	15	0	17	343
Total	83	422	55	0	560	74	10	12	0	96	4	581	12	0	597	5	7	67	0	79	1332
05:00 PM	34	110	10	0	154	16	1	2	0	19	2	158	10	0	170	3	5	20	0	28	371
05:15 PM	16	121	9	0	146	11	0	1	0	12	1	161	7	0	169	6	2	20	0	28	355
05:30 PM	28	117	14	0	159	16	2	1	0	19	1	173	11	0	185	5	3	13	0	21	384
05:45 PM	31	101	12	0	144	16	5	0	0	21	2	169	8	0	179	5	6	13	1	25	369
Total	109	449	45	0	603	59	8	4	0	71	6	661	36	0	703	19	16	66	1	102	1479
Grand Total	192	871	100	0	1163	133	18	16	0	167	10	1242	48	0	1300	24	23	133	1	181	2811
Apprch %	16.5	74.9	8.6	0		79.6	10.8	9.6	0		0.8	95.5	3.7	0		13.3	12.7	73.5	0.6		
Total %	6.8	31	3.6	0	41.4	4.7	0.6	0.6	0	5.9	0.4	44.2	1.7	0	46.2	0.9	0.8	4.7	0	6.4	
CARS	190	859	94	0	1143	131	18	15	0	164	9	1210									
% CARS	99	98.6	94	0	98.3	98.5	100	93.8	0	98.2	90	97.4	100	0	97.5	95.8	100	99.2	100	98.9	97.9
HV	2	12	6	0	20	2	0	1	0	3	1	32	0	0	33	1	0	1	0	2	58
% HV	1	1.4	6	0	1.7	1.5	0	6.2	0	1.8	10	2.6	0	0	2.5	4.2	0	0.8	0	1.1	2.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #33 NRHETT&BRADDOCKPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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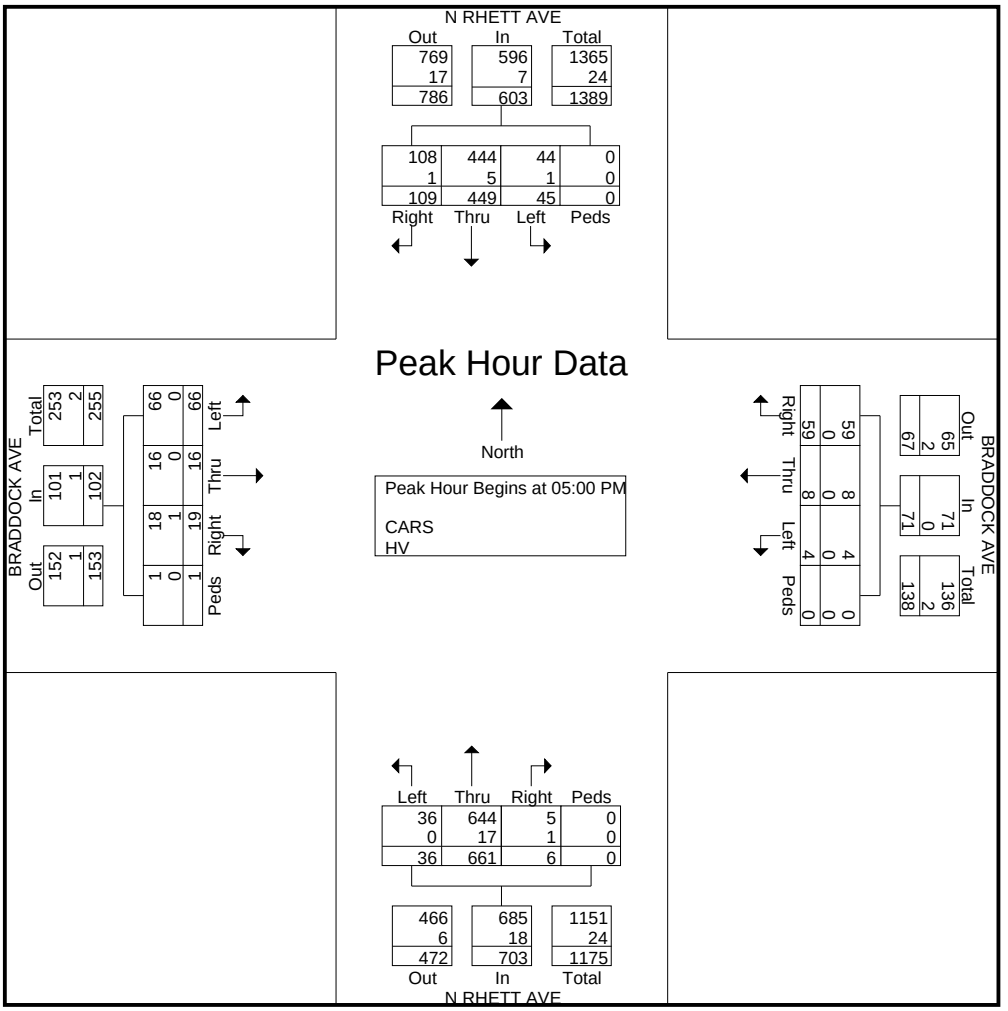
	N RHETT AVE Southbound					BRADDOCK AVE Westbound					N RHETT AVE Northbound					BRADDOCK AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**34**	110	10	0	154	**16**	1	**2**	0	19	**2**	158	10	0	170	3	5	**20**	0	**28**	371
05:15 PM	16	**121**	9	0	146	11	0	1	0	12	1	161	7	0	169	**6**	2	20	0	28	355
05:30 PM	28	117	**14**	0	**159**	16	2	1	0	19	1	**173**	**11**	0	**185**	5	3	13	0	21	**384**
05:45 PM	31	101	12	0	144	16	**5**	0	0	**21**	2	169	8	0	179	5	**6**	13	**1**	25	369
Total Volume	109	449	45	0	603	59	8	4	0	71	6	661	36	0	703	19	16	66	1	102	1479
% App. Total	18.1	74.5	7.5	0		83.1	11.3	5.6	0		0.9	94	5.1	0		18.6	15.7	64.7	1		
PHF	.801	.928	.804	.000	.948	.922	.400	.500	.000	.845	.750	.955	.818	.000	.950	.792	.667	.825	.250	.911	.963
CARS	108	444	44	0	596	59	8	4	0	71	5	644	36	0	685	18	16	66	1	101	1453
% CARS	99.1	98.9	97.8	0	98.8	100	100	100	0	100	83.3	97.4	100	0	97.4	94.7	100	100	100	99.0	98.2
HV	1	5	1	0	7	0	0	0	0	0	1	17	0	0	18	1	0	0	0	1	26
% HV	0.9	1.1	2.2	0	1.2	0	0	0	0	0	16.7	2.6	0	0	2.6	5.3	0	0	0	1.0	1.8



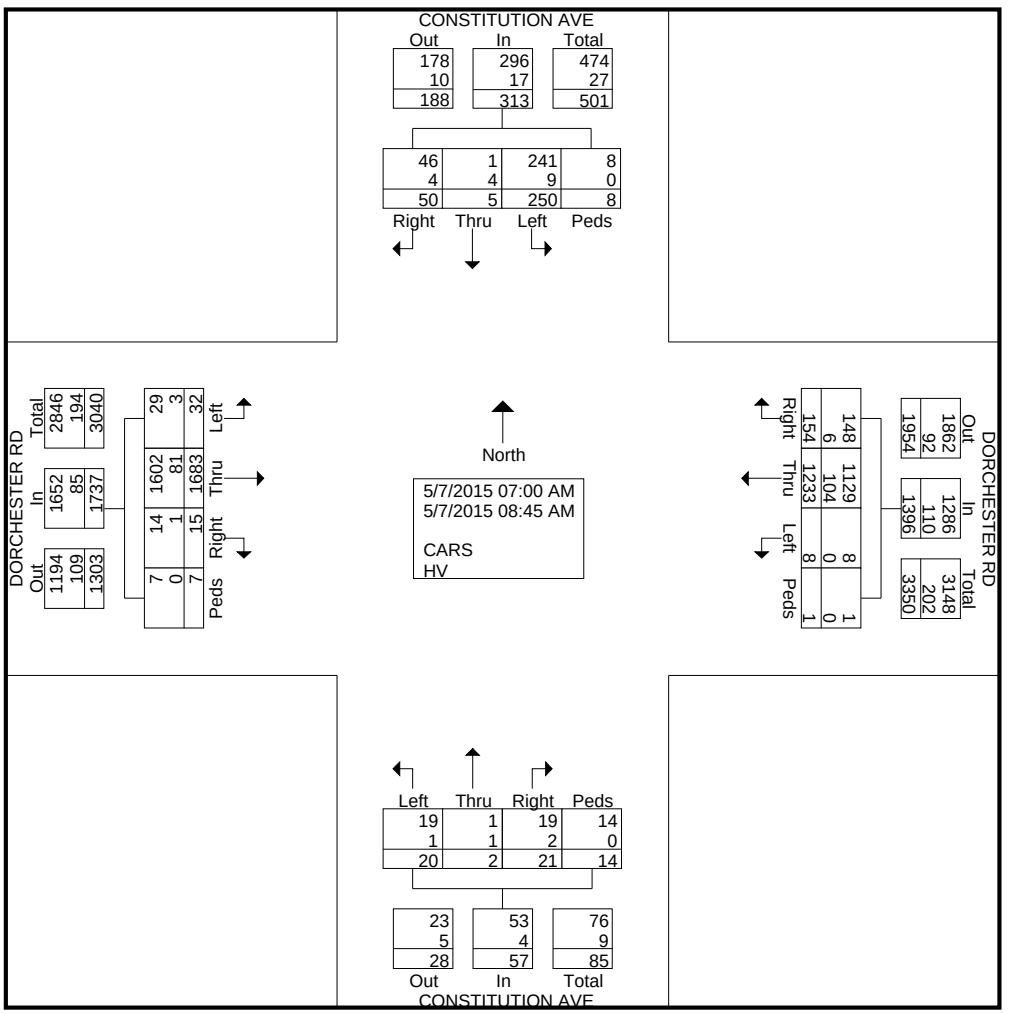
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #34 CONSTITUTION&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CONSTITUTION AVE Southbound					DORCHESTER RD Westbound					CONSTITUTION AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	1	24	0	28	18	108	0	1	127	1	0	4	1	6	1	195	5	1	202	363
07:15 AM	10	1	46	4	61	21	151	0	0	172	3	1	2	2	8	0	199	4	1	204	445
07:30 AM	6	0	42	0	48	22	155	1	0	178	3	0	1	1	5	7	228	1	4	240	471
07:45 AM	4	1	31	3	39	28	193	1	0	222	1	0	4	1	6	0	231	3	1	235	502
Total	23	3	143	7	176	89	607	2	1	699	8	1	11	5	25	8	853	13	7	881	1781
08:00 AM	6	0	33	0	39	25	174	1	0	200	1	1	6	3	11	1	231	4	0	236	486
08:15 AM	9	1	25	0	35	10	153	2	0	165	2	0	2	3	7	2	206	4	0	212	419
08:30 AM	3	0	23	1	27	13	147	3	0	163	8	0	0	0	8	1	195	6	0	202	400
08:45 AM	9	1	26	0	36	17	152	0	0	169	2	0	1	3	6	3	198	5	0	206	417
Total	27	2	107	1	137	65	626	6	0	697	13	1	9	9	32	7	830	19	0	856	1722
Grand Total	50	5	250	8	313	154	1233	8	1	1396	21	2	20	14	57	15	1683	32	7	1737	3503
Apprch %	16	1.6	79.9	2.6		11	88.3	0.6	0.1		36.8	3.5	35.1	24.6		0.9	96.9	1.8	0.4		
Total %	1.4	0.1	7.1	0.2	8.9	4.4	35.2	0.2	0	39.9	0.6	0.1	0.6	0.4	1.6	0.4	48	0.9	0.2	49.6	
CARS	46	1	241	8	296	148	1129										1602				
% CARS	92	20	96.4	100	94.6	96.1	91.6	100	100	92.1	90.5	50	95	100	93	93.3	95.2	90.6	100	95.1	93.8
HV	4	4	9	0	17	6	104	0	0	110	2	1	1	0	4	1	81	3	0	85	216
% HV	8	80	3.6	0	5.4	3.9	8.4	0	0	7.9	9.5	50	5	0	7	6.7	4.8	9.4	0	4.9	6.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #34 CONSTITUTION&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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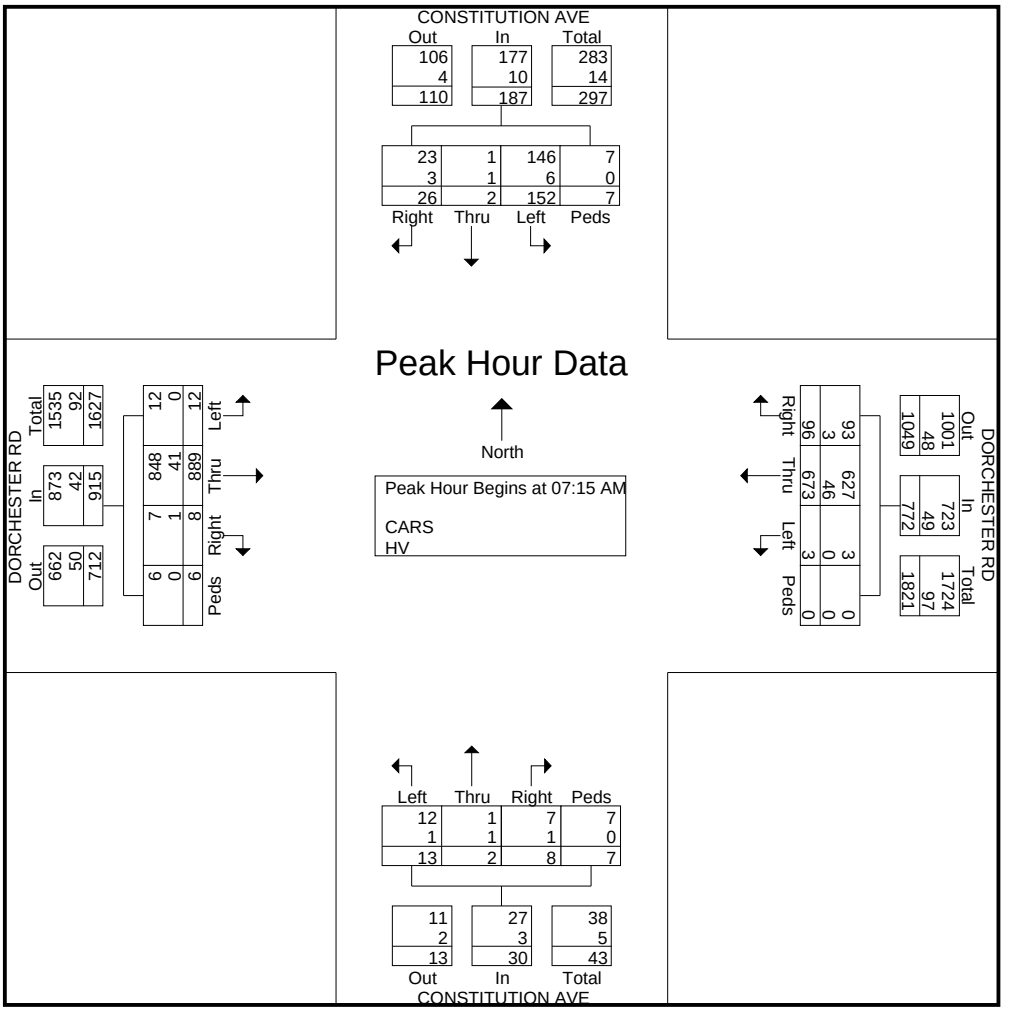
	CONSTITUTION AVE Southbound					DORCHESTER RD Westbound					CONSTITUTION AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**10**	**1**	**46**	**4**	**61**	21	151	0	0	172	**3**	**1**	2	2	8	0	199	**4**	1	204	445
07:30 AM	6	0	42	0	48	22	155	**1**	0	178	3	0	1	1	5	**7**	228	1	**4**	**240**	471
07:45 AM	4	1	31	3	39	**28**	**193**	1	0	**222**	1	0	4	1	6	0	**231**	3	1	235	**502**
08:00 AM	6	0	33	0	39	25	174	1	0	200	1	1	**6**	**3**	**11**	1	231	4	0	236	486
Total Volume	26	2	152	7	187	96	673	3	0	772	8	2	13	7	30	8	889	12	6	915	1904
% App. Total	13.9	1.1	81.3	3.7		12.4	87.2	0.4	0		26.7	6.7	43.3	23.3		0.9	97.2	1.3	0.7		
PHF	.650	.500	.826	.438	.766	.857	.872	.750	.000	.869	.667	.500	.542	.583	.682	.286	.962	.750	.375	.953	.948
CARS	23	1	146	7	177	93	627	3	0	723	7	1	12	7	27	7	848	12	6	873	1800
% CARS	88.5	50.0	96.1	100	94.7	96.9	93.2	100	0	93.7	87.5	50.0	92.3	100	90.0	87.5	95.4	100	100	95.4	94.5
HV	3	1	6	0	10	3	46	0	0	49	1	1	1	0	3	1	41	0	0	42	104
% HV	11.5	50.0	3.9	0	5.3	3.1	6.8	0	0	6.3	12.5	50.0	7.7	0	10.0	12.5	4.6	0	0	4.6	5.5



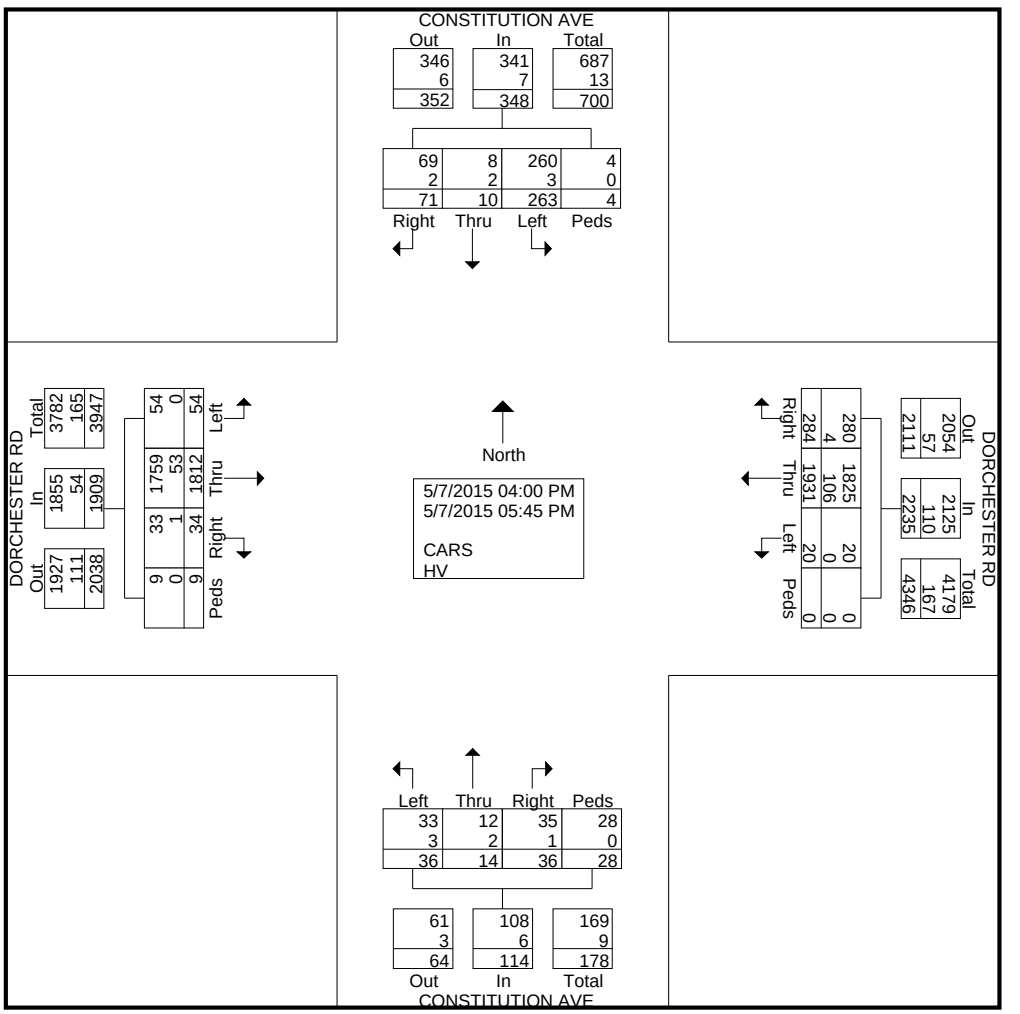
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #34 CONSTITUTION&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CONSTITUTION AVE Southbound					DORCHESTER RD Westbound					CONSTITUTION AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	12	0	26	1	39	31	236	0	0	267	3	0	2	2	7	3	223	4	1	231	544
04:15 PM	6	2	34	1	43	33	200	8	0	241	4	2	7	6	19	2	233	8	3	246	549
04:30 PM	13	1	30	0	44	36	254	0	0	290	5	2	5	4	16	4	195	5	0	204	554
04:45 PM	12	0	23	0	35	42	226	1	0	269	5	1	4	1	11	5	221	7	1	234	549
Total	43	3	113	2	161	142	916	9	0	1067	17	5	18	13	53	14	872	24	5	915	2196
05:00 PM	3	1	39	2	45	33	255	2	0	290	3	5	4	4	16	6	286	6	2	300	651
05:15 PM	6	3	31	0	40	44	254	2	0	300	9	0	4	4	17	5	258	9	0	272	629
05:30 PM	11	0	42	0	53	28	248	3	0	279	2	3	5	3	13	6	206	9	0	221	566
05:45 PM	8	3	38	0	49	37	258	4	0	299	5	1	5	4	15	3	190	6	2	201	564
Total	28	7	150	2	187	142	1015	11	0	1168	19	9	18	15	61	20	940	30	4	994	2410
Grand Total	71	10	263	4	348	284	1931	20	0	2235	36	14	36	28	114	34	1812	54	9	1909	4606
Apprch %	20.4	2.9	75.6	1.1		12.7	86.4	0.9	0		31.6	12.3	31.6	24.6		1.8	94.9	2.8	0.5		
Total %	1.5	0.2	5.7	0.1	7.6	6.2	41.9	0.4	0	48.5	0.8	0.3	0.8	0.6	2.5	0.7	39.3	1.2	0.2	41.4	
CARS	69	8	260	4	341	280	1825										1759				
% CARS	97.2	80	98.9	100	98	98.6	94.5	100	0	95.1	97.2	85.7	91.7	100	94.7	97.1	97.1	100	100	97.2	96.2
HV	2	2	3	0	7	4	106	0	0	110	1	2	3	0	6	1	53	0	0	54	177
% HV	2.8	20	1.1	0	2	1.4	5.5	0	0	4.9	2.8	14.3	8.3	0	5.3	2.9	2.9	0	0	2.8	3.8



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #34 CONSTITUTION&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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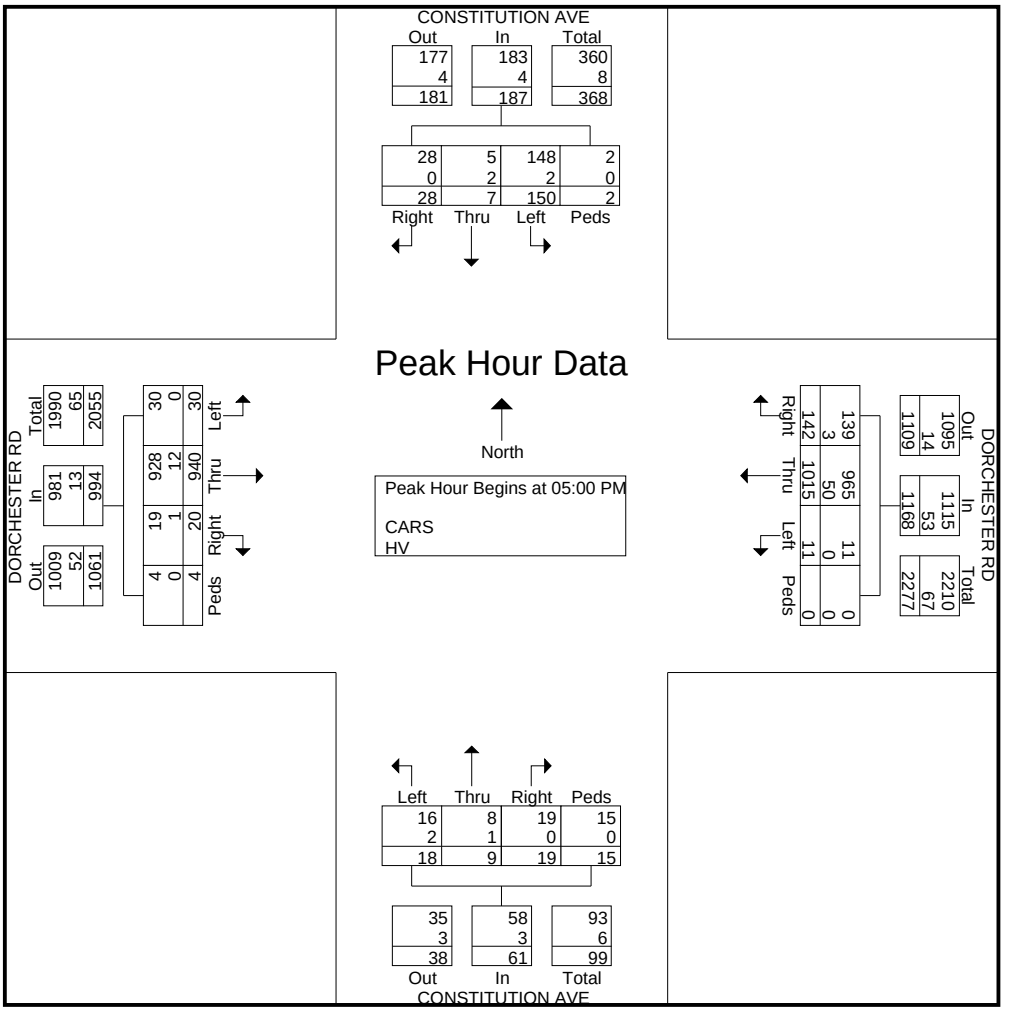
	CONSTITUTION AVE Southbound					DORCHESTER RD Westbound					CONSTITUTION AVE Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	3	1	39	**2**	45	33	255	2	0	290	3	**5**	4	**4**	16	**6**	**286**	6	**2**	**300**	**651**
05:15 PM	6	**3**	31	0	40	**44**	254	2	0	**300**	**9**	0	4	4	**17**	5	258	**9**	0	272	629
05:30 PM	**11**	0	**42**	0	**53**	28	248	3	0	279	2	3	**5**	3	13	6	206	9	0	221	566
05:45 PM	8	3	38	0	49	37	**258**	**4**	0	299	5	1	5	4	15	3	190	6	2	201	564
Total Volume	28	7	150	2	187	142	1015	11	0	1168	19	9	18	15	61	20	940	30	4	994	2410
% App. Total	15	3.7	80.2	1.1		12.2	86.9	0.9	0		31.1	14.8	29.5	24.6		2	94.6	3	0.4		
PHF	.636	.583	.893	.250	.882	.807	.984	.688	.000	.973	.528	.450	.900	.938	.897	.833	.822	.833	.500	.828	.925
CARS	28	5	148	2	183	139	965	11	0	1115	19	8	16	15	58	19	928	30	4	981	2337
% CARS	100	71.4	98.7	100	97.9	97.9	95.1	100	0	95.5	100	88.9	88.9	100	95.1	95.0	98.7	100	100	98.7	97.0
HV	0	2	2	0	4	3	50	0	0	53	0	1	2	0	3	1	12	0	0	13	73
% HV	0	28.6	1.3	0	2.1	2.1	4.9	0	0	4.5	0	11.1	11.1	0	4.9	5.0	1.3	0	0	1.3	3.0



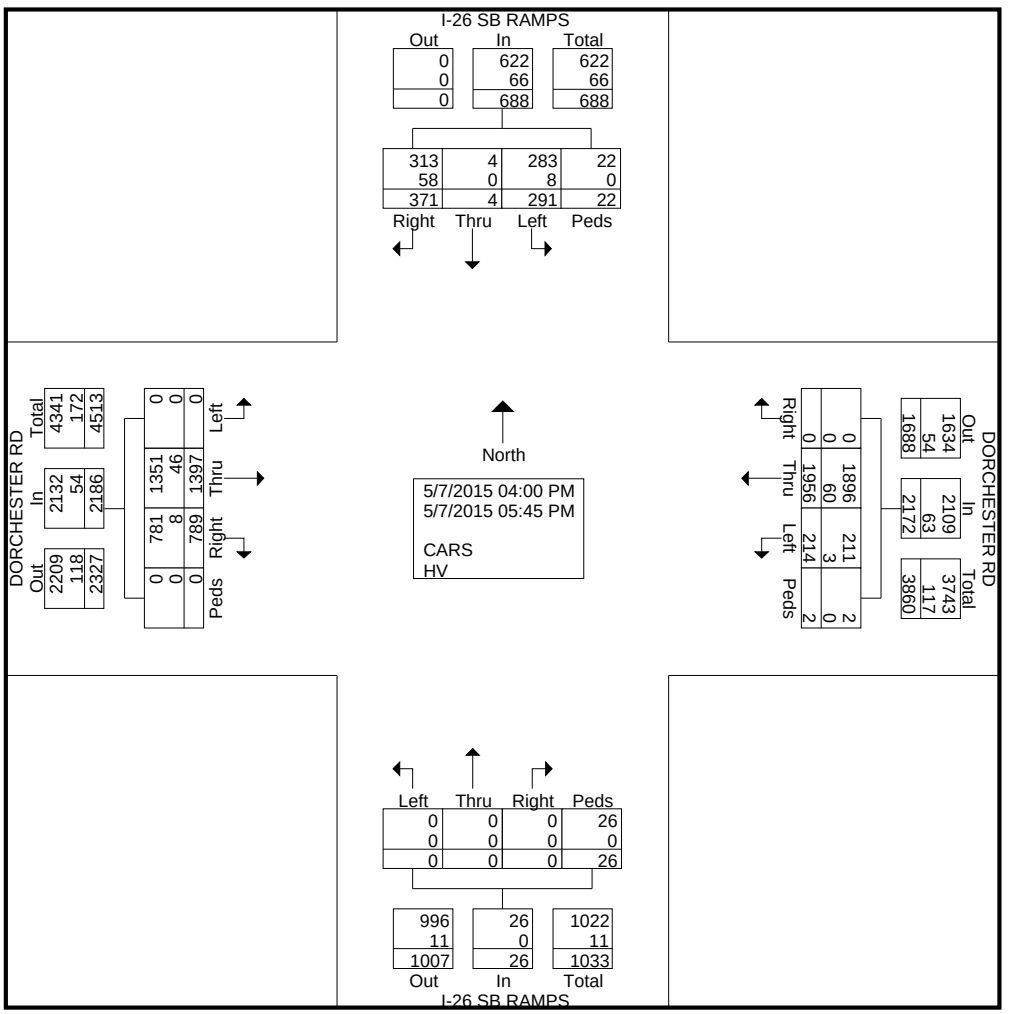
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #35 I26SBRAMPS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 SB RAMPS Southbound					DORCHESTER RD Westbound					I-26 SB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	34	1	40	1	76	0	240	28	2	270	0	0	0	3	3	106	156	0	0	262	611
04:15 PM	29	1	33	2	65	0	234	25	0	259	0	0	0	3	3	102	189	0	0	291	618
04:30 PM	53	0	42	4	99	0	232	34	0	266	0	0	0	4	4	86	168	0	0	254	623
04:45 PM	44	1	32	2	79	0	244	36	0	280	0	0	0	2	2	90	157	0	0	247	608
Total	160	3	147	9	319	0	950	123	2	1075	0	0	0	12	12	384	670	0	0	1054	2460
05:00 PM	55	0	38	5	98	0	251	26	0	277	0	0	0	1	1	111	208	0	0	319	695
05:15 PM	63	0	44	2	109	0	259	27	0	286	0	0	0	2	2	125	188	0	0	313	710
05:30 PM	47	1	32	2	82	0	236	21	0	257	0	0	0	5	5	88	173	0	0	261	605
05:45 PM	46	0	30	4	80	0	260	17	0	277	0	0	0	6	6	81	158	0	0	239	602
Total	211	1	144	13	369	0	1006	91	0	1097	0	0	0	14	14	405	727	0	0	1132	2612
Grand Total	371	4	291	22	688	0	1956	214	2	2172	0	0	0	26	26	789	1397	0	0	2186	5072
Apprch %	53.9	0.6	42.3	3.2		0	90.1	9.9	0.1		0	0	0	100		36.1	63.9	0	0		
Total %	7.3	0.1	5.7	0.4	13.6	0	38.6	4.2	0	42.8	0	0	0	0.5	0.5	15.6	27.5	0	0	43.1	
CARS	313	4	283	22	622	0	1896										1351				
% CARS	84.4	100	97.3	100	90.4	0	96.9	98.6	100	97.1	0	0	0	100	100	99	96.7	0	0	97.5	96.4
HV	58	0	8	0	66	0	60	3	0	63	0	0	0	0	0	8	46	0	0	54	183
% HV	15.6	0	2.7	0	9.6	0	3.1	1.4	0	2.9	0	0	0	0	0	1	3.3	0	0	2.5	3.6

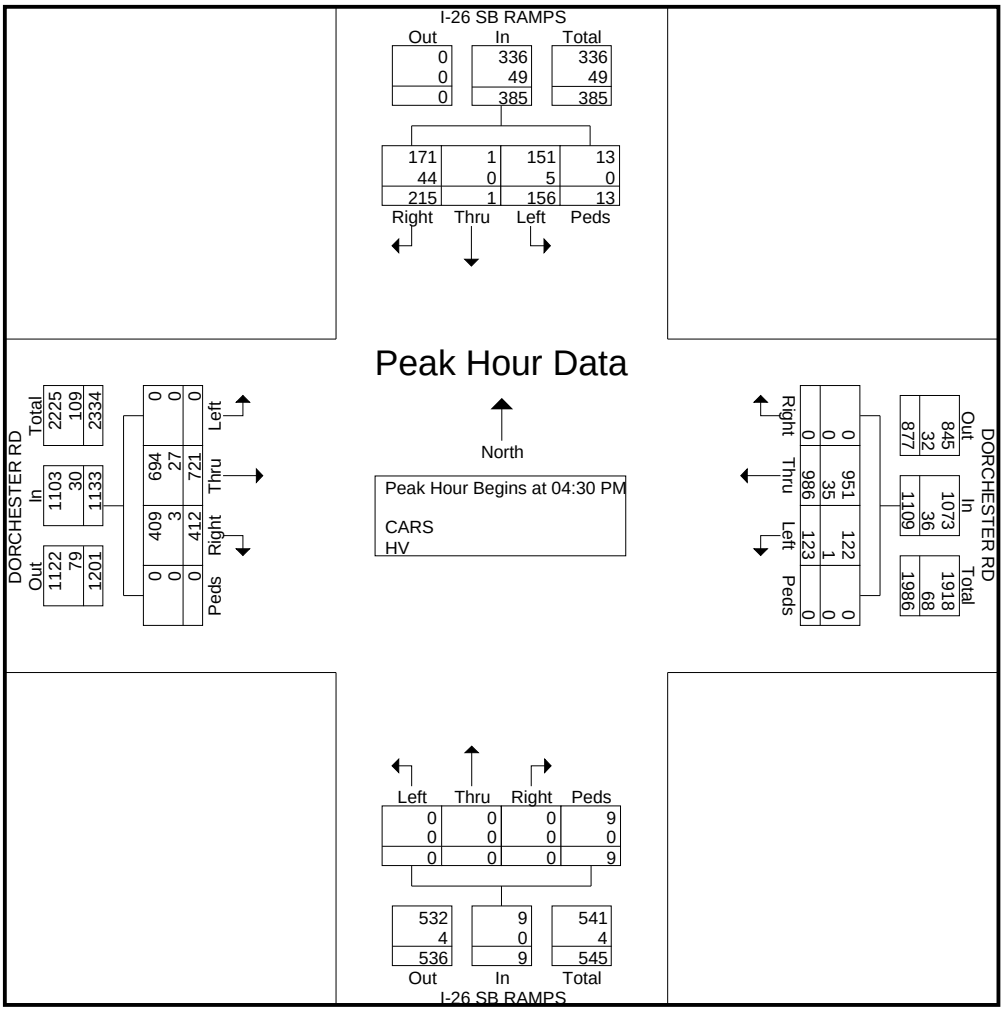


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #35 I26SBRAMPS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-26 SB RAMPS Southbound					DORCHESTER RD Westbound					I-26 SB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	53	0	42	4	99	0	232	34	0	266	0	0	0	**4**	**4**	86	168	0	0	254	623
04:45 PM	44	**1**	32	2	79	0	244	**36**	0	280	0	0	0	2	2	90	157	0	0	247	608
05:00 PM	55	0	38	**5**	98	0	251	26	0	277	0	0	0	1	1	111	**208**	0	0	**319**	695
05:15 PM	**63**	0	**44**	2	**109**	0	**259**	27	0	**286**	0	0	0	2	2	**125**	188	0	0	313	**710**
Total Volume	215	1	156	13	385	0	986	123	0	1109	0	0	0	9	9	412	721	0	0	1133	2636
% App. Total	55.8	0.3	40.5	3.4		0	88.9	11.1	0		0	0	0	100		36.4	63.6	0	0		
PHF	.853	.250	.886	.650	.883	.000	.952	.854	.000	.969	.000	.000	.000	.563	.563	.824	.867	.000	.000	.888	.928
CARS	171	1	151	13	336	0	951	122	0	1073	0	0	0	9	9	409	694	0	0	1103	2521
% CARS	79.5	100	96.8	100	87.3	0	96.5	99.2	0	96.8	0	0	0	100	100	99.3	96.3	0	0	97.4	95.6
HV	44	0	5	0	49	0	35	1	0	36	0	0	0	0	0	3	27	0	0	30	115
% HV	20.5	0	3.2	0	12.7	0	3.5	0.8	0	3.2	0	0	0	0	0	0.7	3.7	0	0	2.6	4.4



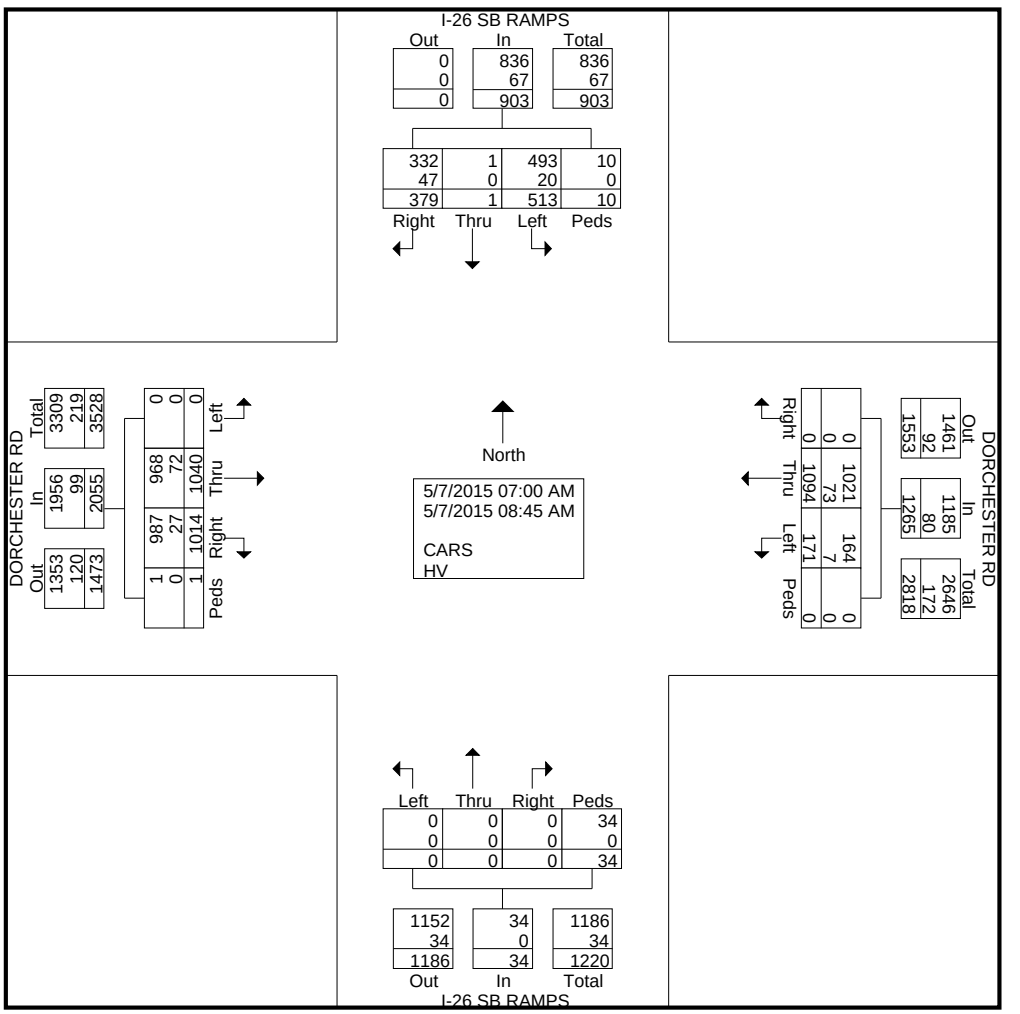
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #35 I26SBRAMPS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 SB RAMPS Southbound					DORCHESTER RD Westbound					I-26 SB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	49	0	74	1	124	0	100	13	0	113	0	0	0	7	7	97	122	0	1	220	464
07:15 AM	49	0	72	0	121	0	125	17	0	142	0	0	0	5	5	113	122	0	0	235	503
07:30 AM	38	0	73	2	113	0	143	25	0	168	0	0	0	7	7	151	139	0	0	290	578
07:45 AM	59	0	66	1	126	0	169	34	0	203	0	0	0	2	2	150	141	0	0	291	622
Total	195	0	285	4	484	0	537	89	0	626	0	0	0	21	21	511	524	0	1	1036	2167
08:00 AM	54	0	50	2	106	0	154	18	0	172	0	0	0	4	4	150	126	0	0	276	558
08:15 AM	40	0	63	1	104	0	131	23	0	154	0	0	0	2	2	126	134	0	0	260	520
08:30 AM	40	0	60	2	102	0	142	15	0	157	0	0	0	6	6	122	114	0	0	236	501
08:45 AM	50	1	55	1	107	0	130	26	0	156	0	0	0	1	1	105	142	0	0	247	511
Total	184	1	228	6	419	0	557	82	0	639	0	0	0	13	13	503	516	0	0	1019	2090
Grand Total	379	1	513	10	903	0	1094	171	0	1265	0	0	0	34	34	1014	1040	0	1	2055	4257
Apprch %	42	0.1	56.8	1.1		0	86.5	13.5	0		0	0	0	100		49.3	50.6	0	0		
Total %	8.9	0	12.1	0.2	21.2	0	25.7	4	0	29.7	0	0	0	0.8	0.8	23.8	24.4	0	0	48.3	
CARS	332	1	493	10	836	0	1021														
% CARS	87.6	100	96.1	100	92.6	0	93.3	95.9	0	93.7	0	0	0	100	100	97.3	93.1	0	100	95.2	94.2
HV	47	0	20	0	67	0	73	7	0	80	0	0	0	0	0	27	72	0	0	99	246
% HV	12.4	0	3.9	0	7.4	0	6.7	4.1	0	6.3	0	0	0	0	0	2.7	6.9	0	0	4.8	5.8



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #35 I26SBRAMPS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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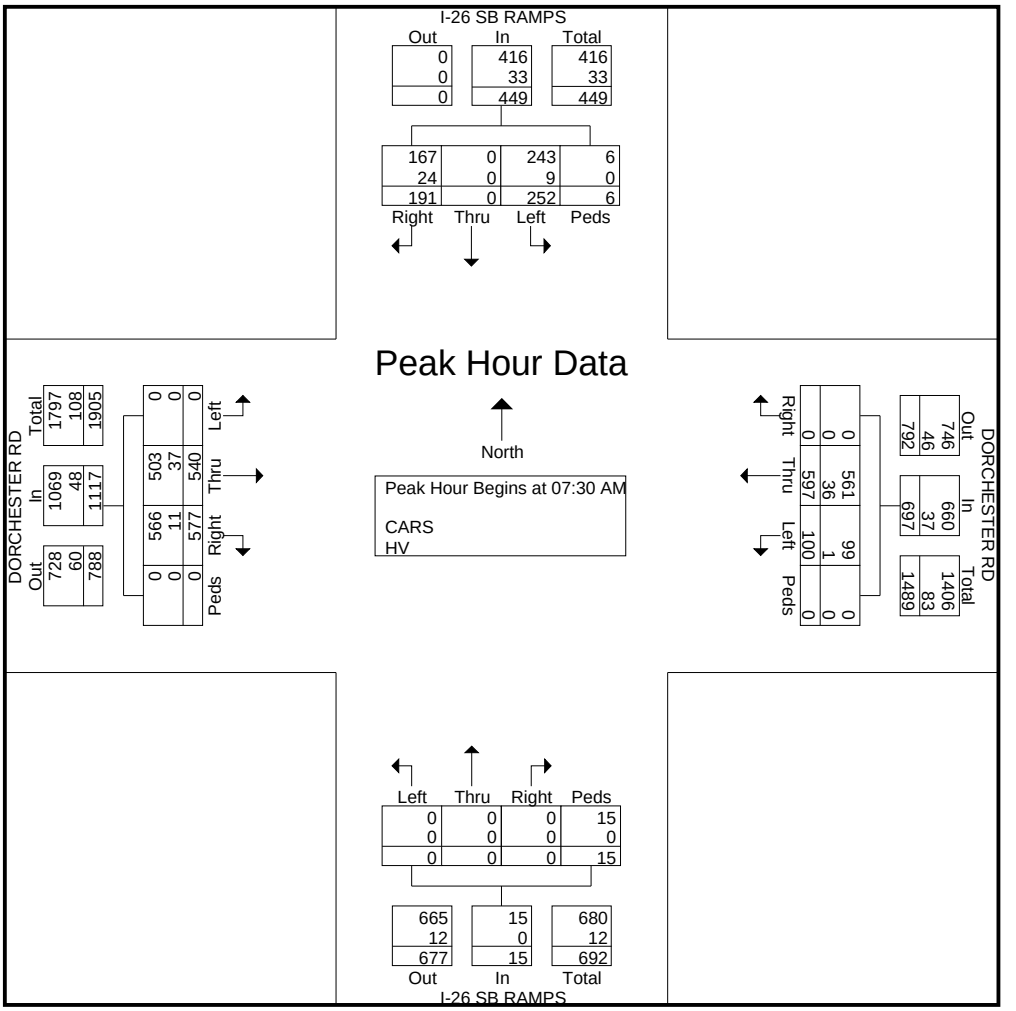
	I-26 SB RAMPS Southbound					DORCHESTER RD Westbound					I-26 SB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	38	0	**73**	**2**	113	0	143	25	0	168	0	0	0	**7**	**7**	**151**	139	0	0	290	578
07:45 AM	**59**	0	66	1	**126**	0	**169**	**34**	0	**203**	0	0	0	2	2	150	**141**	0	0	**291**	**622**
08:00 AM	54	0	50	2	106	0	154	18	0	172	0	0	0	4	4	150	126	0	0	276	558
08:15 AM	40	0	63	1	104	0	131	23	0	154	0	0	0	2	2	126	134	0	0	260	520
Total Volume	191	0	252	6	449	0	597	100	0	697	0	0	0	15	15	577	540	0	0	1117	2278
% App. Total	42.5	0	56.1	1.3		0	85.7	14.3	0		0	0	0	100		51.7	48.3	0	0		
PHF	.809	.000	.863	.750	.891	.000	.883	.735	.000	.858	.000	.000	.000	.536	.536	.955	.957	.000	.000	.960	.916
CARS	167	0	243	6	416	0	561	99	0	660	0	0	0	15	15	566	503	0	0	1069	2160
% CARS	87.4	0	96.4	100	92.7	0	94.0	99.0	0	94.7	0	0	0	100	100	98.1	93.1	0	0	95.7	94.8
HV	24	0	9	0	33	0	36	1	0	37	0	0	0	0	0	11	37	0	0	48	118
% HV	12.6	0	3.6	0	7.3	0	6.0	1.0	0	5.3	0	0	0	0	0	1.9	6.9	0	0	4.3	5.2



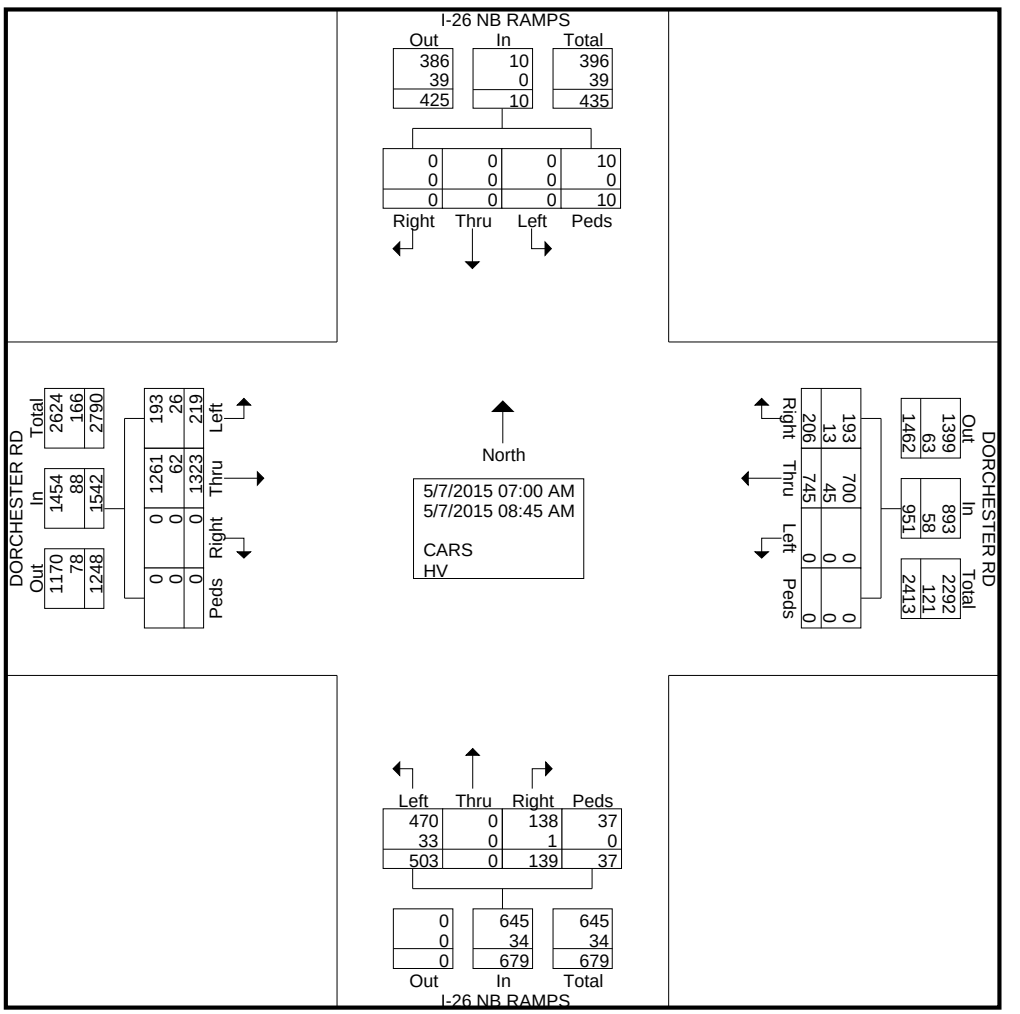
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #36 I26NBRAMPS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 NB RAMPS Southbound					DORCHESTER RD Westbound					I-26 NB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	2	2	16	68	0	0	84	19	0	40	7	66	0	170	27	0	197	349
07:15 AM	0	0	0	0	0	21	96	0	0	117	11	0	43	4	58	0	172	21	0	193	368
07:30 AM	0	0	0	1	1	24	100	0	0	124	22	0	78	8	108	0	184	22	0	206	439
07:45 AM	0	0	0	1	1	27	113	0	0	140	24	0	76	4	104	0	180	29	0	209	454
Total	0	0	0	4	4	88	377	0	0	465	76	0	237	23	336	0	706	99	0	805	1610
08:00 AM	0	0	0	2	2	23	102	0	0	125	22	0	71	3	96	0	148	21	0	169	392
08:15 AM	0	0	0	1	1	30	92	0	0	122	13	0	70	3	86	0	152	39	0	191	400
08:30 AM	0	0	0	2	2	32	84	0	0	116	14	0	66	6	86	0	151	26	0	177	381
08:45 AM	0	0	0	1	1	33	90	0	0	123	14	0	59	2	75	0	166	34	0	200	399
Total	0	0	0	6	6	118	368	0	0	486	63	0	266	14	343	0	617	120	0	737	1572
Grand Total	0	0	0	10	10	206	745	0	0	951	139	0	503	37	679	0	1323	219	0	1542	3182
Apprch %	0	0	0	100		21.7	78.3	0	0		20.5	0	74.1	5.4		0	85.8	14.2	0		
Total %	0	0	0	0.3	0.3	6.5	23.4	0	0	29.9	4.4	0	15.8	1.2	21.3	0	41.6	6.9	0	48.5	
CARS	0	0	0	10	10	193	700	0	0	893	138	0	470	37	645	0	1261				
% CARS	0	0	0	100	100	93.7	94	0	0	93.9	99.3	0	93.4	100	95	0	95.3	88.1	0	94.3	94.3
HV	0	0	0	0	0	13	45	0	0	58	1	0	33	0	34	0	62	26	0	88	180
% HV	0	0	0	0	0	6.3	6	0	0	6.1	0.7	0	6.6	0	5	0	4.7	11.9	0	5.7	5.7

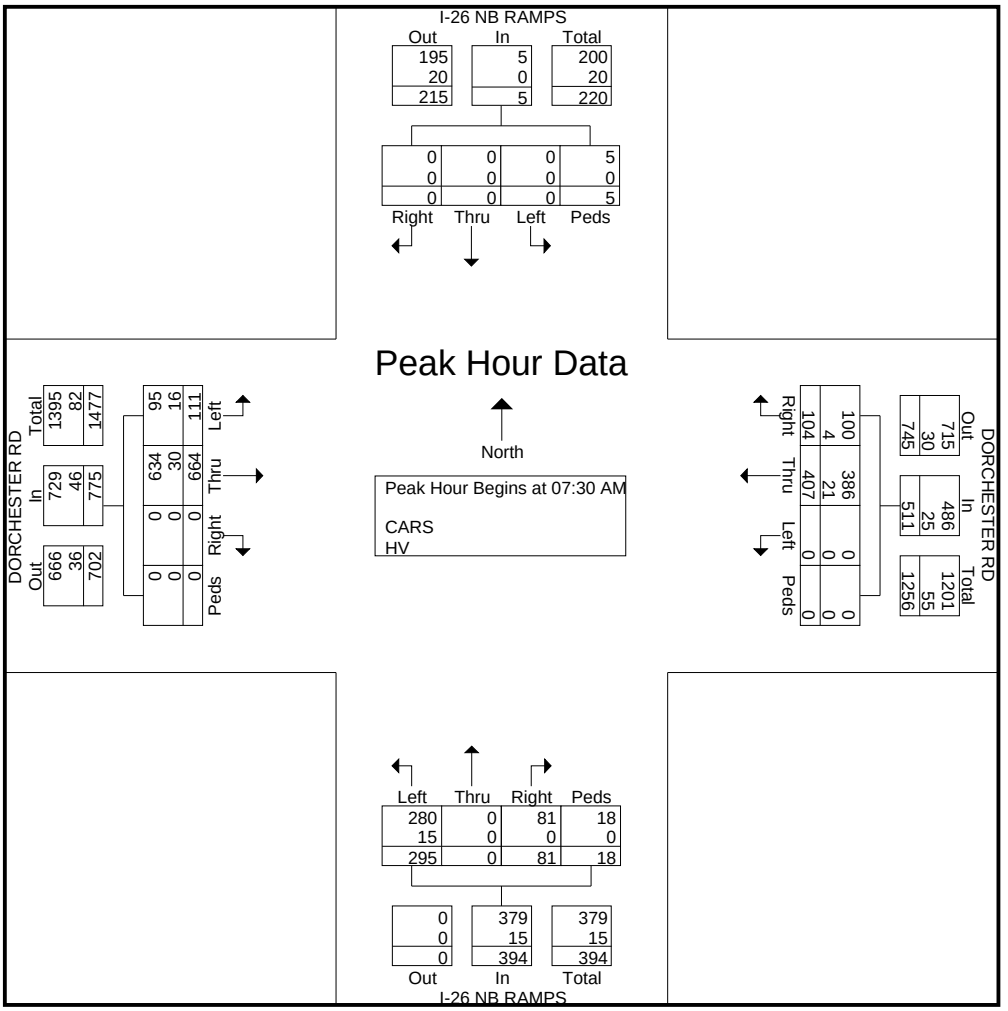


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #36 I26NBRAMPS&DORCHESTERAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-26 NB RAMPS Southbound					DORCHESTER RD Westbound					I-26 NB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	1	1	24	100	0	0	124	22	0	**78**	**8**	**108**	0	**184**	22	0	206	439
07:45 AM	0	0	0	1	1	27	**113**	0	0	**140**	**24**	0	76	4	104	0	180	29	0	**209**	**454**
08:00 AM	0	0	0	**2**	**2**	23	102	0	0	125	22	0	71	3	96	0	148	21	0	169	392
08:15 AM	0	0	0	1	1	**30**	92	0	0	122	13	0	70	3	86	0	152	**39**	0	191	400
Total Volume	0	0	0	5	5	104	407	0	0	511	81	0	295	18	394	0	664	111	0	775	1685
% App. Total	0	0	0	100		20.4	79.6	0	0		20.6	0	74.9	4.6		0	85.7	14.3	0		
PHF	.000	.000	.000	.625	.625	.867	.900	.000	.000	.913	.844	.000	.946	.563	.912	.000	.902	.712	.000	.927	.928
CARS	0	0	0	5	5	100	386	0	0	486	81	0	280	18	379	0	634	95	0	729	1599
% CARS	0	0	0	100	100	96.2	94.8	0	0	95.1	100	0	94.9	100	96.2	0	95.5	85.6	0	94.1	94.9
HV	0	0	0	0	0	4	21	0	0	25	0	0	15	0	15	0	30	16	0	46	86
% HV	0	0	0	0	0	3.8	5.2	0	0	4.9	0	0	5.1	0	3.8	0	4.5	14.4	0	5.9	5.1



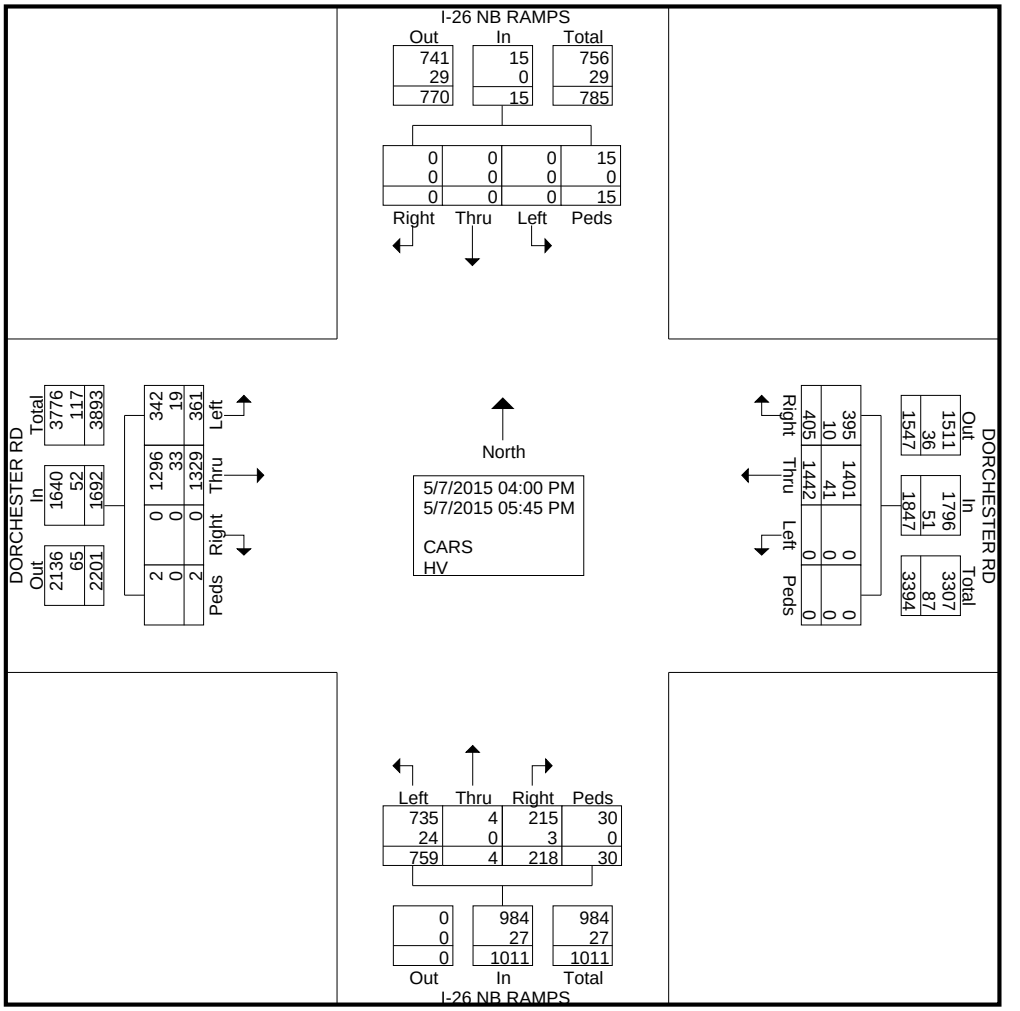
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #36 I26NBRAMPS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 NB RAMPS Southbound					DORCHESTER RD Westbound					I-26 NB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	3	3	64	200	0	0	264	19	2	82	3	106	0	147	42	0	189	562
04:15 PM	0	0	0	3	3	49	174	0	0	223	17	1	93	3	114	0	169	56	0	225	565
04:30 PM	0	0	0	3	3	61	185	0	0	246	24	0	88	3	115	0	157	56	0	213	577
04:45 PM	0	0	0	1	1	60	198	0	0	258	19	0	90	5	114	0	146	35	2	183	556
Total	0	0	0	10	10	234	757	0	0	991	79	3	353	14	449	0	619	189	2	810	2260
05:00 PM	0	0	0	2	2	54	180	0	0	234	20	0	80	3	103	0	190	58	0	248	587
05:15 PM	0	0	0	1	1	44	183	0	0	227	30	1	106	2	139	0	193	45	0	238	605
05:30 PM	0	0	0	0	0	37	156	0	0	193	36	0	105	6	147	0	161	43	0	204	544
05:45 PM	0	0	0	2	2	36	166	0	0	202	53	0	115	5	173	0	166	26	0	192	569
Total	0	0	0	5	5	171	685	0	0	856	139	1	406	16	562	0	710	172	0	882	2305
Grand Total	0	0	0	15	15	405	1442	0	0	1847	218	4	759	30	1011	0	1329	361	2	1692	4565
Apprch %	0	0	0	100		21.9	78.1	0	0		21.6	0.4	75.1	3		0	78.5	21.3	0.1		
Total %	0	0	0	0.3	0.3	8.9	31.6	0	0	40.5	4.8	0.1	16.6	0.7	22.1	0	29.1	7.9	0	37.1	
CARS	0	0	0	15	15	395	1401										1296				
% CARS	0	0	0	100	100	97.5	97.2	0	0	97.2	98.6	100	96.8	100	97.3	0	97.5	94.7	100	96.9	97.2
HV	0	0	0	0	0	10	41	0	0	51	3	0	24	0	27	0	33	19	0	52	130
% HV	0	0	0	0	0	2.5	2.8	0	0	2.8	1.4	0	3.2	0	2.7	0	2.5	5.3	0	3.1	2.8

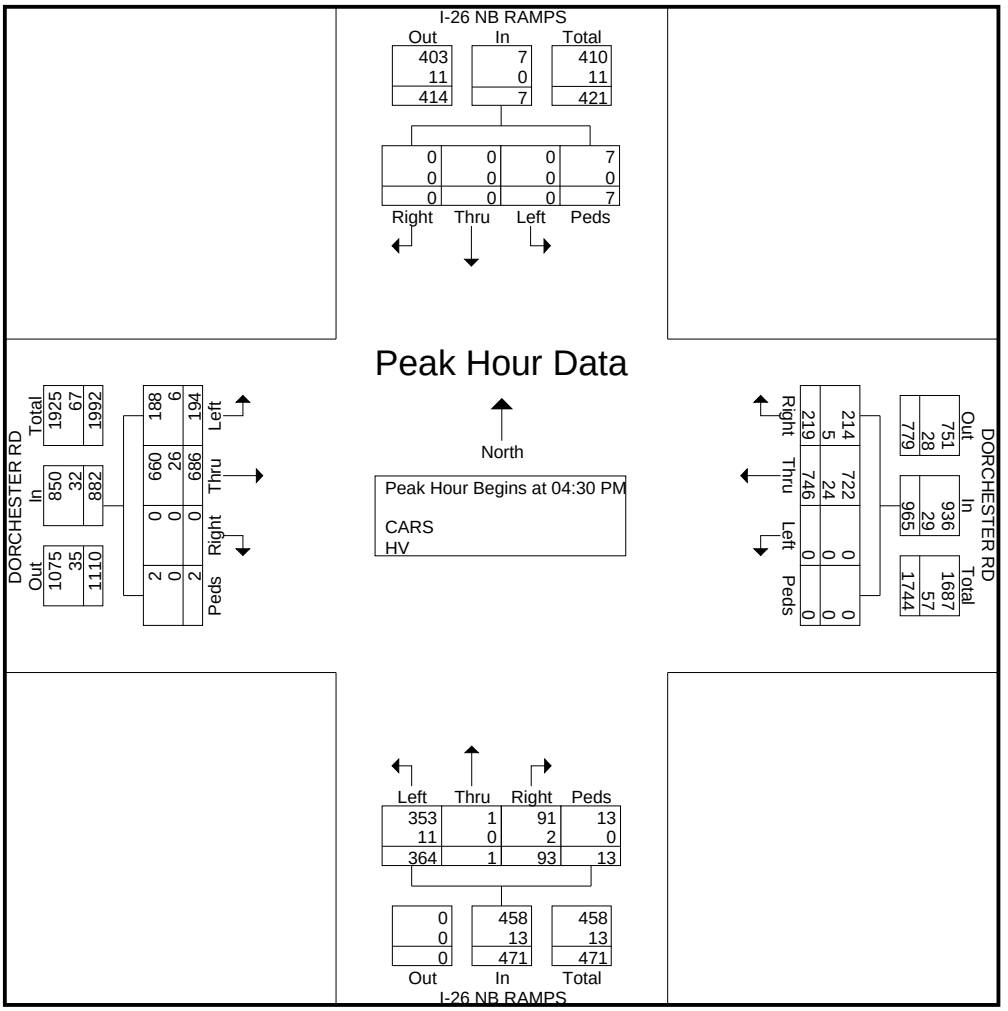


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #36 I26NBRAMPS&DORCHESTERPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-26 NB RAMPS Southbound					DORCHESTER RD Westbound					I-26 NB RAMPS Northbound					DORCHESTER RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	**3**	**3**	**61**	185	0	0	246	24	0	88	3	115	0	157	56	0	213	577
04:45 PM	0	0	0	1	1	60	**198**	0	0	**258**	19	0	90	**5**	114	0	146	35	**2**	183	556
05:00 PM	0	0	0	2	2	54	180	0	0	234	20	0	80	3	103	0	190	**58**	0	**248**	587
05:15 PM	0	0	0	1	1	44	183	0	0	227	**30**	**1**	**106**	2	**139**	0	**193**	45	0	238	**605**
Total Volume	0	0	0	7	7	219	746	0	0	965	93	1	364	13	471	0	686	194	2	882	2325
% App. Total	0	0	0	100		22.7	77.3	0	0		19.7	0.2	77.3	2.8		0	77.8	22	0.2		
PHF	.000	.000	.000	.583	.583	.898	.942	.000	.000	.935	.775	.250	.858	.650	.847	.000	.889	.836	.250	.889	.961
CARS	0	0	0	7	7	214	722	0	0	936	91	1	353	13	458	0	660	188	2	850	2251
% CARS	0	0	0	100	100	97.7	96.8	0	0	97.0	97.8	100	97.0	100	97.2	0	96.2	96.9	100	96.4	96.8
HV	0	0	0	0	0	5	24	0	0	29	2	0	11	0	13	0	26	6	0	32	74
% HV	0	0	0	0	0	2.3	3.2	0	0	3.0	2.2	0	3.0	0	2.8	0	3.8	3.1	0	3.6	3.2



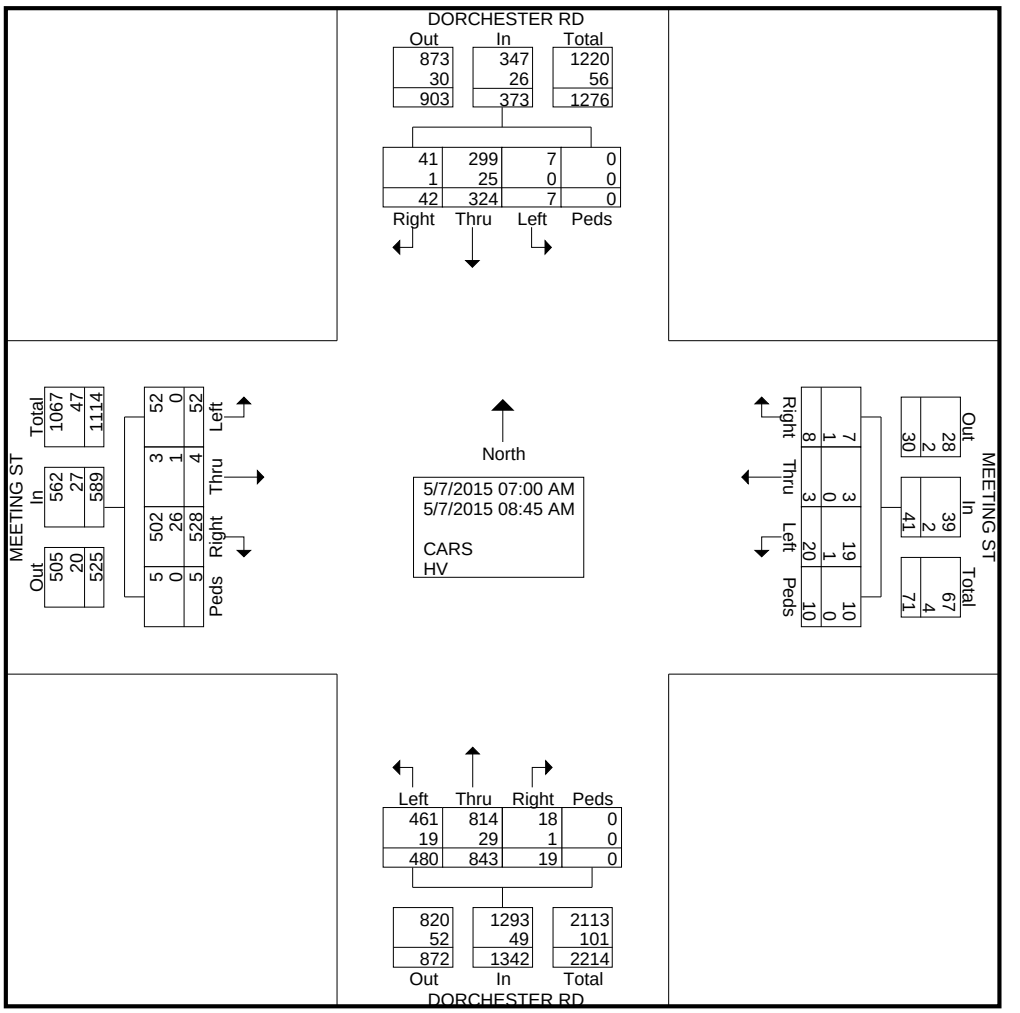
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #37 DORCHESTER&MEETINGAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					MEETING ST Westbound					DORCHESTER RD Northbound					MEETING ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	29	1	0	35	0	0	5	1	6	3	116	53	0	172	40	1	1	0	42	255
07:15 AM	6	40	1	0	47	0	1	5	2	8	6	111	57	0	174	56	0	5	0	61	290
07:30 AM	4	39	2	0	45	1	1	4	0	6	1	112	63	0	176	63	1	8	0	72	299
07:45 AM	9	55	0	0	64	1	0	3	2	6	1	125	64	0	190	80	0	11	0	91	351
Total	24	163	4	0	191	2	2	17	5	26	11	464	237	0	712	239	2	25	0	266	1195
08:00 AM	5	43	1	0	49	0	0	2	1	3	3	88	75	0	166	73	0	5	2	80	298
08:15 AM	2	37	0	0	39	1	0	0	2	3	1	107	56	0	164	71	1	11	2	85	291
08:30 AM	5	40	0	0	45	3	1	1	0	5	1	92	57	0	150	75	1	8	0	84	284
08:45 AM	6	41	2	0	49	2	0	0	2	4	3	92	55	0	150	70	0	3	1	74	277
Total	18	161	3	0	182	6	1	3	5	15	8	379	243	0	630	289	2	27	5	323	1150
Grand Total	42	324	7	0	373	8	3	20	10	41	19	843	480	0	1342	528	4	52	5	589	2345
Apprch %	11.3	86.9	1.9	0		19.5	7.3	48.8	24.4		1.4	62.8	35.8	0		89.6	0.7	8.8	0.8		
Total %	1.8	13.8	0.3	0	15.9	0.3	0.1	0.9	0.4	1.7	0.8	35.9	20.5	0	57.2	22.5	0.2	2.2	0.2	25.1	
CARS	41	299	7	0	347	7	3	19	10	39	18	814	461	0	1293	502	3	52	5	562	2241
% CARS	97.6	92.3	100	0	93	87.5	100	95	100	95.1	94.7	96.6	96	0	96.3	95.1	75	100	100	95.4	95.6
HV	1	25	0	0	26	1	0	1	0	2	1	29	19	0	49	26	1	0	0	27	104
% HV	2.4	7.7	0	0	7	12.5	0	5	0	4.9	5.3	3.4	4	0	3.7	4.9	25	0	0	4.6	4.4



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #37 DORCHESTER&MEETINGAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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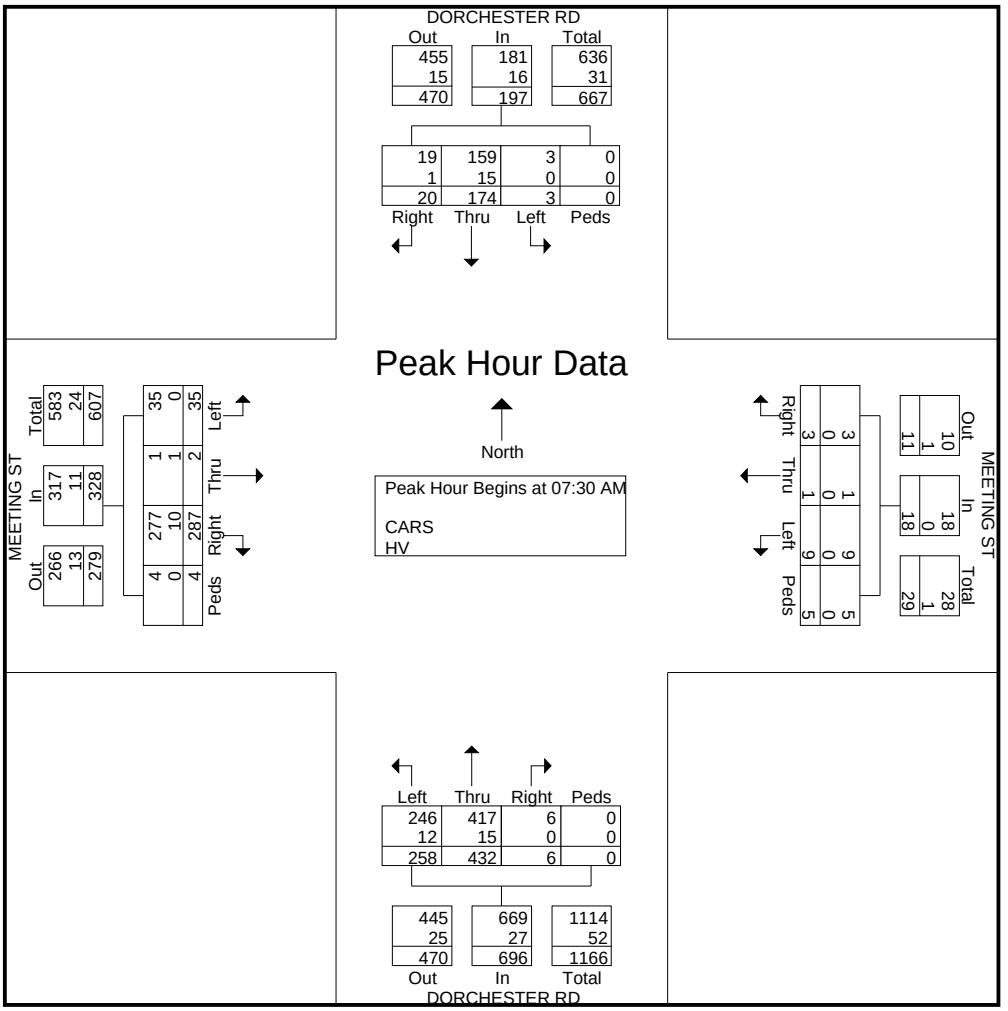
	DORCHESTER RD Southbound					MEETING ST Westbound					DORCHESTER RD Northbound					MEETING ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	4	39	**2**	0	45	**1**	**1**	**4**	0	**6**	1	112	63	0	176	63	**1**	8	0	72	299
07:45 AM	**9**	**55**	0	0	**64**	1	0	3	**2**	6	1	**125**	64	0	**190**	**80**	0	**11**	0	**91**	**351**
08:00 AM	5	43	1	0	49	0	0	2	1	3	**3**	88	**75**	0	166	73	0	5	**2**	80	298
08:15 AM	2	37	0	0	39	1	0	0	2	3	1	107	56	0	164	71	1	11	2	85	291
Total Volume	20	174	3	0	197	3	1	9	5	18	6	432	258	0	696	287	2	35	4	328	1239
% App. Total	10.2	88.3	1.5	0		16.7	5.6	50	27.8		0.9	62.1	37.1	0		87.5	0.6	10.7	1.2		
PHF	.556	.791	.375	.000	.770	.750	.250	.563	.625	.750	.500	.864	.860	.000	.916	.897	.500	.795	.500	.901	.882
CARS	19	159	3	0	181	3	1	9	5	18	6	417	246	0	669	277	1	35	4	317	1185
% CARS	95.0	91.4	100	0	91.9	100	100	100	100	100	100	96.5	95.3	0	96.1	96.5	50.0	100	100	96.6	95.6
HV	1	15	0	0	16	0	0	0	0	0	0	15	12	0	27	10	1	0	0	11	54
% HV	5.0	8.6	0	0	8.1	0	0	0	0	0	0	3.5	4.7	0	3.9	3.5	50.0	0	0	3.4	4.4



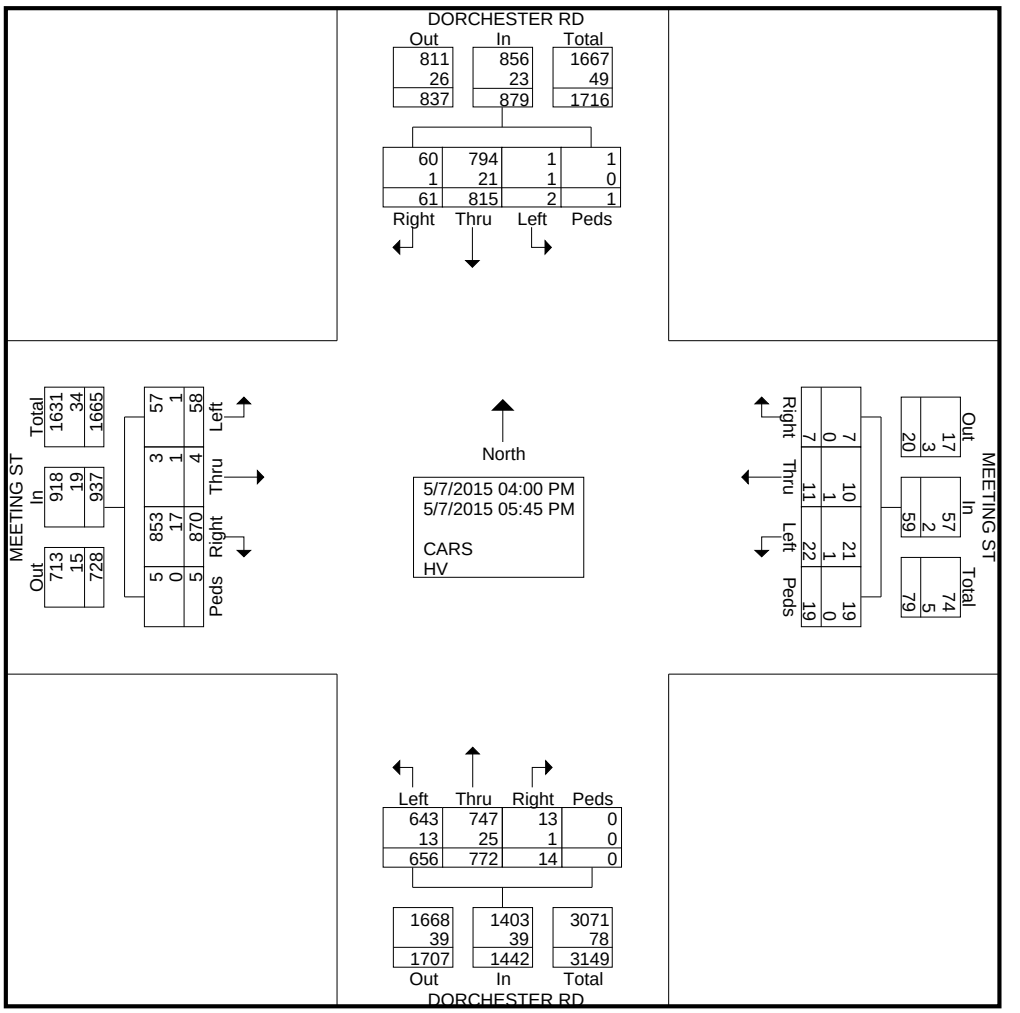
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #37 DORCHESTER&MEETINGPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	DORCHESTER RD Southbound					MEETING ST Westbound					DORCHESTER RD Northbound					MEETING ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	5	113	1	0	119	2	1	4	1	8	3	89	80	0	172	109	0	7	0	116	415
04:15 PM	3	100	0	1	104	3	2	3	4	12	4	94	67	0	165	88	1	3	2	94	375
04:30 PM	5	113	0	0	118	1	0	1	3	5	1	77	73	0	151	128	0	7	0	135	409
04:45 PM	4	96	0	0	100	0	1	1	2	4	0	80	70	0	150	123	1	4	1	129	383
Total	17	422	1	1	441	6	4	9	10	29	8	340	290	0	638	448	2	21	3	474	1582
05:00 PM	9	112	0	0	121	0	0	1	3	4	2	103	97	0	202	136	0	8	0	144	471
05:15 PM	15	106	1	0	122	1	1	1	1	4	1	128	97	0	226	98	1	10	0	109	461
05:30 PM	13	75	0	0	88	0	5	10	1	16	2	101	88	0	191	95	0	11	1	107	402
05:45 PM	7	100	0	0	107	0	1	1	4	6	1	100	84	0	185	93	1	8	1	103	401
Total	44	393	1	0	438	1	7	13	9	30	6	432	366	0	804	422	2	37	2	463	1735
Grand Total	61	815	2	1	879	7	11	22	19	59	14	772	656	0	1442	870	4	58	5	937	3317
Apprch %	6.9	92.7	0.2	0.1		11.9	18.6	37.3	32.2		1	53.5	45.5	0		92.8	0.4	6.2	0.5		
Total %	1.8	24.6	0.1	0	26.5	0.2	0.3	0.7	0.6	1.8	0.4	23.3	19.8	0	43.5	26.2	0.1	1.7	0.2	28.2	
CARS	60	794	1	1	856	7	10	21	19	57	13	747	643	0	1403	853	3	57	5	918	3234
% CARS	98.4	97.4	50	100	97.4	100	90.9	95.5	100	96.6	92.9	96.8	98	0	97.3	98	75	98.3	100	98	97.5
HV	1	21	1	0	23	0	1	1	0	2	1	25	13	0	39	17	1	1	0	19	83
% HV	1.6	2.6	50	0	2.6	0	9.1	4.5	0	3.4	7.1	3.2	2	0	2.7	2	25	1.7	0	2	2.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #37 DORCHESTER&MEETINGPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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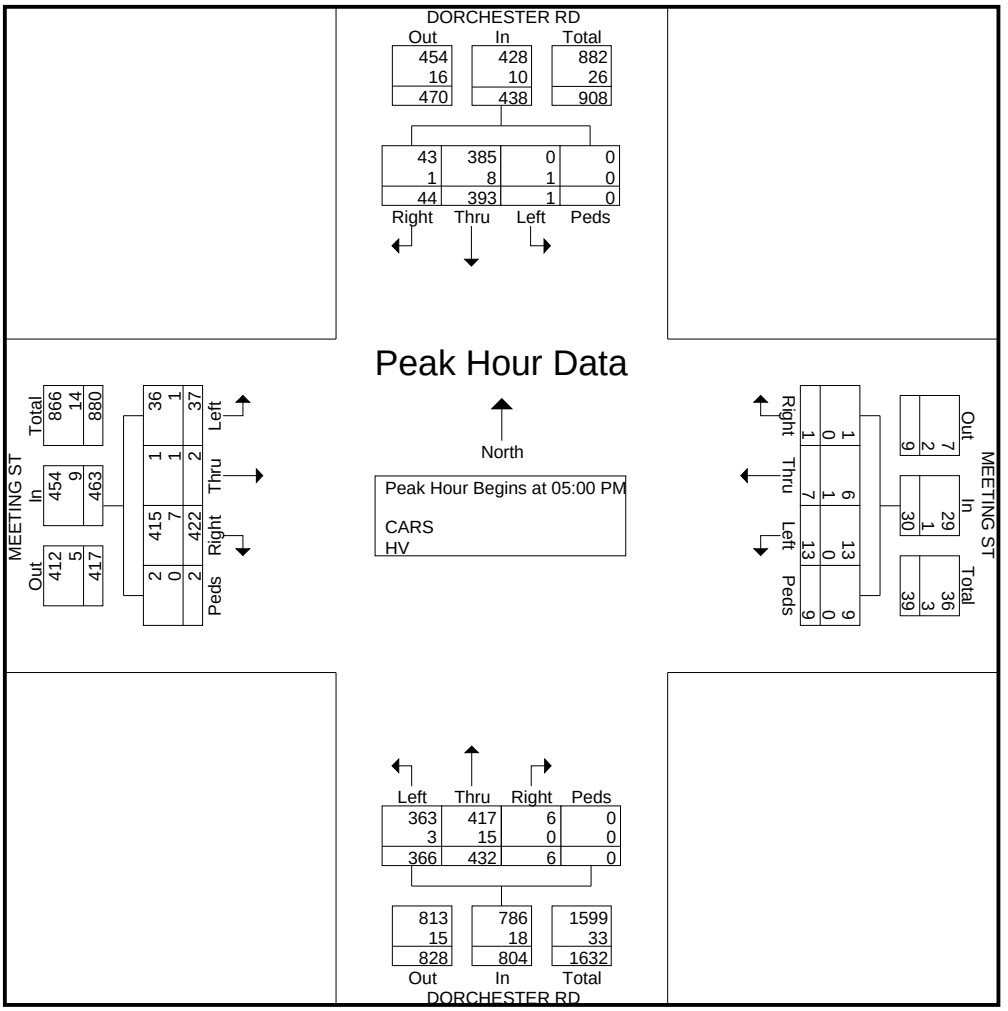
	DORCHESTER RD Southbound					MEETING ST Westbound					DORCHESTER RD Northbound					MEETING ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	9	**112**	0	0	121	0	0	1	3	4	**2**	103	**97**	0	202	**136**	0	8	0	**144**	**471**
05:15 PM	**15**	106	**1**	0	**122**	**1**	1	1	1	4	1	**128**	97	0	**226**	98	**1**	10	0	109	461
05:30 PM	13	75	0	0	88	0	**5**	**10**	1	**16**	2	101	88	0	191	95	0	**11**	**1**	107	402
05:45 PM	7	100	0	0	107	0	1	1	**4**	6	1	100	84	0	185	93	1	8	1	103	401
Total Volume	44	393	1	0	438	1	7	13	9	30	6	432	366	0	804	422	2	37	2	463	1735
% App. Total	10	89.7	0.2	0		3.3	23.3	43.3	30		0.7	53.7	45.5	0		91.1	0.4	8	0.4		
PHF	.733	.877	.250	.000	.898	.250	.350	.325	.563	.469	.750	.844	.943	.000	.889	.776	.500	.841	.500	.804	.921
CARS	43	385	0	0	428	1	6	13	9	29	6	417	363	0	786	415	1	36	2	454	1697
% CARS	97.7	98.0	0	0	97.7	100	85.7	100	100	96.7	100	96.5	99.2	0	97.8	98.3	50.0	97.3	100	98.1	97.8
HV	1	8	1	0	10	0	1	0	0	1	0	15	3	0	18	7	1	1	0	9	38
% HV	2.3	2.0	100	0	2.3	0	14.3	0	0	3.3	0	3.5	0.8	0	2.2	1.7	50.0	2.7	0	1.9	2.2



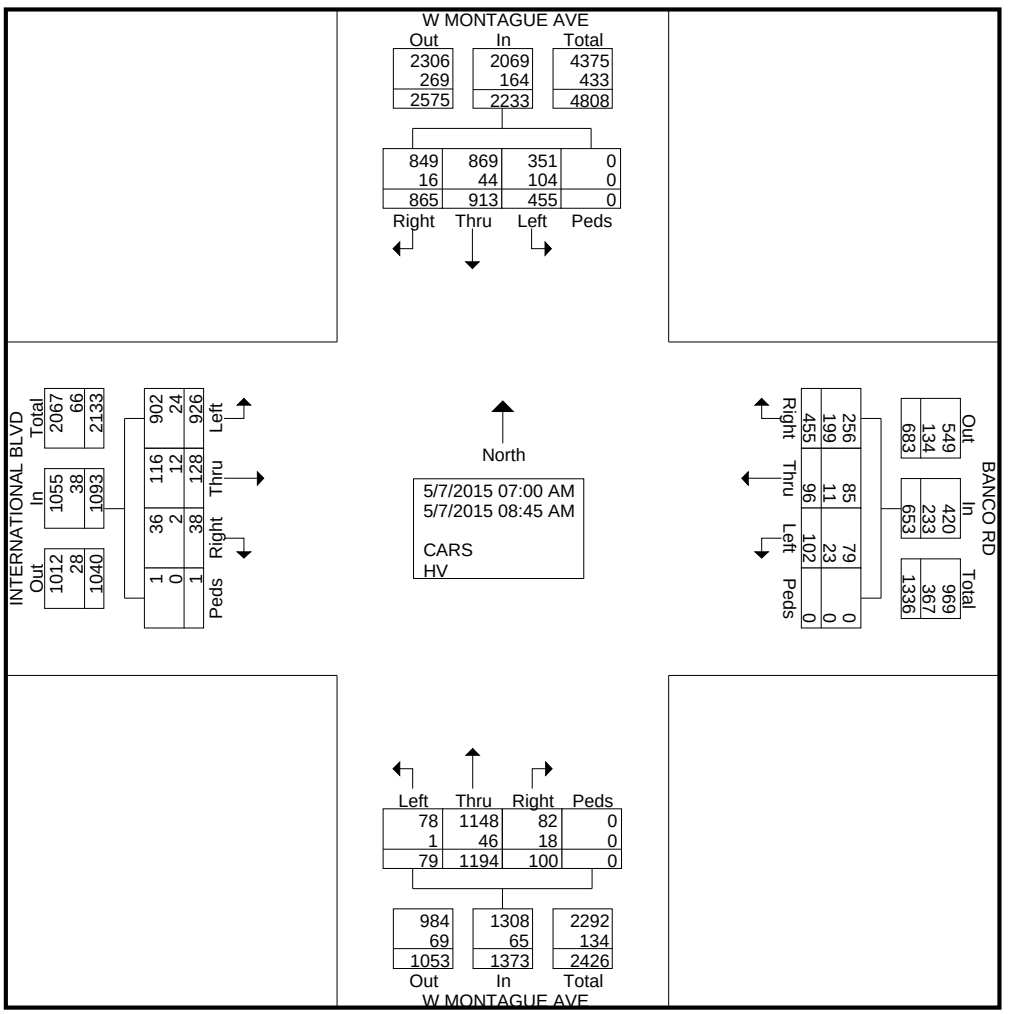
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #38 WMONTAGUE&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					BANCO RD Westbound					W MONTAGUE AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	69	68	66	0	203	63	6	7	0	76	13	137	9	0	159	3	24	112	0	139	577
07:15 AM	103	111	62	0	276	59	18	10	0	87	17	186	10	0	213	3	11	105	0	119	695
07:30 AM	111	136	53	0	300	59	9	9	0	77	17	160	5	0	182	4	18	122	0	144	703
07:45 AM	112	118	63	0	293	61	9	23	0	93	16	182	5	0	203	2	16	124	0	142	731
Total	395	433	244	0	1072	242	42	49	0	333	63	665	29	0	757	12	69	463	0	544	2706
08:00 AM	115	154	64	0	333	55	19	9	0	83	9	168	9	0	186	2	19	113	0	134	736
08:15 AM	118	110	43	0	271	61	17	19	0	97	13	123	10	0	146	10	16	134	0	160	674
08:30 AM	111	101	54	0	266	39	9	14	0	62	8	127	11	0	146	7	12	126	0	145	619
08:45 AM	126	115	50	0	291	58	9	11	0	78	7	111	20	0	138	7	12	90	1	110	617
Total	470	480	211	0	1161	213	54	53	0	320	37	529	50	0	616	26	59	463	1	549	2646
Grand Total	865	913	455	0	2233	455	96	102	0	653	100	1194	79	0	1373	38	128	926	1	1093	5352
Apprch %	38.7	40.9	20.4	0		69.7	14.7	15.6	0		7.3	87	5.8	0		3.5	11.7	84.7	0.1		
Total %	16.2	17.1	8.5	0	41.7	8.5	1.8	1.9	0	12.2	1.9	22.3	1.5	0	25.7	0.7	2.4	17.3	0	20.4	
CARS	849	869	351	0	2069	256	85	79	0	420	82	1148									
% CARS	98.2	95.2	77.1	0	92.7	56.3	88.5	77.5	0	64.3	82	96.1	98.7	0	95.3	94.7	90.6	97.4	100	96.5	90.7
HV	16	44	104	0	164	199	11	23	0	233	18	46	1	0	65	2	12	24	0	38	500
% HV	1.8	4.8	22.9	0	7.3	43.7	11.5	22.5	0	35.7	18	3.9	1.3	0	4.7	5.3	9.4	2.6	0	3.5	9.3



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File Name : #38 WMONTAGUE&INTERNATIONALAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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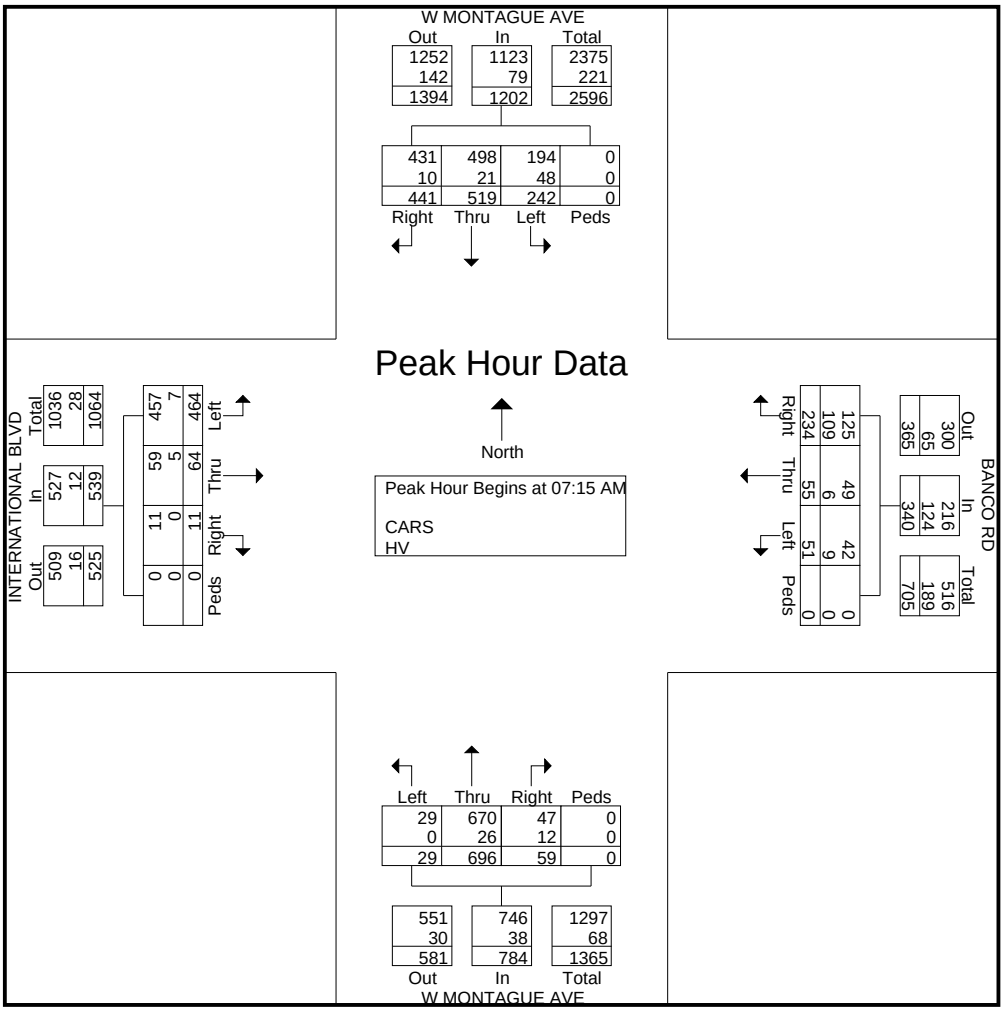
	W MONTAGUE AVE Southbound					BANCO RD Westbound					W MONTAGUE AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	103	111	62	0	276	59	18	10	0	87	**17**	**186**	**10**	0	**213**	3	11	105	0	119	695
07:30 AM	111	136	53	0	300	59	9	9	0	77	17	160	5	0	182	**4**	18	122	0	**144**	703
07:45 AM	112	118	63	0	293	**61**	9	**23**	0	**93**	16	182	5	0	203	2	16	**124**	0	142	731
08:00 AM	**115**	**154**	**64**	0	**333**	55	**19**	9	0	83	9	168	9	0	186	2	**19**	113	0	134	**736**
Total Volume	441	519	242	0	1202	234	55	51	0	340	59	696	29	0	784	11	64	464	0	539	2865
% App. Total	36.7	43.2	20.1	0		68.8	16.2	15	0		7.5	88.8	3.7	0		2	11.9	86.1	0		
PHF	.959	.843	.945	.000	.902	.959	.724	.554	.000	.914	.868	.935	.725	.000	.920	.688	.842	.935	.000	.936	.973
CARS	431	498	194	0	1123	125	49	42	0	216	47	670	29	0	746	11	59	457	0	527	2612
% CARS	97.7	96.0	80.2	0	93.4	53.4	89.1	82.4	0	63.5	79.7	96.3	100	0	95.2	100	92.2	98.5	0	97.8	91.2
HV	10	21	48	0	79	109	6	9	0	124	12	26	0	0	38	0	5	7	0	12	253
% HV	2.3	4.0	19.8	0	6.6	46.6	10.9	17.6	0	36.5	20.3	3.7	0	0	4.8	0	7.8	1.5	0	2.2	8.8



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #38 WMONTAGUE&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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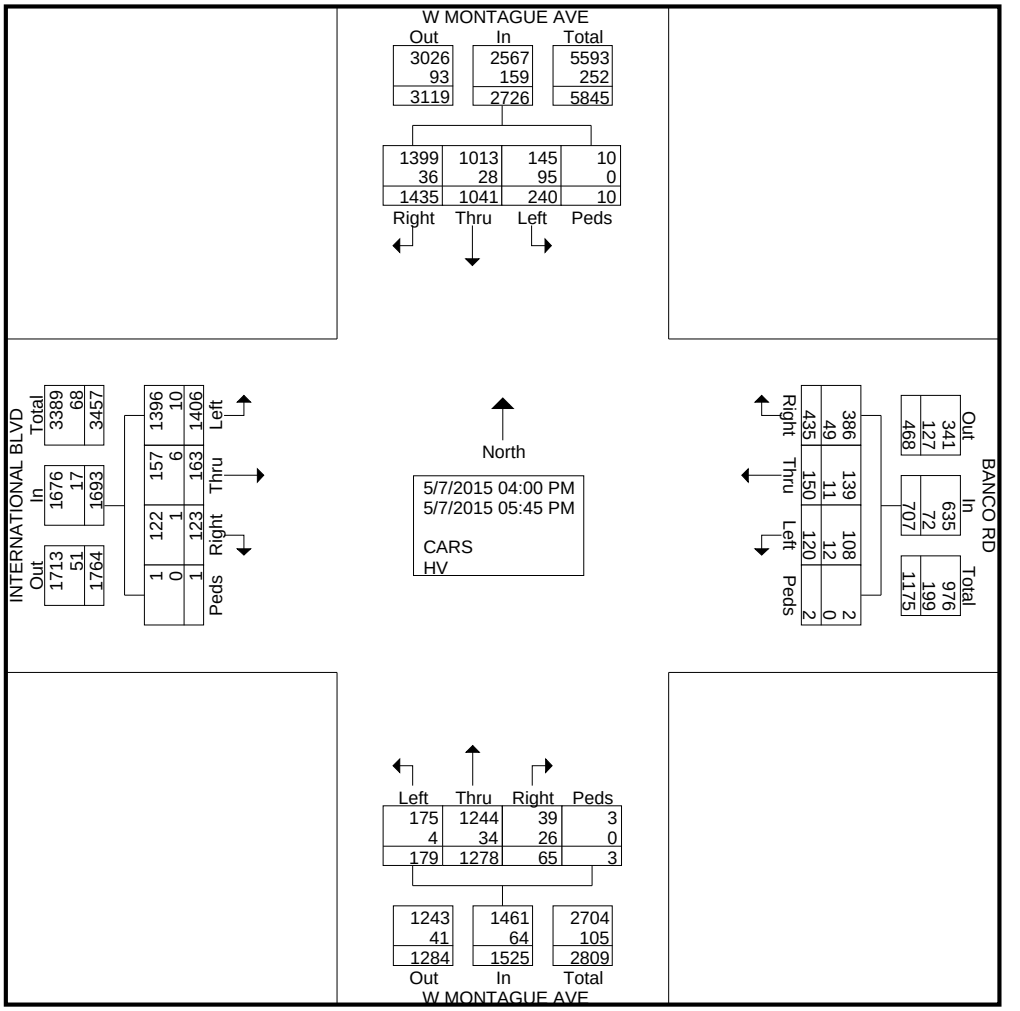
Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					BANCO RD Westbound					W MONTAGUE AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	150	100	42	0	292	54	25	21	0	100	10	121	19	0	150	15	17	150	0	182	724
04:15 PM	210	112	35	0	357	64	20	13	0	97	7	169	27	0	203	17	23	165	0	205	862
04:30 PM	184	146	32	0	362	49	19	6	0	74	6	170	21	0	197	15	17	191	0	223	856
04:45 PM	180	105	23	0	308	45	15	14	1	75	3	141	28	1	173	17	21	212	0	250	806
Total	724	463	132	0	1319	212	79	54	1	346	26	601	95	1	723	64	78	718	0	860	3248
05:00 PM	177	185	30	0	392	93	20	19	0	132	12	199	29	0	240	16	11	146	0	173	937
05:15 PM	187	152	33	2	374	50	16	17	0	83	9	189	14	0	212	16	32	182	0	230	899
05:30 PM	175	106	29	2	312	45	20	17	0	82	13	170	24	1	208	11	19	167	1	198	800
05:45 PM	172	135	16	6	329	35	15	13	1	64	5	119	17	1	142	16	23	193	0	232	767
Total	711	578	108	10	1407	223	71	66	1	361	39	677	84	2	802	59	85	688	1	833	3403
Grand Total	1435	1041	240	10	2726	435	150	120	2	707	65	1278	179	3	1525	123	163	1406	1	1693	6651
Apprch %	52.6	38.2	8.8	0.4		61.5	21.2	17	0.3		4.3	83.8	11.7	0.2		7.3	9.6	83	0.1		
Total %	21.6	15.7	3.6	0.2	41	6.5	2.3	1.8	0	10.6	1	19.2	2.7	0	22.9	1.8	2.5	21.1	0	25.5	
CARS	1399	1013										1244						1396			
% CARS	97.5	97.3	60.4	100	94.2	88.7	92.7	90	100	89.8	60	97.3	97.8	100	95.8	99.2	96.3	99.3	100	99	95.3
HV	36	28	95	0	159	49	11	12	0	72	26	34	4	0	64	1	6	10	0	17	312
% HV	2.5	2.7	39.6	0	5.8	11.3	7.3	10	0	10.2	40	2.7	2.2	0	4.2	0.8	3.7	0.7	0	1	4.7



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #38 WMONTAGUE&INTERNATIONALPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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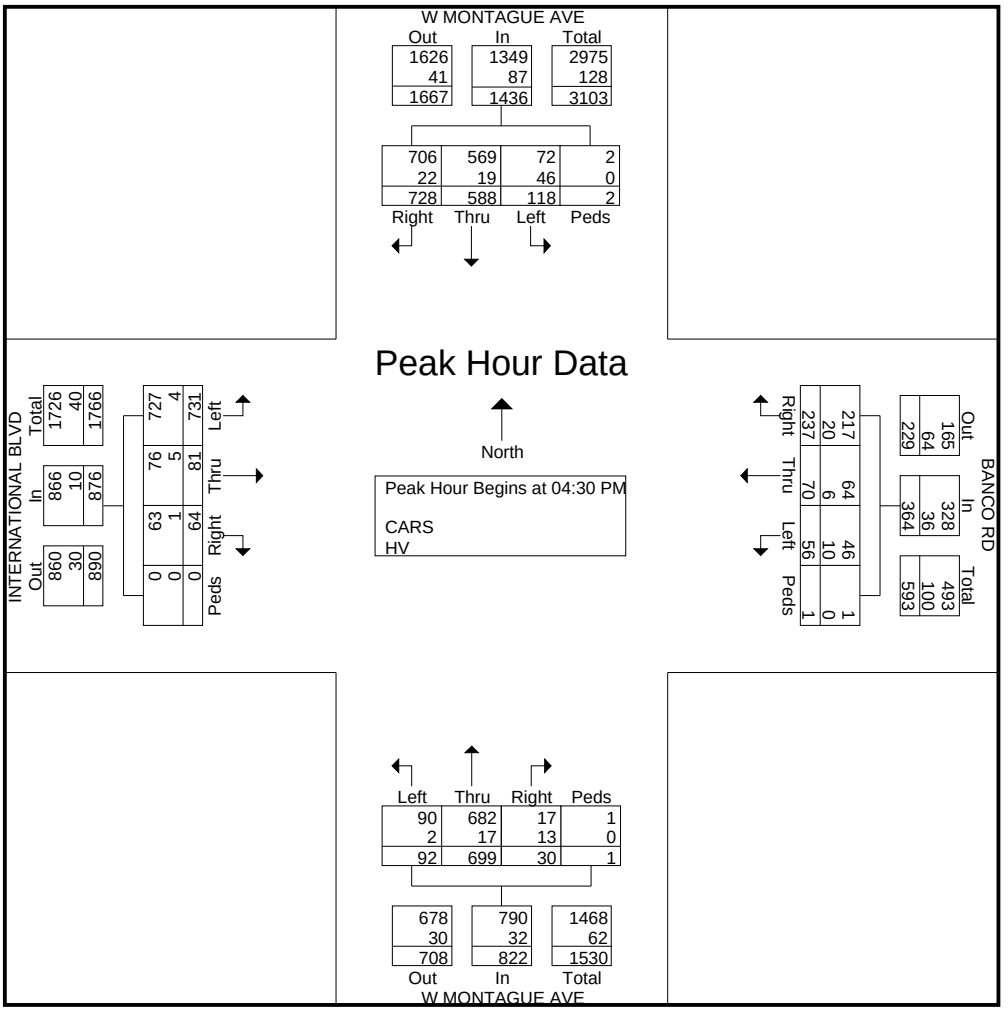
	W MONTAGUE AVE Southbound					BANCO RD Westbound					W MONTAGUE AVE Northbound					INTERNATIONAL BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	184	146	32	0	362	49	19	6	0	74	6	170	21	0	197	15	17	191	0	223	856
04:45 PM	180	105	23	0	308	45	15	14	**1**	75	3	141	28	**1**	173	**17**	21	**212**	0	**250**	806
05:00 PM	177	**185**	30	0	**392**	**93**	**20**	**19**	0	**132**	**12**	**199**	**29**	0	**240**	16	11	146	0	173	**937**
05:15 PM	**187**	152	**33**	**2**	374	50	16	17	0	83	9	189	14	0	212	16	**32**	182	0	230	899
Total Volume	728	588	118	2	1436	237	70	56	1	364	30	699	92	1	822	64	81	731	0	876	3498
% App. Total	50.7	40.9	8.2	0.1		65.1	19.2	15.4	0.3		3.6	85	11.2	0.1		7.3	9.2	83.4	0		
PHF	.973	.795	.894	.250	.916	.637	.875	.737	.250	.689	.625	.878	.793	.250	.856	.941	.633	.862	.000	.876	.933
CARS	706	569	72	2	1349	217	64	46	1	328	17	682	90	1	790	63	76	727	0	866	3333
% CARS	97.0	96.8	61.0	100	93.9	91.6	91.4	82.1	100	90.1	56.7	97.6	97.8	100	96.1	98.4	93.8	99.5	0	98.9	95.3
HV	22	19	46	0	87	20	6	10	0	36	13	17	2	0	32	1	5	4	0	10	165
% HV	3.0	3.2	39.0	0	6.1	8.4	8.6	17.9	0	9.9	43.3	2.4	2.2	0	3.9	1.6	6.2	0.5	0	1.1	4.7



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #39 WMONTAGUE&I26WBRAMPSAM
Site Code : 9513 - CHARLESTON 1
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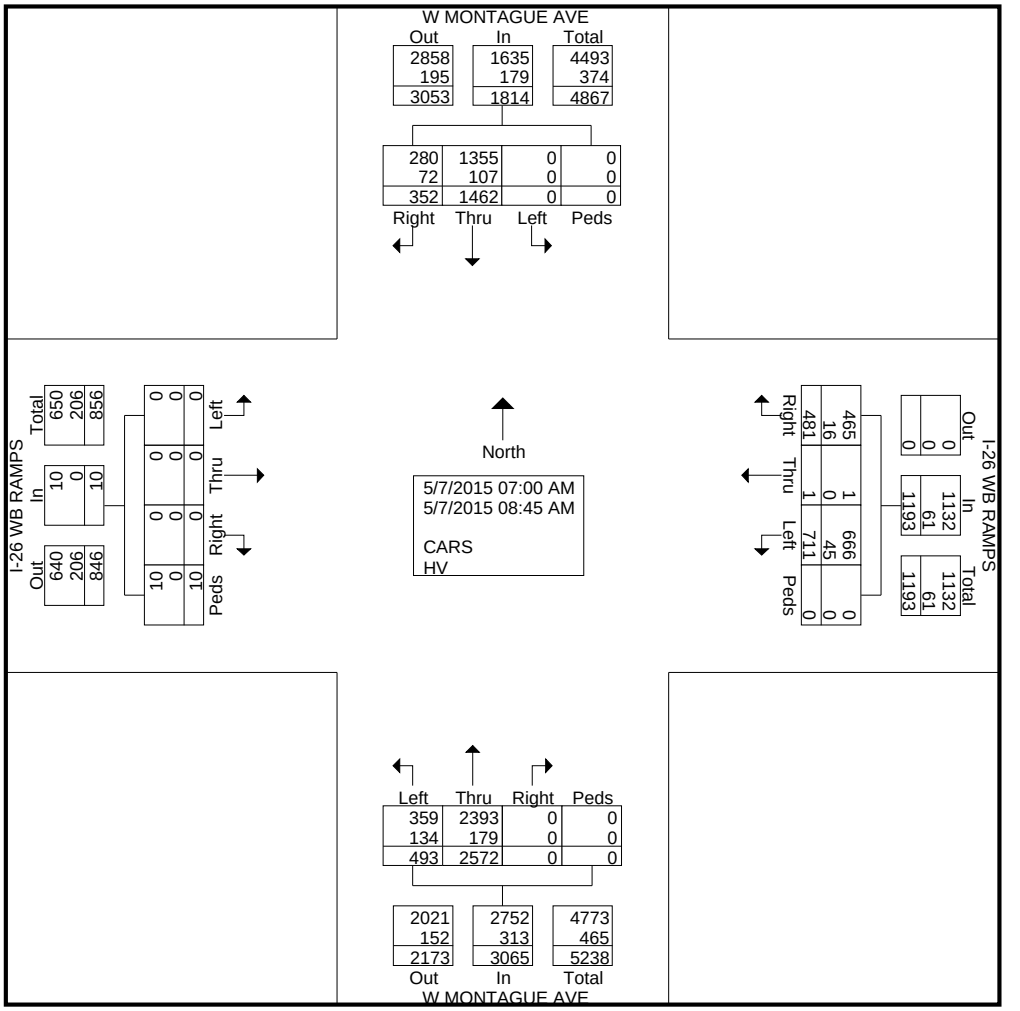
Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					I-26 WB RAMPS Westbound					W MONTAGUE AVE Northbound					I-26 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	27	143	0	0	170	52	0	53	0	105	0	288	42	0	330	0	0	0	0	0	605
07:15 AM	51	170	0	0	221	66	0	92	0	158	0	329	65	0	394	0	0	0	0	0	773
07:30 AM	56	207	0	0	263	89	1	112	0	202	0	342	53	0	395	0	0	0	1	1	861
07:45 AM	51	215	0	0	266	88	0	93	0	181	0	384	74	0	458	0	0	0	2	2	907
Total	185	735	0	0	920	295	1	350	0	646	0	1343	234	0	1577	0	0	0	3	3	3146
08:00 AM	47	222	0	0	269	62	0	92	0	154	0	296	72	0	368	0	0	0	1	1	792
08:15 AM	45	165	0	0	210	46	0	91	0	137	0	373	67	0	440	0	0	0	0	0	787
08:30 AM	34	126	0	0	160	40	0	100	0	140	0	289	63	0	352	0	0	0	2	2	654
08:45 AM	41	214	0	0	255	38	0	78	0	116	0	271	57	0	328	0	0	0	4	4	703
Total	167	727	0	0	894	186	0	361	0	547	0	1229	259	0	1488	0	0	0	7	7	2936
Grand Total	352	1462	0	0	1814	481	1	711	0	1193	0	2572	493	0	3065	0	0	0	10	10	6082
Apprch %	19.4	80.6	0	0		40.3	0.1	59.6	0		0	83.9	16.1	0		0	0	0	100		
Total %	5.8	24	0	0	29.8	7.9	0	11.7	0	19.6	0	42.3	8.1	0	50.4	0	0	0	0.2	0.2	
CARS	280	1355										2393									
% CARS	79.5	92.7	0	0	90.1	96.7	100	93.7	0	94.9	0	93	72.8	0	89.8	0	0	0	100	100	90.9
HV	72	107	0	0	179	16	0	45	0	61	0	179	134	0	313	0	0	0	0	0	553
% HV	20.5	7.3	0	0	9.9	3.3	0	6.3	0	5.1	0	7	27.2	0	10.2	0	0	0	0	0	9.1



All Traffic Data Services, Inc.

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File Name : #39 WMONTAGUE&I26WBRAMPSAM
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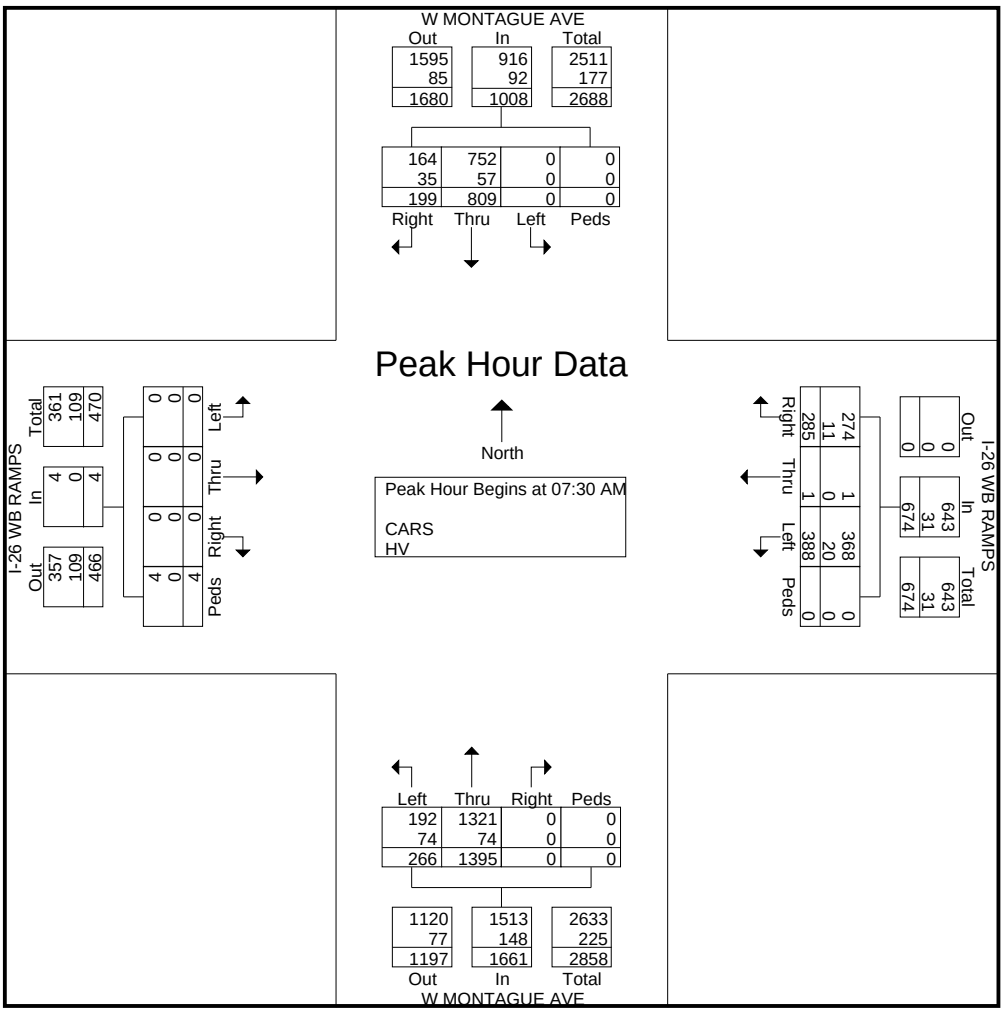
	W MONTAGUE AVE Southbound					I-26 WB RAMPS Westbound					W MONTAGUE AVE Northbound					I-26 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**56**	207	0	0	263	**89**	**1**	**112**	0	**202**	0	342	53	0	395	0	0	0	1	1	861
07:45 AM	51	215	0	0	266	88	0	93	0	181	0	**384**	**74**	0	**458**	0	0	0	**2**	**2**	**907**
08:00 AM	47	**222**	0	0	**269**	62	0	92	0	154	0	296	72	0	368	0	0	0	1	1	792
08:15 AM	45	165	0	0	210	46	0	91	0	137	0	373	67	0	440	0	0	0	0	0	787
Total Volume	199	809	0	0	1008	285	1	388	0	674	0	1395	266	0	1661	0	0	0	4	4	3347
% App. Total	19.7	80.3	0	0		42.3	0.1	57.6	0		0	84	16	0		0	0	0	100		
PHF	.888	.911	.000	.000	.937	.801	.250	.866	.000	.834	.000	.908	.899	.000	.907	.000	.000	.000	.500	.500	.923
CARS	164	752	0	0	916	274	1	368	0	643	0	1321									
% CARS	82.4	93.0	0	0	90.9	96.1	100	94.8	0	95.4	0	94.7	72.2	0	91.1	0	0	0	100	100	91.9
HV	35	57	0	0	92	11	0	20	0	31	0	74	74	0	148	0	0	0	0	0	271
% HV	17.6	7.0	0	0	9.1	3.9	0	5.2	0	4.6	0	5.3	27.8	0	8.9	0	0	0	0	0	8.1



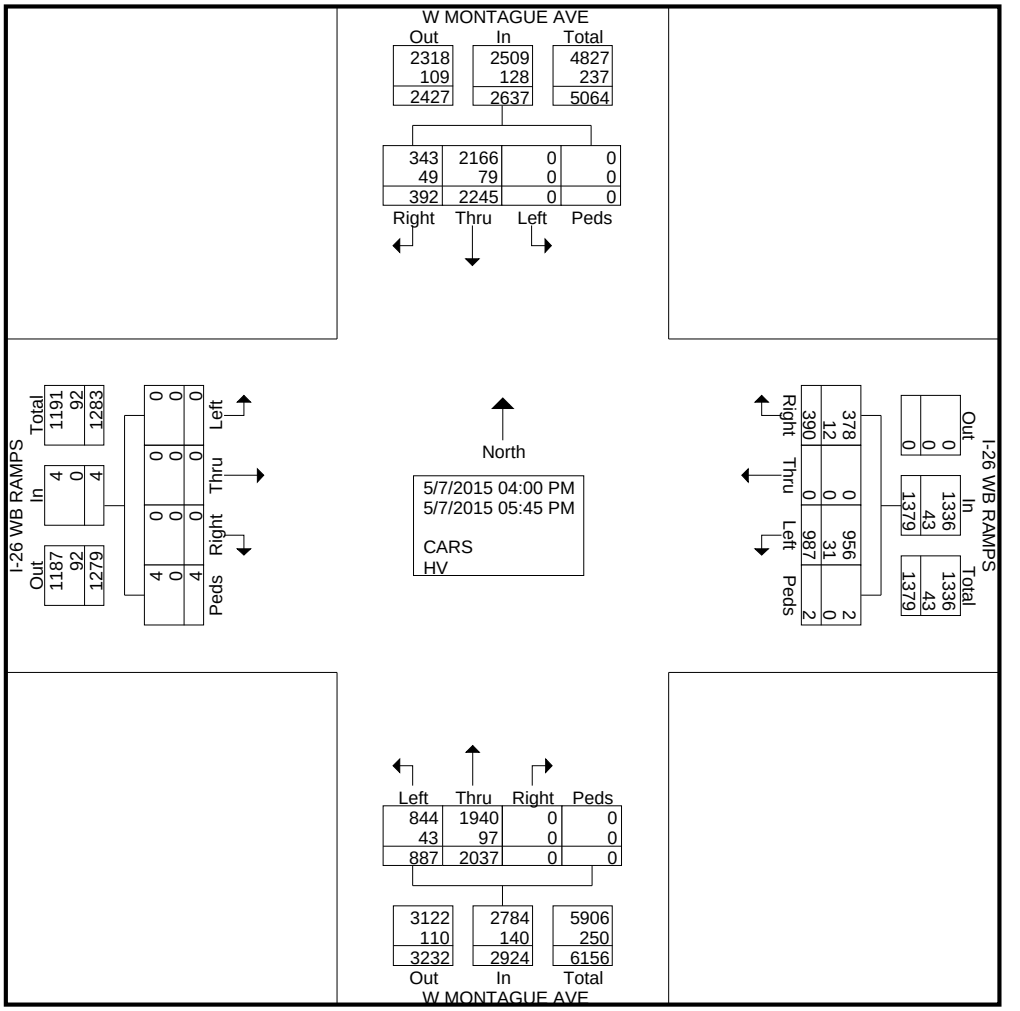
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #39 WMONTAGUE&I26WBRAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					I-26 WB RAMPS Westbound					W MONTAGUE AVE Northbound					I-26 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	60	230	0	0	290	43	0	97	0	140	0	217	103	0	320	0	0	0	0	0	750
04:15 PM	49	296	0	0	345	46	0	121	0	167	0	259	123	0	382	0	0	0	0	0	894
04:30 PM	54	325	0	0	379	53	0	112	0	165	0	236	126	0	362	0	0	0	0	0	906
04:45 PM	40	225	0	0	265	66	0	118	1	185	0	250	110	0	360	0	0	0	0	0	810
Total	203	1076	0	0	1279	208	0	448	1	657	0	962	462	0	1424	0	0	0	0	0	3360
05:00 PM	65	355	0	0	420	50	0	151	0	201	0	282	129	0	411	0	0	0	2	2	1034
05:15 PM	46	315	0	0	361	45	0	130	1	176	0	283	105	0	388	0	0	0	0	0	925
05:30 PM	41	266	0	0	307	34	0	117	0	151	0	280	111	0	391	0	0	0	0	0	849
05:45 PM	37	233	0	0	270	53	0	141	0	194	0	230	80	0	310	0	0	0	2	2	776
Total	189	1169	0	0	1358	182	0	539	1	722	0	1075	425	0	1500	0	0	0	4	4	3584
Grand Total	392	2245	0	0	2637	390	0	987	2	1379	0	2037	887	0	2924	0	0	0	4	4	6944
Apprch %	14.9	85.1	0	0		28.3	0	71.6	0.1		0	69.7	30.3	0		0	0	0	100		
Total %	5.6	32.3	0	0	38	5.6	0	14.2	0	19.9	0	29.3	12.8	0	42.1	0	0	0	0.1	0.1	
CARS	343	2166										1940									
% CARS	87.5	96.5	0	0	95.1	96.9	0	96.9	100	96.9	0	95.2	95.2	0	95.2	0	0	0	100	100	95.5
HV	49	79	0	0	128	12	0	31	0	43	0	97	43	0	140	0	0	0	0	0	311
% HV	12.5	3.5	0	0	4.9	3.1	0	3.1	0	3.1	0	4.8	4.8	0	4.8	0	0	0	0	0	4.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #39 WMONTAGUE&I26WBRAMPSPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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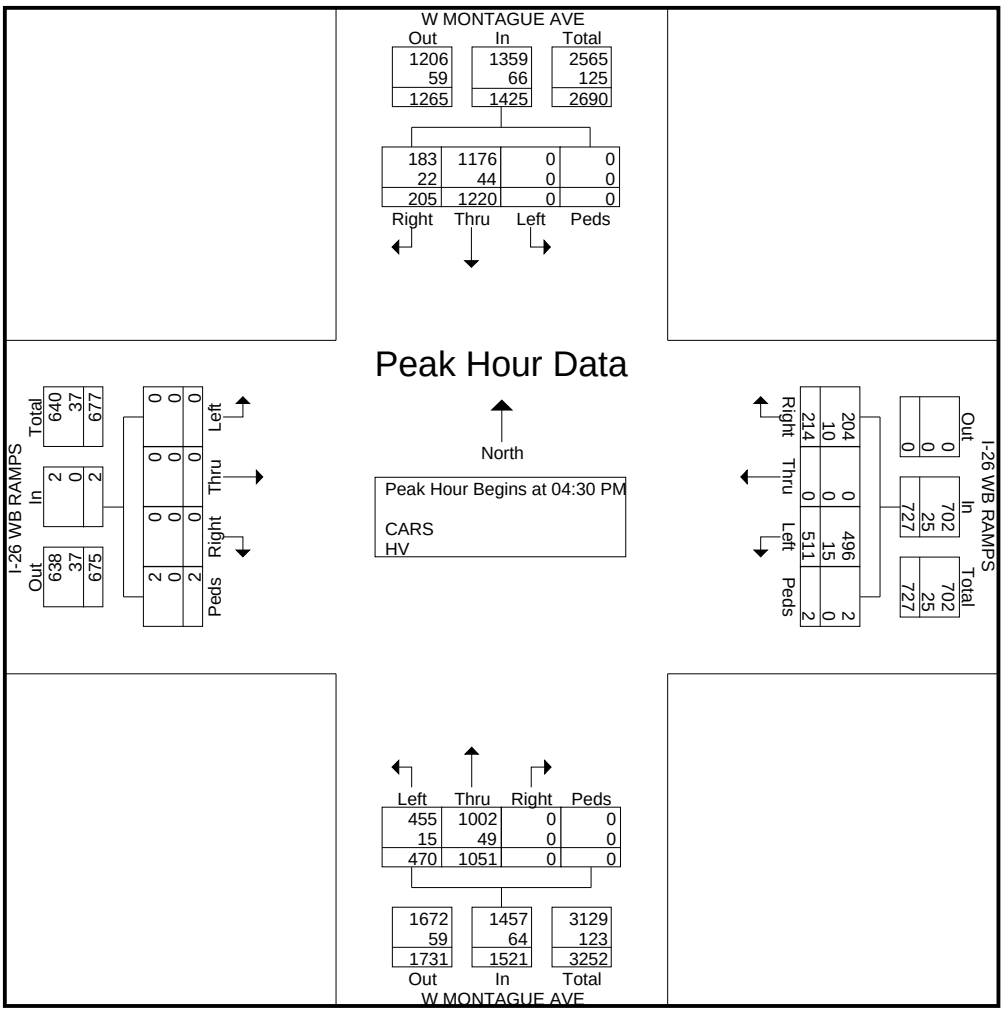
	W MONTAGUE AVE Southbound					I-26 WB RAMPS Westbound					W MONTAGUE AVE Northbound					I-26 WB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	54	325	0	0	379	53	0	112	0	165	0	236	126	0	362	0	0	0	0	0	906
04:45 PM	40	225	0	0	265	**66**	0	118	**1**	185	0	250	110	0	360	0	0	0	0	0	810
05:00 PM	**65**	**355**	0	0	**420**	50	0	**151**	0	**201**	0	282	**129**	0	**411**	0	0	0	**2**	**2**	**1034**
05:15 PM	46	315	0	0	361	45	0	130	1	176	0	**283**	105	0	388	0	0	0	0	0	925
Total Volume	205	1220	0	0	1425	214	0	511	2	727	0	1051	470	0	1521	0	0	0	2	2	3675
% App. Total	14.4	85.6	0	0		29.4	0	70.3	0.3		0	69.1	30.9	0		0	0	0	100		
PHF	.788	.859	.000	.000	.848	.811	.000	.846	.500	.904	.000	.928	.911	.000	.925	.000	.000	.000	.250	.250	.889
CARS	183	1176										1002									
% CARS	89.3	96.4	0	0	95.4	95.3	0	97.1	100	96.6	0	95.3	96.8	0	95.8	0	0	0	100	100	95.8
HV	22	44	0	0	66	10	0	15	0	25	0	49	15	0	64	0	0	0	0	0	155
% HV	10.7	3.6	0	0	4.6	4.7	0	2.9	0	3.4	0	4.7	3.2	0	4.2	0	0	0	0	0	4.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #40 WMONTAGUE&MALLAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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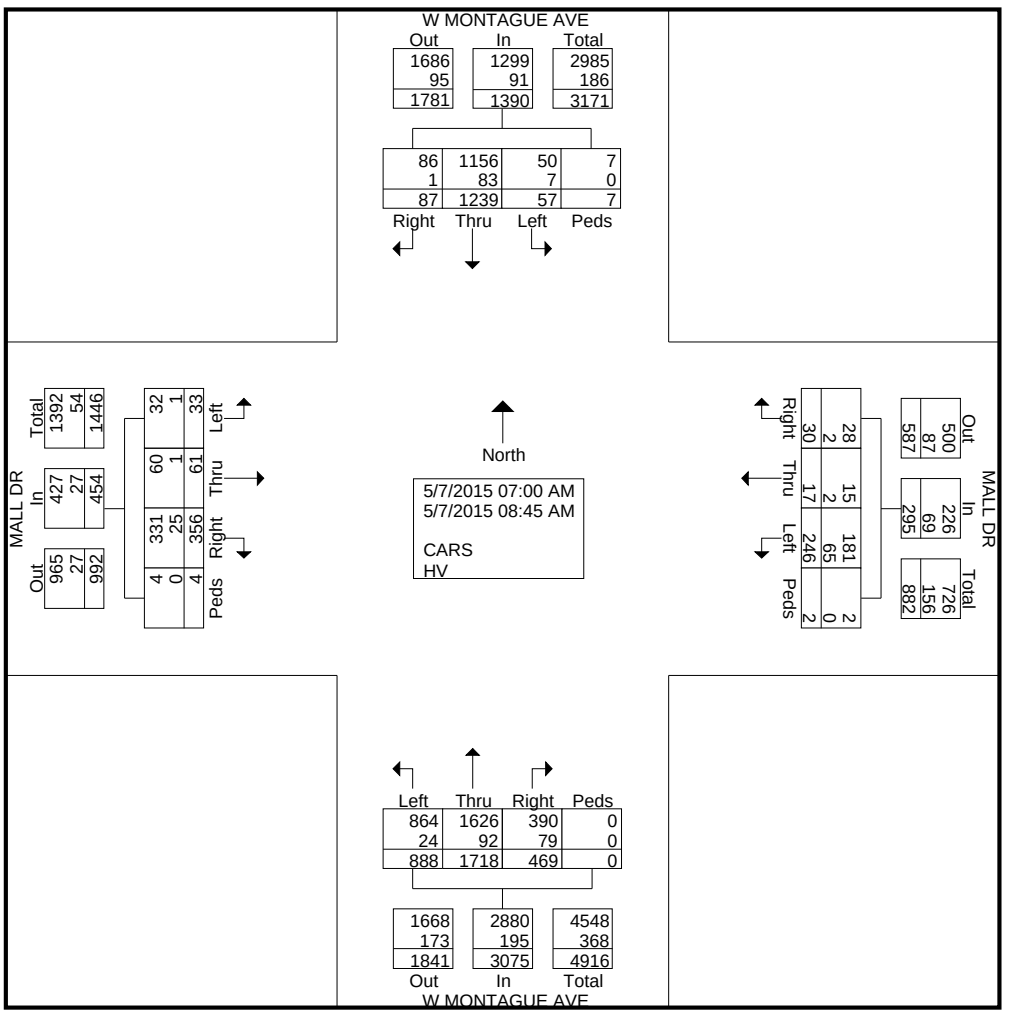
Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					MALL DR Westbound					W MONTAGUE AVE Northbound					MALL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	9	121	4	0	134	0	0	14	0	14	32	221	82	0	335	29	6	4	0	39	522
07:15 AM	16	170	7	0	193	3	1	25	1	30	55	240	90	0	385	41	5	4	0	50	658
07:30 AM	12	192	4	2	210	2	4	29	0	35	52	293	103	0	448	39	7	4	0	50	743
07:45 AM	12	207	12	0	231	1	2	26	0	29	70	304	132	0	506	43	15	8	0	66	832
Total	49	690	27	2	768	6	7	94	1	108	209	1058	407	0	1674	152	33	20	0	205	2755
08:00 AM	9	180	5	0	194	9	1	34	0	44	63	181	127	0	371	57	5	2	1	65	674
08:15 AM	11	117	13	4	145	6	1	37	0	44	78	181	132	0	391	56	8	5	0	69	649
08:30 AM	11	106	3	1	121	2	2	38	1	43	70	141	113	0	324	40	9	2	0	51	539
08:45 AM	7	146	9	0	162	7	6	43	0	56	49	157	109	0	315	51	6	4	3	64	597
Total	38	549	30	5	622	24	10	152	1	187	260	660	481	0	1401	204	28	13	4	249	2459
Grand Total	87	1239	57	7	1390	30	17	246	2	295	469	1718	888	0	3075	356	61	33	4	454	5214
Apprch %	6.3	89.1	4.1	0.5		10.2	5.8	83.4	0.7		15.3	55.9	28.9	0		78.4	13.4	7.3	0.9		
Total %	1.7	23.8	1.1	0.1	26.7	0.6	0.3	4.7	0	5.7	9	32.9	17	0	59	6.8	1.2	0.6	0.1	8.7	
CARS	86	1156										1626									
% CARS	98.9	93.3	87.7	100	93.5	93.3	88.2	73.6	100	76.6	83.2	94.6	97.3	0	93.7	93	98.4	97	100	94.1	92.7
HV	1	83	7	0	91	2	2	65	0	69	79	92	24	0	195	25	1	1	0	27	382
% HV	1.1	6.7	12.3	0	6.5	6.7	11.8	26.4	0	23.4	16.8	5.4	2.7	0	6.3	7	1.6	3	0	5.9	7.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #40 WMONTAGUE&MALLAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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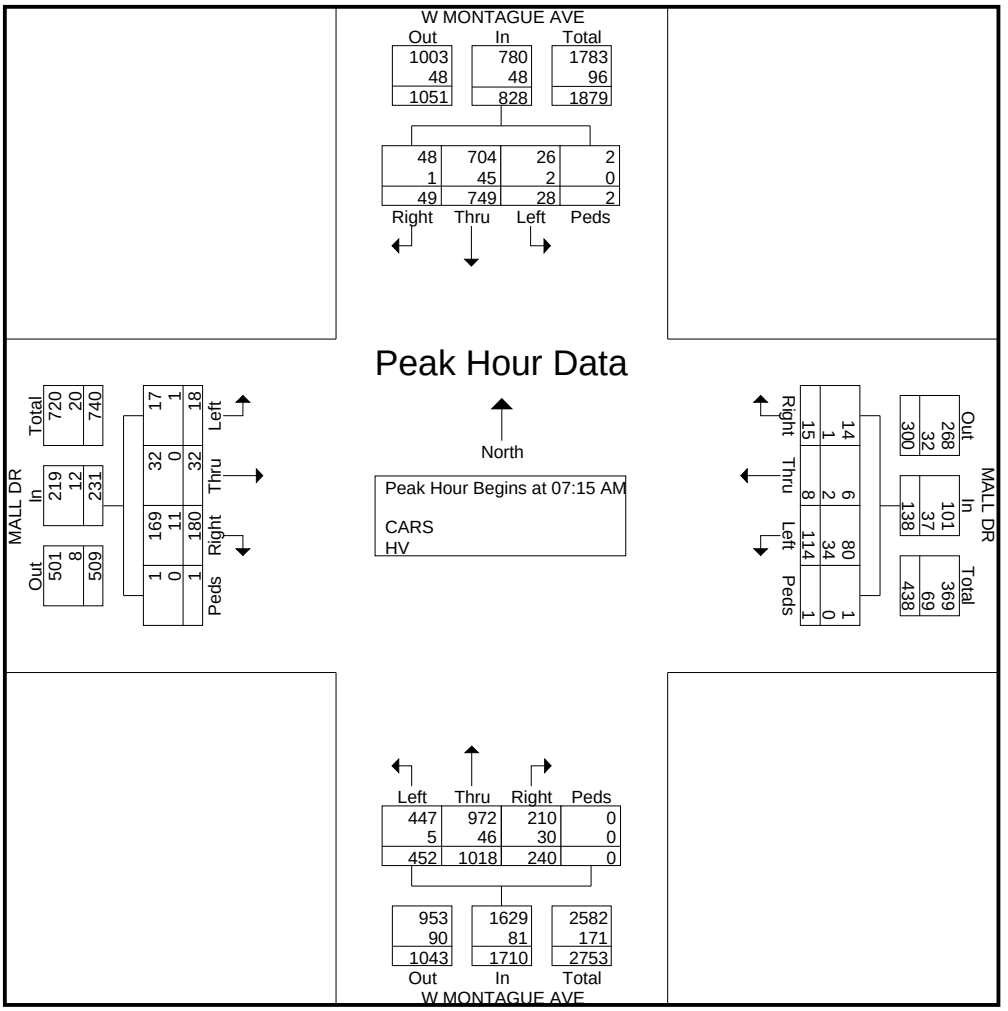
	W MONTAGUE AVE Southbound					MALL DR Westbound					W MONTAGUE AVE Northbound					MALL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**16**	170	7	0	193	3	1	25	**1**	30	55	240	90	0	385	41	5	4	0	50	658
07:30 AM	12	192	4	**2**	210	2	**4**	29	0	35	52	293	103	0	448	39	7	4	0	50	743
07:45 AM	12	**207**	**12**	0	**231**	1	2	26	0	29	**70**	**304**	**132**	0	**506**	43	**15**	**8**	0	**66**	**832**
08:00 AM	9	180	5	0	194	**9**	1	**34**	0	**44**	63	181	127	0	371	**57**	5	2	**1**	65	674
Total Volume	49	749	28	2	828	15	8	114	1	138	240	1018	452	0	1710	180	32	18	1	231	2907
% App. Total	5.9	90.5	3.4	0.2		10.9	5.8	82.6	0.7		14	59.5	26.4	0		77.9	13.9	7.8	0.4		
PHF	.766	.905	.583	.250	.896	.417	.500	.838	.250	.784	.857	.837	.856	.000	.845	.789	.533	.563	.250	.875	.873
CARS	48	704	26	2	780	14	6	80	1	101	210	972	447	0	1629	169	32	17	1	219	2729
% CARS	98.0	94.0	92.9	100	94.2	93.3	75.0	70.2	100	73.2	87.5	95.5	98.9	0	95.3	93.9	100	94.4	100	94.8	93.9
HV	1	45	2	0	48	1	2	34	0	37	30	46	5	0	81	11	0	1	0	12	178
% HV	2.0	6.0	7.1	0	5.8	6.7	25.0	29.8	0	26.8	12.5	4.5	1.1	0	4.7	6.1	0	5.6	0	5.2	6.1



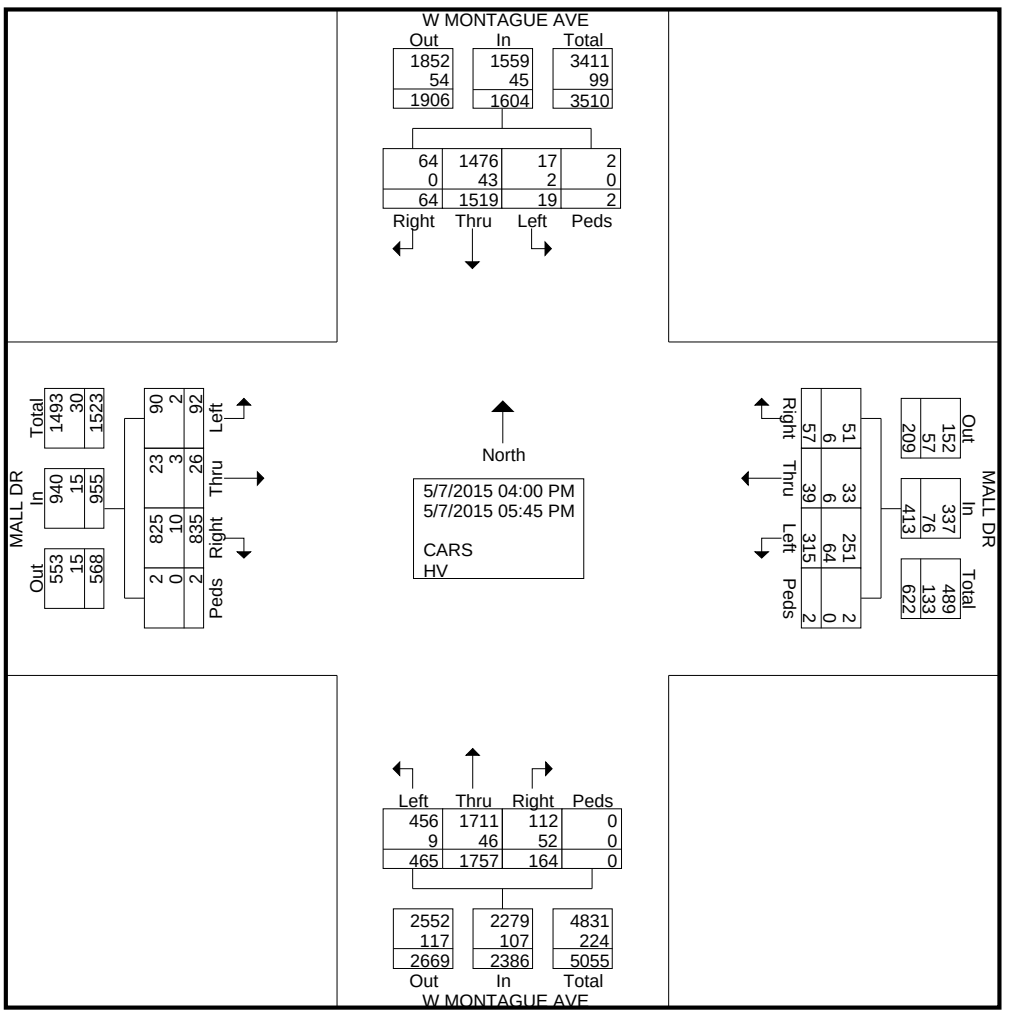
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #40 WMONTAGUE&MALLPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	W MONTAGUE AVE Southbound					MALL DR Westbound					W MONTAGUE AVE Northbound					MALL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	10	163	1	1	175	10	7	52	0	69	31	179	49	0	259	84	5	8	0	97	600
04:15 PM	9	213	1	0	223	7	8	42	1	58	19	201	64	0	284	82	4	8	0	94	659
04:30 PM	9	222	2	0	233	7	6	45	0	58	23	202	64	0	289	118	6	21	0	145	725
04:45 PM	12	156	5	0	173	8	6	35	0	49	21	214	53	0	288	77	3	12	1	93	603
Total	40	754	9	1	804	32	27	174	1	234	94	796	230	0	1120	361	18	49	1	429	2587
05:00 PM	4	209	2	0	215	11	7	58	0	76	18	276	50	0	344	192	1	23	0	216	851
05:15 PM	5	214	3	1	223	6	3	28	1	38	14	244	69	0	327	105	3	9	0	117	705
05:30 PM	8	171	2	0	181	4	1	33	0	38	18	241	55	0	314	92	1	7	0	100	633
05:45 PM	7	171	3	0	181	4	1	22	0	27	20	200	61	0	281	85	3	4	1	93	582
Total	24	765	10	1	800	25	12	141	1	179	70	961	235	0	1266	474	8	43	1	526	2771
Grand Total	64	1519	19	2	1604	57	39	315	2	413	164	1757	465	0	2386	835	26	92	2	955	5358
Apprch %	4	94.7	1.2	0.1		13.8	9.4	76.3	0.5		6.9	73.6	19.5	0		87.4	2.7	9.6	0.2		
Total %	1.2	28.4	0.4	0	29.9	1.1	0.7	5.9	0	7.7	3.1	32.8	8.7	0	44.5	15.6	0.5	1.7	0	17.8	
CARS	64	1476										1711									
% CARS	100	97.2	89.5	100	97.2	89.5	84.6	79.7	100	81.6	68.3	97.4	98.1	0	95.5	98.8	88.5	97.8	100	98.4	95.5
HV	0	43	2	0	45	6	6	64	0	76	52	46	9	0	107	10	3	2	0	15	243
% HV	0	2.8	10.5	0	2.8	10.5	15.4	20.3	0	18.4	31.7	2.6	1.9	0	4.5	1.2	11.5	2.2	0	1.6	4.5



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #40 WMONTAGUE&MALLPM
Site Code : 9513 - CHARLESTON 1
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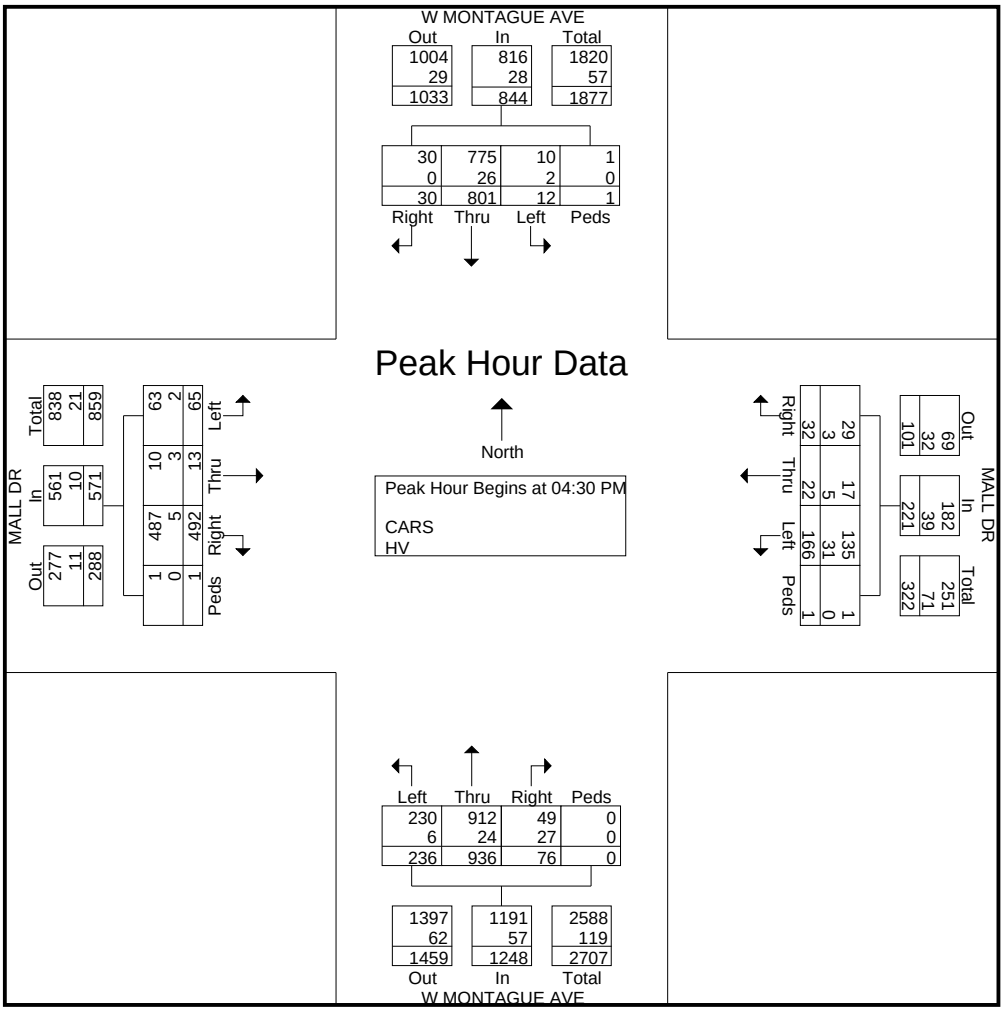
	W MONTAGUE AVE Southbound					MALL DR Westbound					W MONTAGUE AVE Northbound					MALL DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	9	**222**	2	0	**233**	7	6	45	0	58	**23**	202	64	0	289	118	**6**	21	0	145	725
04:45 PM	**12**	156	**5**	0	173	8	6	35	0	49	21	214	53	0	288	77	3	12	**1**	93	603
05:00 PM	4	209	2	0	215	**11**	**7**	**58**	0	**76**	18	**276**	50	0	**344**	**192**	1	**23**	0	**216**	**851**
05:15 PM	5	214	3	**1**	223	6	3	28	**1**	38	14	244	**69**	0	327	105	3	9	0	117	705
Total Volume	30	801	12	1	844	32	22	166	1	221	76	936	236	0	1248	492	13	65	1	571	2884
% App. Total	3.6	94.9	1.4	0.1		14.5	10	75.1	0.5		6.1	75	18.9	0		86.2	2.3	11.4	0.2		
PHF	.625	.902	.600	.250	.906	.727	.786	.716	.250	.727	.826	.848	.855	.000	.907	.641	.542	.707	.250	.661	.847
CARS	30	775	10	1	816	29	17	135	1	182	49	912	230	0	1191	487	10	63	1	561	2750
% CARS	100	96.8	83.3	100	96.7	90.6	77.3	81.3	100	82.4	64.5	97.4	97.5	0	95.4	99.0	76.9	96.9	100	98.2	95.4
HV	0	26	2	0	28	3	5	31	0	39	27	24	6	0	57	5	3	2	0	10	134
% HV	0	3.2	16.7	0	3.3	9.4	22.7	18.7	0	17.6	35.5	2.6	2.5	0	4.6	1.0	23.1	3.1	0	1.8	4.6



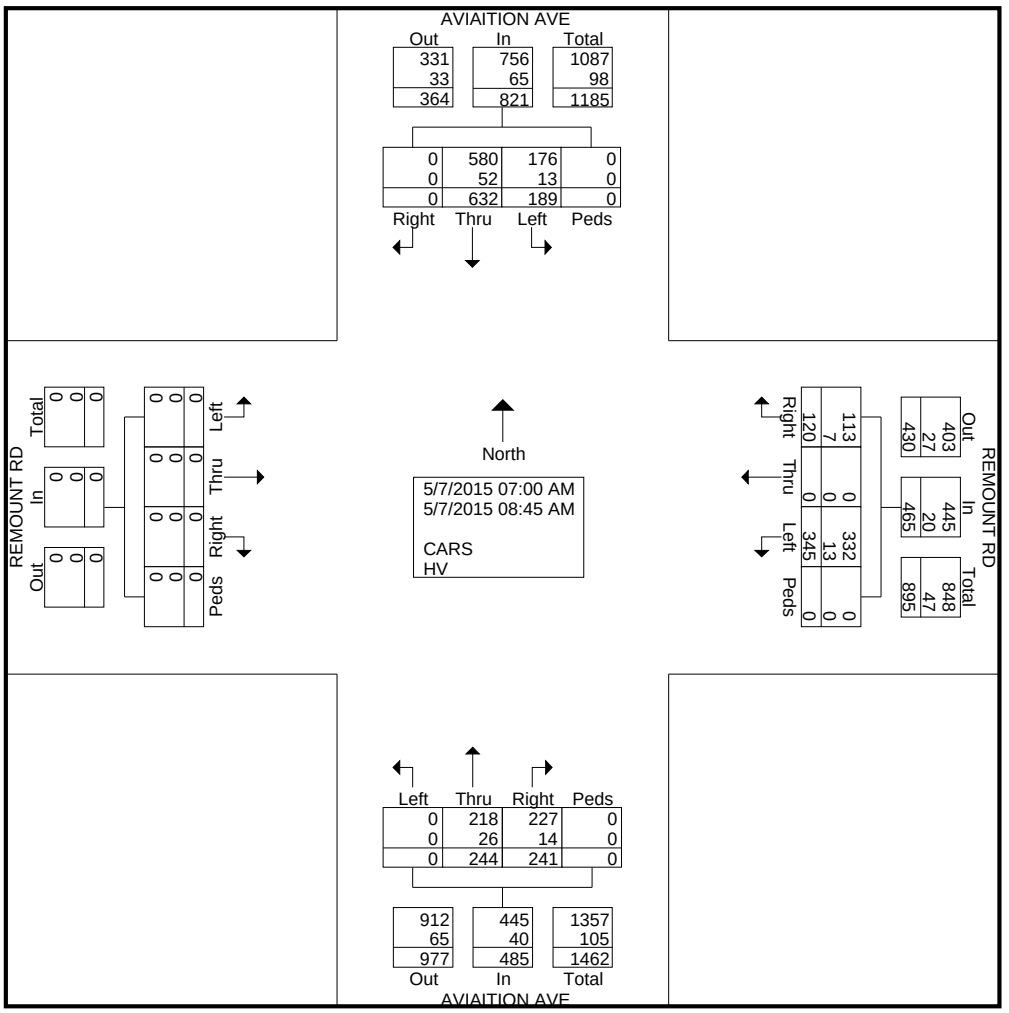
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #41 AVIATION&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	AVIAITION AVE Southbound					REMOUNT RD Westbound					AVIAITION AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	78	20	0	98	14	0	49	0	63	36	31	0	0	67	0	0	0	0	0	228
07:15 AM	0	78	25	0	103	17	0	36	0	53	38	31	0	0	69	0	0	0	0	0	225
07:30 AM	0	104	30	0	134	11	0	39	0	50	29	36	0	0	65	0	0	0	0	0	249
07:45 AM	0	80	29	0	109	19	0	43	0	62	29	48	0	0	77	0	0	0	0	0	248
Total	0	340	104	0	444	61	0	167	0	228	132	146	0	0	278	0	0	0	0	0	950
08:00 AM	0	77	25	0	102	20	0	42	0	62	30	29	0	0	59	0	0	0	0	0	223
08:15 AM	0	85	21	0	106	14	0	49	0	63	30	24	0	0	54	0	0	0	0	0	223
08:30 AM	0	64	21	0	85	11	0	39	0	50	16	19	0	0	35	0	0	0	0	0	170
08:45 AM	0	66	18	0	84	14	0	48	0	62	33	26	0	0	59	0	0	0	0	0	205
Total	0	292	85	0	377	59	0	178	0	237	109	98	0	0	207	0	0	0	0	0	821
Grand Total	0	632	189	0	821	120	0	345	0	465	241	244	0	0	485	0	0	0	0	0	1771
Apprch %	0	77	23	0		25.8	0	74.2	0		49.7	50.3	0	0		0	0	0	0		
Total %	0	35.7	10.7	0	46.4	6.8	0	19.5	0	26.3	13.6	13.8	0	0	27.4	0	0	0	0	0	
CARS	0	580	176	0	756	113	0	332	0	445	227	218	0	0	445	0	0	0	0	0	1646
% CARS	0	91.8	93.1	0	92.1	94.2	0	96.2	0	95.7	94.2	89.3	0	0	91.8	0	0	0	0	0	92.9
HV	0	52	13	0	65	7	0	13	0	20	14	26	0	0	40	0	0	0	0	0	125
% HV	0	8.2	6.9	0	7.9	5.8	0	3.8	0	4.3	5.8	10.7	0	0	8.2	0	0	0	0	0	7.1



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #41 AVIATION&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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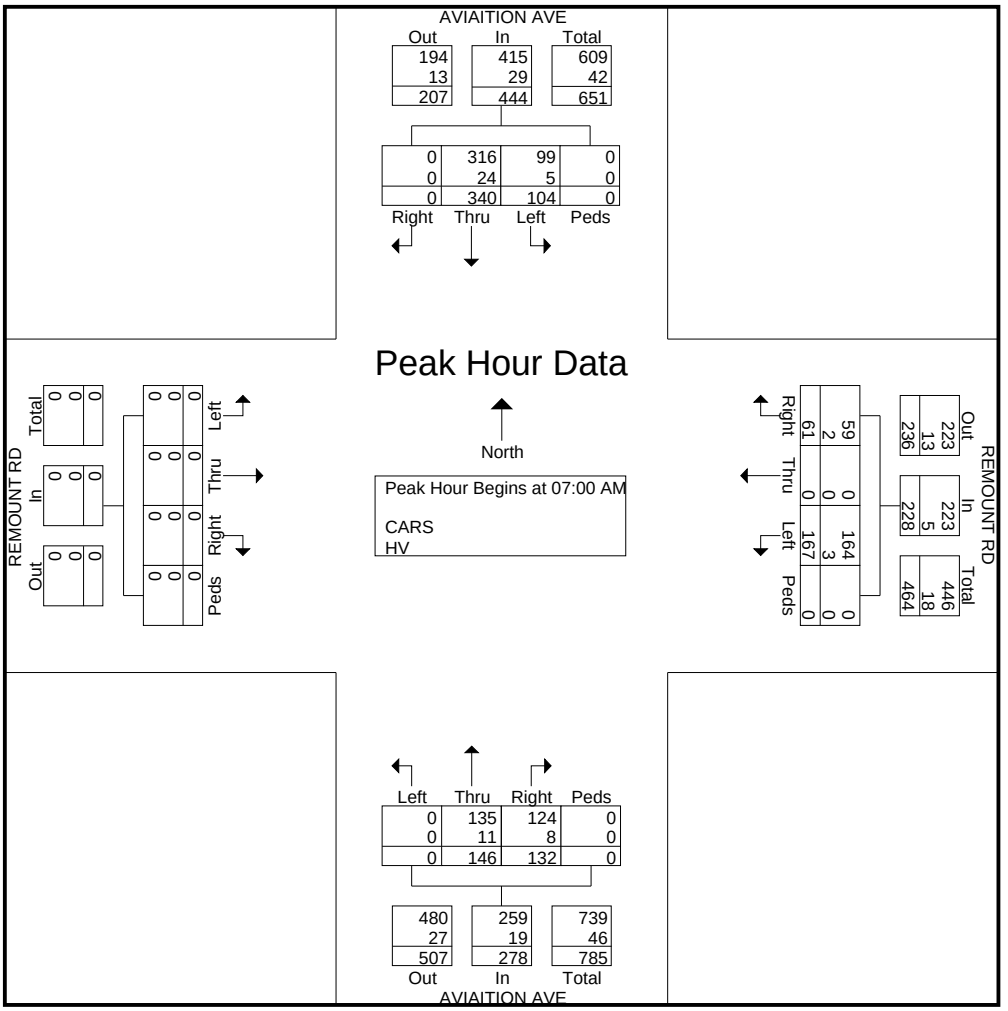
	AVIAITION AVE Southbound					REMOUNT RD Westbound					AVIAITION AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	78	20	0	98	14	0	**49**	0	**63**	36	31	0	0	67	0	0	0	0	0	228
07:15 AM	0	78	25	0	103	17	0	36	0	53	**38**	31	0	0	69	0	0	0	0	0	225
07:30 AM	0	**104**	**30**	0	**134**	11	0	39	0	50	29	36	0	0	65	0	0	0	0	0	**249**
07:45 AM	0	80	29	0	109	**19**	0	43	0	62	29	**48**	0	0	**77**	0	0	0	0	0	248
Total Volume	0	340	104	0	444	61	0	167	0	228	132	146	0	0	278	0	0	0	0	0	950
% App. Total	0	76.6	23.4	0		26.8	0	73.2	0		47.5	52.5	0	0		0	0	0	0		
PHF	.000	.817	.867	.000	.828	.803	.000	.852	.000	.905	.868	.760	.000	.000	.903	.000	.000	.000	.000	.000	.954
CARS	0	316	99	0	415	59	0	164	0	223	124	135	0	0	259	0	0	0	0	0	897
% CARS	0	92.9	95.2	0	93.5	96.7	0	98.2	0	97.8	93.9	92.5	0	0	93.2	0	0	0	0	0	94.4
HV	0	24	5	0	29	2	0	3	0	5	8	11	0	0	19	0	0	0	0	0	53
% HV	0	7.1	4.8	0	6.5	3.3	0	1.8	0	2.2	6.1	7.5	0	0	6.8	0	0	0	0	0	5.6



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #41 AVIATION&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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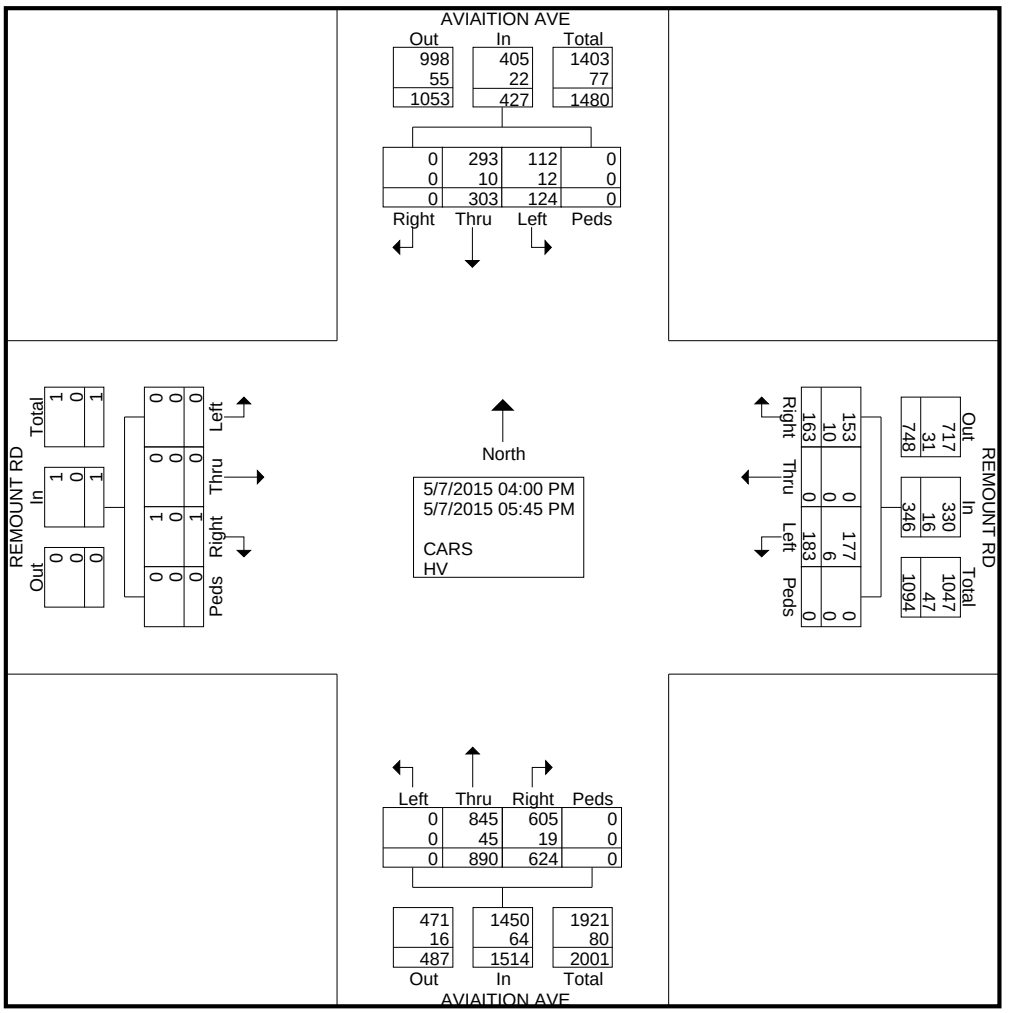
Groups Printed- CARS - HV

	AVIAITION AVE Southbound					REMOUNT RD Westbound					AVIAITION AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	47	27	0	74	19	0	14	0	33	70	93	0	0	163	0	0	0	0	0	270
04:15 PM	0	36	16	0	52	20	0	15	0	35	90	101	0	0	191	1	0	0	0	1	279
04:30 PM	0	40	20	0	60	18	0	26	0	44	99	104	0	0	203	0	0	0	0	0	307
04:45 PM	0	32	19	0	51	30	0	23	0	53	68	99	0	0	167	0	0	0	0	0	271
Total	0	155	82	0	237	87	0	78	0	165	327	397	0	0	724	1	0	0	0	1	1127
05:00 PM	0	38	19	0	57	26	0	35	0	61	91	122	0	0	213	0	0	0	0	0	331
05:15 PM	0	40	10	0	50	19	0	26	0	45	89	147	0	0	236	0	0	0	0	0	331
05:30 PM	0	42	11	0	53	22	0	28	0	50	60	135	0	0	195	0	0	0	0	0	298
05:45 PM	0	28	2	0	30	9	0	16	0	25	57	89	0	0	146	0	0	0	0	0	201
Total	0	148	42	0	190	76	0	105	0	181	297	493	0	0	790	0	0	0	0	0	1161
Grand Total	0	303	124	0	427	163	0	183	0	346	624	890	0	0	1514	1	0	0	0	1	2288
Apprch %	0	71	29	0		47.1	0	52.9	0		41.2	58.8	0	0		100	0	0	0		
Total %	0	13.2	5.4	0	18.7	7.1	0	8	0	15.1	27.3	38.9	0	0	66.2	0	0	0	0	0	
CARS	0	293	112	0	405	153	0	177	0	330	605	845	0	0	1450	1	0	0	0	1	2186
% CARS	0	96.7	90.3	0	94.8	93.9	0	96.7	0	95.4	97	94.9	0	0	95.8	100	0	0	0	100	95.5
HV	0	10	12	0	22	10	0	6	0	16	19	45	0	0	64	0	0	0	0	0	102
% HV	0	3.3	9.7	0	5.2	6.1	0	3.3	0	4.6	3	5.1	0	0	4.2	0	0	0	0	0	4.5



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File Name : #41 AVIATION&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
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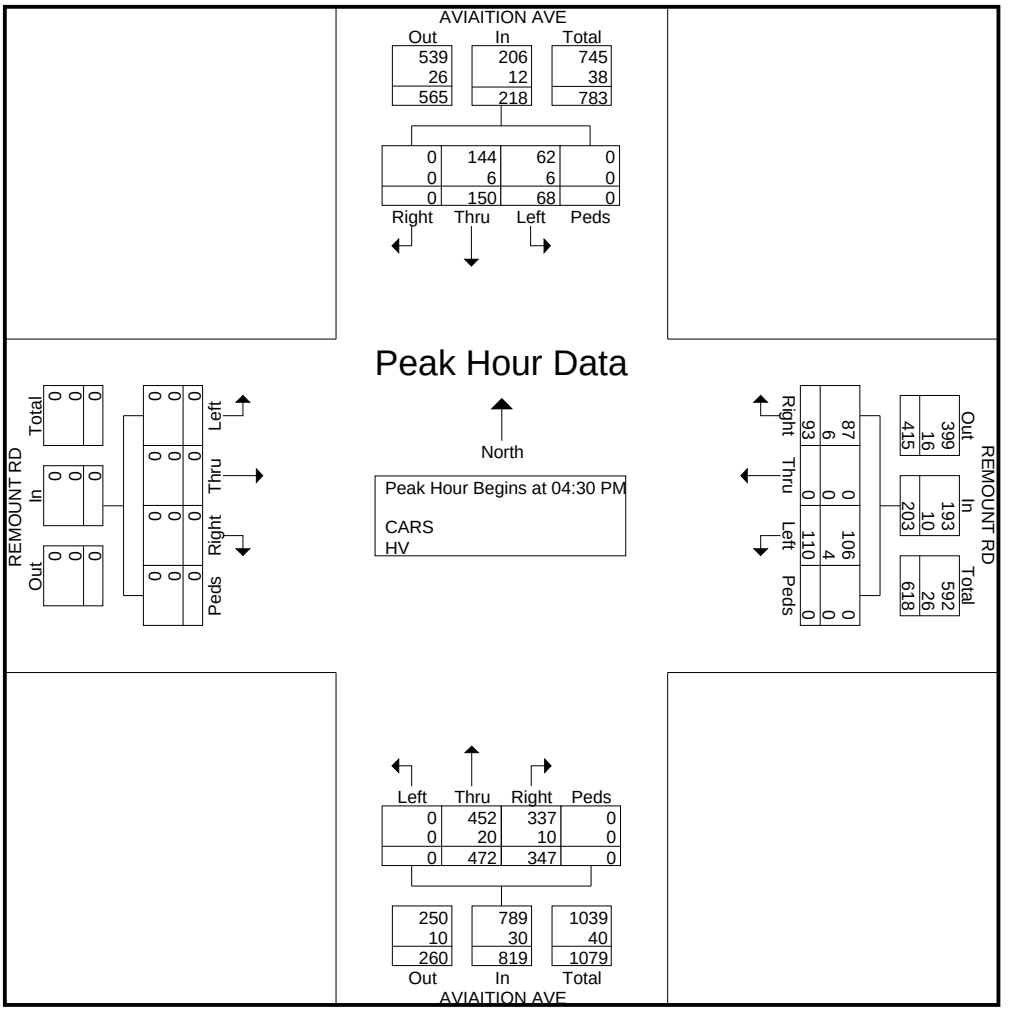
	AVIAITION AVE Southbound					REMOUNT RD Westbound					AVIAITION AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	**40**	**20**	0	**60**	18	0	26	0	44	**99**	104	0	0	203	0	0	0	0	0	307
04:45 PM	0	32	19	0	51	**30**	0	23	0	53	68	99	0	0	167	0	0	0	0	0	271
05:00 PM	0	38	19	0	57	26	0	**35**	0	**61**	91	122	0	0	213	0	0	0	0	0	**331**
05:15 PM	0	40	10	0	50	19	0	26	0	45	89	**147**	0	0	**236**	0	0	0	0	0	331
Total Volume	0	150	68	0	218	93	0	110	0	203	347	472	0	0	819	0	0	0	0	0	1240
% App. Total	0	68.8	31.2	0		45.8	0	54.2	0		42.4	57.6	0	0		0	0	0	0		
PHF	.000	.938	.850	.000	.908	.775	.000	.786	.000	.832	.876	.803	.000	.000	.868	.000	.000	.000	.000	.000	.937
CARS	0	144	62	0	206	87	0	106	0	193	337	452	0	0	789	0	0	0	0	0	1188
% CARS	0	96.0	91.2	0	94.5	93.5	0	96.4	0	95.1	97.1	95.8	0	0	96.3	0	0	0	0	0	95.8
HV	0	6	6	0	12	6	0	4	0	10	10	20	0	0	30	0	0	0	0	0	52
% HV	0	4.0	8.8	0	5.5	6.5	0	3.6	0	4.9	2.9	4.2	0	0	3.7	0	0	0	0	0	4.2



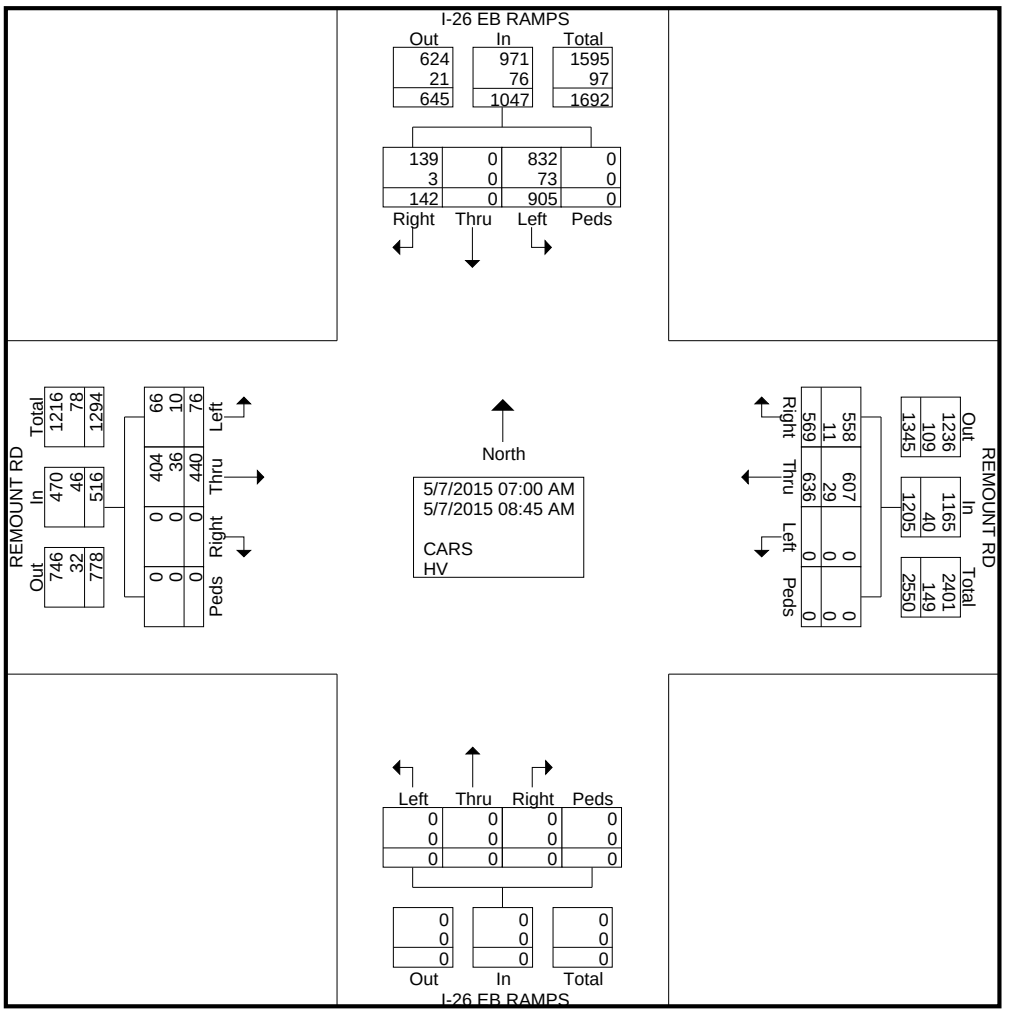
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #42 I26EBRAMPS&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					REMOUNT RD Westbound					I-26 EB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	25	0	122	0	147	71	86	0	0	157	0	0	0	0	0	0	67	10	0	77	381
07:15 AM	12	0	98	0	110	74	57	0	0	131	0	0	0	0	0	0	59	7	0	66	307
07:30 AM	14	0	125	0	139	92	71	0	0	163	0	0	0	0	0	0	68	8	0	76	378
07:45 AM	27	0	132	0	159	72	88	0	0	160	0	0	0	0	0	0	56	8	0	64	383
Total	78	0	477	0	555	309	302	0	0	611	0	0	0	0	0	0	250	33	0	283	1449
08:00 AM	24	0	137	0	161	69	95	0	0	164	0	0	0	0	0	0	48	5	0	53	378
08:15 AM	14	0	112	0	126	65	92	0	0	157	0	0	0	0	0	0	53	7	0	60	343
08:30 AM	8	0	104	0	112	63	74	0	0	137	0	0	0	0	0	0	51	18	0	69	318
08:45 AM	18	0	75	0	93	63	73	0	0	136	0	0	0	0	0	0	38	13	0	51	280
Total	64	0	428	0	492	260	334	0	0	594	0	0	0	0	0	0	190	43	0	233	1319
Grand Total	142	0	905	0	1047	569	636	0	0	1205	0	0	0	0	0	0	440	76	0	516	2768
Apprch %	13.6	0	86.4	0		47.2	52.8	0	0		0	0	0	0		0	85.3	14.7	0		
Total %	5.1	0	32.7	0	37.8	20.6	23	0	0	43.5	0	0	0	0	0	0	15.9	2.7	0	18.6	
CARS	139	0	832	0	971	558	607	0	0	1165	0	0	0	0	0	0	404	66	0	470	2606
% CARS	97.9	0	91.9	0	92.7	98.1	95.4	0	0	96.7	0	0	0	0	0	0	91.8	86.8	0	91.1	94.1
HV	3	0	73	0	76	11	29	0	0	40	0	0	0	0	0	0	36	10	0	46	162
% HV	2.1	0	8.1	0	7.3	1.9	4.6	0	0	3.3	0	0	0	0	0	0	8.2	13.2	0	8.9	5.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #42 I26EBRAMPS&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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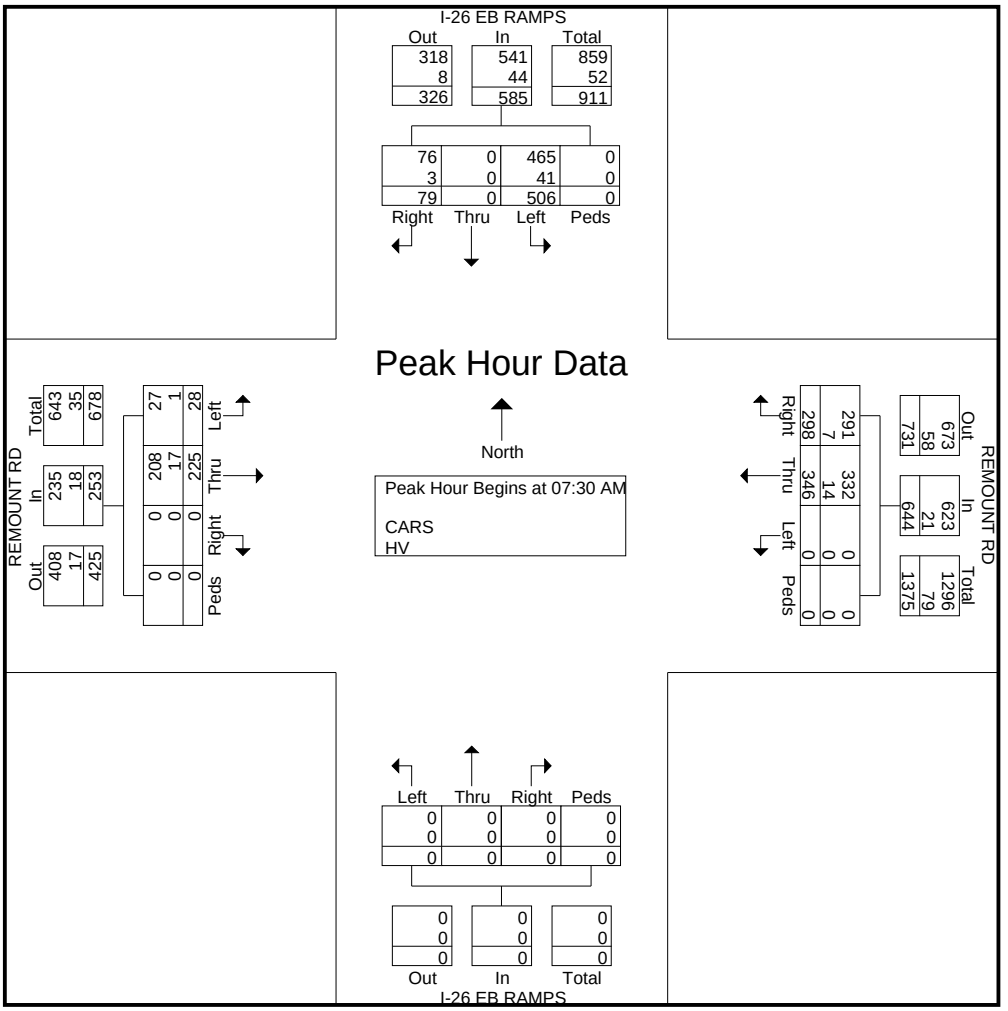
	I-26 EB RAMPS Southbound					REMOUNT RD Westbound					I-26 EB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	14	0	125	0	139	**92**	71	0	0	163	0	0	0	0	0	0	**68**	**8**	0	**76**	378
07:45 AM	**27**	0	132	0	159	72	88	0	0	160	0	0	0	0	0	0	56	8	0	64	**383**
08:00 AM	24	0	**137**	0	**161**	69	**95**	0	0	**164**	0	0	0	0	0	0	48	5	0	53	378
08:15 AM	14	0	112	0	126	65	92	0	0	157	0	0	0	0	0	0	53	7	0	60	343
Total Volume	79	0	506	0	585	298	346	0	0	644	0	0	0	0	0	0	225	28	0	253	1482
% App. Total	13.5	0	86.5	0		46.3	53.7	0	0		0	0	0	0		0	88.9	11.1	0		
PHF	.731	.000	.923	.000	.908	.810	.911	.000	.000	.982	.000	.000	.000	.000	.000	.000	.827	.875	.000	.832	.967
CARS	76	0	465	0	541	291	332	0	0	623	0	0	0	0	0	0	208	27	0	235	1399
% CARS	96.2	0	91.9	0	92.5	97.7	96.0	0	0	96.7	0	0	0	0	0	0	92.4	96.4	0	92.9	94.4
HV	3	0	41	0	44	7	14	0	0	21	0	0	0	0	0	0	17	1	0	18	83
% HV	3.8	0	8.1	0	7.5	2.3	4.0	0	0	3.3	0	0	0	0	0	0	7.6	3.6	0	7.1	5.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #42 I26EBRAMPS&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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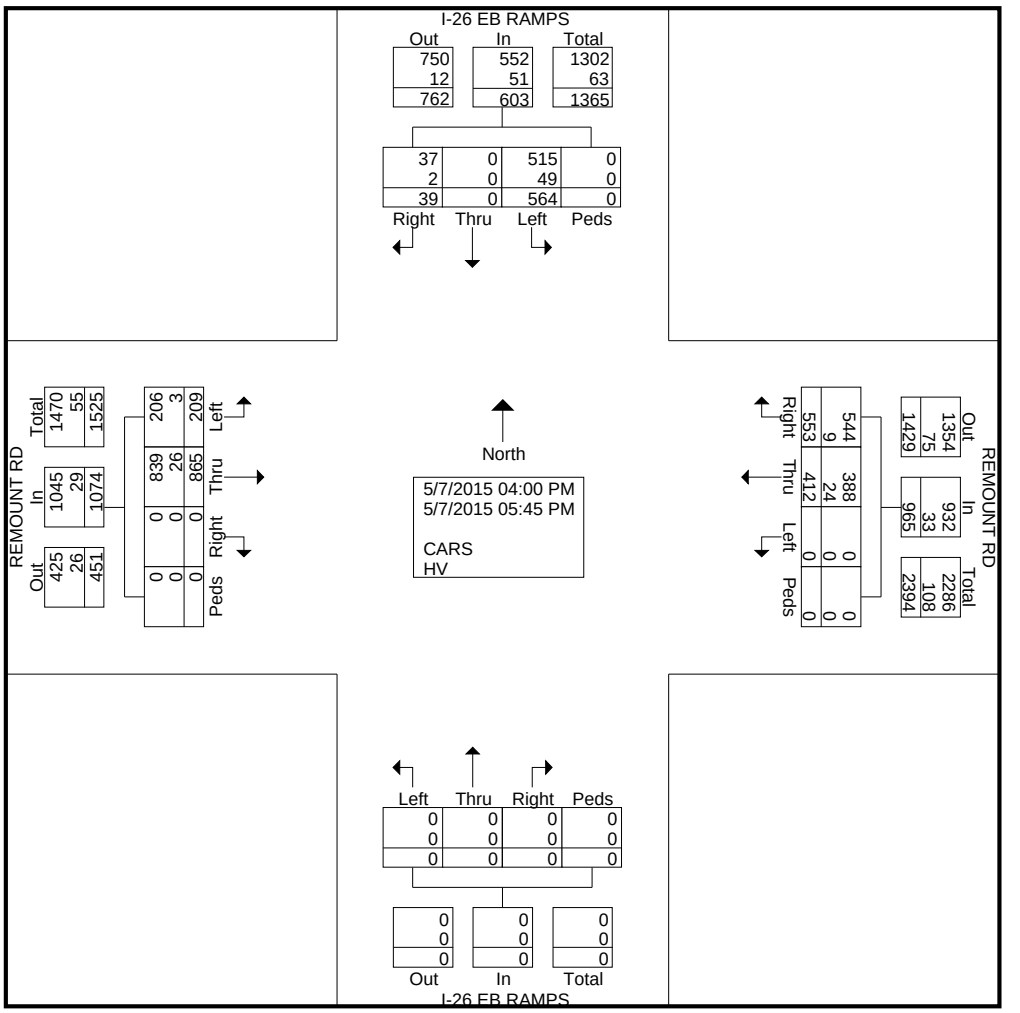
Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					REMOUNT RD Westbound					I-26 EB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	8	0	57	0	65	69	43	0	0	112	0	0	0	0	0	0	104	26	0	130	307
04:15 PM	4	0	70	0	74	70	45	0	0	115	0	0	0	0	0	0	114	28	0	142	331
04:30 PM	7	0	66	0	73	61	58	0	0	119	0	0	0	0	0	0	129	33	0	162	354
04:45 PM	5	0	70	0	75	63	60	0	0	123	0	0	0	0	0	0	108	28	0	136	334
Total	24	0	263	0	287	263	206	0	0	469	0	0	0	0	0	0	455	115	0	570	1326
05:00 PM	6	0	65	0	71	96	43	0	0	139	0	0	0	0	0	0	117	40	0	157	367
05:15 PM	1	0	83	0	84	63	55	0	0	118	0	0	0	0	0	0	97	21	0	118	320
05:30 PM	5	0	80	0	85	84	50	0	0	134	0	0	0	0	0	0	115	25	0	140	359
05:45 PM	3	0	73	0	76	47	58	0	0	105	0	0	0	0	0	0	81	8	0	89	270
Total	15	0	301	0	316	290	206	0	0	496	0	0	0	0	0	0	410	94	0	504	1316
Grand Total	39	0	564	0	603	553	412	0	0	965	0	0	0	0	0	0	865	209	0	1074	2642
Apprch %	6.5	0	93.5	0		57.3	42.7	0	0		0	0	0	0		0	80.5	19.5	0		
Total %	1.5	0	21.3	0	22.8	20.9	15.6	0	0	36.5	0	0	0	0	0	0	32.7	7.9	0	40.7	
CARS	37	0	515	0	552	544	388	0	0	932	0	0	0	0	0	0	839	206	0	1045	2529
% CARS	94.9	0	91.3	0	91.5	98.4	94.2	0	0	96.6	0	0	0	0	0	0	97	98.6	0	97.3	95.7
HV	2	0	49	0	51	9	24	0	0	33	0	0	0	0	0	0	26	3	0	29	113
% HV	5.1	0	8.7	0	8.5	1.6	5.8	0	0	3.4	0	0	0	0	0	0	3	1.4	0	2.7	4.3



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File Name : #42 I26EBRAMPS&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
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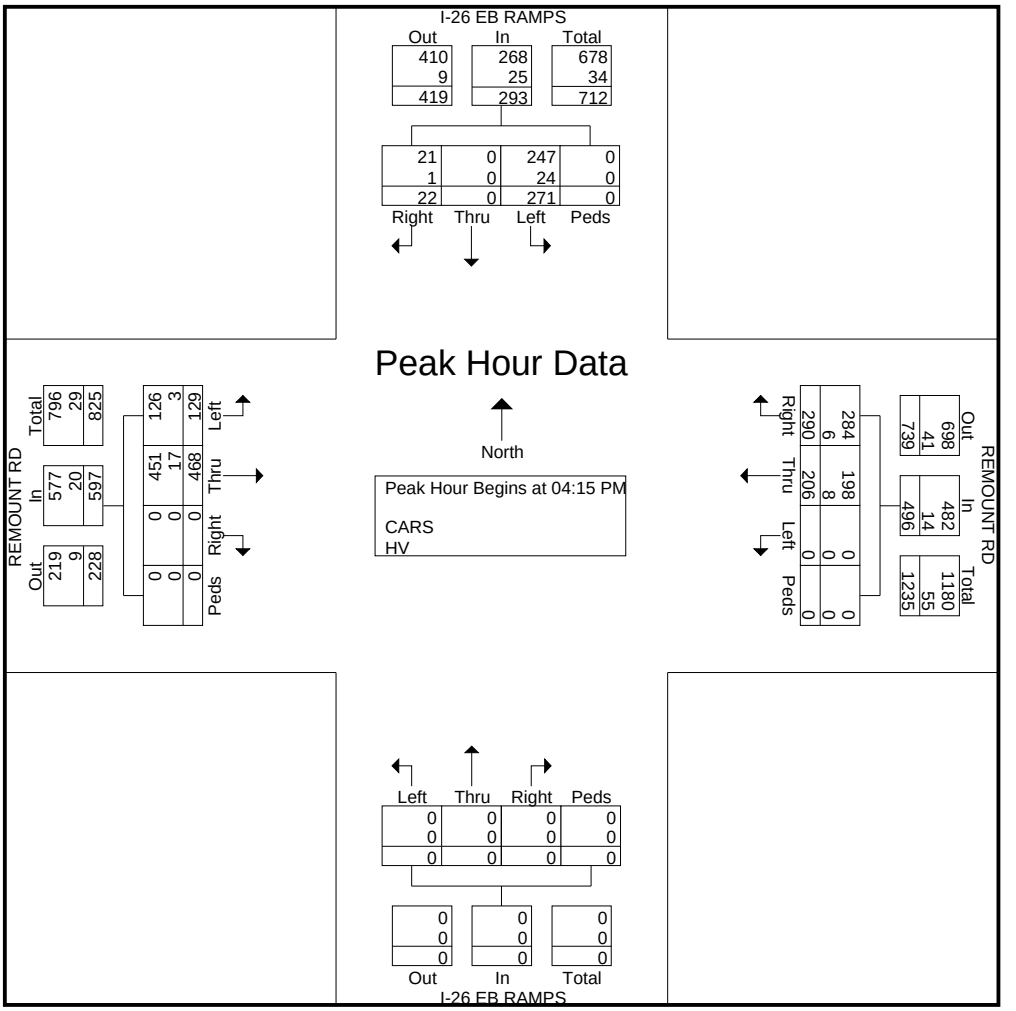
	I-26 EB RAMPS Southbound					REMOUNT RD Westbound					I-26 EB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	4	0	**70**	0	74	70	45	0	0	115	0	0	0	0	0	0	114	28	0	142	331
04:30 PM	**7**	0	66	0	73	61	58	0	0	119	0	0	0	0	0	0	**129**	33	0	**162**	354
04:45 PM	5	0	70	0	**75**	63	**60**	0	0	123	0	0	0	0	0	0	108	28	0	136	334
05:00 PM	6	0	65	0	71	**96**	43	0	0	**139**	0	0	0	0	0	0	117	**40**	0	157	**367**
Total Volume	22	0	271	0	293	290	206	0	0	496	0	0	0	0	0	0	468	129	0	597	1386
% App. Total	7.5	0	92.5	0		58.5	41.5	0	0		0	0	0	0		0	78.4	21.6	0		
PHF	.786	.000	.968	.000	.977	.755	.858	.000	.000	.892	.000	.000	.000	.000	.000	.000	.907	.806	.000	.921	.944
CARS	21	0	247	0	268	284	198	0	0	482	0	0	0	0	0	0	451	126	0	577	1327
% CARS	95.5	0	91.1	0	91.5	97.9	96.1	0	0	97.2	0	0	0	0	0	0	96.4	97.7	0	96.6	95.7
HV	1	0	24	0	25	6	8	0	0	14	0	0	0	0	0	0	17	3	0	20	59
% HV	4.5	0	8.9	0	8.5	2.1	3.9	0	0	2.8	0	0	0	0	0	0	3.6	2.3	0	3.4	4.3



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #43 I26WBRAMPS&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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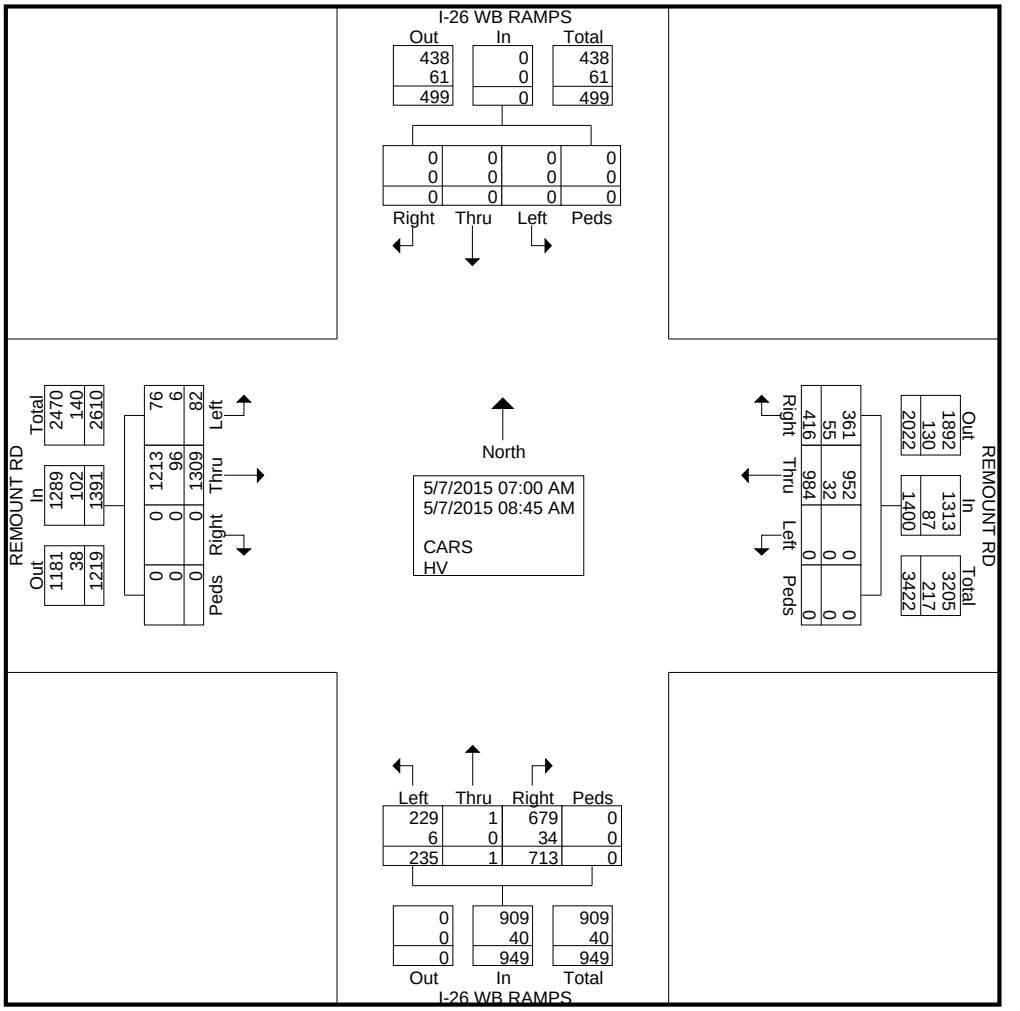
Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					REMOUNT RD Westbound					I-26 WB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	59	150	0	0	209	65	0	22	0	87	0	141	22	0	163	459
07:15 AM	0	0	0	0	0	53	117	0	0	170	57	0	23	0	80	0	162	15	0	177	427
07:30 AM	0	0	0	0	0	63	139	0	0	202	94	0	20	0	114	0	172	11	0	183	499
07:45 AM	0	0	0	0	0	39	113	0	0	152	88	0	38	0	126	0	171	7	0	178	456
Total	0	0	0	0	0	214	519	0	0	733	304	0	103	0	407	0	646	55	0	701	1841
08:00 AM	0	0	0	0	0	62	138	0	0	200	126	1	38	0	165	0	156	10	0	166	531
08:15 AM	0	0	0	0	0	46	121	0	0	167	115	0	26	0	141	0	166	8	0	174	482
08:30 AM	0	0	0	0	0	42	88	0	0	130	97	0	39	0	136	0	178	2	0	180	446
08:45 AM	0	0	0	0	0	52	118	0	0	170	71	0	29	0	100	0	163	7	0	170	440
Total	0	0	0	0	0	202	465	0	0	667	409	1	132	0	542	0	663	27	0	690	1899
Grand Total	0	0	0	0	0	416	984	0	0	1400	713	1	235	0	949	0	1309	82	0	1391	3740
Apprch %	0	0	0	0		29.7	70.3	0	0		75.1	0.1	24.8	0		0	94.1	5.9	0		
Total %	0	0	0	0	0	11.1	26.3	0	0	37.4	19.1	0	6.3	0	25.4	0	35	2.2	0	37.2	
CARS	0	0	0	0	0	361	952	0	0	1313	679	1	229	0	909	0	1213				
% CARS	0	0	0	0	0	86.8	96.7	0	0	93.8	95.2	100	97.4	0	95.8	0	92.7	92.7	0	92.7	93.9
HV	0	0	0	0	0	55	32	0	0	87	34	0	6	0	40	0	96	6	0	102	229
% HV	0	0	0	0	0	13.2	3.3	0	0	6.2	4.8	0	2.6	0	4.2	0	7.3	7.3	0	7.3	6.1



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File Name : #43 I26WBRAMPS&REMOUNTAM
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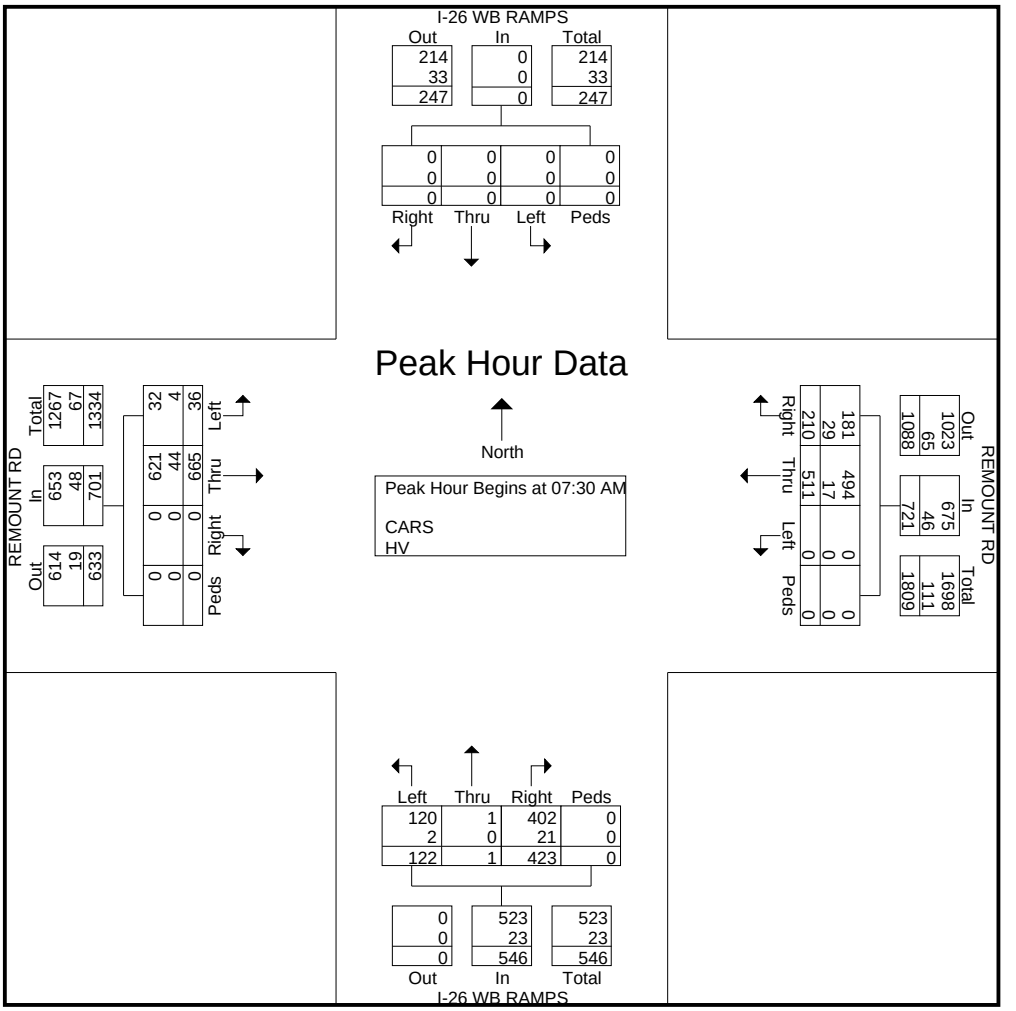
	I-26 WB RAMPS Southbound					REMOUNT RD Westbound					I-26 WB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	**63**	**139**	0	0	**202**	94	0	20	0	114	0	**172**	**11**	0	**183**	499
07:45 AM	0	0	0	0	0	39	113	0	0	152	88	0	**38**	0	126	0	171	7	0	178	456
08:00 AM	0	0	0	0	0	62	138	0	0	200	**126**	**1**	38	0	**165**	0	156	10	0	166	**531**
08:15 AM	0	0	0	0	0	46	121	0	0	167	115	0	26	0	141	0	166	8	0	174	482
Total Volume	0	0	0	0	0	210	511	0	0	721	423	1	122	0	546	0	665	36	0	701	1968
% App. Total	0	0	0	0		29.1	70.9	0	0		77.5	0.2	22.3	0		0	94.9	5.1	0		
PHF	.000	.000	.000	.000	.000	.833	.919	.000	.000	.892	.839	.250	.803	.000	.827	.000	.967	.818	.000	.958	.927
CARS	0	0	0	0	0	181	494	0	0	675	402	1	120	0	523	0	621	32	0	653	1851
% CARS	0	0	0	0	0	86.2	96.7	0	0	93.6	95.0	100	98.4	0	95.8	0	93.4	88.9	0	93.2	94.1
HV	0	0	0	0	0	29	17	0	0	46	21	0	2	0	23	0	44	4	0	48	117
% HV	0	0	0	0	0	13.8	3.3	0	0	6.4	5.0	0	1.6	0	4.2	0	6.6	11.1	0	6.8	5.9



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File Name : #43 I26WBRAMPS&REMOUNTPM
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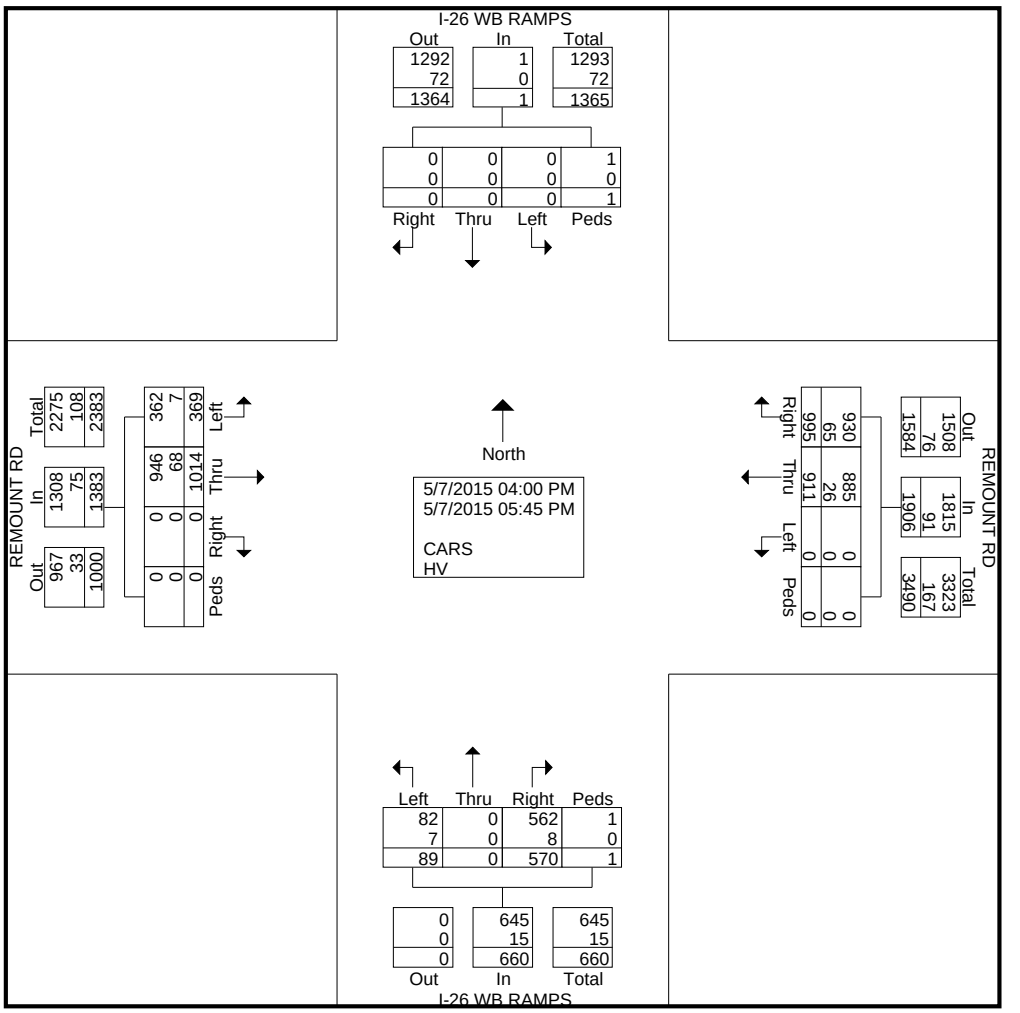
Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					REMOUNT RD Westbound					I-26 WB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	143	107	0	0	250	92	0	13	1	106	0	115	45	0	160	516
04:15 PM	0	0	0	0	0	114	96	0	0	210	88	0	14	0	102	0	136	57	0	193	505
04:30 PM	0	0	0	0	0	122	106	0	0	228	94	0	16	0	110	0	146	55	0	201	539
04:45 PM	0	0	0	0	0	133	116	0	0	249	58	0	14	0	72	0	121	48	0	169	490
Total	0	0	0	0	0	512	425	0	0	937	332	0	57	1	390	0	518	205	0	723	2050
05:00 PM	0	0	0	0	0	134	144	0	0	278	60	0	9	0	69	0	140	62	0	202	549
05:15 PM	0	0	0	0	0	116	123	0	0	239	51	0	9	0	60	0	145	46	0	191	490
05:30 PM	0	0	0	1	1	127	120	0	0	247	57	0	7	0	64	0	109	28	0	137	449
05:45 PM	0	0	0	0	0	106	99	0	0	205	70	0	7	0	77	0	102	28	0	130	412
Total	0	0	0	1	1	483	486	0	0	969	238	0	32	0	270	0	496	164	0	660	1900
Grand Total	0	0	0	1	1	995	911	0	0	1906	570	0	89	1	660	0	1014	369	0	1383	3950
Apprch %	0	0	0	100		52.2	47.8	0	0		86.4	0	13.5	0.2		0	73.3	26.7	0		
Total %	0	0	0	0	0	25.2	23.1	0	0	48.3	14.4	0	2.3	0	16.7	0	25.7	9.3	0	35	
CARS	0	0	0	1	1	930	885	0	0	1815	562	0	82	1	645	0	946	362	0	1308	3769
% CARS	0	0	0	100	100	93.5	97.1	0	0	95.2	98.6	0	92.1	100	97.7	0	93.3	98.1	0	94.6	95.4
HV	0	0	0	0	0	65	26	0	0	91	8	0	7	0	15	0	68	7	0	75	181
% HV	0	0	0	0	0	6.5	2.9	0	0	4.8	1.4	0	7.9	0	2.3	0	6.7	1.9	0	5.4	4.6



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File Name : #43 I26WBRAMPS&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
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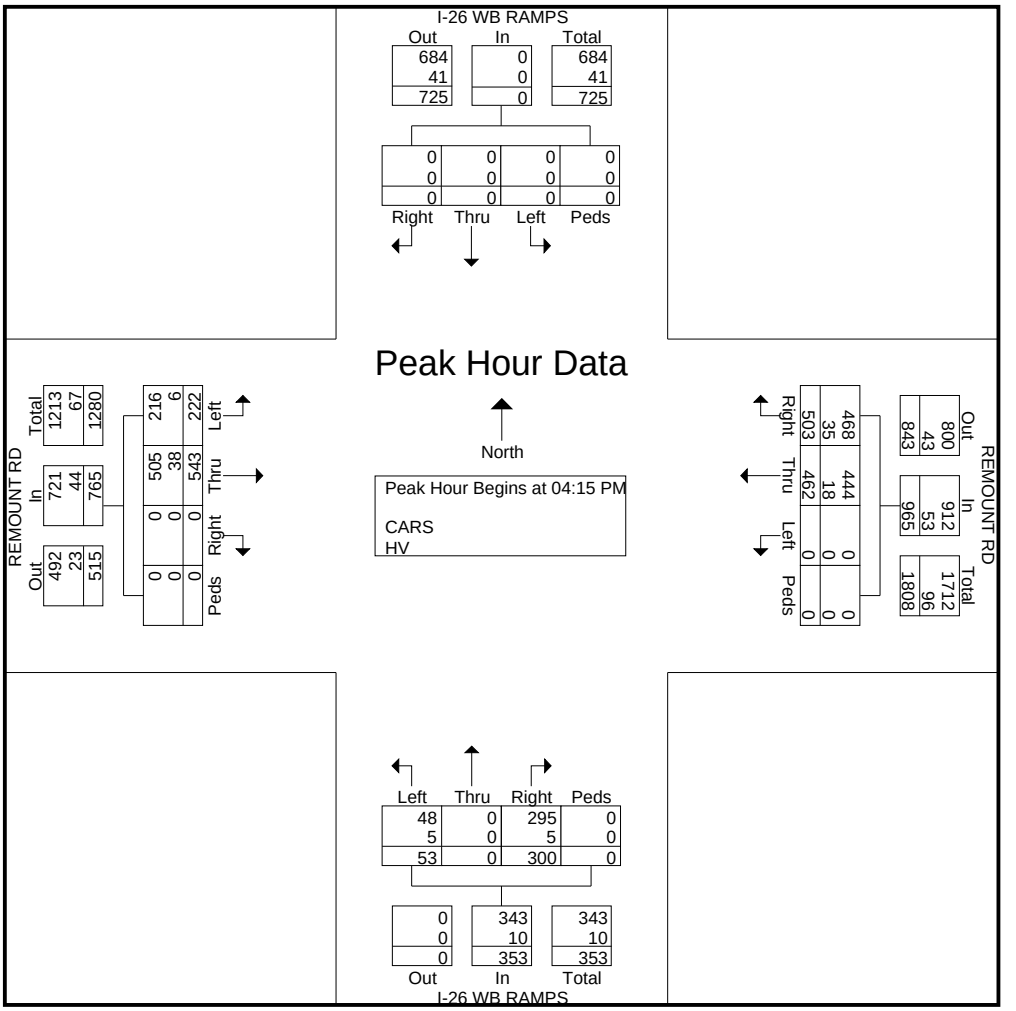
	I-26 WB RAMPS Southbound					REMOUNT RD Westbound					I-26 WB RAMPS Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0	0	114	96	0	0	210	88	0	14	0	102	0	136	57	0	193	505
04:30 PM	0	0	0	0	0	122	106	0	0	228	**94**	0	**16**	0	**110**	0	**146**	55	0	201	539
04:45 PM	0	0	0	0	0	133	116	0	0	249	58	0	14	0	72	0	121	48	0	169	490
05:00 PM	0	0	0	0	0	**134**	**144**	0	0	**278**	60	0	9	0	69	0	140	**62**	0	**202**	**549**
Total Volume	0	0	0	0	0	503	462	0	0	965	300	0	53	0	353	0	543	222	0	765	2083
% App. Total	0	0	0	0		52.1	47.9	0	0		85	0	15	0		0	71	29	0		
PHF	.000	.000	.000	.000	.000	.938	.802	.000	.000	.868	.798	.000	.828	.000	.802	.000	.930	.895	.000	.947	.949
CARS	0	0	0	0	0	468	444	0	0	912	295	0	48	0	343	0	505	216	0	721	1976
% CARS	0	0	0	0	0	93.0	96.1	0	0	94.5	98.3	0	90.6	0	97.2	0	93.0	97.3	0	94.2	94.9
HV	0	0	0	0	0	35	18	0	0	53	5	0	5	0	10	0	38	6	0	44	107
% HV	0	0	0	0	0	7.0	3.9	0	0	5.5	1.7	0	9.4	0	2.8	0	7.0	2.7	0	5.8	5.1



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #44 RIVERS&REMOUNTAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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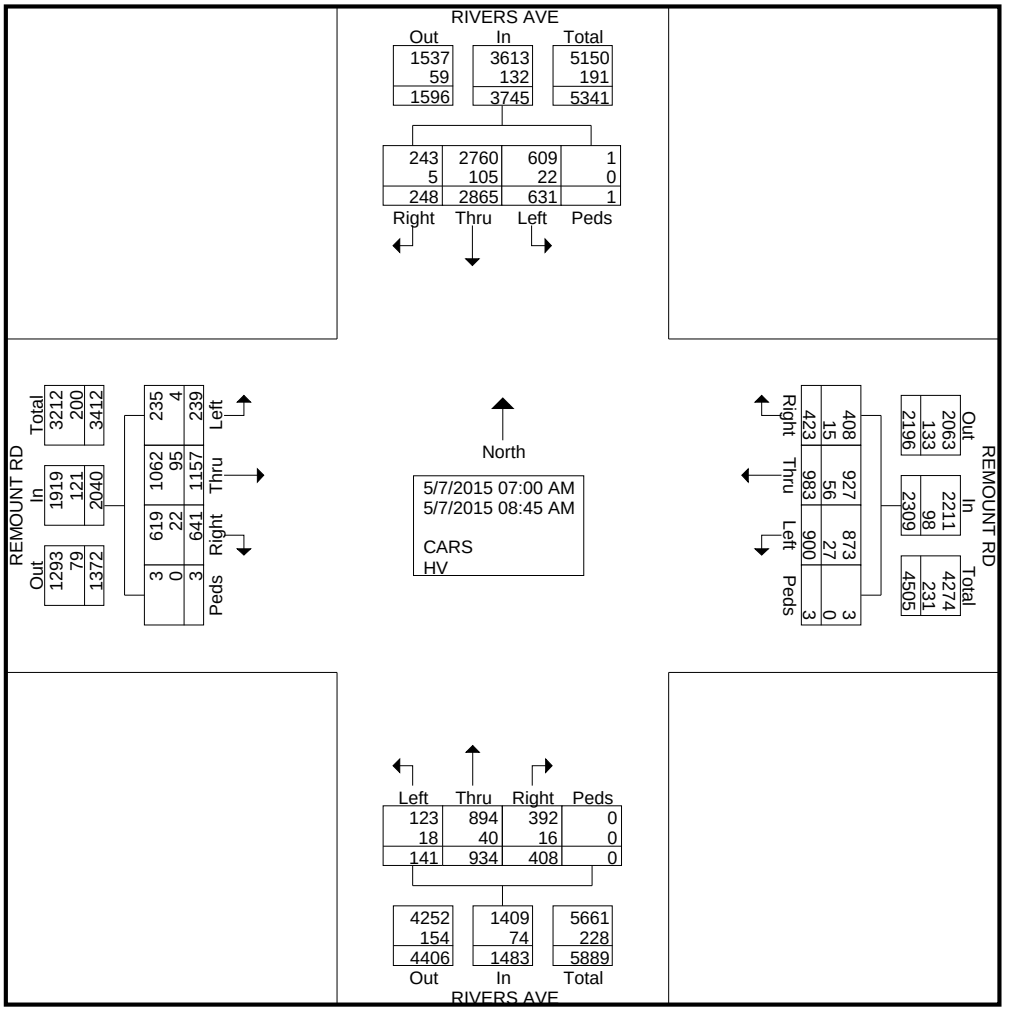
Groups Printed- CARS - HV

	RIVERS AVE Southbound					REMOUNT RD Westbound					RIVERS AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	43	461	112	1	617	37	138	76	0	251	37	75	10	0	122	59	138	20	0	217	1207
07:15 AM	31	397	90	0	518	49	140	128	0	317	46	80	25	0	151	57	122	22	0	201	1187
07:30 AM	38	463	104	0	605	57	118	110	1	286	37	132	10	0	179	74	171	19	0	264	1334
07:45 AM	26	342	77	0	445	51	121	143	1	316	54	104	22	0	180	95	145	28	1	269	1210
Total	138	1663	383	1	2185	194	517	457	2	1170	174	391	67	0	632	285	576	89	1	951	4938
08:00 AM	31	356	66	0	453	35	118	145	1	299	61	138	17	0	216	94	165	25	0	284	1252
08:15 AM	28	339	75	0	442	69	121	123	0	313	51	121	17	0	189	102	144	42	1	289	1233
08:30 AM	23	238	57	0	318	39	100	94	0	233	60	116	21	0	197	84	152	42	1	279	1027
08:45 AM	28	269	50	0	347	86	127	81	0	294	62	168	19	0	249	76	120	41	0	237	1127
Total	110	1202	248	0	1560	229	466	443	1	1139	234	543	74	0	851	356	581	150	2	1089	4639
Grand Total	248	2865	631	1	3745	423	983	900	3	2309	408	934	141	0	1483	641	1157	239	3	2040	9577
Apprch %	6.6	76.5	16.8	0		18.3	42.6	39	0.1		27.5	63	9.5	0		31.4	56.7	11.7	0.1		
Total %	2.6	29.9	6.6	0	39.1	4.4	10.3	9.4	0	24.1	4.3	9.8	1.5	0	15.5	6.7	12.1	2.5	0	21.3	
CARS	243	2760															1062				
% CARS	98	96.3	96.5	100	96.5	96.5	94.3	97	100	95.8	96.1	95.7	87.2	0	95	96.6	91.8	98.3	100	94.1	95.6
HV	5	105	22	0	132	15	56	27	0	98	16	40	18	0	74	22	95	4	0	121	425
% HV	2	3.7	3.5	0	3.5	3.5	5.7	3	0	4.2	3.9	4.3	12.8	0	5	3.4	8.2	1.7	0	5.9	4.4



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1336 Farmer Rd
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File Name : #44 RIVERS&REMOUNTAM
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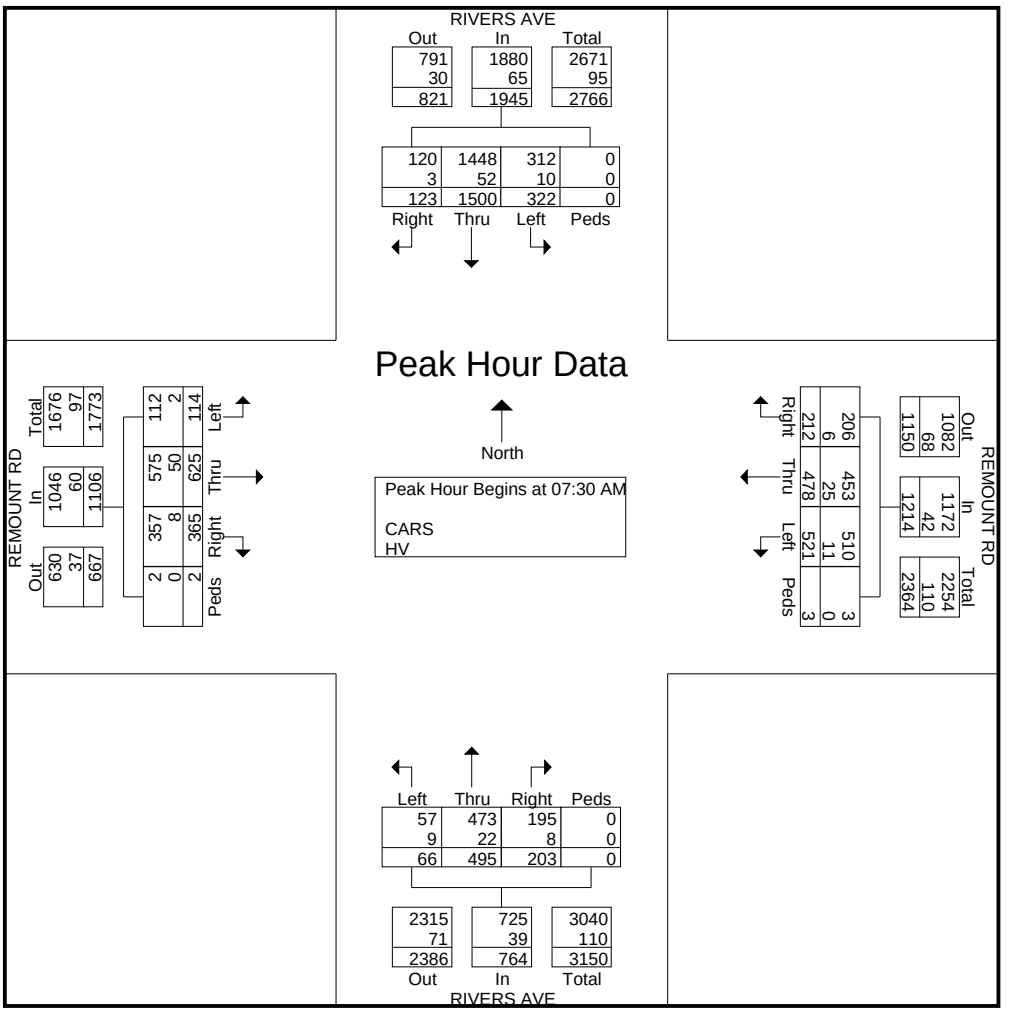
	RIVERS AVE Southbound					REMOUNT RD Westbound					RIVERS AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**38**	**463**	**104**	0	**605**	57	118	110	**1**	286	37	132	10	0	179	74	**171**	19	0	264	**1334**
07:45 AM	26	342	77	0	445	51	**121**	143	1	**316**	54	104	**22**	0	180	95	145	28	**1**	269	1210
08:00 AM	31	356	66	0	453	35	118	**145**	1	299	**61**	**138**	17	0	**216**	94	165	25	0	284	1252
08:15 AM	28	339	75	0	442	**69**	121	123	0	313	51	121	17	0	189	**102**	144	**42**	1	**289**	1233
Total Volume	123	1500	322	0	1945	212	478	521	3	1214	203	495	66	0	764	365	625	114	2	1106	5029
% App. Total	6.3	77.1	16.6	0		17.5	39.4	42.9	0.2		26.6	64.8	8.6	0		33	56.5	10.3	0.2		
PHF	.809	.810	.774	.000	.804	.768	.988	.898	.750	.960	.832	.897	.750	.000	.884	.895	.914	.679	.500	.957	.942
CARS	120	1448																			
% CARS	97.6	96.5	96.9	0	96.7	97.2	94.8	97.9	100	96.5	96.1	95.6	86.4	0	94.9	97.8	92.0	98.2	100	94.6	95.9
HV	3	52	10	0	65	6	25	11	0	42	8	22	9	0	39	8	50	2	0	60	206
% HV	2.4	3.5	3.1	0	3.3	2.8	5.2	2.1	0	3.5	3.9	4.4	13.6	0	5.1	2.2	8.0	1.8	0	5.4	4.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #44 RIVERS&REMOUNTPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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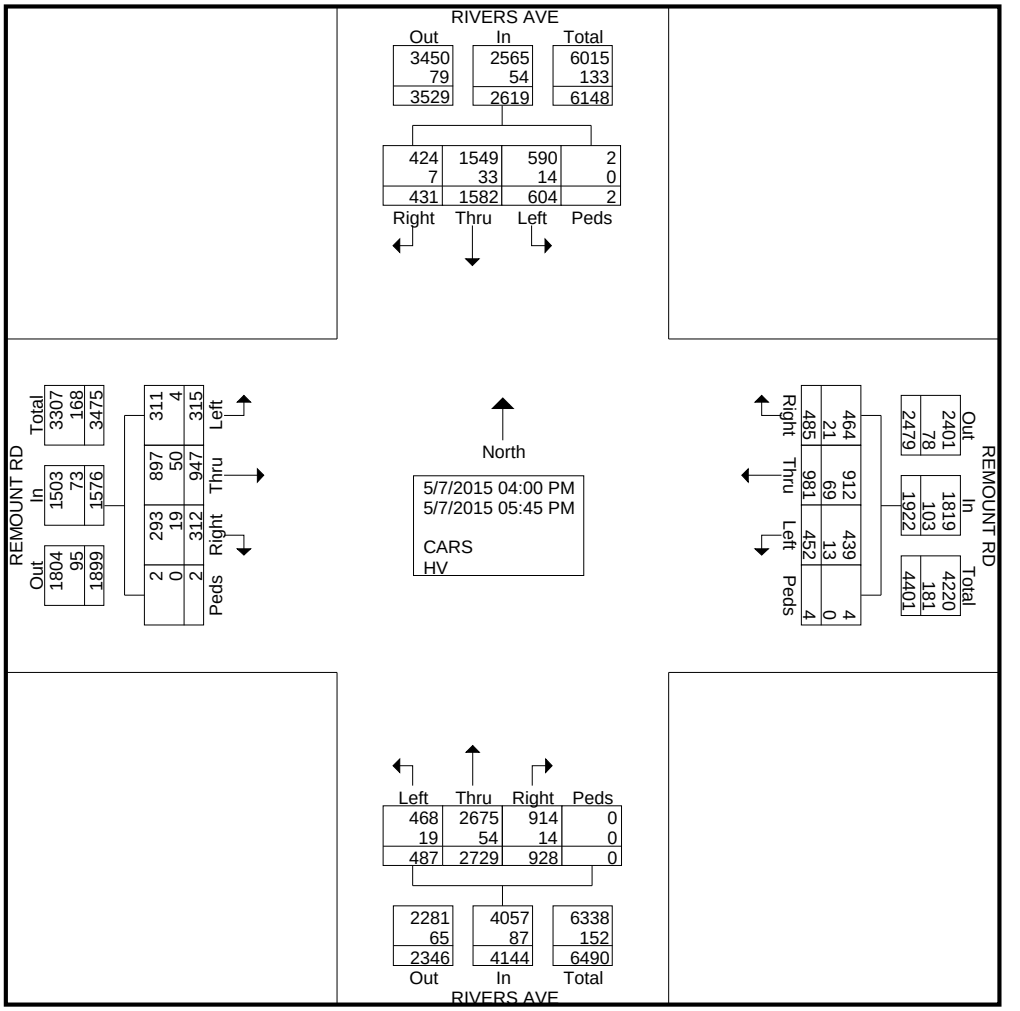
Groups Printed- CARS - HV

	RIVERS AVE Southbound					REMOUNT RD Westbound					RIVERS AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	42	196	74	0	312	55	129	54	1	239	94	299	48	0	441	40	148	44	1	233	1225
04:15 PM	28	180	67	0	275	42	131	69	1	243	106	283	64	0	453	43	117	44	0	204	1175
04:30 PM	50	197	73	0	320	43	137	52	0	232	103	303	64	0	470	46	133	50	0	229	1251
04:45 PM	39	179	70	0	288	50	137	56	0	243	111	342	67	0	520	51	118	27	1	197	1248
Total	159	752	284	0	1195	190	534	231	2	957	414	1227	243	0	1884	180	516	165	2	863	4899
05:00 PM	97	235	104	1	437	62	120	50	1	233	163	353	61	0	577	39	101	35	0	175	1422
05:15 PM	73	236	85	0	394	63	136	43	1	243	119	369	69	0	557	40	105	34	0	179	1373
05:30 PM	63	222	74	0	359	86	102	63	0	251	113	416	58	0	587	30	106	37	0	173	1370
05:45 PM	39	137	57	1	234	84	89	65	0	238	119	364	56	0	539	23	119	44	0	186	1197
Total	272	830	320	2	1424	295	447	221	2	965	514	1502	244	0	2260	132	431	150	0	713	5362
Grand Total	431	1582	604	2	2619	485	981	452	4	1922	928	2729	487	0	4144	312	947	315	2	1576	10261
Apprch %	16.5	60.4	23.1	0.1		25.2	51	23.5	0.2		22.4	65.9	11.8	0		19.8	60.1	20	0.1		
Total %	4.2	15.4	5.9	0	25.5	4.7	9.6	4.4	0	18.7	9	26.6	4.7	0	40.4	3	9.2	3.1	0	15.4	
CARS	424	1549										2675									
% CARS	98.4	97.9	97.7	100	97.9	95.7	93	97.1	100	94.6	98.5	98	96.1	0	97.9	93.9	94.7	98.7	100	95.4	96.9
HV	7	33	14	0	54	21	69	13	0	103	14	54	19	0	87	19	50	4	0	73	317
% HV	1.6	2.1	2.3	0	2.1	4.3	7	2.9	0	5.4	1.5	2	3.9	0	2.1	6.1	5.3	1.3	0	4.6	3.1



All Traffic Data Services, Inc.

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File Name : #44 RIVERS&REMOUNTPM
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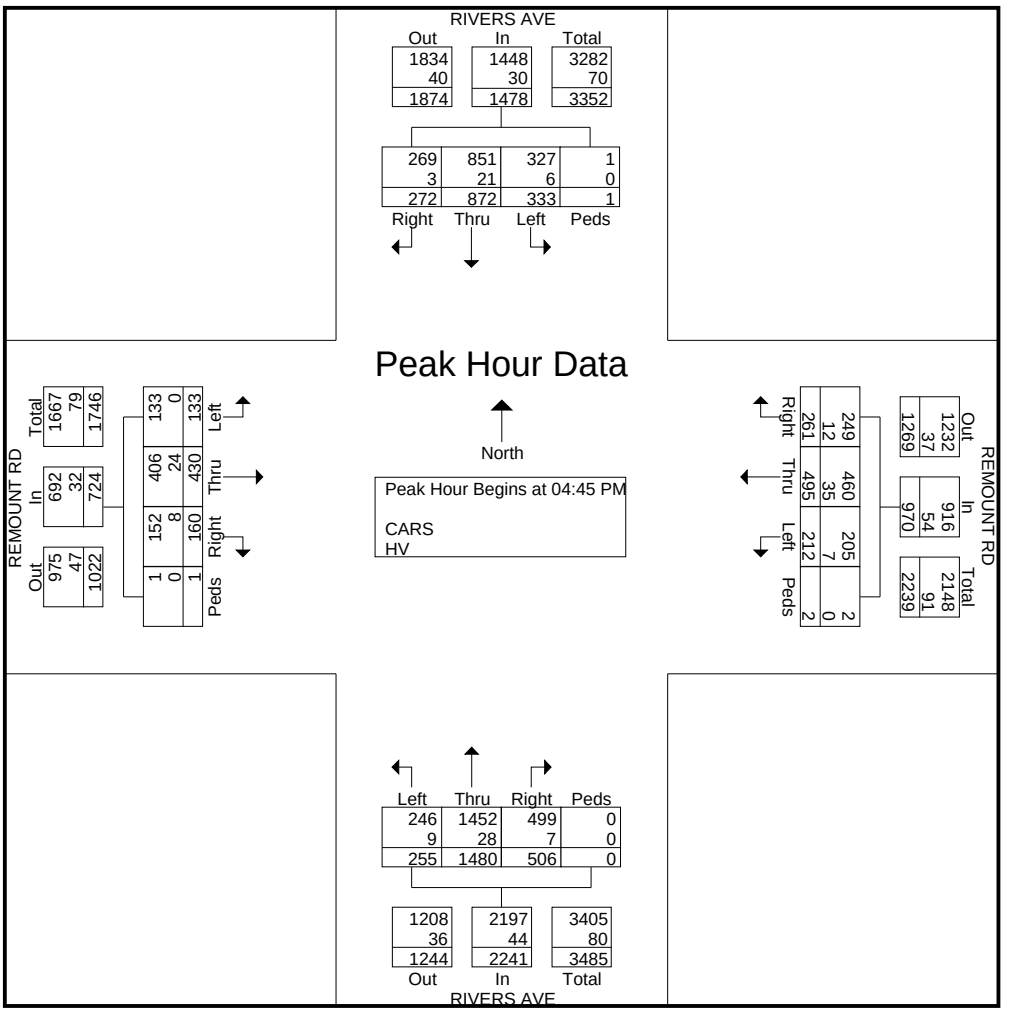
	RIVERS AVE Southbound					REMOUNT RD Westbound					RIVERS AVE Northbound					REMOUNT RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	39	179	70	0	288	50	**137**	56	0	243	111	342	67	0	520	**51**	**118**	27	**1**	**197**	1248
05:00 PM	**97**	235	**104**	**1**	**437**	62	120	50	**1**	233	**163**	353	61	0	577	39	101	35	0	175	**1422**
05:15 PM	73	**236**	85	0	394	63	136	43	1	243	119	369	**69**	0	557	40	105	34	0	179	1373
05:30 PM	63	222	74	0	359	**86**	102	**63**	0	**251**	113	**416**	58	0	**587**	30	106	**37**	0	173	1370
Total Volume	272	872	333	1	1478	261	495	212	2	970	506	1480	255	0	2241	160	430	133	1	724	5413
% App. Total	18.4	59	22.5	0.1		26.9	51	21.9	0.2		22.6	66	11.4	0		22.1	59.4	18.4	0.1		
PHF	.701	.924	.800	.250	.846	.759	.903	.841	.500	.966	.776	.889	.924	.000	.954	.784	.911	.899	.250	.919	.952
CARS	269	851	327	1	1448	249	460	205	2	916	499	1452									
% CARS	98.9	97.6	98.2	100	98.0	95.4	92.9	96.7	100	94.4	98.6	98.1	96.5	0	98.0	95.0	94.4	100	100	95.6	97.0
HV	3	21	6	0	30	12	35	7	0	54	7	28	9	0	44	8	24	0	0	32	160
% HV	1.1	2.4	1.8	0	2.0	4.6	7.1	3.3	0	5.6	1.4	1.9	3.5	0	2.0	5.0	5.6	0	0	4.4	3.0



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #45 SAVIATION&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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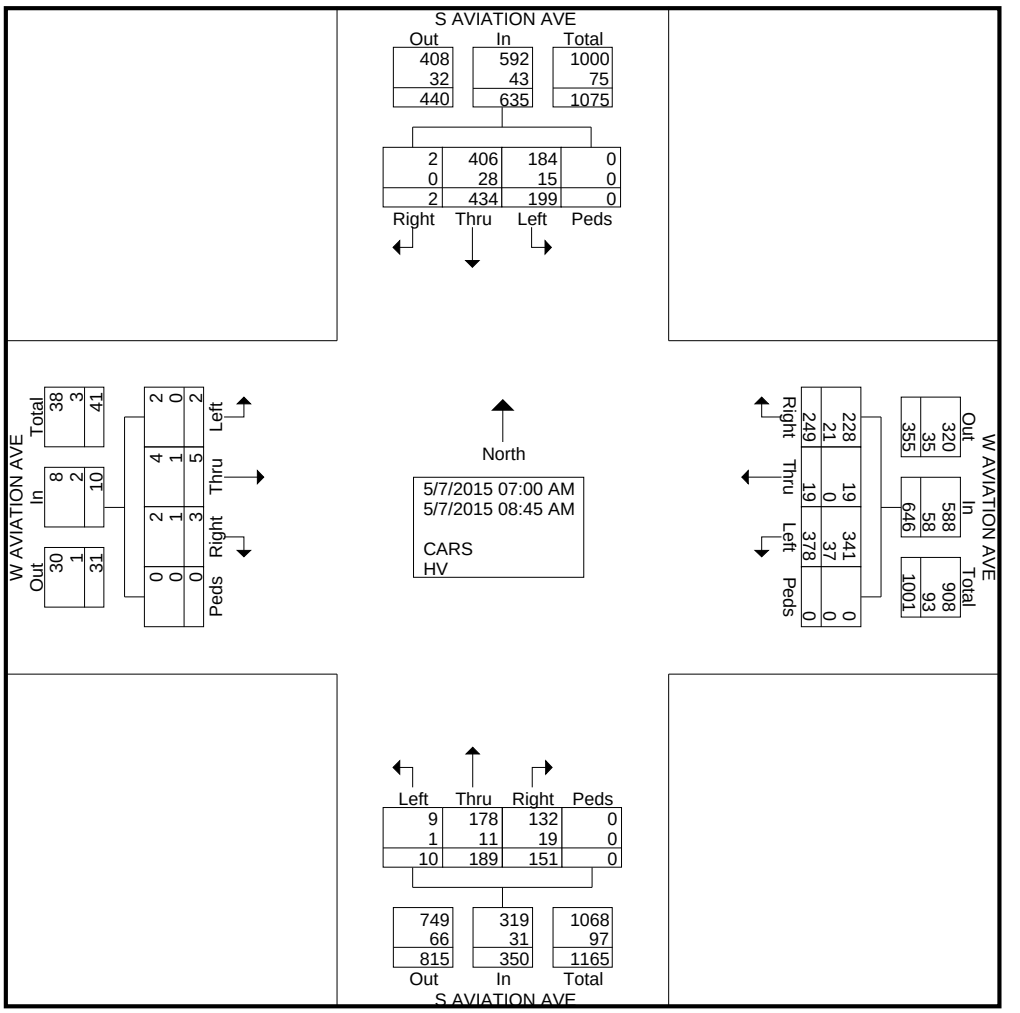
Groups Printed- CARS - HV

	S AVIATION AVE Southbound					W AVIATION AVE Westbound					S AVIATION AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	56	17	0	73	48	1	40	0	89	22	23	1	0	46	0	0	0	0	0	208
07:15 AM	1	65	27	0	93	41	1	47	0	89	25	24	2	0	51	0	2	0	0	2	235
07:30 AM	0	69	38	0	107	38	1	62	0	101	18	25	1	0	44	0	0	0	0	0	252
07:45 AM	1	54	18	0	73	38	4	49	0	91	32	28	2	0	62	0	1	1	0	2	228
Total	2	244	100	0	346	165	7	198	0	370	97	100	6	0	203	0	3	1	0	4	923
08:00 AM	0	53	25	0	78	28	4	49	0	81	21	23	2	0	46	1	1	0	0	2	207
08:15 AM	0	55	29	0	84	30	2	49	0	81	12	23	0	0	35	1	1	0	0	2	202
08:30 AM	0	37	18	0	55	9	3	46	0	58	8	20	1	0	29	0	0	0	0	0	142
08:45 AM	0	45	27	0	72	17	3	36	0	56	13	23	1	0	37	1	0	1	0	2	167
Total	0	190	99	0	289	84	12	180	0	276	54	89	4	0	147	3	2	1	0	6	718
Grand Total	2	434	199	0	635	249	19	378	0	646	151	189	10	0	350	3	5	2	0	10	1641
Apprch %	0.3	68.3	31.3	0		38.5	2.9	58.5	0		43.1	54	2.9	0		30	50	20	0		
Total %	0.1	26.4	12.1	0	38.7	15.2	1.2	23	0	39.4	9.2	11.5	0.6	0	21.3	0.2	0.3	0.1	0	0.6	
CARS	2	406	184	0	592	228	19	341	0	588	132	178	9	0	319	2	4	2	0	8	1507
% CARS	100	93.5	92.5	0	93.2	91.6	100	90.2	0	91	87.4	94.2	90	0	91.1	66.7	80	100	0	80	91.8
HV	0	28	15	0	43	21	0	37	0	58	19	11	1	0	31	1	1	0	0	2	134
% HV	0	6.5	7.5	0	6.8	8.4	0	9.8	0	9	12.6	5.8	10	0	8.9	33.3	20	0	0	20	8.2



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File Name : #45 SAVIATION&WAVIATIONAM
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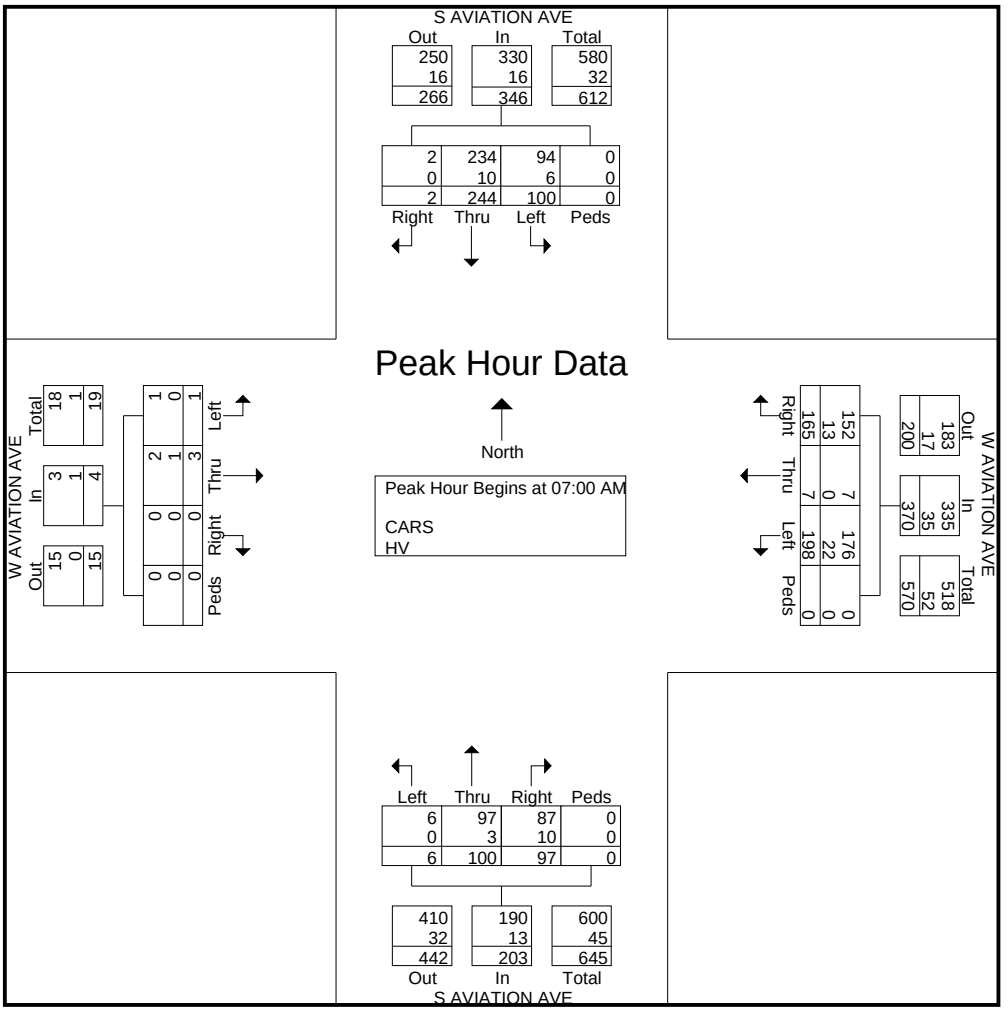
	S AVIATION AVE Southbound					W AVIATION AVE Westbound					S AVIATION AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	56	17	0	73	**48**	1	40	0	89	22	23	1	0	46	0	0	0	0	0	208
07:15 AM	**1**	65	27	0	93	41	1	47	0	89	25	24	**2**	0	51	0	**2**	0	0	**2**	235
07:30 AM	0	**69**	**38**	0	**107**	38	1	**62**	0	**101**	18	25	1	0	44	0	0	0	0	0	**252**
07:45 AM	1	54	18	0	73	38	**4**	49	0	91	**32**	**28**	2	0	**62**	0	1	**1**	0	2	228
Total Volume	2	244	100	0	346	165	7	198	0	370	97	100	6	0	203	0	3	1	0	4	923
% App. Total	0.6	70.5	28.9	0		44.6	1.9	53.5	0		47.8	49.3	3	0		0	75	25	0		
PHF	.500	.884	.658	.000	.808	.859	.438	.798	.000	.916	.758	.893	.750	.000	.819	.000	.375	.250	.000	.500	.916
CARS	2	234	94	0	330	152	7	176	0	335	87	97	6	0	190	0	2	1	0	3	858
% CARS	100	95.9	94.0	0	95.4	92.1	100	88.9	0	90.5	89.7	97.0	100	0	93.6	0	66.7	100	0	75.0	93.0
HV	0	10	6	0	16	13	0	22	0	35	10	3	0	0	13	0	1	0	0	1	65
% HV	0	4.1	6.0	0	4.6	7.9	0	11.1	0	9.5	10.3	3.0	0	0	6.4	0	33.3	0	0	25.0	7.0



All Traffic Data Services, Inc.

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File Name : #45 SAVIATION&WAVIATIONPM
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Start Date : 5/7/2015
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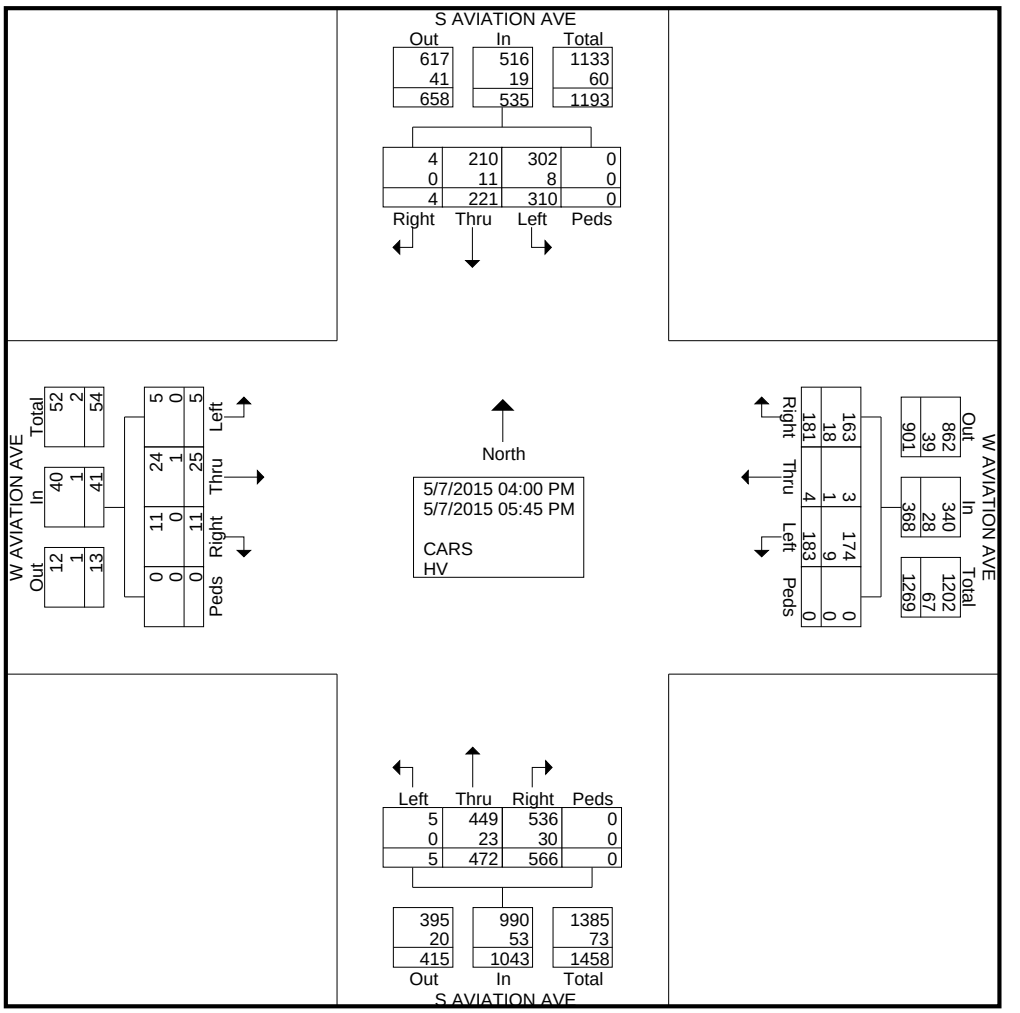
Groups Printed- CARS - HV

	S AVIATION AVE Southbound					W AVIATION AVE Westbound					S AVIATION AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	40	48	0	88	32	0	32	0	64	60	50	0	0	110	0	1	1	0	2	264
04:15 PM	0	31	50	0	81	29	1	21	0	51	57	60	3	0	120	1	1	0	0	2	254
04:30 PM	2	34	55	0	91	19	0	24	0	43	58	62	0	0	120	2	8	0	0	10	264
04:45 PM	1	31	42	0	74	21	1	12	0	34	68	58	0	0	126	2	7	3	0	12	246
Total	3	136	195	0	334	101	2	89	0	192	243	230	3	0	476	5	17	4	0	26	1028
05:00 PM	0	28	38	0	66	23	0	27	0	50	81	62	0	0	143	2	1	0	0	3	262
05:15 PM	0	24	37	0	61	26	1	24	0	51	102	66	1	0	169	1	4	0	0	5	286
05:30 PM	0	19	29	0	48	12	1	28	0	41	85	71	0	0	156	2	1	0	0	3	248
05:45 PM	1	14	11	0	26	19	0	15	0	34	55	43	1	0	99	1	2	1	0	4	163
Total	1	85	115	0	201	80	2	94	0	176	323	242	2	0	567	6	8	1	0	15	959
Grand Total	4	221	310	0	535	181	4	183	0	368	566	472	5	0	1043	11	25	5	0	41	1987
Apprch %	0.7	41.3	57.9	0		49.2	1.1	49.7	0		54.3	45.3	0.5	0		26.8	61	12.2	0		
Total %	0.2	11.1	15.6	0	26.9	9.1	0.2	9.2	0	18.5	28.5	23.8	0.3	0	52.5	0.6	1.3	0.3	0	2.1	
CARS	4	210	302	0	516	163	3	174	0	340	536	449	5	0	990	11	24	5	0	40	1886
% CARS	100	95	97.4	0	96.4	90.1	75	95.1	0	92.4	94.7	95.1	100	0	94.9	100	96	100	0	97.6	94.9
HV	0	11	8	0	19	18	1	9	0	28	30	23	0	0	53	0	1	0	0	1	101
% HV	0	5	2.6	0	3.6	9.9	25	4.9	0	7.6	5.3	4.9	0	0	5.1	0	4	0	0	2.4	5.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #45 SAVIATION&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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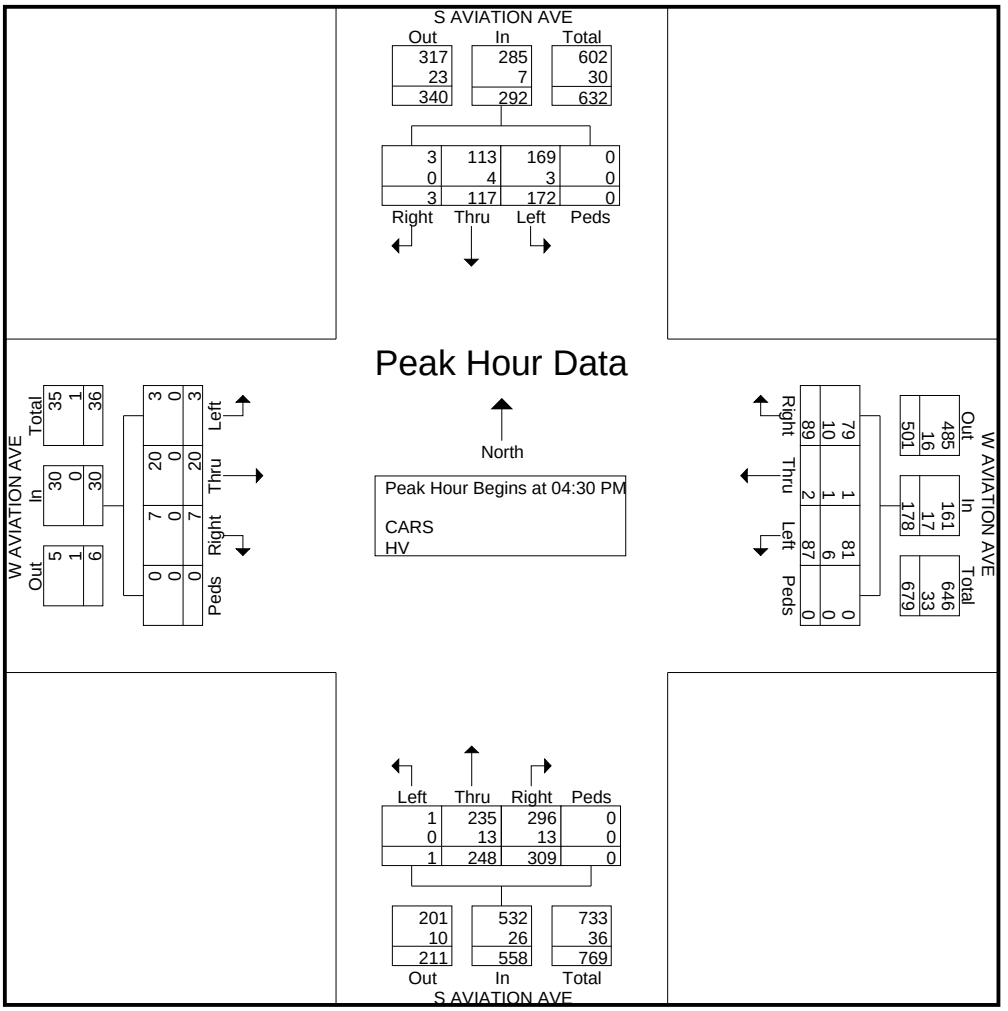
	S AVIATION AVE Southbound					W AVIATION AVE Westbound					S AVIATION AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**2**	**34**	**55**	0	**91**	19	0	24	0	43	58	62	0	0	120	**2**	**8**	0	0	10	264
04:45 PM	1	31	42	0	74	21	**1**	12	0	34	68	58	0	0	126	2	7	**3**	0	**12**	246
05:00 PM	0	28	38	0	66	23	0	**27**	0	50	81	62	0	0	143	2	1	0	0	3	262
05:15 PM	0	24	37	0	61	**26**	1	24	0	**51**	**102**	**66**	**1**	0	**169**	1	4	0	0	5	**286**
Total Volume	3	117	172	0	292	89	2	87	0	178	309	248	1	0	558	7	20	3	0	30	1058
% App. Total	1	40.1	58.9	0		50	1.1	48.9	0		55.4	44.4	0.2	0		23.3	66.7	10	0		
PHF	.375	.860	.782	.000	.802	.856	.500	.806	.000	.873	.757	.939	.250	.000	.825	.875	.625	.250	.000	.625	.925
CARS	3	113	169	0	285	79	1	81	0	161	296	235	1	0	532	7	20	3	0	30	1008
% CARS	100	96.6	98.3	0	97.6	88.8	50.0	93.1	0	90.4	95.8	94.8	100	0	95.3	100	100	100	0	100	95.3
HV	0	4	3	0	7	10	1	6	0	17	13	13	0	0	26	0	0	0	0	0	50
% HV	0	3.4	1.7	0	2.4	11.2	50.0	6.9	0	9.6	4.2	5.2	0	0	4.7	0	0	0	0	0	4.7



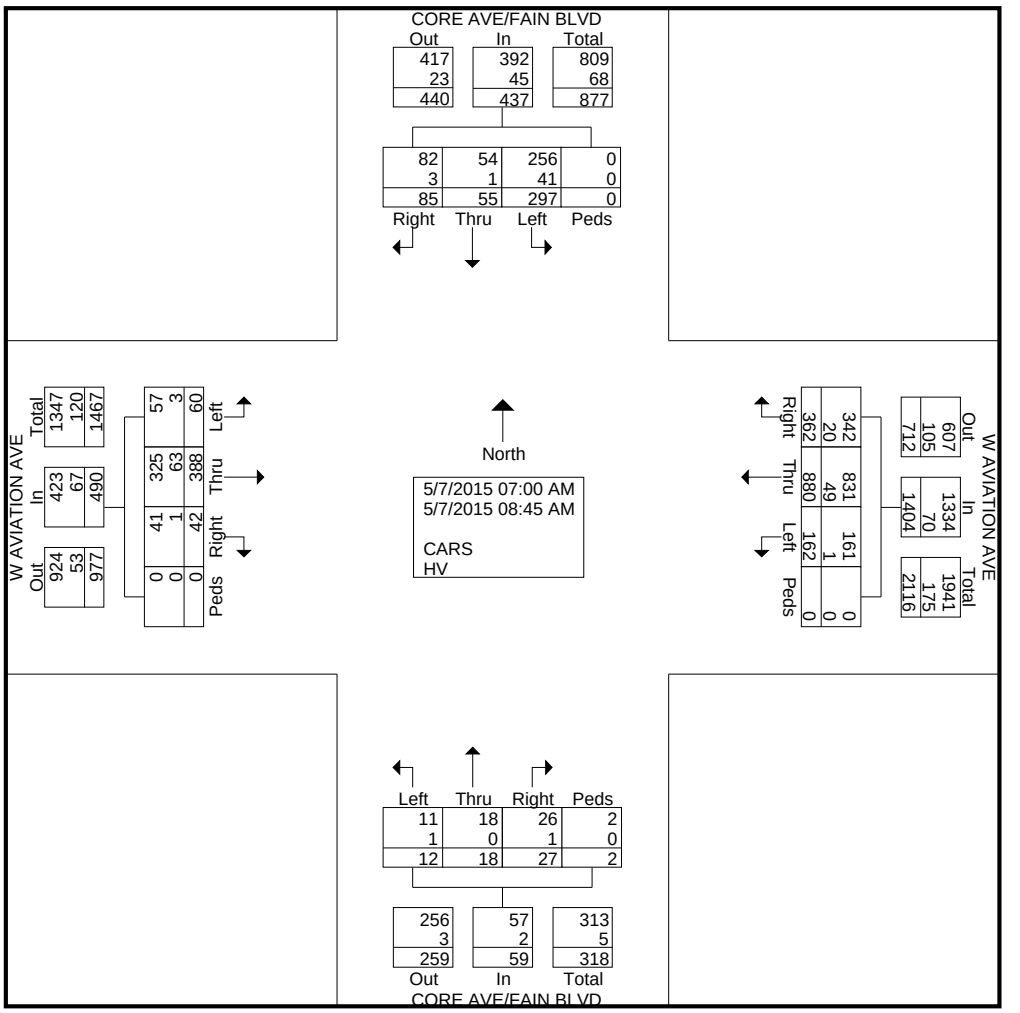
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #46 CORE&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CORE AVE/FAIN BLVD Southbound					W AVIATION AVE Westbound					CORE AVE/FAIN BLVD Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	8	4	35	0	47	43	140	19	0	202	2	3	1	0	6	2	50	6	0	58	313
07:15 AM	11	8	42	0	61	58	115	22	0	195	2	5	1	0	8	4	65	13	0	82	346
07:30 AM	18	12	45	0	75	72	141	25	0	238	0	2	0	1	3	5	57	7	0	69	385
07:45 AM	12	1	41	0	54	58	110	23	0	191	6	1	0	0	7	8	54	11	0	73	325
Total	49	25	163	0	237	231	506	89	0	826	10	11	2	1	24	19	226	37	0	282	1369
08:00 AM	9	8	33	0	50	47	108	23	0	178	5	2	2	0	9	7	49	7	0	63	300
08:15 AM	13	11	42	0	66	22	101	20	0	143	7	1	3	1	12	5	44	8	0	57	278
08:30 AM	7	10	31	0	48	36	81	10	0	127	4	1	3	0	8	4	32	0	0	36	219
08:45 AM	7	1	28	0	36	26	84	20	0	130	1	3	2	0	6	7	37	8	0	52	224
Total	36	30	134	0	200	131	374	73	0	578	17	7	10	1	35	23	162	23	0	208	1021
Grand Total	85	55	297	0	437	362	880	162	0	1404	27	18	12	2	59	42	388	60	0	490	2390
Apprch %	19.5	12.6	68	0		25.8	62.7	11.5	0		45.8	30.5	20.3	3.4		8.6	79.2	12.2	0		
Total %	3.6	2.3	12.4	0	18.3	15.1	36.8	6.8	0	58.7	1.1	0.8	0.5	0.1	2.5	1.8	16.2	2.5	0	20.5	
CARS	82	54	256	0	392	342	831	161	0	1334	26	18	11	2	57	41	325	57	0	423	2206
% CARS	96.5	98.2	86.2	0	89.7	94.5	94.4	99.4	0	95	96.3	100	91.7	100	96.6	97.6	83.8	95	0	86.3	92.3
HV	3	1	41	0	45	20	49	1	0	70	1	0	1	0	2	1	63	3	0	67	184
% HV	3.5	1.8	13.8	0	10.3	5.5	5.6	0.6	0	5	3.7	0	8.3	0	3.4	2.4	16.2	5	0	13.7	7.7

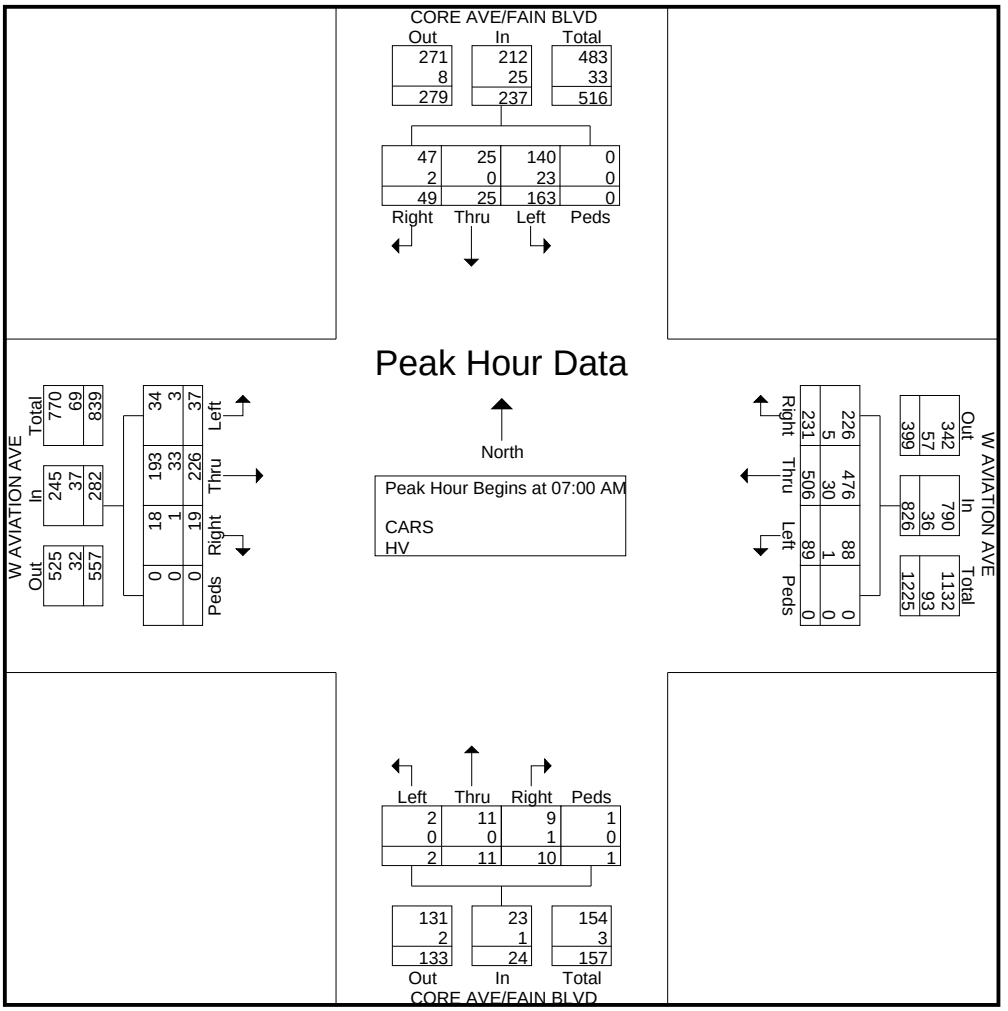


All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #46 CORE&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	CORE AVE/FAIN BLVD Southbound					W AVIATION AVE Westbound					CORE AVE/FAIN BLVD Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	8	4	35	0	47	43	140	19	0	202	2	3	**1**	0	6	2	50	6	0	58	313
07:15 AM	11	8	42	0	61	58	115	22	0	195	2	**5**	1	0	**8**	4	**65**	**13**	0	**82**	346
07:30 AM	**18**	**12**	**45**	0	**75**	**72**	**141**	**25**	0	**238**	0	2	0	**1**	3	5	57	7	0	69	**385**
07:45 AM	12	1	41	0	54	58	110	23	0	191	**6**	1	0	0	7	**8**	54	11	0	73	325
Total Volume	49	25	163	0	237	231	506	89	0	826	10	11	2	1	24	19	226	37	0	282	1369
% App. Total	20.7	10.5	68.8	0		28	61.3	10.8	0		41.7	45.8	8.3	4.2		6.7	80.1	13.1	0		
PHF	.681	.521	.906	.000	.790	.802	.897	.890	.000	.868	.417	.550	.500	.250	.750	.594	.869	.712	.000	.860	.889
CARS	47	25	140	0	212	226	476	88	0	790	9	11	2	1	23	18	193	34	0	245	1270
% CARS	95.9	100	85.9	0	89.5	97.8	94.1	98.9	0	95.6	90.0	100	100	100	95.8	94.7	85.4	91.9	0	86.9	92.8
HV	2	0	23	0	25	5	30	1	0	36	1	0	0	0	1	1	33	3	0	37	99
% HV	4.1	0	14.1	0	10.5	2.2	5.9	1.1	0	4.4	10.0	0	0	0	4.2	5.3	14.6	8.1	0	13.1	7.2



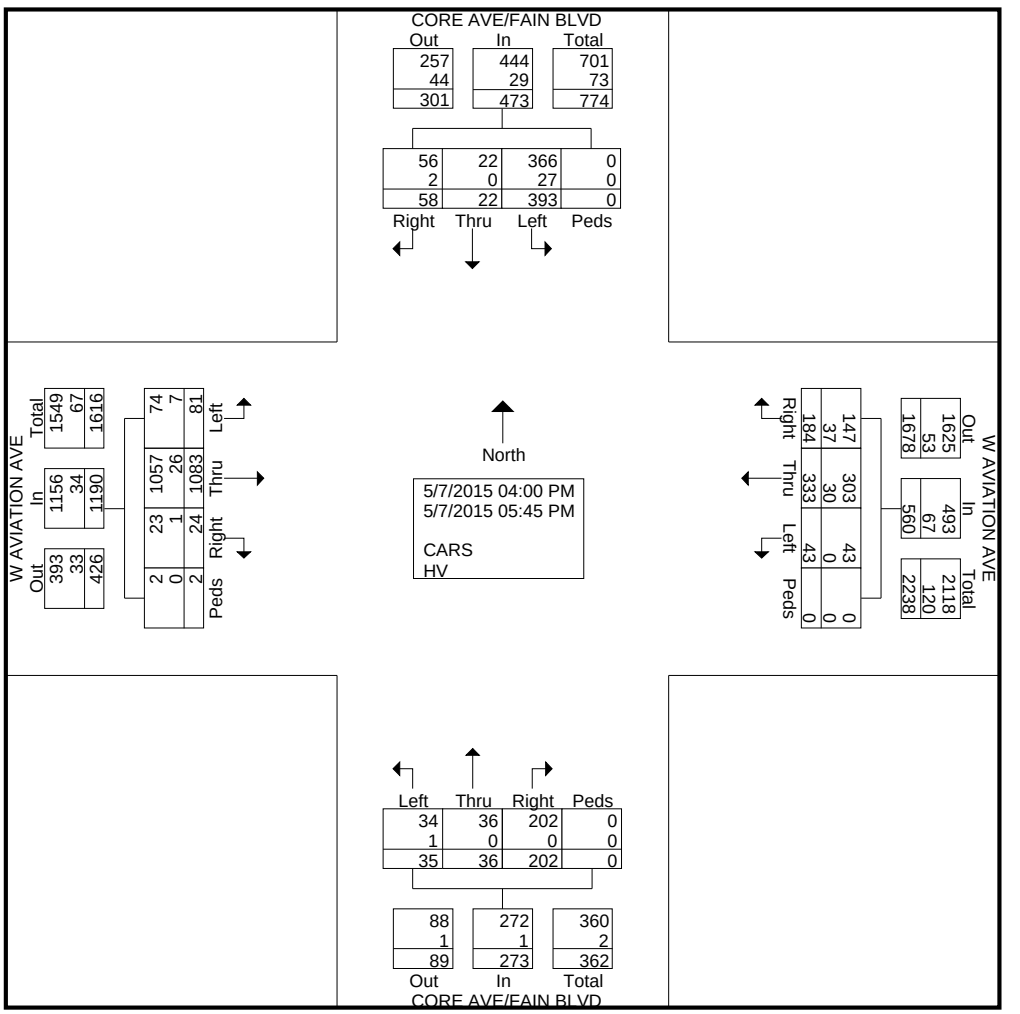
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #46 CORE&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	CORE AVE/FAIN BLVD Southbound					W AVIATION AVE Westbound					CORE AVE/FAIN BLVD Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	10	5	54	0	69	29	59	8	0	96	36	4	5	0	45	3	135	8	0	146	356
04:15 PM	6	4	40	0	50	20	42	7	0	69	22	8	6	0	36	8	139	12	0	159	314
04:30 PM	9	0	67	0	76	16	36	6	0	58	32	3	3	0	38	4	145	12	0	161	333
04:45 PM	4	2	43	0	49	27	29	7	0	63	27	2	2	0	31	1	129	7	0	137	280
Total	29	11	204	0	244	92	166	28	0	286	117	17	16	0	150	16	548	39	0	603	1283
05:00 PM	5	1	81	0	87	22	54	2	0	78	35	5	4	0	44	2	150	13	0	165	374
05:15 PM	8	3	29	0	40	26	39	3	0	68	17	7	9	0	33	4	165	11	0	180	321
05:30 PM	9	4	52	0	65	25	39	4	0	68	15	3	4	0	22	2	141	12	0	155	310
05:45 PM	7	3	27	0	37	19	35	6	0	60	18	4	2	0	24	0	79	6	2	87	208
Total	29	11	189	0	229	92	167	15	0	274	85	19	19	0	123	8	535	42	2	587	1213
Grand Total	58	22	393	0	473	184	333	43	0	560	202	36	35	0	273	24	1083	81	2	1190	2496
Apprch %	12.3	4.7	83.1	0		32.9	59.5	7.7	0		74	13.2	12.8	0		2	91	6.8	0.2		
Total %	2.3	0.9	15.7	0	19	7.4	13.3	1.7	0	22.4	8.1	1.4	1.4	0	10.9	1	43.4	3.2	0.1	47.7	
CARS	56	22	366	0	444	147	303	43	0	493	202	36	34	0	272	23	1057				
% CARS	96.6	100	93.1	0	93.9	79.9	91	100	0	88	100	100	97.1	0	99.6	95.8	97.6	91.4	100	97.1	94.8
HV	2	0	27	0	29	37	30	0	0	67	0	0	1	0	1	1	26	7	0	34	131
% HV	3.4	0	6.9	0	6.1	20.1	9	0	0	12	0	0	2.9	0	0.4	4.2	2.4	8.6	0	2.9	5.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #46 CORE&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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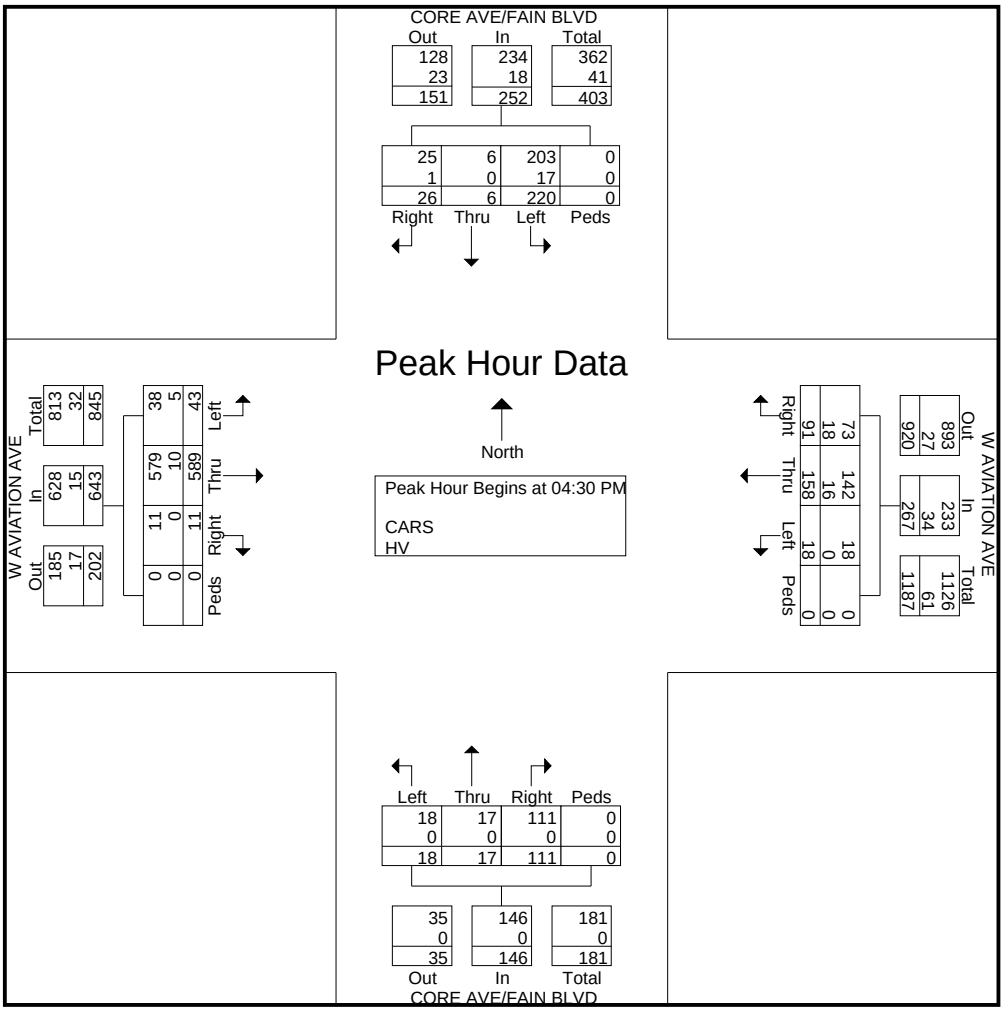
	CORE AVE/FAIN BLVD Southbound					W AVIATION AVE Westbound					CORE AVE/FAIN BLVD Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**9**	0	67	0	76	16	36	6	0	58	32	3	3	0	38	**4**	145	12	0	161	333
04:45 PM	4	2	43	0	49	**27**	29	**7**	0	63	27	2	2	0	31	1	129	7	0	137	280
05:00 PM	5	1	**81**	0	**87**	22	**54**	2	0	**78**	**35**	5	4	0	**44**	2	150	**13**	0	165	**374**
05:15 PM	8	**3**	29	0	40	26	39	3	0	68	17	**7**	**9**	0	33	4	**165**	11	0	**180**	321
Total Volume	26	6	220	0	252	91	158	18	0	267	111	17	18	0	146	11	589	43	0	643	1308
% App. Total	10.3	2.4	87.3	0		34.1	59.2	6.7	0		76	11.6	12.3	0		1.7	91.6	6.7	0		
PHF	.722	.500	.679	.000	.724	.843	.731	.643	.000	.856	.793	.607	.500	.000	.830	.688	.892	.827	.000	.893	.874
CARS	25	6	203	0	234	73	142	18	0	233	111	17	18	0	146	11	579	38	0	628	1241
% CARS	96.2	100	92.3	0	92.9	80.2	89.9	100	0	87.3	100	100	100	0	100	100	98.3	88.4	0	97.7	94.9
HV	1	0	17	0	18	18	16	0	0	34	0	0	0	0	0	0	10	5	0	15	67
% HV	3.8	0	7.7	0	7.1	19.8	10.1	0	0	12.7	0	0	0	0	0	0	1.7	11.6	0	2.3	5.1



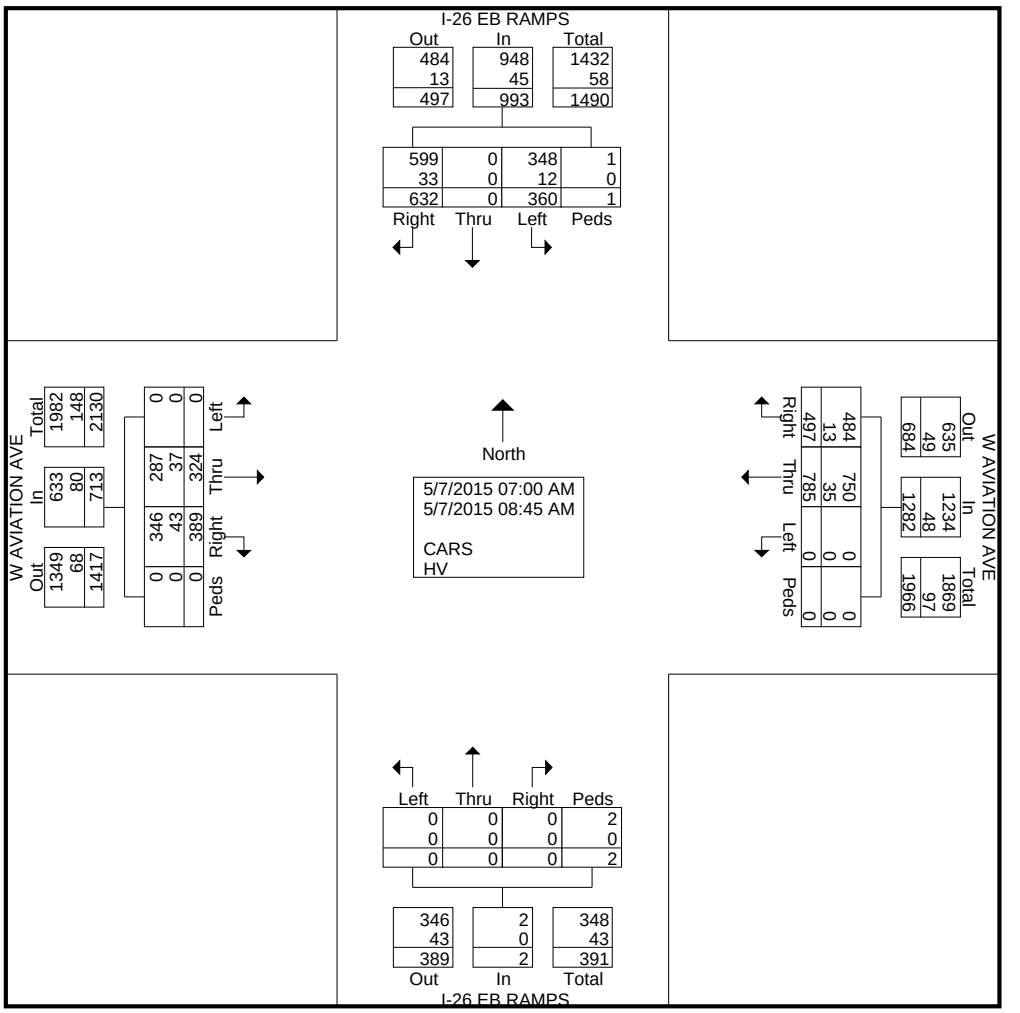
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #47 I26EBRAMPS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					W AVIATION AVE Westbound					I-26 EB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	86	0	32	0	118	70	113	0	0	183	0	0	0	0	0	47	40	0	0	87	388
07:15 AM	90	0	34	0	124	84	106	0	0	190	0	0	0	0	0	69	39	0	0	108	422
07:30 AM	90	0	43	0	133	82	141	0	0	223	0	0	0	1	1	59	41	0	0	100	457
07:45 AM	99	0	55	0	154	52	101	0	0	153	0	0	0	0	0	50	53	0	0	103	410
Total	365	0	164	0	529	288	461	0	0	749	0	0	0	1	1	225	173	0	0	398	1677
08:00 AM	79	0	47	0	126	52	105	0	0	157	0	0	0	0	0	41	47	0	0	88	371
08:15 AM	75	0	62	0	137	57	71	0	0	128	0	0	0	1	1	50	44	0	0	94	360
08:30 AM	55	0	44	1	100	40	73	0	0	113	0	0	0	0	0	40	31	0	0	71	284
08:45 AM	58	0	43	0	101	60	75	0	0	135	0	0	0	0	0	33	29	0	0	62	298
Total	267	0	196	1	464	209	324	0	0	533	0	0	0	1	1	164	151	0	0	315	1313
Grand Total	632	0	360	1	993	497	785	0	0	1282	0	0	0	2	2	389	324	0	0	713	2990
Apprch %	63.6	0	36.3	0.1		38.8	61.2	0	0		0	0	0	100		54.6	45.4	0	0		
Total %	21.1	0	12	0	33.2	16.6	26.3	0	0	42.9	0	0	0	0.1	0.1	13	10.8	0	0	23.8	
CARS	599	0	348	1	948	484	750	0	0	1234	0	0	0	2	2	346	287	0	0	633	2817
% CARS	94.8	0	96.7	100	95.5	97.4	95.5	0	0	96.3	0	0	0	100	100	88.9	88.6	0	0	88.8	94.2
HV	33	0	12	0	45	13	35	0	0	48	0	0	0	0	0	43	37	0	0	80	173
% HV	5.2	0	3.3	0	4.5	2.6	4.5	0	0	3.7	0	0	0	0	0	11.1	11.4	0	0	11.2	5.8



All Traffic Data Services, Inc.

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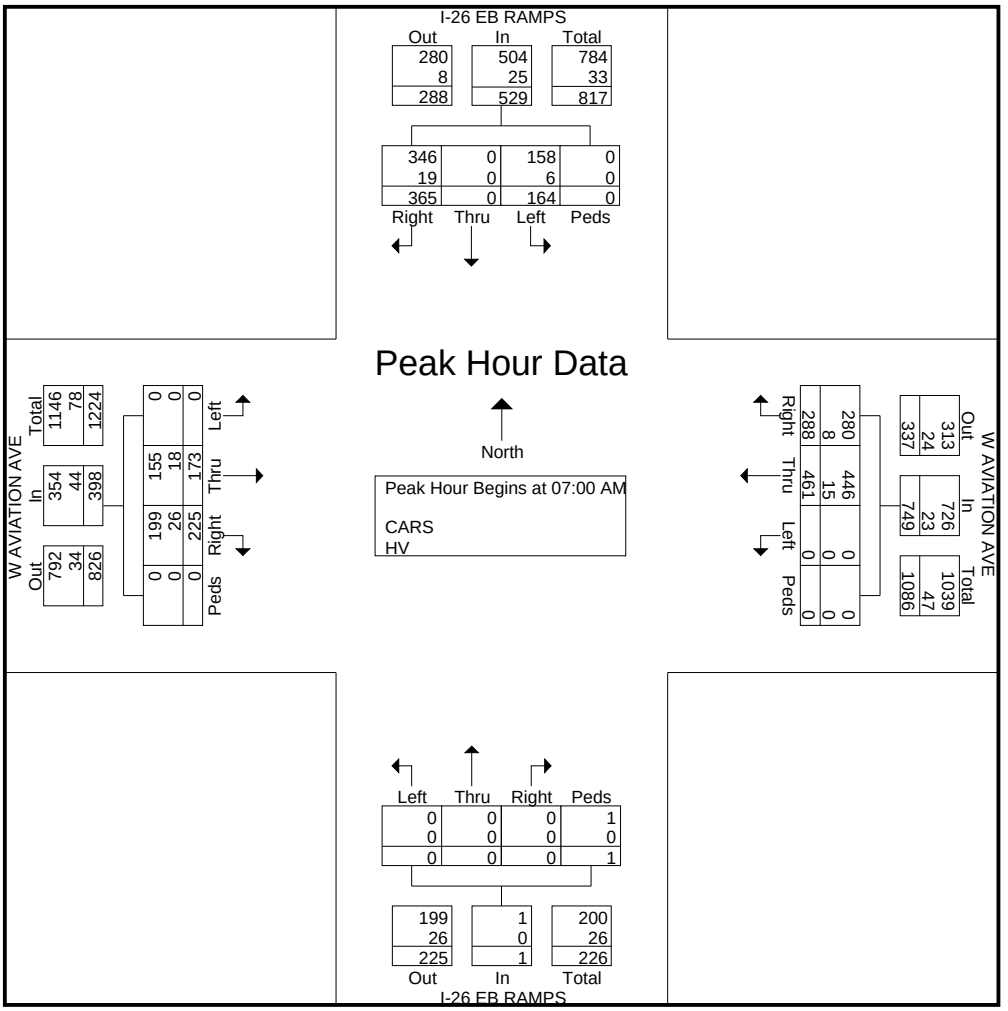
File Name : #47 I26EBRAMPS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 2

	I-26 EB RAMPS Southbound					W AVIATION AVE Westbound					I-26 EB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	86	0	32	0	118	70	113	0	0	183	0	0	0	0	0	47	40	0	0	87	388
07:15 AM	90	0	34	0	124	**84**	106	0	0	190	0	0	0	0	0	**69**	39	0	0	**108**	422
07:30 AM	90	0	43	0	133	82	**141**	0	0	**223**	0	0	0	**1**	**1**	59	41	0	0	100	**457**
07:45 AM	**99**	0	**55**	0	**154**	52	101	0	0	153	0	0	0	0	0	50	**53**	0	0	103	410
Total Volume	365	0	164	0	529	288	461	0	0	749	0	0	0	1	1	225	173	0	0	398	1677
% App. Total	69	0	31	0		38.5	61.5	0	0		0	0	0	100		56.5	43.5	0	0		
PHF	.922	.000	.745	.000	.859	.857	.817	.000	.000	.840	.000	.000	.000	.250	.250	.815	.816	.000	.000	.921	.917
CARS	346	0	158	0	504	280	446	0	0	726	0	0	0	1	1	199	155	0	0	354	1585
% CARS	94.8	0	96.3	0	95.3	97.2	96.7	0	0	96.9	0	0	0	100	100	88.4	89.6	0	0	88.9	94.5
HV	19	0	6	0	25	8	15	0	0	23	0	0	0	0	0	26	18	0	0	44	92
% HV	5.2	0	3.7	0	4.7	2.8	3.3	0	0	3.1	0	0	0	0	0	11.6	10.4	0	0	11.1	5.5



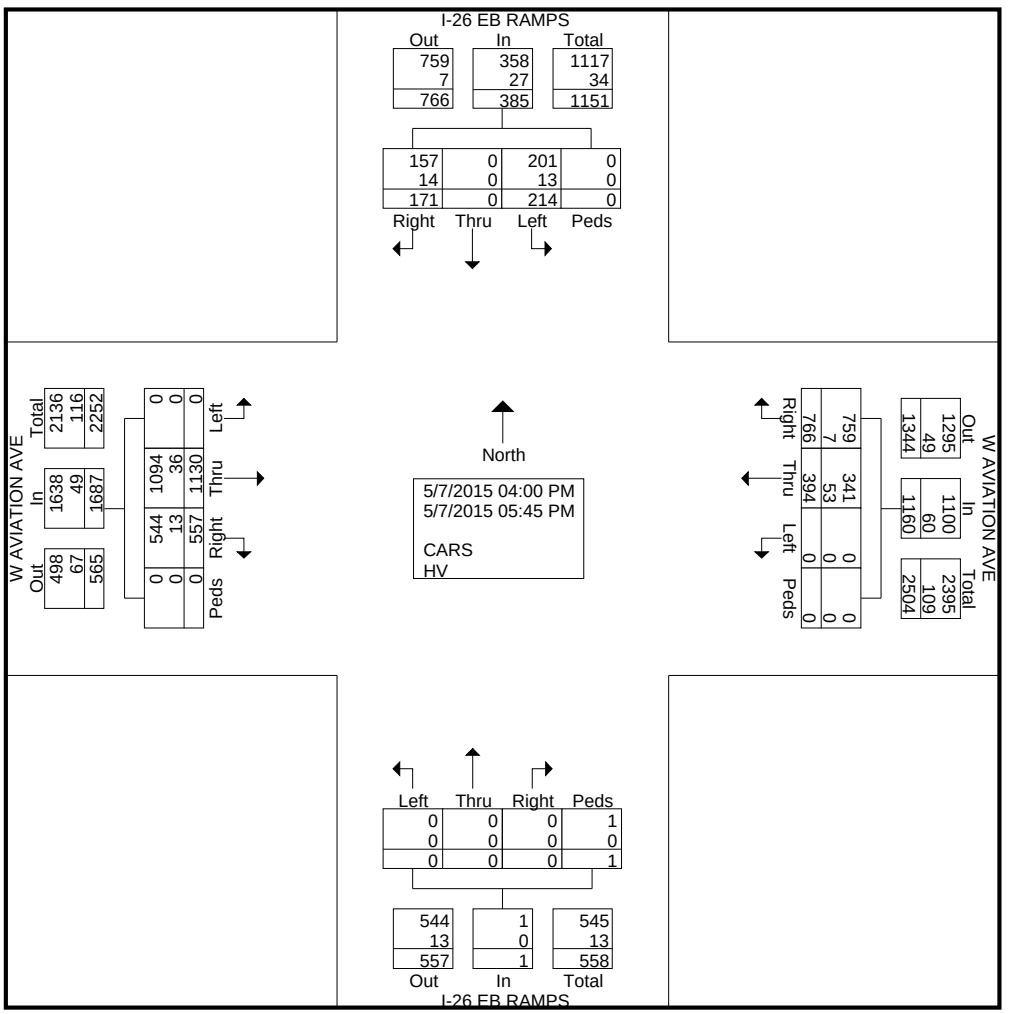
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #47 I26EBRAMPS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					W AVIATION AVE Westbound					I-26 EB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	29	0	25	0	54	91	66	0	0	157	0	0	0	1	1	85	137	0	0	222	434
04:15 PM	19	0	29	0	48	89	53	0	0	142	0	0	0	0	0	75	124	0	0	199	389
04:30 PM	18	0	23	0	41	110	39	0	0	149	0	0	0	0	0	85	169	0	0	254	444
04:45 PM	20	0	12	0	32	102	47	0	0	149	0	0	0	0	0	71	127	0	0	198	379
Total	86	0	89	0	175	392	205	0	0	597	0	0	0	1	1	316	557	0	0	873	1646
05:00 PM	23	0	32	0	55	126	56	0	0	182	0	0	0	0	0	94	172	0	0	266	503
05:15 PM	26	0	31	0	57	87	44	0	0	131	0	0	0	0	0	57	156	0	0	213	401
05:30 PM	18	0	31	0	49	83	49	0	0	132	0	0	0	0	0	57	156	0	0	213	394
05:45 PM	18	0	31	0	49	78	40	0	0	118	0	0	0	0	0	33	89	0	0	122	289
Total	85	0	125	0	210	374	189	0	0	563	0	0	0	0	0	241	573	0	0	814	1587
Grand Total	171	0	214	0	385	766	394	0	0	1160	0	0	0	1	1	557	1130	0	0	1687	3233
Apprch %	44.4	0	55.6	0		66	34	0	0		0	0	0	100		33	67	0	0		
Total %	5.3	0	6.6	0	11.9	23.7	12.2	0	0	35.9	0	0	0	0	0	17.2	35	0	0	52.2	
CARS	157	0	201	0	358	759	341	0	0	1100	0	0	0	1	1	544	1094				
% CARS	91.8	0	93.9	0	93	99.1	86.5	0	0	94.8	0	0	0	100	100	97.7	96.8	0	0	97.1	95.8
HV	14	0	13	0	27	7	53	0	0	60	0	0	0	0	0	13	36	0	0	49	136
% HV	8.2	0	6.1	0	7	0.9	13.5	0	0	5.2	0	0	0	0	0	2.3	3.2	0	0	2.9	4.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #47 I26EBRAMPS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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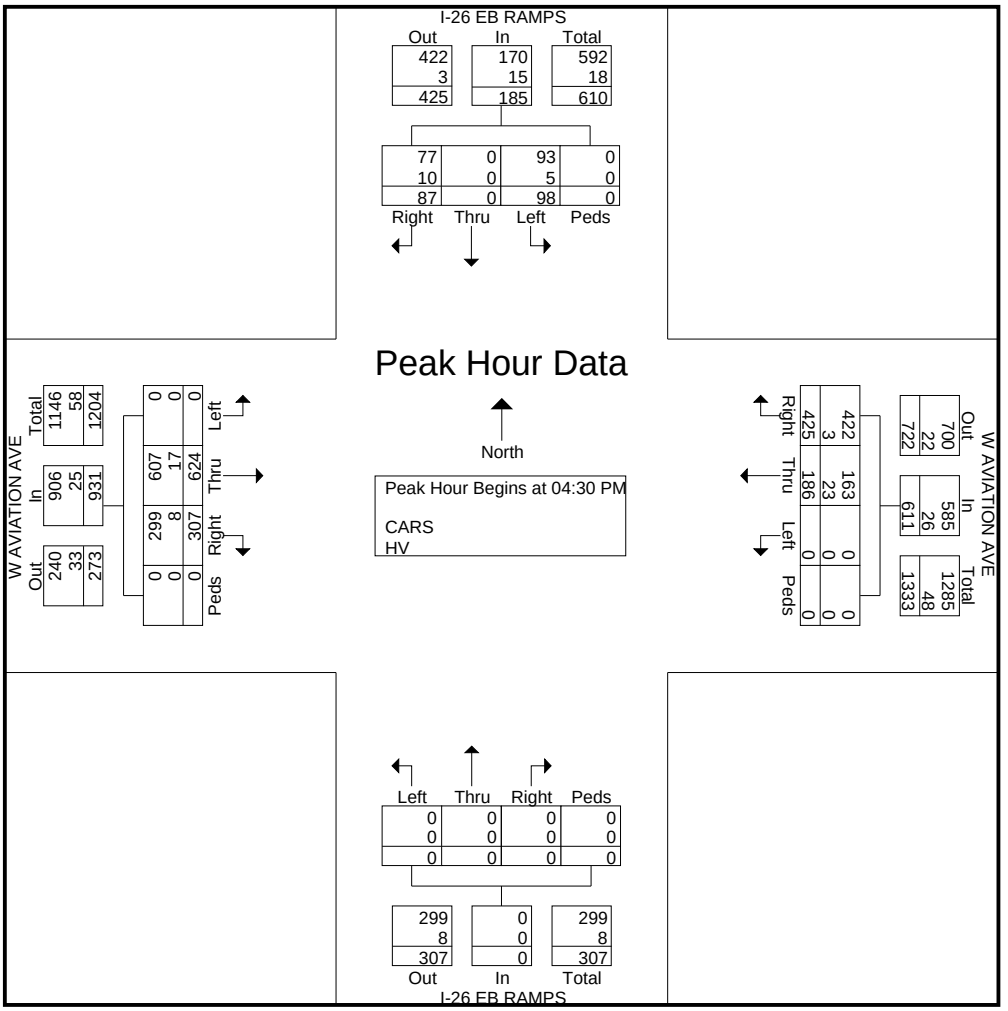
	I-26 EB RAMPS Southbound					W AVIATION AVE Westbound					I-26 EB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	18	0	23	0	41	110	39	0	0	149	0	0	0	0	0	85	169	0	0	254	444
04:45 PM	20	0	12	0	32	102	47	0	0	149	0	0	0	0	0	71	127	0	0	198	379
05:00 PM	23	0	**32**	0	55	**126**	**56**	0	0	**182**	0	0	0	0	0	**94**	**172**	0	0	**266**	**503**
05:15 PM	**26**	0	31	0	**57**	87	44	0	0	131	0	0	0	0	0	57	156	0	0	213	401
Total Volume	87	0	98	0	185	425	186	0	0	611	0	0	0	0	0	307	624	0	0	931	1727
% App. Total	47	0	53	0		69.6	30.4	0	0		0	0	0	0		33	67	0	0		
PHF	.837	.000	.766	.000	.811	.843	.830	.000	.000	.839	.000	.000	.000	.000	.000	.816	.907	.000	.000	.875	.858
CARS	77	0	93	0	170	422	163	0	0	585	0	0	0	0	0	299	607	0	0	906	1661
% CARS	88.5	0	94.9	0	91.9	99.3	87.6	0	0	95.7	0	0	0	0	0	97.4	97.3	0	0	97.3	96.2
HV	10	0	5	0	15	3	23	0	0	26	0	0	0	0	0	8	17	0	0	25	66
% HV	11.5	0	5.1	0	8.1	0.7	12.4	0	0	4.3	0	0	0	0	0	2.6	2.7	0	0	2.7	3.8



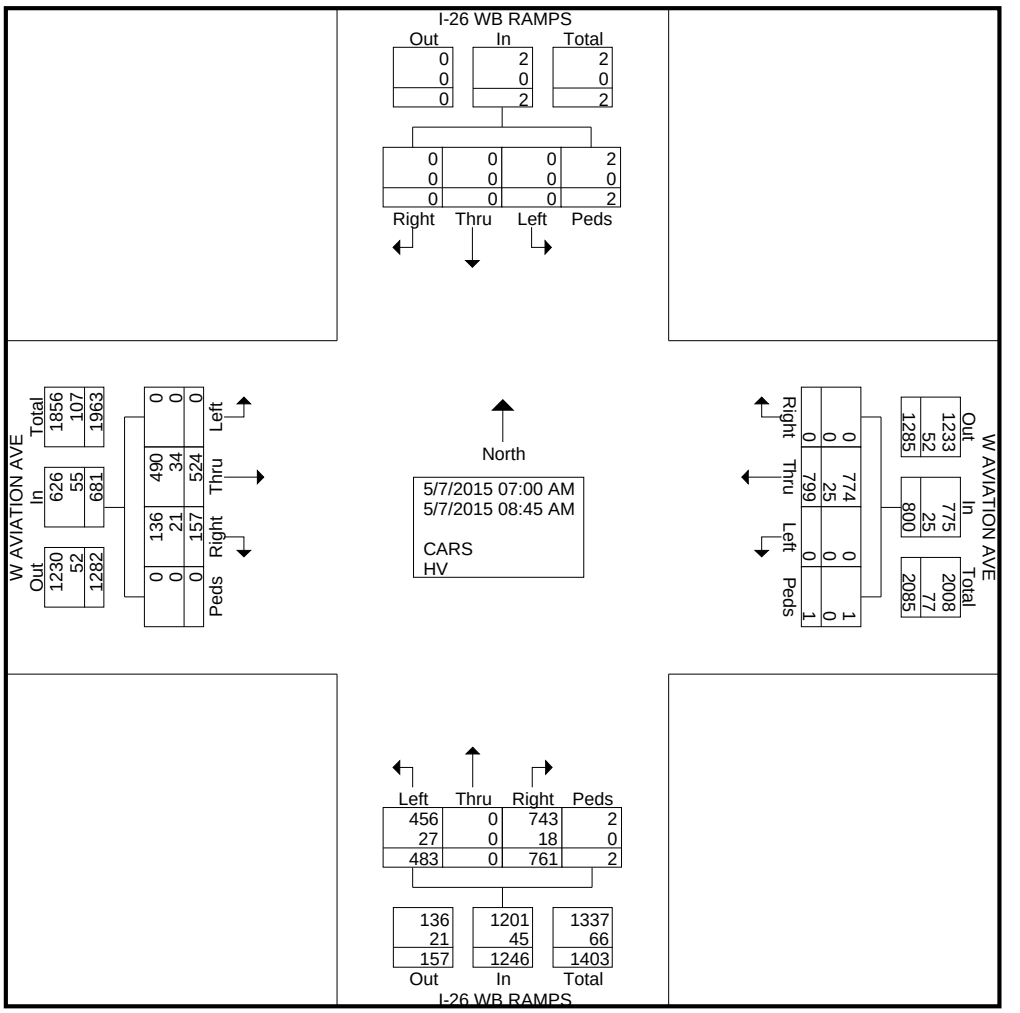
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #48 I26WBRAMPS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					W AVIATION AVE Westbound					I-26 WB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	114	0	0	114	48	0	67	0	115	19	55	0	0	74	303
07:15 AM	0	0	0	0	0	0	120	0	0	120	76	0	70	0	146	15	61	0	0	76	342
07:30 AM	0	0	0	0	0	0	131	0	0	131	76	0	92	1	169	25	59	0	0	84	384
07:45 AM	0	0	0	0	0	0	89	0	0	89	113	0	66	0	179	23	83	0	0	106	374
Total	0	0	0	0	0	0	454	0	0	454	313	0	295	1	609	82	258	0	0	340	1403
08:00 AM	0	0	0	0	0	0	87	0	0	87	104	0	65	0	169	21	75	0	0	96	352
08:15 AM	0	0	0	0	0	0	91	0	0	91	107	0	34	1	142	21	82	0	0	103	336
08:30 AM	0	0	0	2	2	0	73	0	1	74	108	0	43	0	151	22	53	0	0	75	302
08:45 AM	0	0	0	0	0	0	94	0	0	94	129	0	46	0	175	11	56	0	0	67	336
Total	0	0	0	2	2	0	345	0	1	346	448	0	188	1	637	75	266	0	0	341	1326
Grand Total	0	0	0	2	2	0	799	0	1	800	761	0	483	2	1246	157	524	0	0	681	2729
Apprch %	0	0	0	100		0	99.9	0	0.1		61.1	0	38.8	0.2		23.1	76.9	0	0		
Total %	0	0	0	0.1	0.1	0	29.3	0	0	29.3	27.9	0	17.7	0.1	45.7	5.8	19.2	0	0	25	
CARS	0	0	0	2	2	0	774	0	1	775	743	0	456	2	1201	136	490	0	0	626	2604
% CARS	0	0	0	100	100	0	96.9	0	100	96.9	97.6	0	94.4	100	96.4	86.6	93.5	0	0	91.9	95.4
HV	0	0	0	0	0	0	25	0	0	25	18	0	27	0	45	21	34	0	0	55	125
% HV	0	0	0	0	0	0	3.1	0	0	3.1	2.4	0	5.6	0	3.6	13.4	6.5	0	0	8.1	4.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #48 I26WBRAMPS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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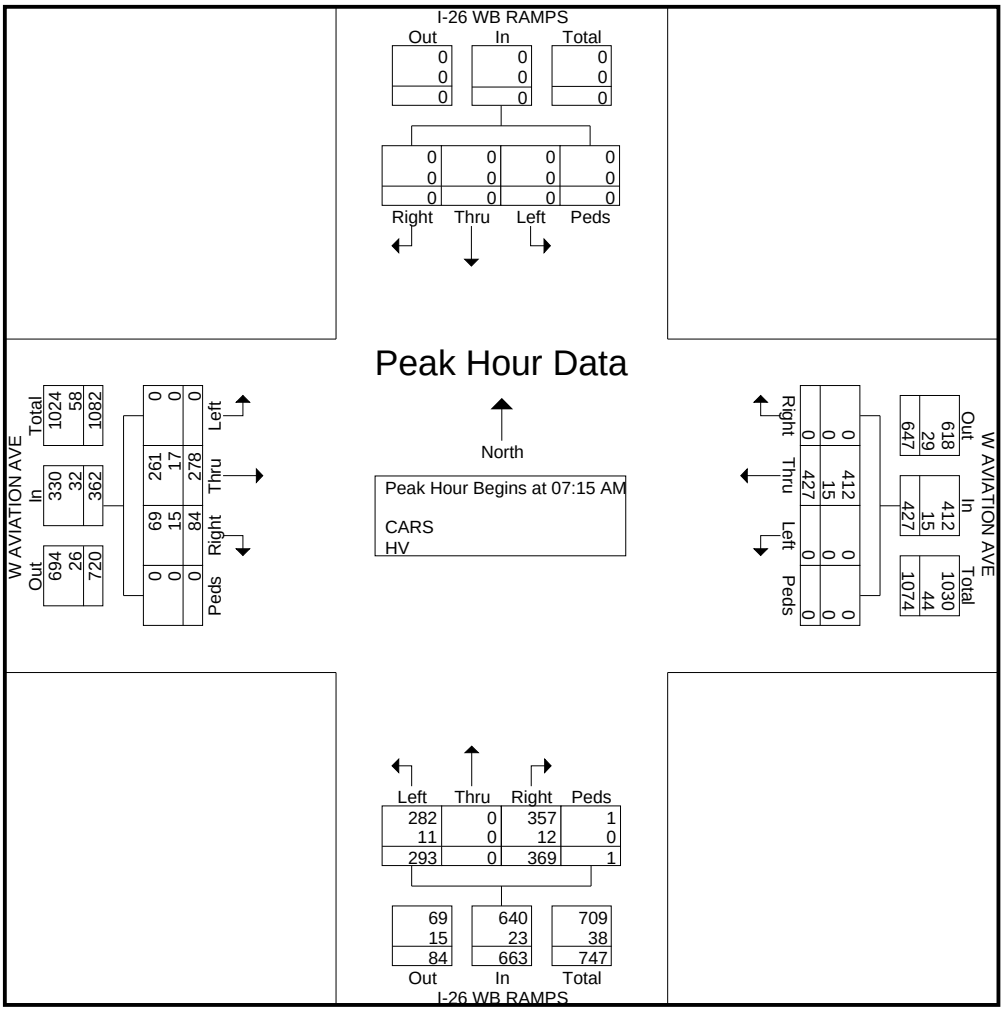
	I-26 WB RAMPS Southbound					W AVIATION AVE Westbound					I-26 WB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	120	0	0	120	76	0	70	0	146	15	61	0	0	76	342
07:30 AM	0	0	0	0	0	0	**131**	0	0	**131**	76	0	**92**	**1**	169	**25**	59	0	0	84	**384**
07:45 AM	0	0	0	0	0	0	89	0	0	89	**113**	0	66	0	**179**	23	**83**	0	0	**106**	374
08:00 AM	0	0	0	0	0	0	87	0	0	87	104	0	65	0	169	21	75	0	0	96	352
Total Volume	0	0	0	0	0	0	427	0	0	427	369	0	293	1	663	84	278	0	0	362	1452
% App. Total	0	0	0	0		0	100	0	0		55.7	0	44.2	0.2		23.2	76.8	0	0		
PHF	.000	.000	.000	.000	.000	.000	.815	.000	.000	.815	.816	.000	.796	.250	.926	.840	.837	.000	.000	.854	.945
CARS	0	0	0	0	0	0	412	0	0	412	357	0	282	1	640	69	261	0	0	330	1382
% CARS	0	0	0	0	0	0	96.5	0	0	96.5	96.7	0	96.2	100	96.5	82.1	93.9	0	0	91.2	95.2
HV	0	0	0	0	0	0	15	0	0	15	12	0	11	0	23	15	17	0	0	32	70
% HV	0	0	0	0	0	0	3.5	0	0	3.5	3.3	0	3.8	0	3.5	17.9	6.1	0	0	8.8	4.8



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #48 I26WBRAMPS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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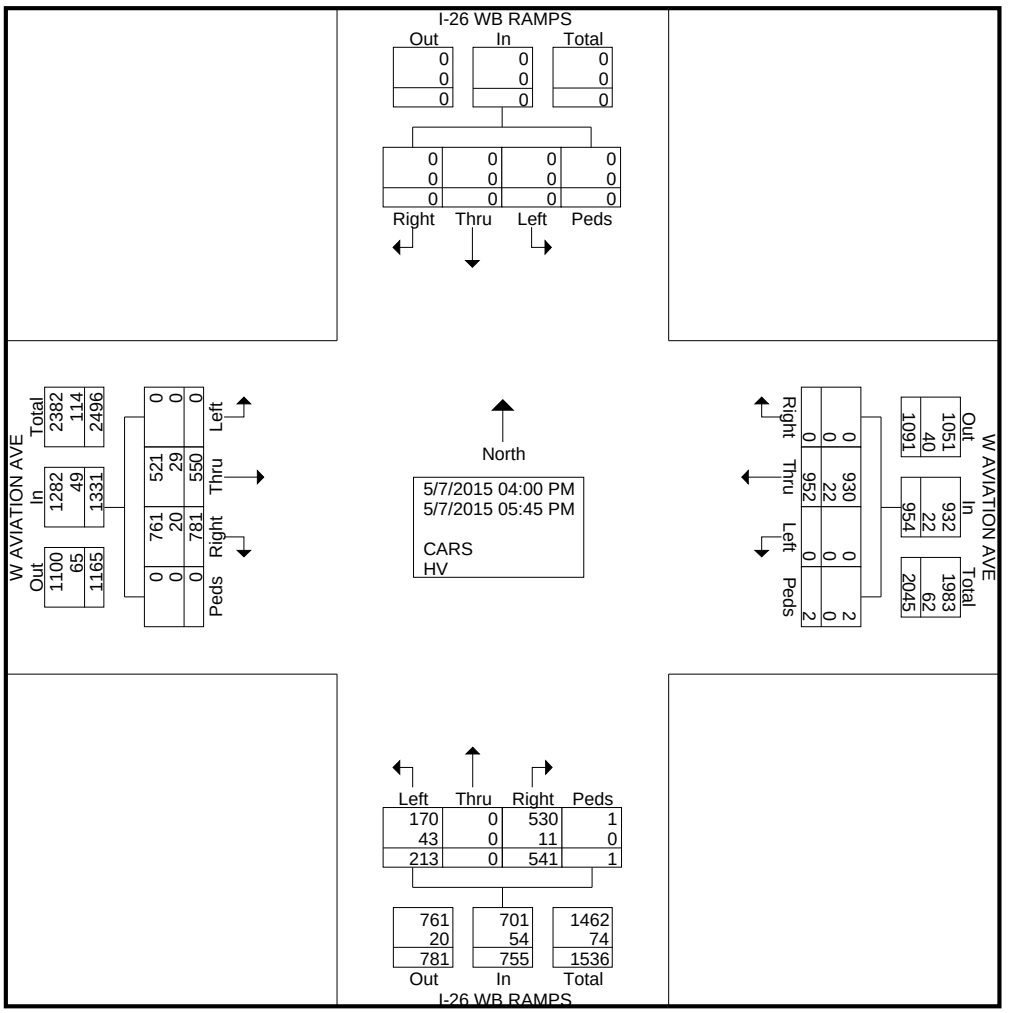
Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					W AVIATION AVE Westbound					I-26 WB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	115	0	0	115	73	0	45	1	119	96	59	0	0	155	389
04:15 PM	0	0	0	0	0	0	117	0	0	117	84	0	24	0	108	88	65	0	0	153	378
04:30 PM	0	0	0	0	0	0	131	0	0	131	64	0	22	0	86	116	69	0	0	185	402
04:45 PM	0	0	0	0	0	0	123	0	0	123	70	0	23	0	93	90	54	0	0	144	360
Total	0	0	0	0	0	0	486	0	0	486	291	0	114	1	406	390	247	0	0	637	1529
05:00 PM	0	0	0	0	0	0	153	0	0	153	57	0	24	0	81	123	75	0	0	198	432
05:15 PM	0	0	0	0	0	0	109	0	0	109	70	0	24	0	94	102	85	0	0	187	390
05:30 PM	0	0	0	0	0	0	109	0	0	109	64	0	25	0	89	106	83	0	0	189	387
05:45 PM	0	0	0	0	0	0	95	0	2	97	59	0	26	0	85	60	60	0	0	120	302
Total	0	0	0	0	0	0	466	0	2	468	250	0	99	0	349	391	303	0	0	694	1511
Grand Total	0	0	0	0	0	0	952	0	2	954	541	0	213	1	755	781	550	0	0	1331	3040
Apprch %	0	0	0	0		0	99.8	0	0.2		71.7	0	28.2	0.1		58.7	41.3	0	0		
Total %	0	0	0	0	0	0	31.3	0	0.1	31.4	17.8	0	7	0	24.8	25.7	18.1	0	0	43.8	
CARS	0	0	0	0	0	0	930	0	2	932	530	0	170	1	701	761	521	0	0	1282	2915
% CARS	0	0	0	0	0	0	97.7	0	100	97.7	98	0	79.8	100	92.8	97.4	94.7	0	0	96.3	95.9
HV	0	0	0	0	0	0	22	0	0	22	11	0	43	0	54	20	29	0	0	49	125
% HV	0	0	0	0	0	0	2.3	0	0	2.3	2	0	20.2	0	7.2	2.6	5.3	0	0	3.7	4.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #48 I26WBRAMPS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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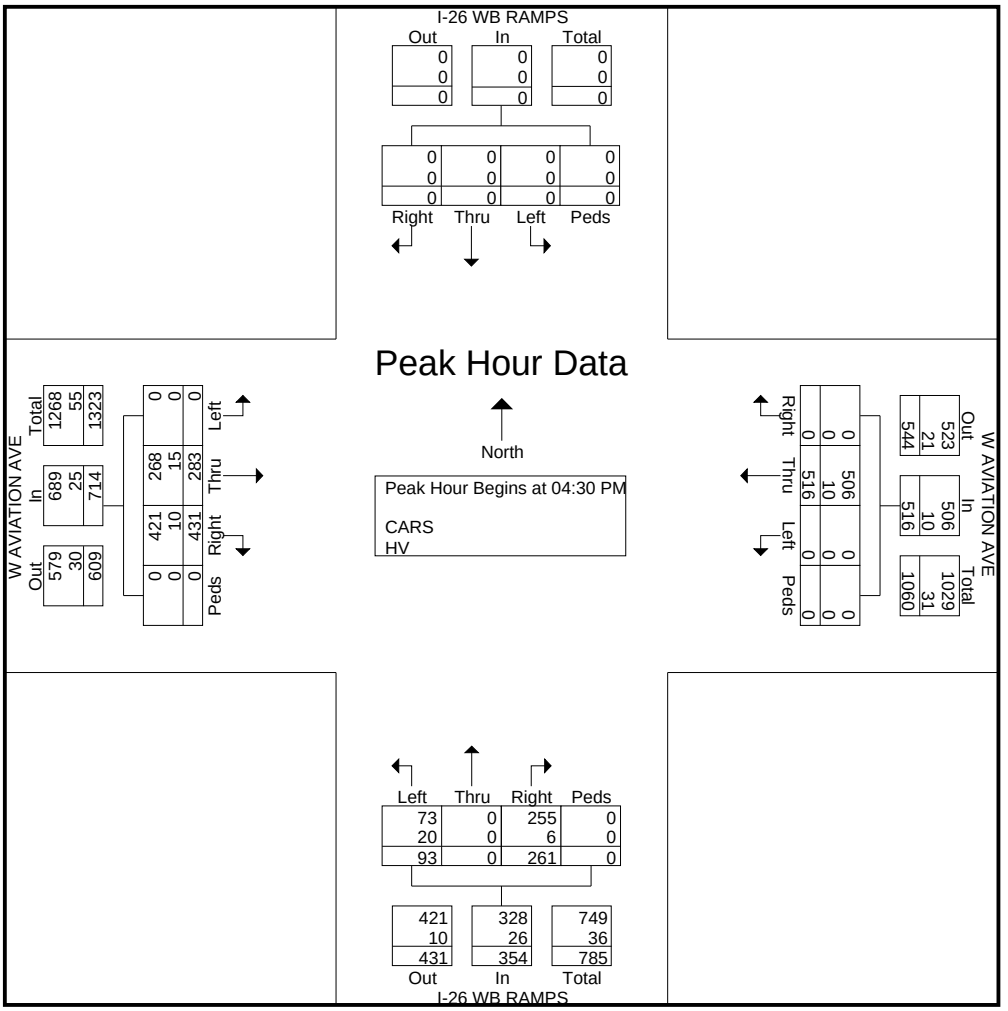
	I-26 WB RAMPS Southbound					W AVIATION AVE Westbound					I-26 WB RAMPS Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	131	0	0	131	64	0	22	0	86	116	69	0	0	185	402
04:45 PM	0	0	0	0	0	0	123	0	0	123	**70**	0	23	0	93	90	54	0	0	144	360
05:00 PM	0	0	0	0	0	0	**153**	0	0	**153**	57	0	**24**	0	81	**123**	75	0	0	**198**	**432**
05:15 PM	0	0	0	0	0	0	109	0	0	109	70	0	24	0	**94**	102	**85**	0	0	187	390
Total Volume	0	0	0	0	0	0	516	0	0	516	261	0	93	0	354	431	283	0	0	714	1584
% App. Total	0	0	0	0		0	100	0	0		73.7	0	26.3	0		60.4	39.6	0	0		
PHF	.000	.000	.000	.000	.000	.000	.843	.000	.000	.843	.932	.000	.969	.000	.941	.876	.832	.000	.000	.902	.917
CARS	0	0	0	0	0	0	506	0	0	506	255	0	73	0	328	421	268	0	0	689	1523
% CARS	0	0	0	0	0	0	98.1	0	0	98.1	97.7	0	78.5	0	92.7	97.7	94.7	0	0	96.5	96.1
HV	0	0	0	0	0	0	10	0	0	10	6	0	20	0	26	10	15	0	0	25	61
% HV	0	0	0	0	0	0	1.9	0	0	1.9	2.3	0	21.5	0	7.3	2.3	5.3	0	0	3.5	3.9



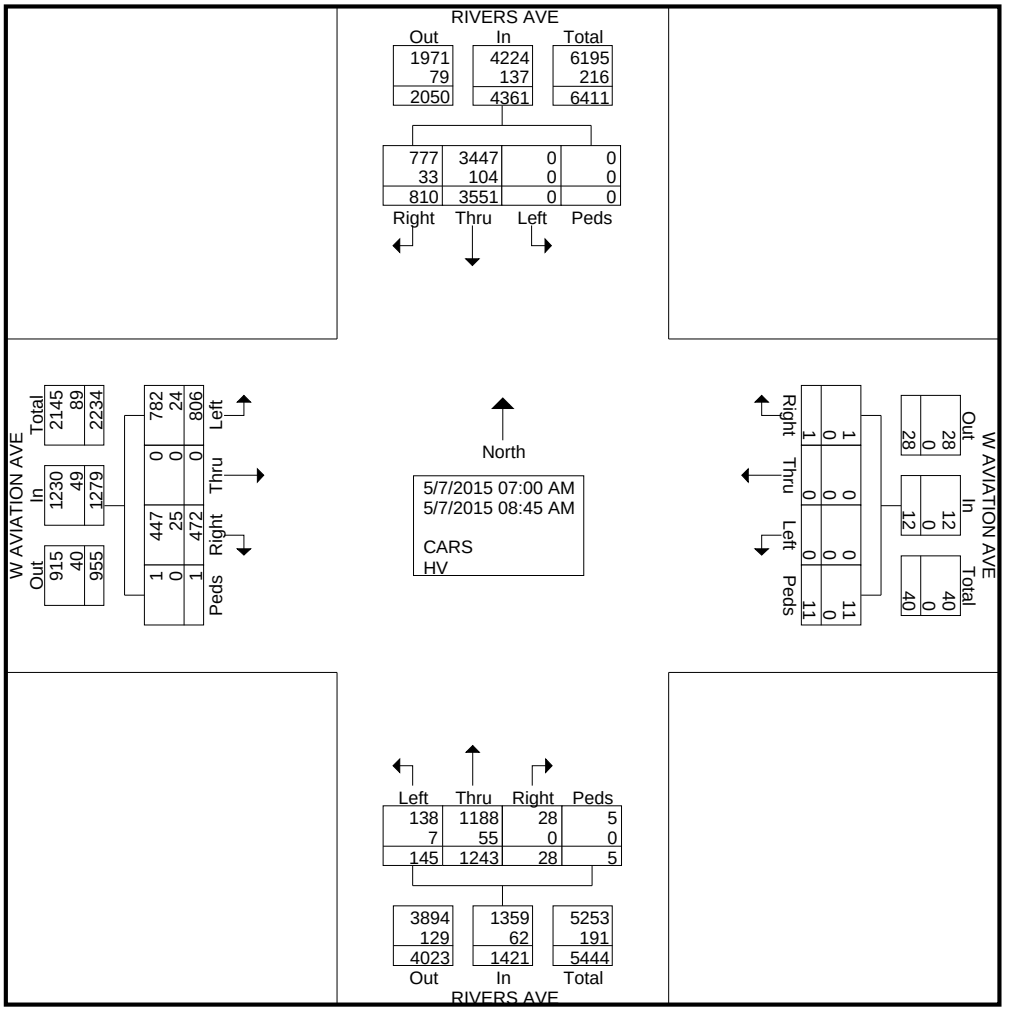
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #49 RIVERS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE Southbound					W AVIATION AVE Westbound					RIVERS AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	120	553	0	0	673	0	0	0	2	2	3	93	13	2	111	30	0	70	0	100	886
07:15 AM	120	571	0	0	691	0	0	0	1	1	5	129	22	0	156	52	0	86	0	138	986
07:30 AM	136	491	0	0	627	0	0	0	0	0	3	133	24	0	160	58	0	80	0	138	925
07:45 AM	95	466	0	0	561	0	0	0	1	1	2	178	18	0	198	69	0	118	0	187	947
Total	471	2081	0	0	2552	0	0	0	4	4	13	533	77	2	625	209	0	354	0	563	3744
08:00 AM	88	409	0	0	497	0	0	0	2	2	6	149	18	0	173	55	0	126	0	181	853
08:15 AM	86	420	0	0	506	0	0	0	4	4	2	177	21	3	203	69	0	115	0	184	897
08:30 AM	74	348	0	0	422	1	0	0	1	2	4	176	8	0	188	67	0	88	0	155	767
08:45 AM	91	293	0	0	384	0	0	0	0	0	3	208	21	0	232	72	0	123	1	196	812
Total	339	1470	0	0	1809	1	0	0	7	8	15	710	68	3	796	263	0	452	1	716	3329
Grand Total	810	3551	0	0	4361	1	0	0	11	12	28	1243	145	5	1421	472	0	806	1	1279	7073
Apprch %	18.6	81.4	0	0		8.3	0	0	91.7		2	87.5	10.2	0.4		36.9	0	63	0.1		
Total %	11.5	50.2	0	0	61.7	0	0	0	0.2	0.2	0.4	17.6	2.1	0.1	20.1	6.7	0	11.4	0	18.1	
CARS	777	3447										1188									
% CARS	95.9	97.1	0	0	96.9	100	0	0	100	100	100	95.6	95.2	100	95.6	94.7	0	97	100	96.2	96.5
HV	33	104	0	0	137	0	0	0	0	0	0	55	7	0	62	25	0	24	0	49	248
% HV	4.1	2.9	0	0	3.1	0	0	0	0	0	0	4.4	4.8	0	4.4	5.3	0	3	0	3.8	3.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #49 RIVERS&WAVIATIONAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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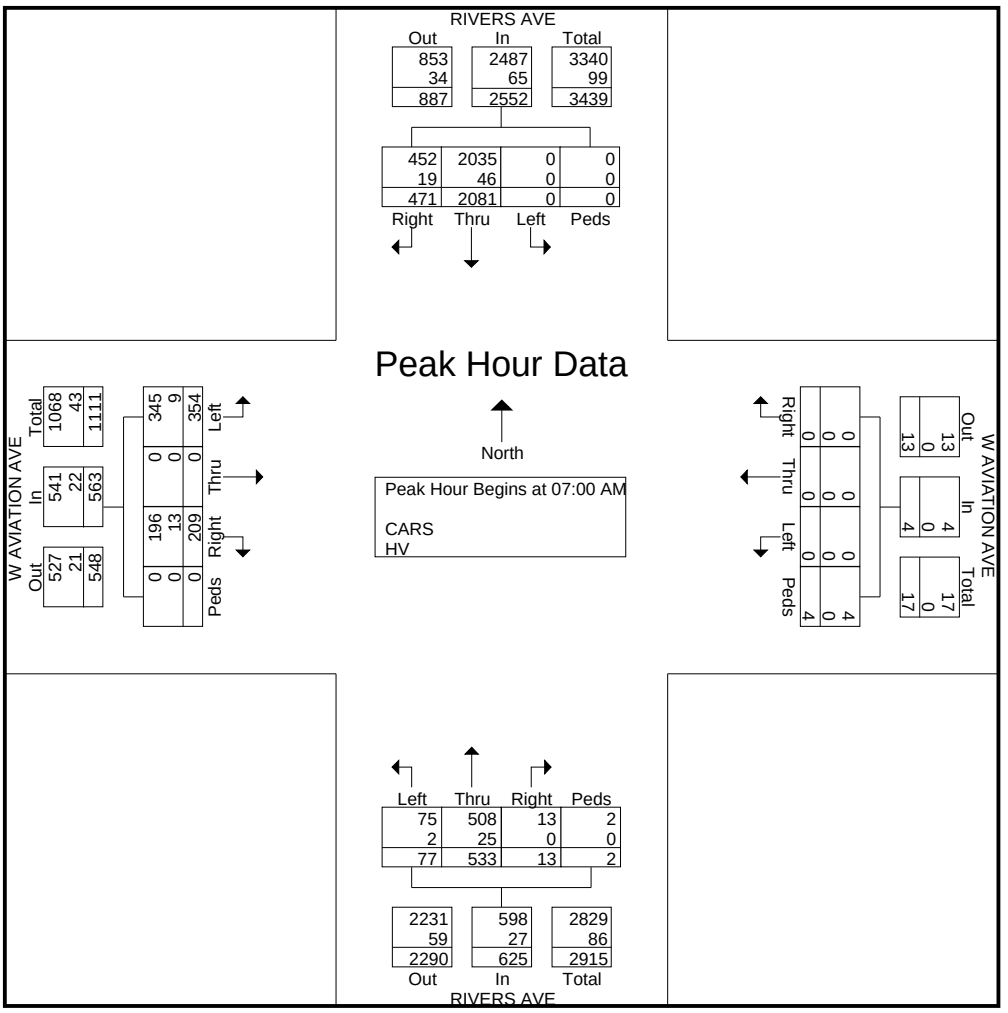
	RIVERS AVE Southbound					W AVIATION AVE Westbound					RIVERS AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	120	553	0	0	673	0	0	0	**2**	**2**	3	93	13	**2**	111	30	0	70	0	100	886
07:15 AM	120	**571**	0	0	**691**	0	0	0	1	1	**5**	129	22	0	156	52	0	86	0	138	**986**
07:30 AM	**136**	491	0	0	627	0	0	0	0	0	3	133	**24**	0	160	58	0	80	0	138	925
07:45 AM	95	466	0	0	561	0	0	0	1	1	2	**178**	18	0	**198**	**69**	0	**118**	0	**187**	947
Total Volume	471	2081	0	0	2552	0	0	0	4	4	13	533	77	2	625	209	0	354	0	563	3744
% App. Total	18.5	81.5	0	0		0	0	0	100		2.1	85.3	12.3	0.3		37.1	0	62.9	0		
PHF	.866	.911	.000	.000	.923	.000	.000	.000	.500	.500	.650	.749	.802	.250	.789	.757	.000	.750	.000	.753	.949
CARS	452	2035																			
% CARS	96.0	97.8	0	0	97.5	0	0	0	100	100	100	95.3	97.4	100	95.7	93.8	0	97.5	0	96.1	97.0
HV	19	46	0	0	65	0	0	0	0	0	0	25	2	0	27	13	0	9	0	22	114
% HV	4.0	2.2	0	0	2.5	0	0	0	0	0	0	4.7	2.6	0	4.3	6.2	0	2.5	0	3.9	3.0



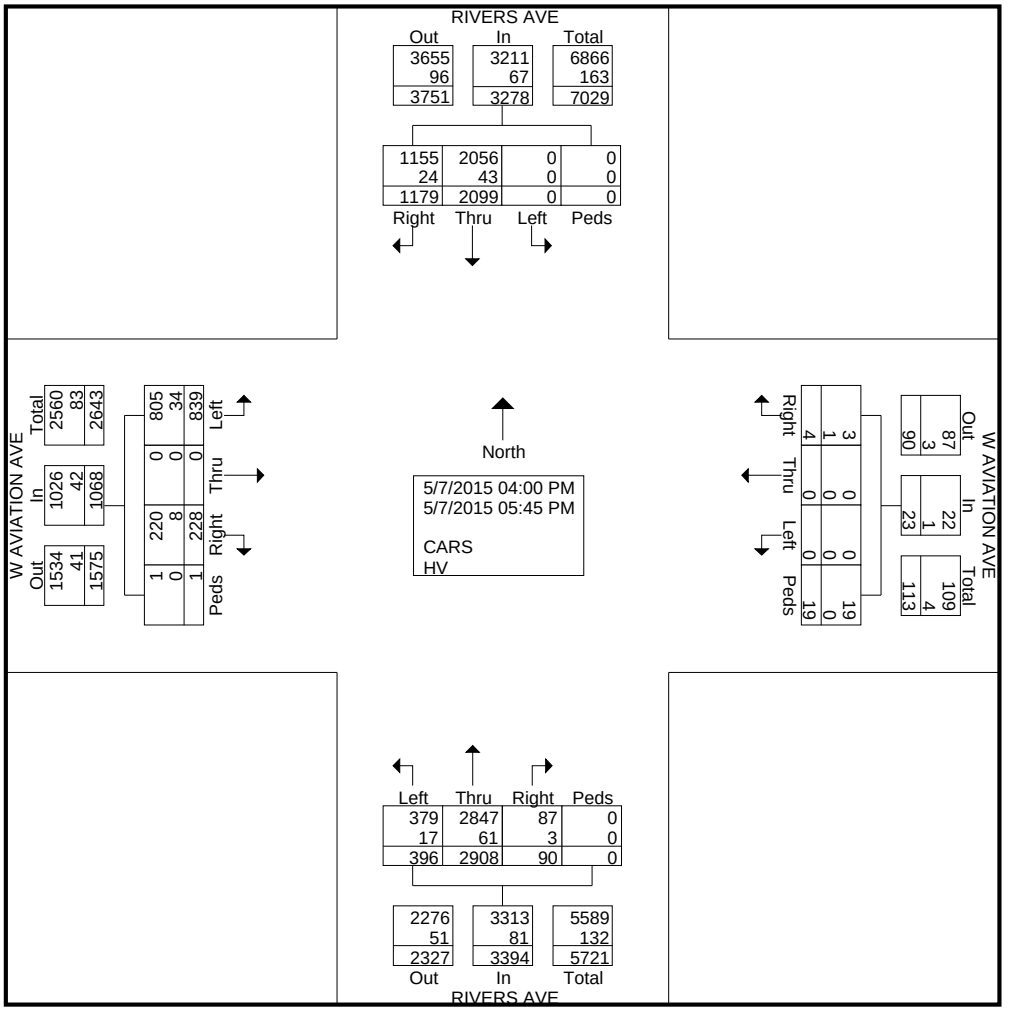
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #49 RIVERS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE Southbound					W AVIATION AVE Westbound					RIVERS AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	133	272	0	0	405	1	0	0	1	2	10	312	44	0	366	28	0	107	0	135	908
04:15 PM	135	274	0	0	409	0	0	0	0	0	10	341	32	0	383	35	0	117	0	152	944
04:30 PM	149	250	0	0	399	1	0	0	5	6	11	345	49	0	405	34	0	94	1	129	939
04:45 PM	133	265	0	0	398	0	0	0	0	0	17	346	55	0	418	20	0	103	0	123	939
Total	550	1061	0	0	1611	2	0	0	6	8	48	1344	180	0	1572	117	0	421	1	539	3730
05:00 PM	228	307	0	0	535	2	0	0	3	5	12	367	63	0	442	30	0	103	0	133	1115
05:15 PM	153	253	0	0	406	0	0	0	2	2	9	385	49	0	443	32	0	120	0	152	1003
05:30 PM	141	271	0	0	412	0	0	0	3	3	8	407	53	0	468	25	0	120	0	145	1028
05:45 PM	107	207	0	0	314	0	0	0	5	5	13	405	51	0	469	24	0	75	0	99	887
Total	629	1038	0	0	1667	2	0	0	13	15	42	1564	216	0	1822	111	0	418	0	529	4033
Grand Total	1179	2099	0	0	3278	4	0	0	19	23	90	2908	396	0	3394	228	0	839	1	1068	7763
Apprch %	36	64	0	0		17.4	0	0	82.6		2.7	85.7	11.7	0		21.3	0	78.6	0.1		
Total %	15.2	27	0	0	42.2	0.1	0	0	0.2	0.3	1.2	37.5	5.1	0	43.7	2.9	0	10.8	0	13.8	
CARS	1155	2056										2847									
% CARS	98	98	0	0	98	75	0	0	100	95.7	96.7	97.9	95.7	0	97.6	96.5	0	95.9	100	96.1	97.5
HV	24	43	0	0	67	1	0	0	0	1	3	61	17	0	81	8	0	34	0	42	191
% HV	2	2	0	0	2	25	0	0	0	4.3	3.3	2.1	4.3	0	2.4	3.5	0	4.1	0	3.9	2.5



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1336 Farmer Rd
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File Name : #49 RIVERS&WAVIATIONPM
Site Code : 9513 - CHARLESTON 1
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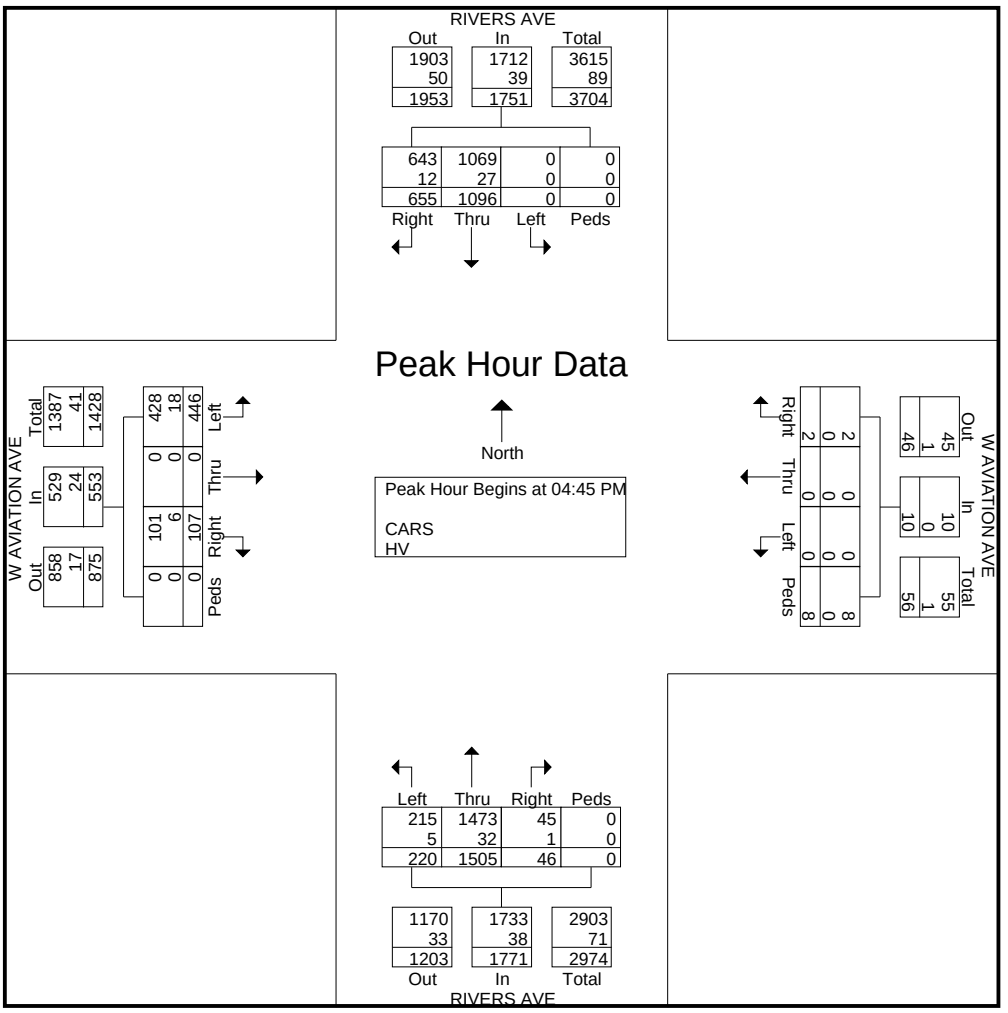
	RIVERS AVE Southbound					W AVIATION AVE Westbound					RIVERS AVE Northbound					W AVIATION AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	133	265	0	0	398	0	0	0	0	0	**17**	346	55	0	418	20	0	103	0	123	939
05:00 PM	**228**	**307**	0	0	**535**	**2**	0	0	**3**	**5**	12	367	**63**	0	442	30	0	103	0	133	**1115**
05:15 PM	153	253	0	0	406	0	0	0	2	2	9	385	49	0	443	**32**	0	**120**	0	**152**	1003
05:30 PM	141	271	0	0	412	0	0	0	3	3	8	**407**	53	0	**468**	25	0	120	0	145	1028
Total Volume	655	1096	0	0	1751	2	0	0	8	10	46	1505	220	0	1771	107	0	446	0	553	4085
% App. Total	37.4	62.6	0	0		20	0	0	80		2.6	85	12.4	0		19.3	0	80.7	0		
PHF	.718	.893	.000	.000	.818	.250	.000	.000	.667	.500	.676	.924	.873	.000	.946	.836	.000	.929	.000	.910	.916
CARS	643	1069										1473									
% CARS	98.2	97.5	0	0	97.8	100	0	0	100	100	97.8	97.9	97.7	0	97.9	94.4	0	96.0	0	95.7	97.5
HV	12	27	0	0	39	0	0	0	0	0	1	32	5	0	38	6	0	18	0	24	101
% HV	1.8	2.5	0	0	2.2	0	0	0	0	0	2.2	2.1	2.3	0	2.1	5.6	0	4.0	0	4.3	2.5



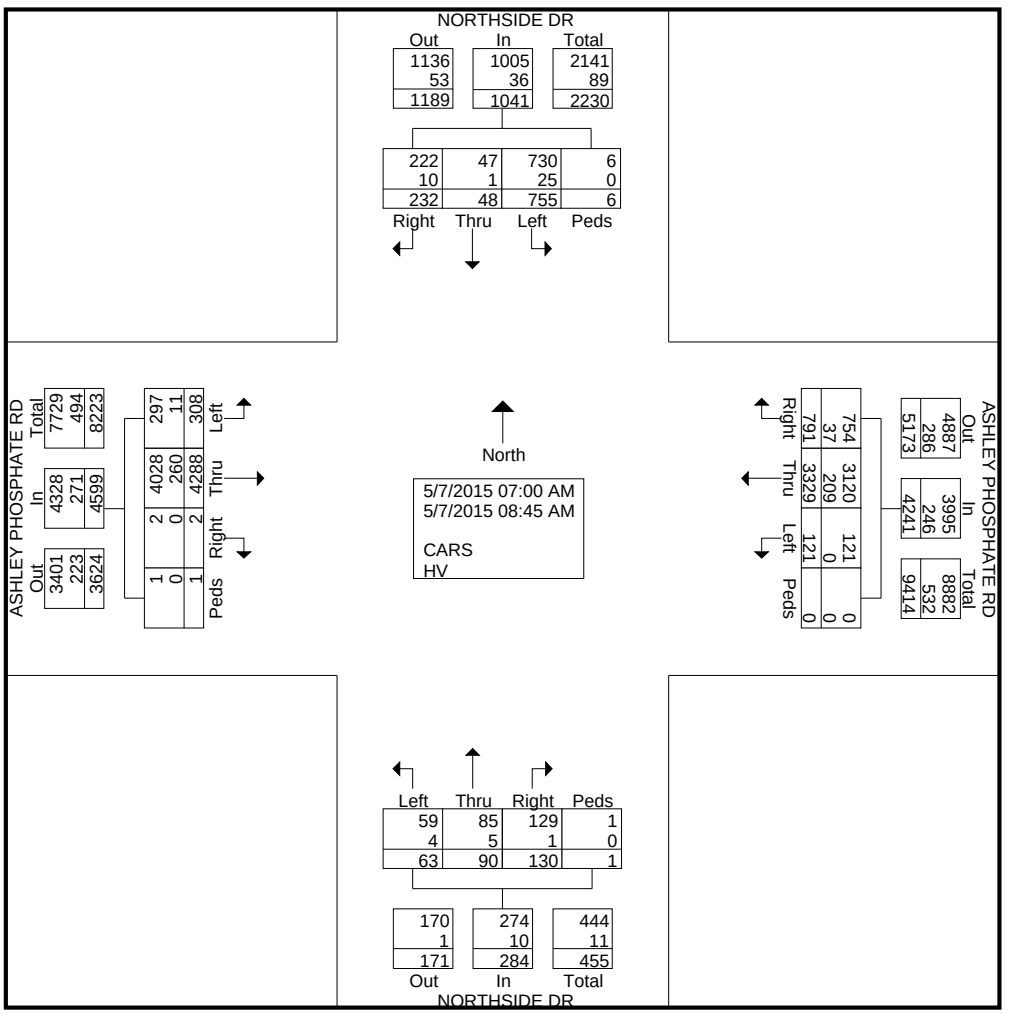
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #50 NORTHSIDE&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	NORTHSIDE DR Southbound					ASHLEY PHOSPHATE RD Westbound					NORTHSIDE DR Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	29	4	105	0	138	72	485	18	0	575	19	29	8	0	56	0	547	49	0	596	1365
07:15 AM	51	17	133	0	201	123	420	22	0	565	26	30	10	1	67	0	489	34	0	523	1356
07:30 AM	30	11	100	0	141	134	407	12	0	553	9	8	7	0	24	0	508	42	0	550	1268
07:45 AM	34	4	107	1	146	108	448	9	0	565	8	3	9	0	20	0	550	44	1	595	1326
Total	144	36	445	1	626	437	1760	61	0	2258	62	70	34	1	167	0	2094	169	1	2264	5315
08:00 AM	27	8	91	2	128	92	332	5	0	429	11	6	6	0	23	0	572	35	0	607	1187
08:15 AM	19	1	64	0	84	88	416	17	0	521	24	3	5	0	32	1	577	37	0	615	1252
08:30 AM	11	1	62	3	77	95	431	14	0	540	16	2	7	0	25	0	553	33	0	586	1228
08:45 AM	31	2	93	0	126	79	390	24	0	493	17	9	11	0	37	1	492	34	0	527	1183
Total	88	12	310	5	415	354	1569	60	0	1983	68	20	29	0	117	2	2194	139	0	2335	4850
Grand Total	232	48	755	6	1041	791	3329	121	0	4241	130	90	63	1	284	2	4288	308	1	4599	10165
Apprch %	22.3	4.6	72.5	0.6		18.7	78.5	2.9	0		45.8	31.7	22.2	0.4		0	93.2	6.7	0		
Total %	2.3	0.5	7.4	0.1	10.2	7.8	32.7	1.2	0	41.7	1.3	0.9	0.6	0	2.8	0	42.2	3	0	45.2	
CARS	222	47	730	6	1005	754	3120										4028				
% CARS	95.7	97.9	96.7	100	96.5	95.3	93.7	100	0	94.2	99.2	94.4	93.7	100	96.5	100	93.9	96.4	100	94.1	94.5
HV	10	1	25	0	36	37	209	0	0	246	1	5	4	0	10	0	260	11	0	271	563
% HV	4.3	2.1	3.3	0	3.5	4.7	6.3	0	0	5.8	0.8	5.6	6.3	0	3.5	0	6.1	3.6	0	5.9	5.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #50 NORTHSIDE&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
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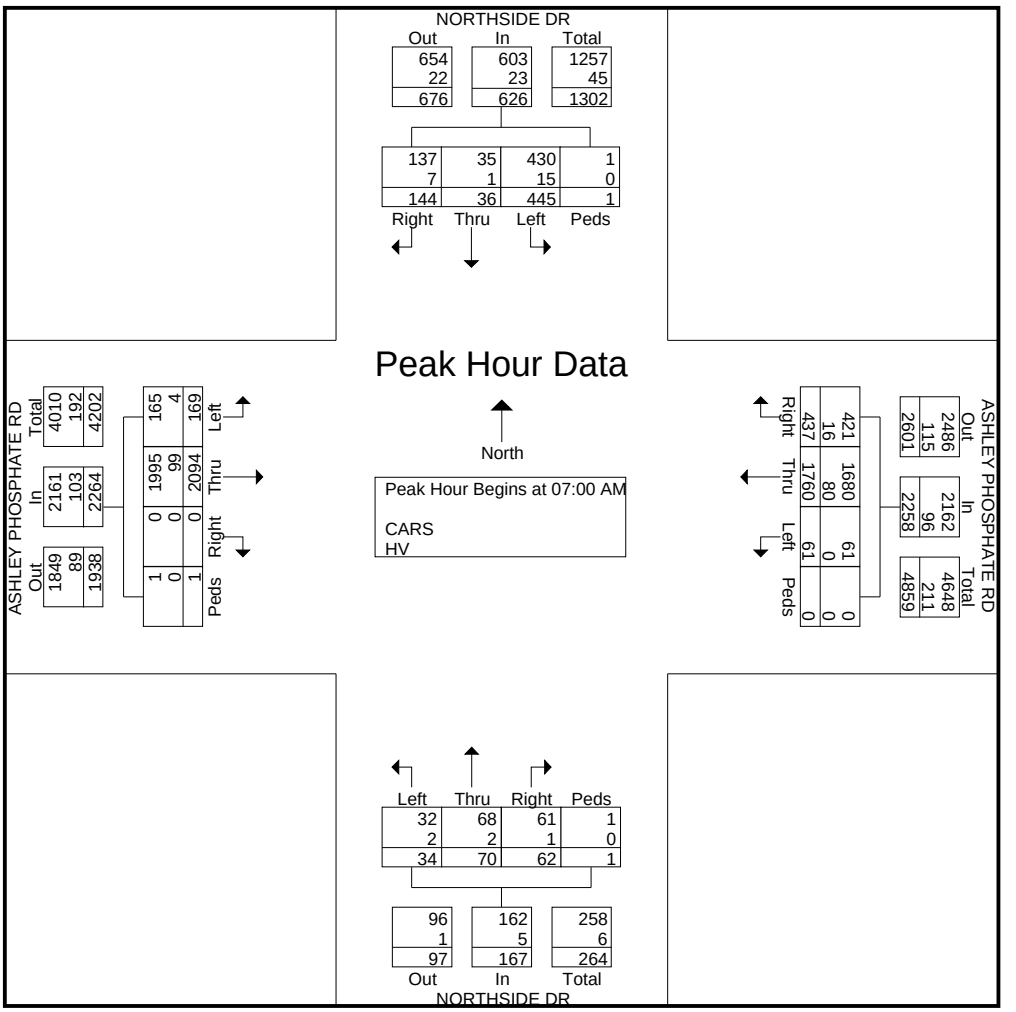
	NORTHSIDE DR Southbound					ASHLEY PHOSPHATE RD Westbound					NORTHSIDE DR Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	29	4	105	0	138	72	**485**	18	0	**575**	19	29	8	0	56	0	547	**49**	0	**596**	**1365**
07:15 AM	**51**	**17**	**133**	0	**201**	123	420	**22**	0	565	**26**	**30**	**10**	**1**	**67**	0	489	34	0	523	1356
07:30 AM	30	11	100	0	141	**134**	407	12	0	553	9	8	7	0	24	0	508	42	0	550	1268
07:45 AM	34	4	107	**1**	146	108	448	9	0	565	8	3	9	0	20	0	**550**	44	**1**	595	1326
Total Volume	144	36	445	1	626	437	1760	61	0	2258	62	70	34	1	167	0	2094	169	1	2264	5315
% App. Total	23	5.8	71.1	0.2		19.4	77.9	2.7	0		37.1	41.9	20.4	0.6		0	92.5	7.5	0		
PHF	.706	.529	.836	.250	.779	.815	.907	.693	.000	.982	.596	.583	.850	.250	.623	.000	.952	.862	.250	.950	.973
CARS	137	35	430	1	603	421	1680										1995				
% CARS	95.1	97.2	96.6	100	96.3	96.3	95.5	100	0	95.7	98.4	97.1	94.1	100	97.0	0	95.3	97.6	100	95.5	95.7
HV	7	1	15	0	23	16	80	0	0	96	1	2	2	0	5	0	99	4	0	103	227
% HV	4.9	2.8	3.4	0	3.7	3.7	4.5	0	0	4.3	1.6	2.9	5.9	0	3.0	0	4.7	2.4	0	4.5	4.3



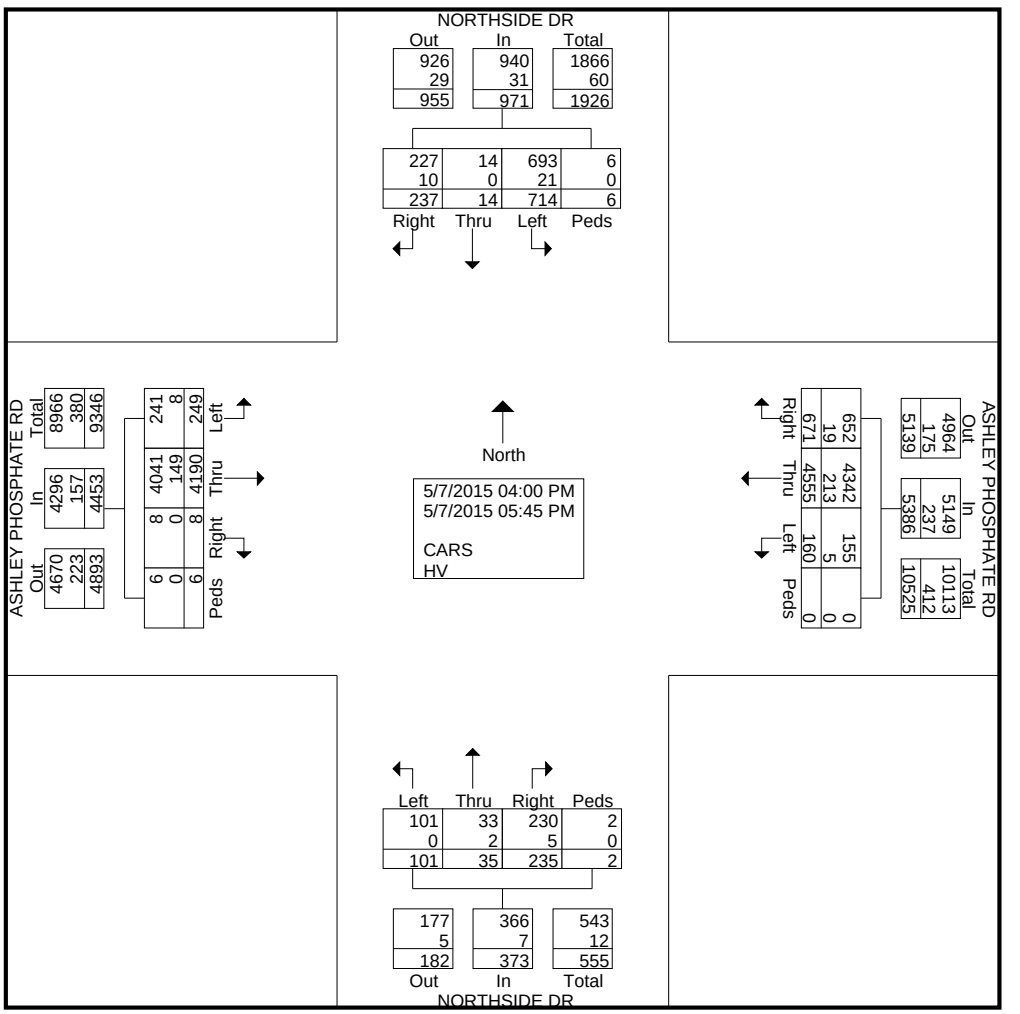
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #50 NORTHSIDE&ASHLEYPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	NORTHSIDE DR Southbound					ASHLEY PHOSPHATE RD Westbound					NORTHSIDE DR Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	31	2	79	1	113	87	525	18	0	630	34	1	9	1	45	1	493	29	1	524	1312
04:15 PM	49	1	92	1	143	91	615	13	0	719	37	4	10	0	51	2	557	32	0	591	1504
04:30 PM	31	1	97	1	130	74	563	22	0	659	43	6	4	1	54	1	529	32	0	562	1405
04:45 PM	29	0	86	1	116	72	515	16	0	603	33	3	11	0	47	0	495	34	1	530	1296
Total	140	4	354	4	502	324	2218	69	0	2611	147	14	34	2	197	4	2074	127	2	2207	5517
05:00 PM	29	2	104	0	135	88	594	19	0	701	30	1	19	0	50	1	534	24	1	560	1446
05:15 PM	26	2	83	0	111	93	571	19	0	683	15	4	13	0	32	2	576	37	0	615	1441
05:30 PM	24	4	87	1	116	83	548	25	0	656	32	4	22	0	58	1	494	26	2	523	1353
05:45 PM	18	2	86	1	107	83	624	28	0	735	11	12	13	0	36	0	512	35	1	548	1426
Total	97	10	360	2	469	347	2337	91	0	2775	88	21	67	0	176	4	2116	122	4	2246	5666
Grand Total	237	14	714	6	971	671	4555	160	0	5386	235	35	101	2	373	8	4190	249	6	4453	11183
Apprch %	24.4	1.4	73.5	0.6		12.5	84.6	3	0		63	9.4	27.1	0.5		0.2	94.1	5.6	0.1		
Total %	2.1	0.1	6.4	0.1	8.7	6	40.7	1.4	0	48.2	2.1	0.3	0.9	0	3.3	0.1	37.5	2.2	0.1	39.8	
CARS	227	14	693	6	940	652	4342										4041				10751
% CARS	95.8	100	97.1	100	96.8	97.2	95.3	96.9	0	95.6	97.9	94.3	100	100	98.1	100	96.4	96.8	100	96.5	96.1
HV	10	0	21	0	31	19	213	5	0	237	5	2	0	0	7	0	149	8	0	157	432
% HV	4.2	0	2.9	0	3.2	2.8	4.7	3.1	0	4.4	2.1	5.7	0	0	1.9	0	3.6	3.2	0	3.5	3.9



All Traffic Data Services, Inc.

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File Name : #50 NORTHSIDE&ASHLEYPM
Site Code : 9513 - CHARLESTON 1
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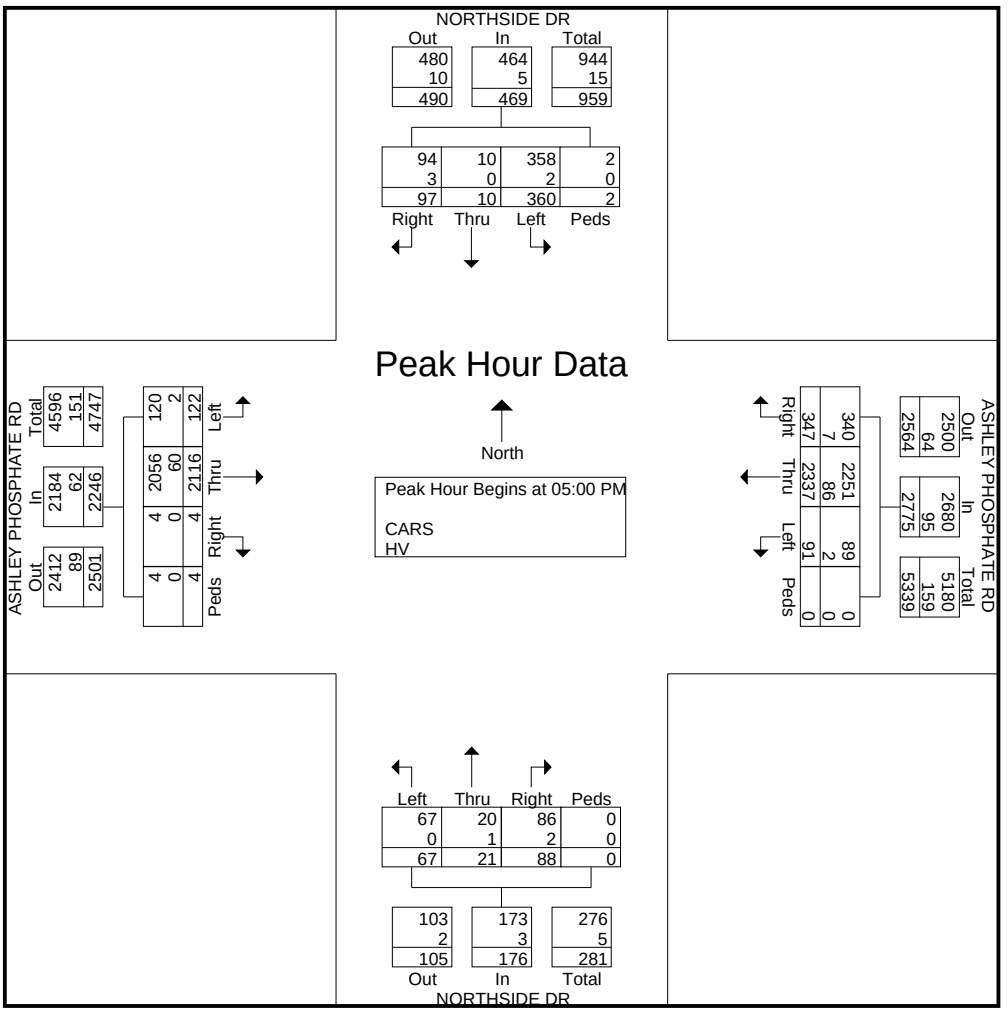
	NORTHSIDE DR Southbound					ASHLEY PHOSPHATE RD Westbound					NORTHSIDE DR Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**29**	2	**104**	0	**135**	88	594	19	0	701	30	1	19	0	50	1	534	24	1	560	**1446**
05:15 PM	26	2	83	0	111	**93**	571	19	0	683	15	4	13	0	32	**2**	**576**	**37**	0	**615**	1441
05:30 PM	24	**4**	87	**1**	116	83	548	25	0	656	**32**	4	**22**	0	**58**	1	494	26	**2**	523	1353
05:45 PM	18	2	86	1	107	83	**624**	**28**	0	**735**	11	**12**	13	0	36	0	512	35	1	548	1426
Total Volume	97	10	360	2	469	347	2337	91	0	2775	88	21	67	0	176	4	2116	122	4	2246	5666
% App. Total	20.7	2.1	76.8	0.4		12.5	84.2	3.3	0		50	11.9	38.1	0		0.2	94.2	5.4	0.2		
PHF	.836	.625	.865	.500	.869	.933	.936	.813	.000	.944	.688	.438	.761	.000	.759	.500	.918	.824	.500	.913	.980
CARS	94	10	358	2	464	340	2251										2056				
% CARS	96.9	100	99.4	100	98.9	98.0	96.3	97.8	0	96.6	97.7	95.2	100	0	98.3	100	97.2	98.4	100	97.2	97.1
HV	3	0	2	0	5	7	86	2	0	95	2	1	0	0	3	0	60	2	0	62	165
% HV	3.1	0	0.6	0	1.1	2.0	3.7	2.2	0	3.4	2.3	4.8	0	0	1.7	0	2.8	1.6	0	2.8	2.9



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #51 I26EBRAMPS&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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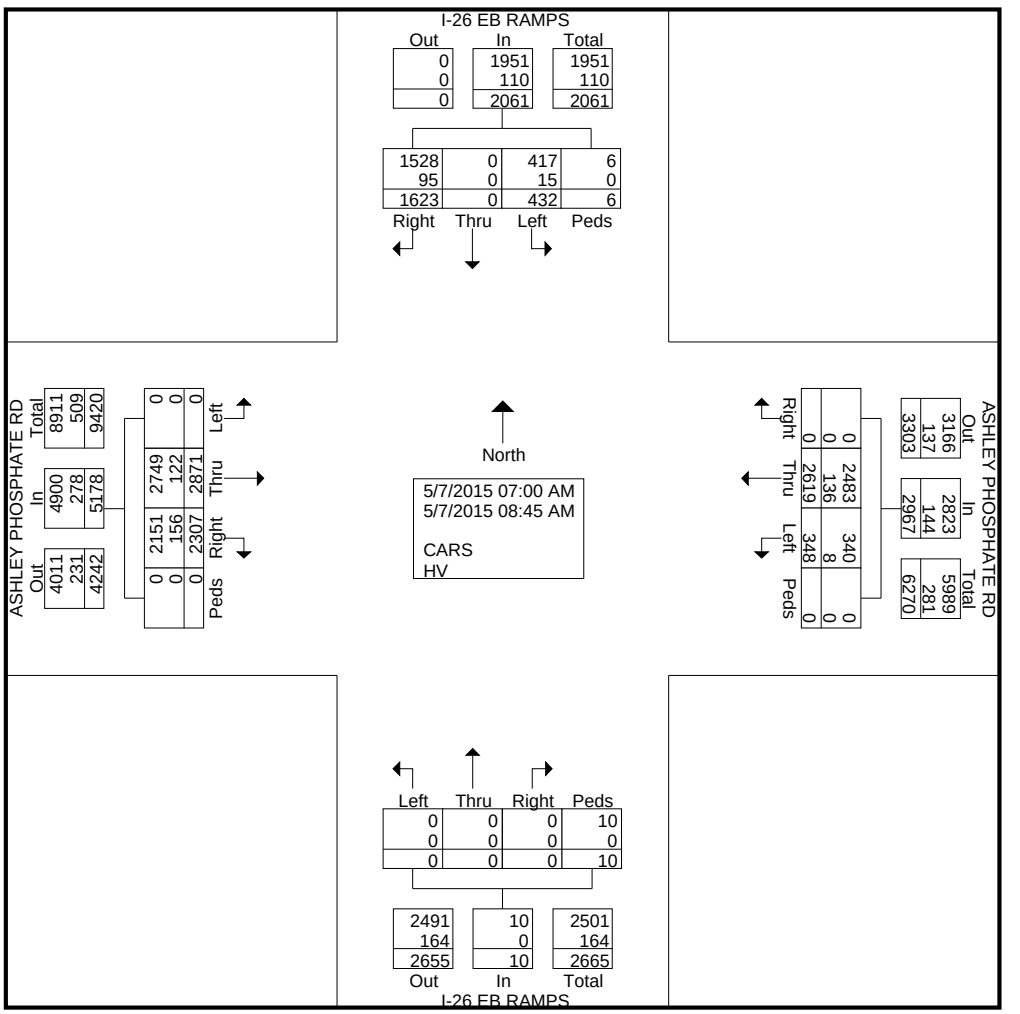
Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 EB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	227	0	37	0	264	0	261	42	0	303	0	0	0	2	2	307	360	0	0	667	1236
07:15 AM	220	0	58	0	278	0	353	44	0	397	0	0	0	1	1	302	320	0	0	622	1298
07:30 AM	149	0	30	0	179	0	332	48	0	380	0	0	0	3	3	299	314	0	0	613	1175
07:45 AM	209	0	24	0	233	0	390	34	0	424	0	0	0	1	1	328	374	0	0	702	1360
Total	805	0	149	0	954	0	1336	168	0	1504	0	0	0	7	7	1236	1368	0	0	2604	5069
08:00 AM	171	0	31	3	205	0	315	30	0	345	0	0	0	0	0	301	357	0	0	658	1208
08:15 AM	230	0	42	1	273	0	338	47	0	385	0	0	0	0	0	275	374	0	0	649	1307
08:30 AM	212	0	126	2	340	0	304	52	0	356	0	0	0	0	0	242	407	0	0	649	1345
08:45 AM	205	0	84	0	289	0	326	51	0	377	0	0	0	3	3	253	365	0	0	618	1287
Total	818	0	283	6	1107	0	1283	180	0	1463	0	0	0	3	3	1071	1503	0	0	2574	5147
Grand Total	1623	0	432	6	2061	0	2619	348	0	2967	0	0	0	10	10	2307	2871	0	0	5178	10216
Apprch %	78.7	0	21	0.3		0	88.3	11.7	0		0	0	0	100		44.6	55.4	0	0		
Total %	15.9	0	4.2	0.1	20.2	0	25.6	3.4	0	29	0	0	0	0.1	0.1	22.6	28.1	0	0	50.7	
CARS	1528						2483									2151	2749				
% CARS	94.1	0	96.5	100	94.7	0	94.8	97.7	0	95.1	0	0	0	100	100	93.2	95.8	0	0	94.6	94.8
HV	95	0	15	0	110	0	136	8	0	144	0	0	0	0	0	156	122	0	0	278	532
% HV	5.9	0	3.5	0	5.3	0	5.2	2.3	0	4.9	0	0	0	0	0	6.8	4.2	0	0	5.4	5.2



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #51 I26EBRAMPS&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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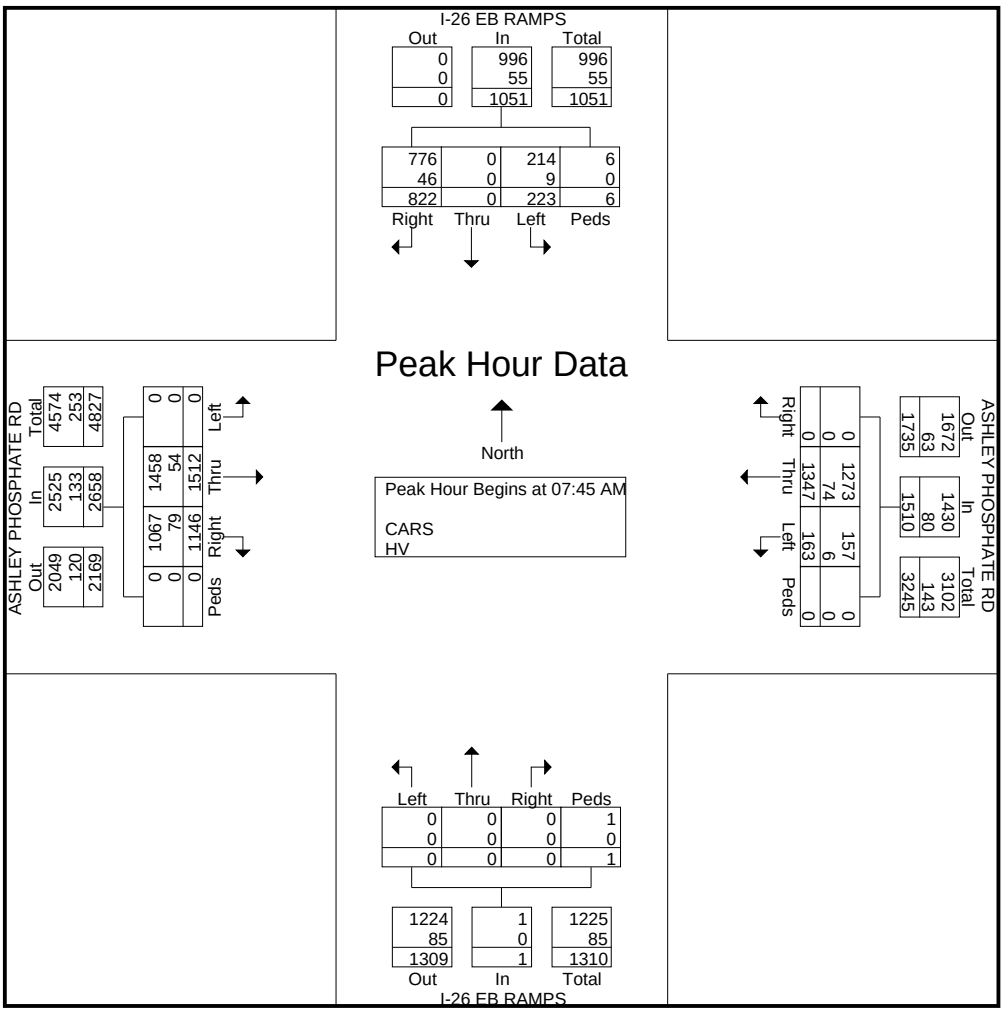
	I-26 EB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 EB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	209	0	24	0	233	0	**390**	34	0	**424**	0	0	0	**1**	**1**	**328**	374	0	0	**702**	**1360**
08:00 AM	171	0	31	**3**	205	0	315	30	0	345	0	0	0	0	0	301	357	0	0	658	1208
08:15 AM	**230**	0	42	1	273	0	338	47	0	385	0	0	0	0	0	275	374	0	0	649	1307
08:30 AM	212	0	**126**	2	**340**	0	304	**52**	0	356	0	0	0	0	0	242	**407**	0	0	649	1345
Total Volume	822	0	223	6	1051	0	1347	163	0	1510	0	0	0	1	1	1146	1512	0	0	2658	5220
% App. Total	78.2	0	21.2	0.6		0	89.2	10.8	0		0	0	0	100		43.1	56.9	0	0		
PHF	.893	.000	.442	.500	.773	.000	.863	.784	.000	.890	.000	.000	.000	.250	.250	.873	.929	.000	.000	.947	.960
CARS	776	0	214	6	996	0	1273									1067	1458				
% CARS	94.4	0	96.0	100	94.8	0	94.5	96.3	0	94.7	0	0	0	100	100	93.1	96.4	0	0	95.0	94.9
HV	46	0	9	0	55	0	74	6	0	80	0	0	0	0	0	79	54	0	0	133	268
% HV	5.6	0	4.0	0	5.2	0	5.5	3.7	0	5.3	0	0	0	0	0	6.9	3.6	0	0	5.0	5.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #51 I26EBRAMPS&ASHLEYPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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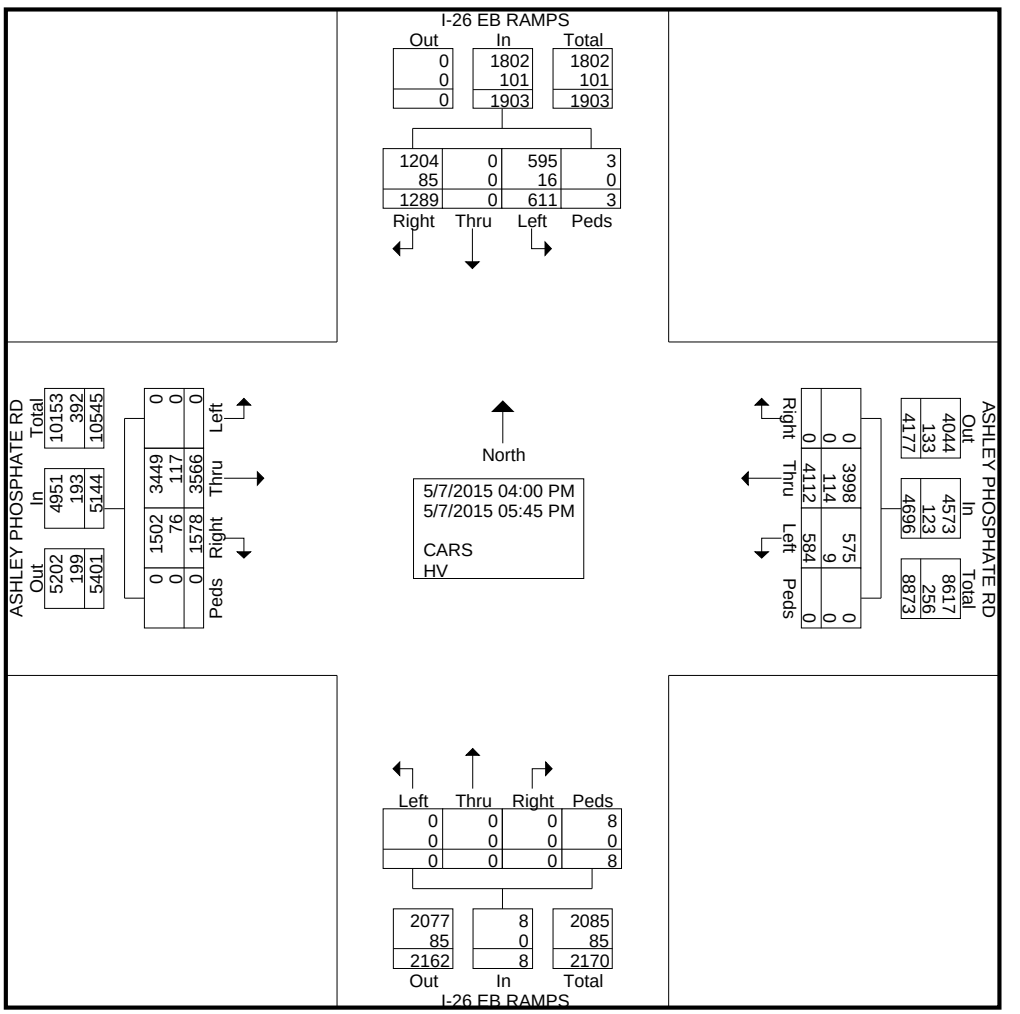
Groups Printed- CARS - HV

	I-26 EB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 EB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	182	0	55	0	237	0	551	83	0	634	0	0	0	1	1	212	396	0	0	608	1480
04:15 PM	161	0	76	0	237	0	610	74	0	684	0	0	0	0	0	190	460	0	0	650	1571
04:30 PM	187	0	91	0	278	0	623	78	0	701	0	0	0	3	3	208	428	0	0	636	1618
04:45 PM	144	0	74	2	220	0	563	62	0	625	0	0	0	2	2	201	450	0	0	651	1498
Total	674	0	296	2	972	0	2347	297	0	2644	0	0	0	6	6	811	1734	0	0	2545	6167
05:00 PM	166	0	76	0	242	0	407	73	0	480	0	0	0	0	0	197	461	0	0	658	1380
05:15 PM	147	0	69	0	216	0	480	64	0	544	0	0	0	1	1	216	470	0	0	686	1447
05:30 PM	146	0	76	1	223	0	433	83	0	516	0	0	0	0	0	166	437	0	0	603	1342
05:45 PM	156	0	94	0	250	0	445	67	0	512	0	0	0	1	1	188	464	0	0	652	1415
Total	615	0	315	1	931	0	1765	287	0	2052	0	0	0	2	2	767	1832	0	0	2599	5584
Grand Total	1289	0	611	3	1903	0	4112	584	0	4696	0	0	0	8	8	1578	3566	0	0	5144	11751
Apprch %	67.7	0	32.1	0.2		0	87.6	12.4	0		0	0	0	100		30.7	69.3	0	0		
Total %	11	0	5.2	0	16.2	0	35	5	0	40	0	0	0	0.1	0.1	13.4	30.3	0	0	43.8	
CARS	1204						3998									1502	3449				11334
% CARS	93.4	0	97.4	100	94.7	0	97.2	98.5	0	97.4	0	0	0	100	100	95.2	96.7	0	0	96.2	96.5
HV	85	0	16	0	101	0	114	9	0	123	0	0	0	0	0	76	117	0	0	193	417
% HV	6.6	0	2.6	0	5.3	0	2.8	1.5	0	2.6	0	0	0	0	0	4.8	3.3	0	0	3.8	3.5



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1336 Farmer Rd
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File Name : #51 I26EBRAMPS&ASHLEYPM
Site Code : 9513 - CHARLESTON 1
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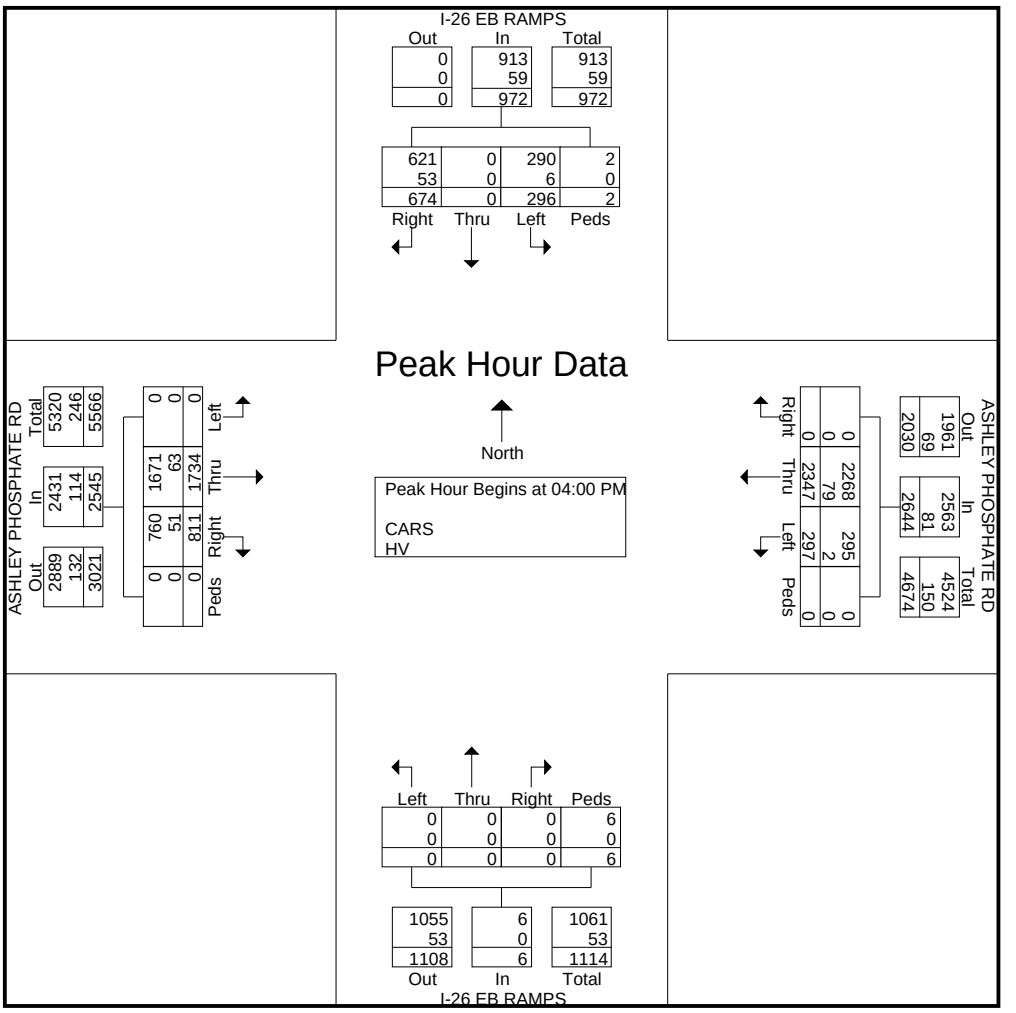
	I-26 EB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 EB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	182	0	55	0	237	0	551	**83**	0	634	0	0	0	1	1	**212**	396	0	0	608	1480
04:15 PM	161	0	76	0	237	0	610	74	0	684	0	0	0	0	0	190	**460**	0	0	650	1571
04:30 PM	**187**	0	**91**	0	**278**	0	**623**	78	0	**701**	0	0	0	**3**	**3**	208	428	0	0	636	**1618**
04:45 PM	144	0	74	**2**	220	0	563	62	0	625	0	0	0	2	2	201	450	0	0	**651**	1498
Total Volume	674	0	296	2	972	0	2347	297	0	2644	0	0	0	6	6	811	1734	0	0	2545	6167
% App. Total	69.3	0	30.5	0.2		0	88.8	11.2	0		0	0	0	100		31.9	68.1	0	0		
PHF	.901	.000	.813	.250	.874	.000	.942	.895	.000	.943	.000	.000	.000	.500	.500	.956	.942	.000	.000	.977	.953
CARS	621	0	290	2	913	0	2268										1671				
% CARS	92.1	0	98.0	100	93.9	0	96.6	99.3	0	96.9	0	0	0	100	100	93.7	96.4	0	0	95.5	95.9
HV	53	0	6	0	59	0	79	2	0	81	0	0	0	0	0	51	63	0	0	114	254
% HV	7.9	0	2.0	0	6.1	0	3.4	0.7	0	3.1	0	0	0	0	0	6.3	3.6	0	0	4.5	4.1



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #52 I26RAMPS&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
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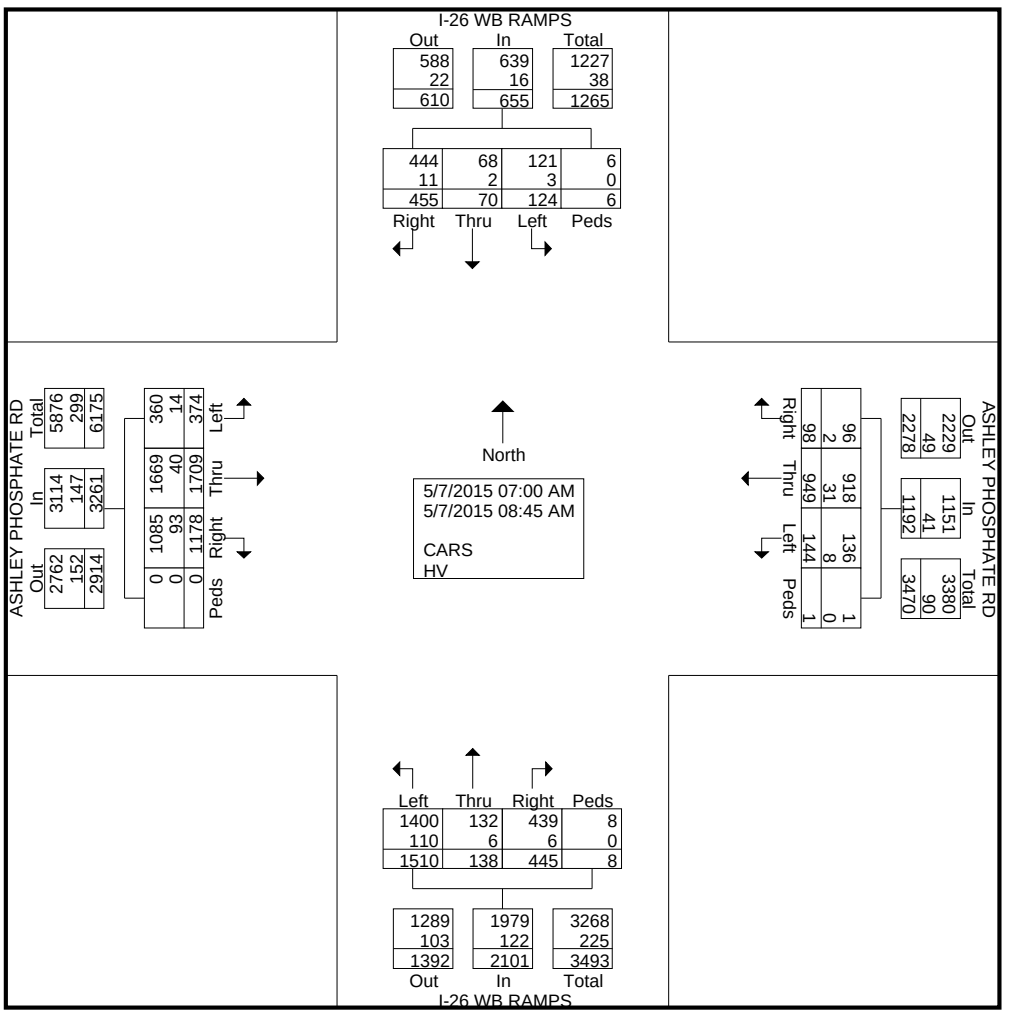
Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 WB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	55	11	9	0	75	9	145	19	0	173	37	11	171	1	220	150	194	33	0	377	845
07:15 AM	40	10	23	0	73	10	124	16	1	151	31	13	192	2	238	147	207	32	0	386	848
07:30 AM	85	8	7	0	100	17	121	13	0	151	46	15	254	3	318	135	145	29	0	309	878
07:45 AM	47	13	12	2	74	8	142	15	0	165	56	26	215	0	297	170	204	32	0	406	942
Total	227	42	51	2	322	44	532	63	1	640	170	65	832	6	1073	602	750	126	0	1478	3513
08:00 AM	56	7	15	2	80	9	96	21	0	126	69	18	176	0	263	151	212	46	0	409	878
08:15 AM	60	7	21	1	89	13	92	20	0	125	62	19	184	1	266	152	226	57	0	435	915
08:30 AM	60	6	15	0	81	16	105	20	0	141	70	18	162	1	251	117	268	72	0	457	930
08:45 AM	52	8	22	1	83	16	124	20	0	160	74	18	156	0	248	156	253	73	0	482	973
Total	228	28	73	4	333	54	417	81	0	552	275	73	678	2	1028	576	959	248	0	1783	3696
Grand Total	455	70	124	6	655	98	949	144	1	1192	445	138	1510	8	2101	1178	1709	374	0	3261	7209
Apprch %	69.5	10.7	18.9	0.9		8.2	79.6	12.1	0.1		21.2	6.6	71.9	0.4		36.1	52.4	11.5	0		
Total %	6.3	1	1.7	0.1	9.1	1.4	13.2	2	0	16.5	6.2	1.9	20.9	0.1	29.1	16.3	23.7	5.2	0	45.2	
CARS	444	68	121	6	639	96	918	136	1	1151	439	132	1400			1085	1669				
% CARS	97.6	97.1	97.6	100	97.6	98	96.7	94.4	100	96.6	98.7	95.7	92.7	100	94.2	92.1	97.7	96.3	0	95.5	95.5
HV	11	2	3	0	16	2	31	8	0	41	6	6	110	0	122	93	40	14	0	147	326
% HV	2.4	2.9	2.4	0	2.4	2	3.3	5.6	0	3.4	1.3	4.3	7.3	0	5.8	7.9	2.3	3.7	0	4.5	4.5



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #52 I26RAMPS&ASHLEYAM
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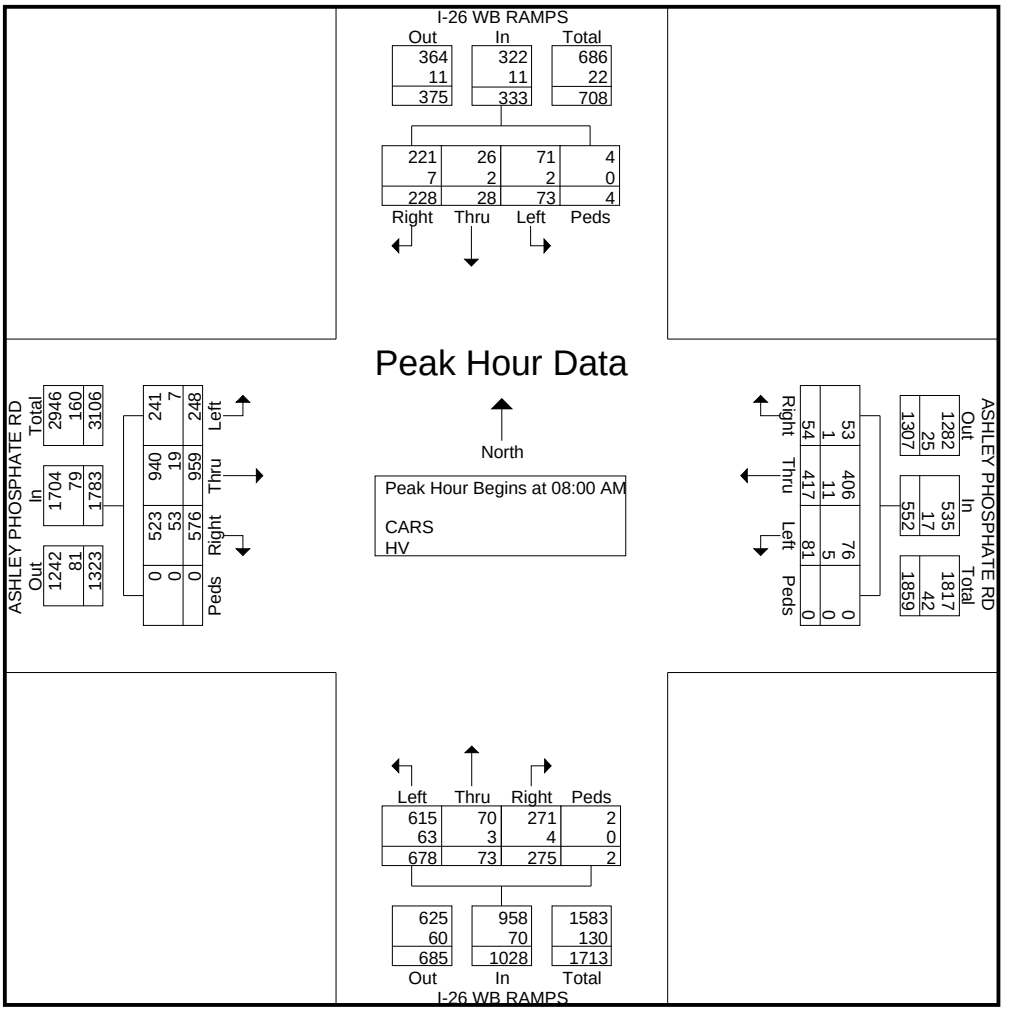
	I-26 WB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 WB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	56	7	15	**2**	80	9	96	**21**	0	126	69	18	176	0	263	151	212	46	0	409	878
08:15 AM	**60**	7	21	1	**89**	13	92	20	0	125	62	**19**	**184**	**1**	**266**	152	226	57	0	435	915
08:30 AM	60	6	15	0	81	**16**	105	20	0	141	70	18	162	1	251	117	**268**	72	0	457	930
08:45 AM	52	**8**	**22**	1	83	16	**124**	20	0	**160**	**74**	18	156	0	248	**156**	253	**73**	0	**482**	**973**
Total Volume	228	28	73	4	333	54	417	81	0	552	275	73	678	2	1028	576	959	248	0	1783	3696
% App. Total	68.5	8.4	21.9	1.2		9.8	75.5	14.7	0		26.8	7.1	66	0.2		32.3	53.8	13.9	0		
PHF	.950	.875	.830	.500	.935	.844	.841	.964	.000	.863	.929	.961	.921	.500	.966	.923	.895	.849	.000	.925	.950
CARS	221	26	71	4	322	53	406	76	0	535	271	70	615	2	958	523	940	241	0	1704	3519
% CARS	96.9	92.9	97.3	100	96.7	98.1	97.4	93.8	0	96.9	98.5	95.9	90.7	100	93.2	90.8	98.0	97.2	0	95.6	95.2
HV	7	2	2	0	11	1	11	5	0	17	4	3	63	0	70	53	19	7	0	79	177
% HV	3.1	7.1	2.7	0	3.3	1.9	2.6	6.2	0	3.1	1.5	4.1	9.3	0	6.8	9.2	2.0	2.8	0	4.4	4.8



All Traffic Data Services, Inc.

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File Name : #52 I26RAMPS&ASHLEYPM
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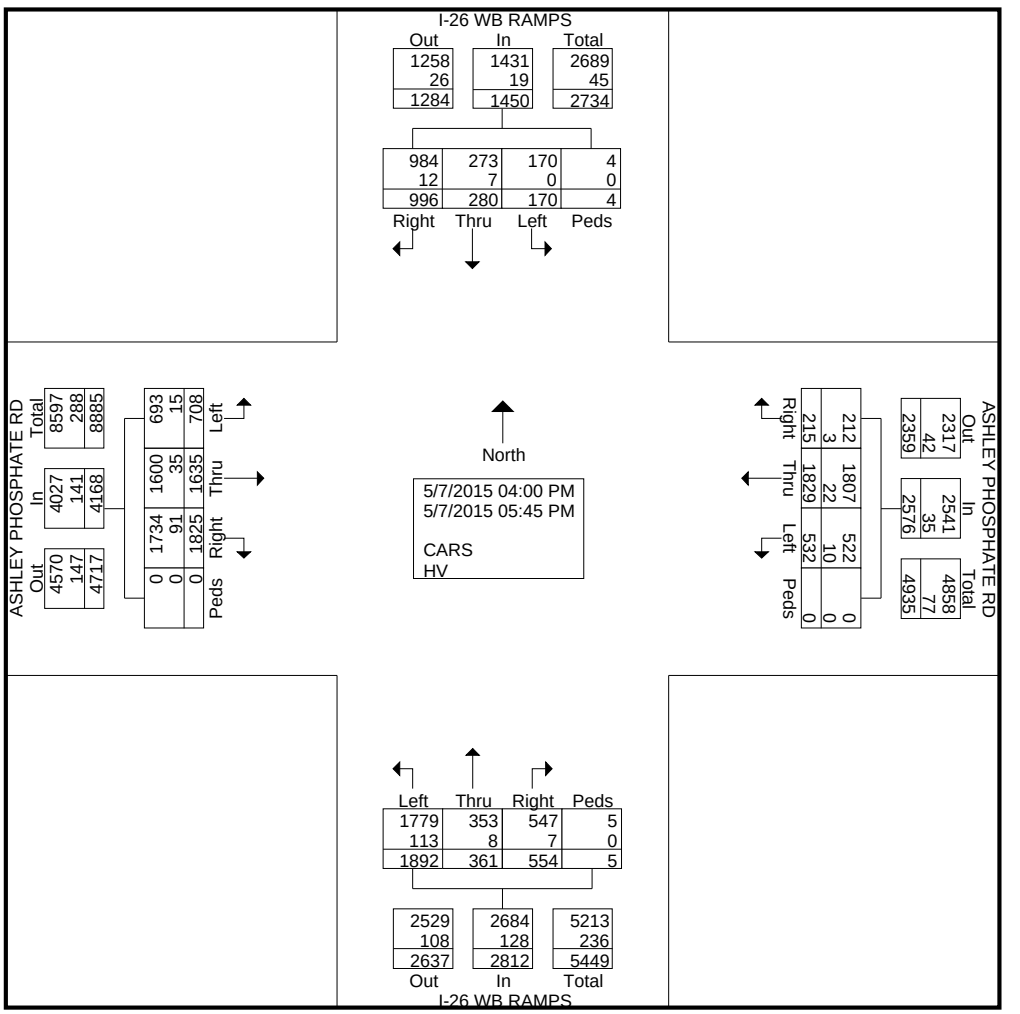
Groups Printed- CARS - HV

	I-26 WB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 WB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	100	35	18	1	154	19	274	60	0	353	88	41	222	1	352	227	184	83	0	494	1353
04:15 PM	123	31	15	1	170	29	244	67	0	340	92	34	261	0	387	232	220	99	0	551	1448
04:30 PM	107	34	29	0	170	23	242	74	0	339	56	35	273	0	364	228	206	114	0	548	1421
04:45 PM	115	34	27	0	176	34	262	64	0	360	70	45	212	2	329	215	181	78	0	474	1339
Total	445	134	89	2	670	105	1022	265	0	1392	306	155	968	3	1432	902	791	374	0	2067	5561
05:00 PM	131	44	20	0	195	19	200	71	0	290	49	51	247	1	348	252	237	90	0	579	1412
05:15 PM	141	34	18	1	194	28	205	62	0	295	53	39	230	0	322	236	212	63	0	511	1322
05:30 PM	136	34	33	0	203	32	187	65	0	284	68	46	214	0	328	220	187	86	0	493	1308
05:45 PM	143	34	10	1	188	31	215	69	0	315	78	70	233	1	382	215	208	95	0	518	1403
Total	551	146	81	2	780	110	807	267	0	1184	248	206	924	2	1380	923	844	334	0	2101	5445
Grand Total	996	280	170	4	1450	215	1829	532	0	2576	554	361	1892	5	2812	1825	1635	708	0	4168	11006
Apprch %	68.7	19.3	11.7	0.3		8.3	71	20.7	0		19.7	12.8	67.3	0.2		43.8	39.2	17	0		
Total %	9	2.5	1.5	0	13.2	2	16.6	4.8	0	23.4	5	3.3	17.2	0	25.5	16.6	14.9	6.4	0	37.9	
CARS	984	273	170	4	1431	212	1807						1779			1734	1600				10683
% CARS	98.8	97.5	100	100	98.7	98.6	98.8	98.1	0	98.6	98.7	97.8	94	100	95.4	95	97.9	97.9	0	96.6	97.1
HV	12	7	0	0	19	3	22	10	0	35	7	8	113	0	128	91	35	15	0	141	323
% HV	1.2	2.5	0	0	1.3	1.4	1.2	1.9	0	1.4	1.3	2.2	6	0	4.6	5	2.1	2.1	0	3.4	2.9



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File Name : #52 I26RAMPS&ASHLEYPM
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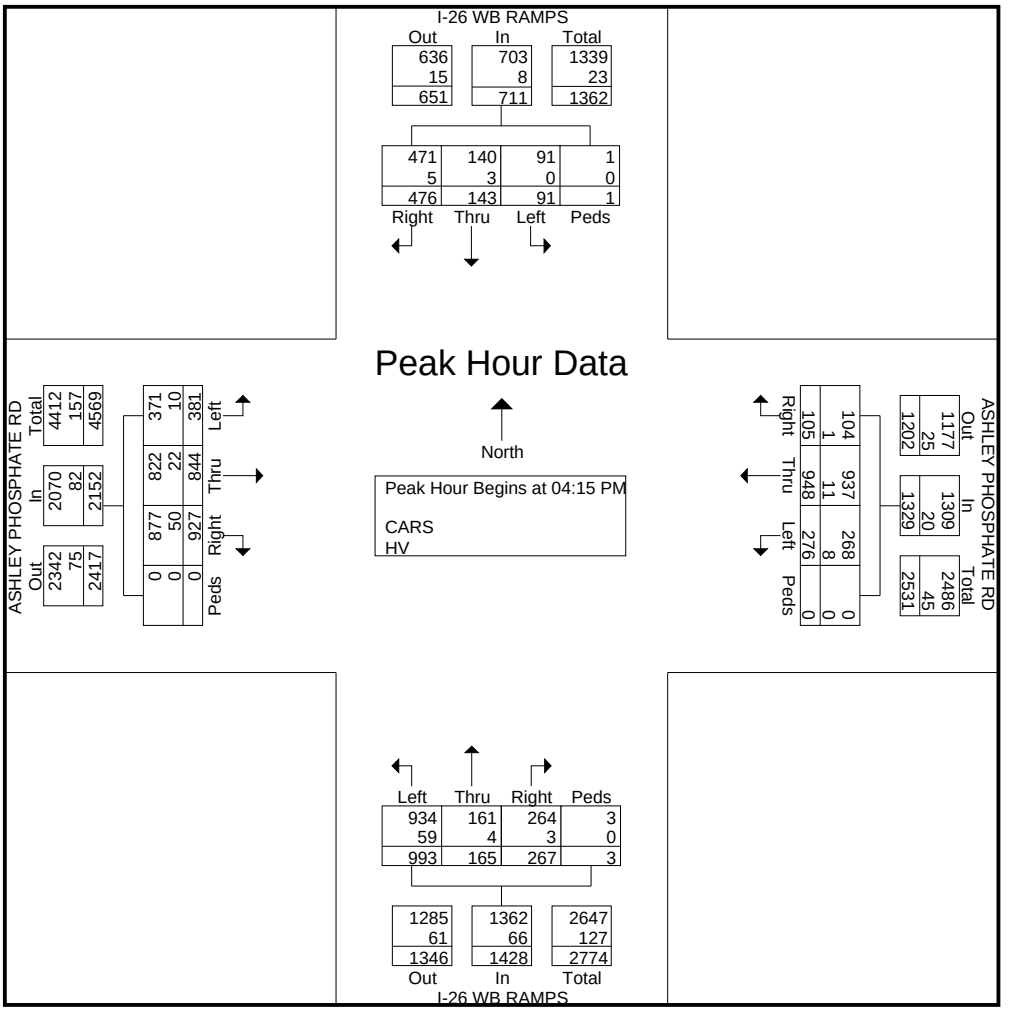
	I-26 WB RAMPS Southbound					ASHLEY PHOSPHATE RD Westbound					I-26 WB RAMPS Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	123	31	15	**1**	170	29	244	67	0	340	**92**	34	261	0	**387**	232	220	99	0	551	**1448**
04:30 PM	107	34	**29**	0	170	23	242	**74**	0	339	56	35	**273**	0	364	228	206	**114**	0	548	1421
04:45 PM	115	34	27	0	176	**34**	**262**	64	0	**360**	70	45	212	**2**	329	215	181	78	0	474	1339
05:00 PM	**131**	**44**	20	0	**195**	19	200	71	0	290	49	**51**	247	1	348	**252**	**237**	90	0	**579**	1412
Total Volume	476	143	91	1	711	105	948	276	0	1329	267	165	993	3	1428	927	844	381	0	2152	5620
% App. Total	66.9	20.1	12.8	0.1		7.9	71.3	20.8	0		18.7	11.6	69.5	0.2		43.1	39.2	17.7	0		
PHF	.908	.813	.784	.250	.912	.772	.905	.932	.000	.923	.726	.809	.909	.375	.922	.920	.890	.836	.000	.929	.970
CARS	471	140	91	1	703	104	937	268	0	1309	264	161	934	3	1362	877	822	371	0	2070	5444
% CARS	98.9	97.9	100	100	98.9	99.0	98.8	97.1	0	98.5	98.9	97.6	94.1	100	95.4	94.6	97.4	97.4	0	96.2	96.9
HV	5	3	0	0	8	1	11	8	0	20	3	4	59	0	66	50	22	10	0	82	176
% HV	1.1	2.1	0	0	1.1	1.0	1.2	2.9	0	1.5	1.1	2.4	5.9	0	4.6	5.4	2.6	2.6	0	3.8	3.1



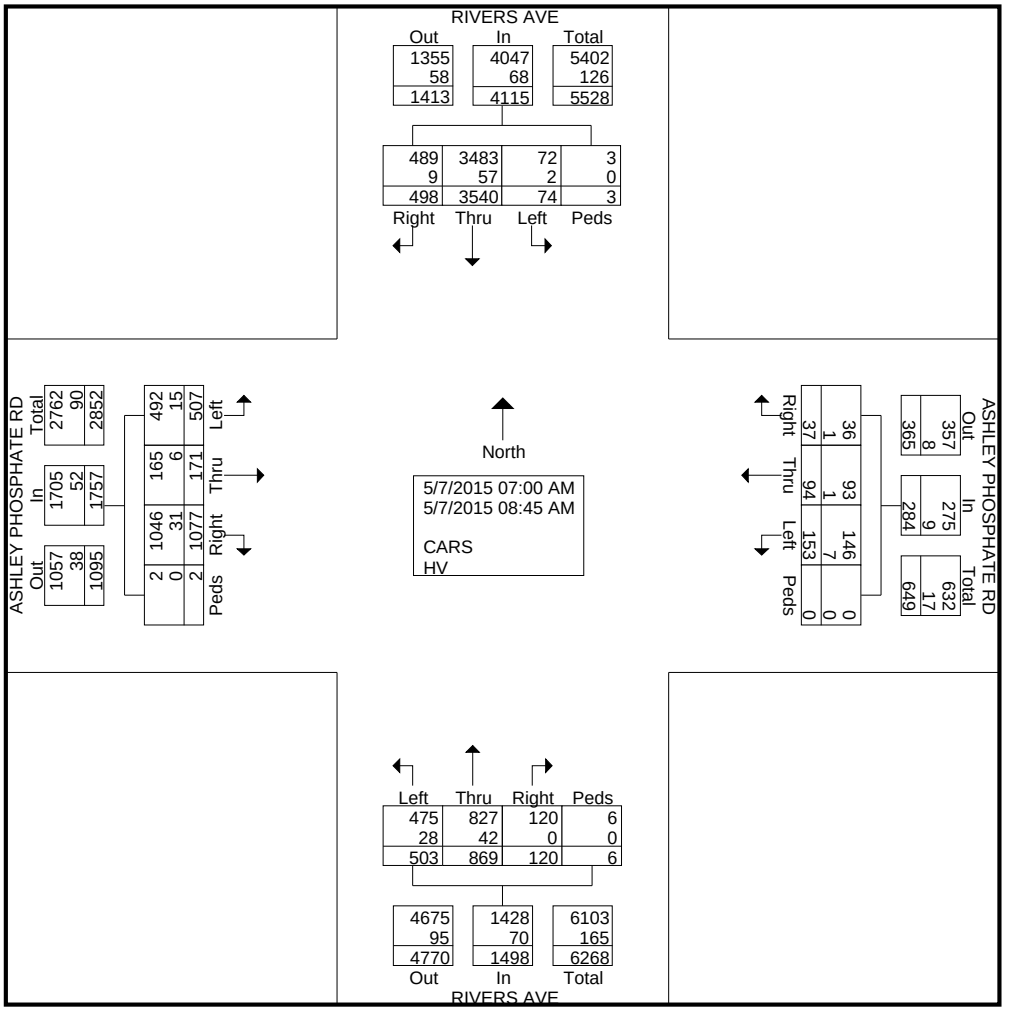
All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #53 RIVERS&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
Page No : 1

Groups Printed- CARS - HV

	RIVERS AVE Southbound					ASHLEY PHOSPHATE RD Westbound					RIVERS AVE Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	75	558	5	1	639	7	9	17	0	33	7	87	76	1	171	139	20	41	1	201	1044
07:15 AM	71	595	6	0	672	3	15	18	0	36	9	108	51	0	168	127	14	45	0	186	1062
07:30 AM	73	511	8	0	592	4	8	13	0	25	9	114	74	1	198	106	17	51	0	174	989
07:45 AM	62	460	11	0	533	6	11	21	0	38	21	120	48	1	190	105	16	61	0	182	943
Total	281	2124	30	1	2436	20	43	69	0	132	46	429	249	3	727	477	67	198	1	743	4038
08:00 AM	63	442	4	0	509	1	12	19	0	32	12	97	56	2	167	113	21	75	0	209	917
08:15 AM	46	422	17	2	487	1	11	16	0	28	16	121	59	1	197	151	25	71	1	248	960
08:30 AM	49	338	13	0	400	7	13	24	0	44	25	128	64	0	217	161	29	71	0	261	922
08:45 AM	59	214	10	0	283	8	15	25	0	48	21	94	75	0	190	175	29	92	0	296	817
Total	217	1416	44	2	1679	17	51	84	0	152	74	440	254	3	771	600	104	309	1	1014	3616
Grand Total	498	3540	74	3	4115	37	94	153	0	284	120	869	503	6	1498	1077	171	507	2	1757	7654
Apprch %	12.1	86	1.8	0.1		13	33.1	53.9	0		8	58	33.6	0.4		61.3	9.7	28.9	0.1		
Total %	6.5	46.3	1	0	53.8	0.5	1.2	2	0	3.7	1.6	11.4	6.6	0.1	19.6	14.1	2.2	6.6	0	23	
CARS	489	3483														1046					
% CARS	98.2	98.4	97.3	100	98.3	97.3	98.9	95.4	0	96.8	100	95.2	94.4	100	95.3	97.1	96.5	97	100	97	97.4
HV	9	57	2	0	68	1	1	7	0	9	0	42	28	0	70	31	6	15	0	52	199
% HV	1.8	1.6	2.7	0	1.7	2.7	1.1	4.6	0	3.2	0	4.8	5.6	0	4.7	2.9	3.5	3	0	3	2.6



All Traffic Data Services, Inc.

1336 Farmer Rd
Conyers, GA 30012

File Name : #53 RIVERS&ASHLEYAM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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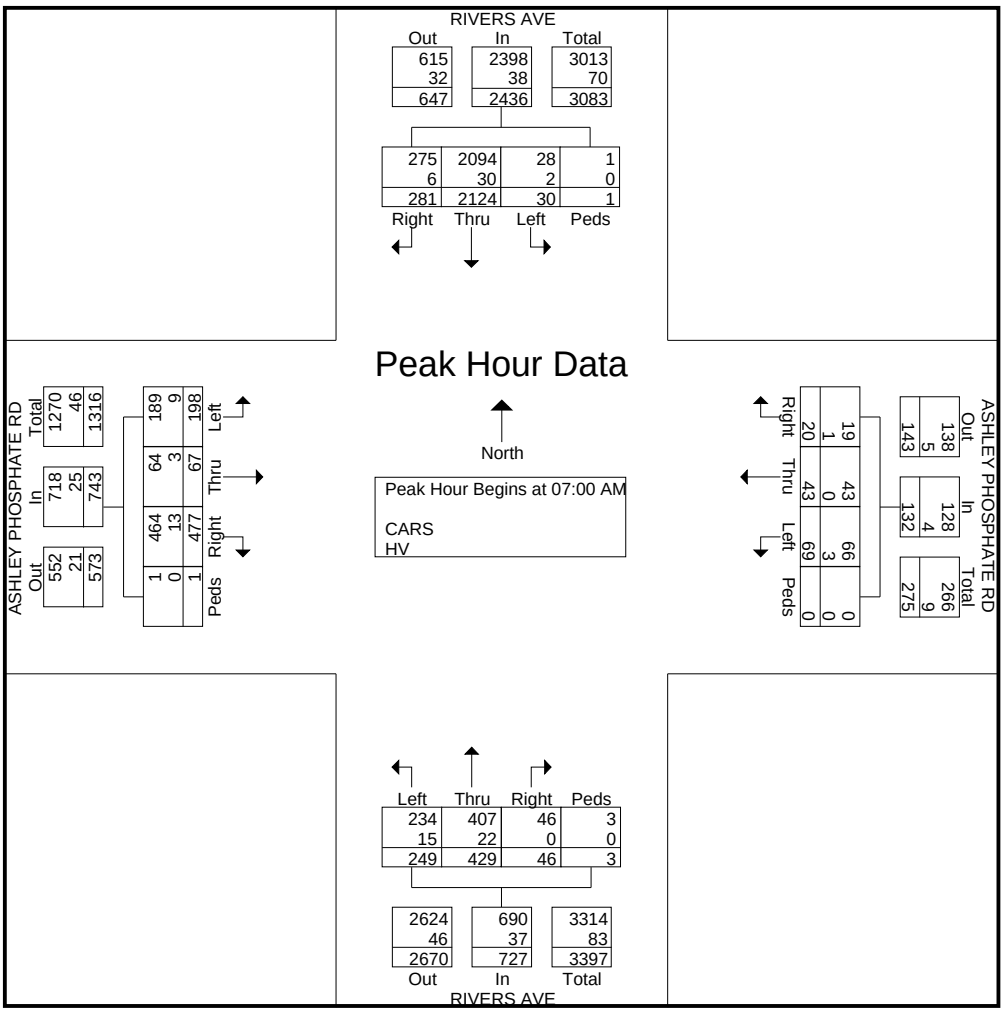
	RIVERS AVE Southbound					ASHLEY PHOSPHATE RD Westbound					RIVERS AVE Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**75**	558	5	**1**	639	**7**	9	17	0	33	7	87	**76**	**1**	171	**139**	**20**	41	**1**	**201**	1044
07:15 AM	71	**595**	6	0	**672**	3	**15**	18	0	36	9	108	51	0	168	127	14	45	0	186	**1062**
07:30 AM	73	511	8	0	592	4	8	13	0	25	9	114	74	1	**198**	106	17	51	0	174	989
07:45 AM	62	460	**11**	0	533	6	11	**21**	0	**38**	**21**	**120**	48	1	190	105	16	**61**	0	182	943
Total Volume	281	2124	30	1	2436	20	43	69	0	132	46	429	249	3	727	477	67	198	1	743	4038
% App. Total	11.5	87.2	1.2	0		15.2	32.6	52.3	0		6.3	59	34.3	0.4		64.2	9	26.6	0.1		
PHF	.937	.892	.682	.250	.906	.714	.717	.821	.000	.868	.548	.894	.819	.750	.918	.858	.838	.811	.250	.924	.951
CARS	275	2094																			
% CARS	97.9	98.6	93.3	100	98.4	95.0	100	95.7	0	97.0	100	94.9	94.0	100	94.9	97.3	95.5	95.5	100	96.6	97.4
HV	6	30	2	0	38	1	0	3	0	4	0	22	15	0	37	13	3	9	0	25	104
% HV	2.1	1.4	6.7	0	1.6	5.0	0	4.3	0	3.0	0	5.1	6.0	0	5.1	2.7	4.5	4.5	0	3.4	2.6



All Traffic Data Services, Inc.

1336 Farmer Rd
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File Name : #53 RIVERS&ASHLEYPM
Site Code : 9513 - CHARLESTON 1
Start Date : 5/7/2015
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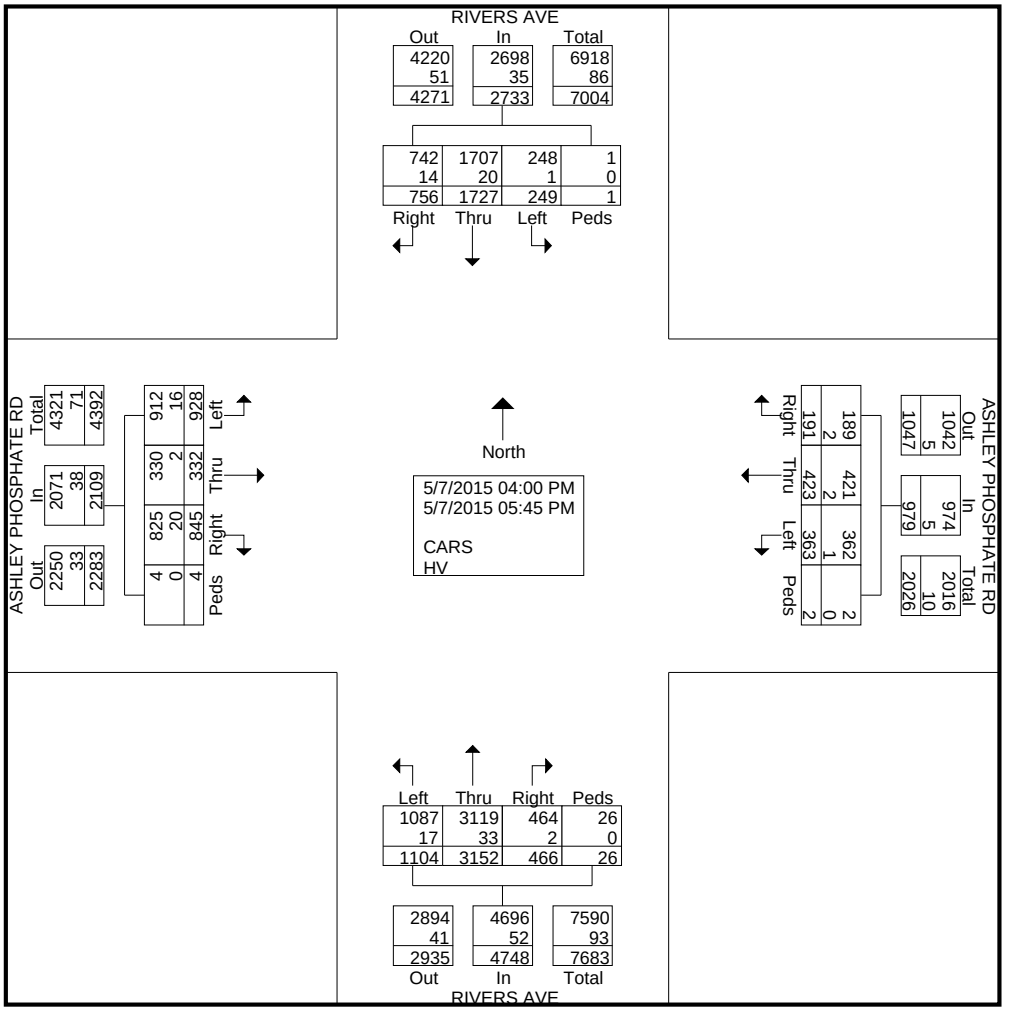
Groups Printed- CARS - HV

	RIVERS AVE Southbound					ASHLEY PHOSPHATE RD Westbound					RIVERS AVE Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	102	191	36	0	329	22	70	34	0	126	56	374	141	4	575	107	44	122	0	273	1303
04:15 PM	99	194	24	0	317	21	59	47	0	127	58	368	150	1	577	126	43	117	1	287	1308
04:30 PM	105	237	23	0	365	24	32	46	0	102	40	379	131	4	554	94	45	123	1	263	1284
04:45 PM	108	229	31	0	368	18	39	42	0	99	64	405	174	0	643	107	28	103	1	239	1349
Total	414	851	114	0	1379	85	200	169	0	454	218	1526	596	9	2349	434	160	465	3	1062	5244
05:00 PM	96	217	40	0	353	38	64	46	0	148	59	389	136	6	590	97	49	140	0	286	1377
05:15 PM	84	206	35	1	326	17	66	41	1	125	64	416	114	2	596	115	52	110	0	277	1324
05:30 PM	78	237	27	0	342	26	40	48	1	115	57	433	113	8	611	94	46	109	1	250	1318
05:45 PM	84	216	33	0	333	25	53	59	0	137	68	388	145	1	602	105	25	104	0	234	1306
Total	342	876	135	1	1354	106	223	194	2	525	248	1626	508	17	2399	411	172	463	1	1047	5325
Grand Total	756	1727	249	1	2733	191	423	363	2	979	466	3152	1104	26	4748	845	332	928	4	2109	10569
Apprch %	27.7	63.2	9.1	0		19.5	43.2	37.1	0.2		9.8	66.4	23.3	0.5		40.1	15.7	44	0.2		
Total %	7.2	16.3	2.4	0	25.9	1.8	4	3.4	0	9.3	4.4	29.8	10.4	0.2	44.9	8	3.1	8.8	0	20	
CARS	742	1707										3119	1087								10439
% CARS	98.1	98.8	99.6	100	98.7	99	99.5	99.7	100	99.5	99.6	99	98.5	100	98.9	97.6	99.4	98.3	100	98.2	98.8
HV	14	20	1	0	35	2	2	1	0	5	2	33	17	0	52	20	2	16	0	38	130
% HV	1.9	1.2	0.4	0	1.3	1	0.5	0.3	0	0.5	0.4	1	1.5	0	1.1	2.4	0.6	1.7	0	1.8	1.2



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File Name : #53 RIVERS&ASHLEYPM
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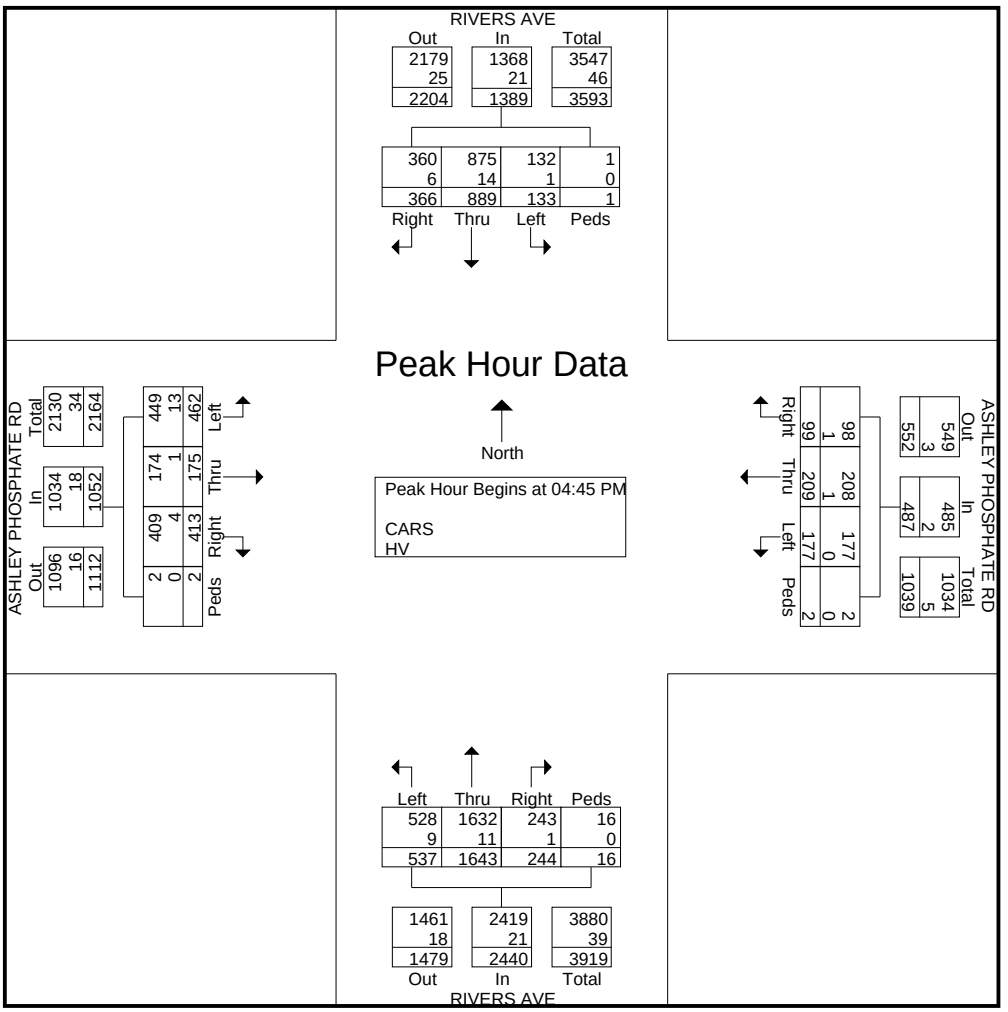
	RIVERS AVE Southbound					ASHLEY PHOSPHATE RD Westbound					RIVERS AVE Northbound					ASHLEY PHOSPHATE RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**108**	229	31	0	**368**	18	39	42	0	99	**64**	405	**174**	0	**643**	107	28	103	**1**	239	1349
05:00 PM	96	217	**40**	0	353	**38**	64	46	0	**148**	59	389	136	6	590	97	49	**140**	0	**286**	**1377**
05:15 PM	84	206	35	**1**	326	17	**66**	41	**1**	125	64	416	114	2	596	**115**	**52**	110	0	277	1324
05:30 PM	78	**237**	27	0	342	26	40	**48**	1	115	57	**433**	113	**8**	611	94	46	109	1	250	1318
Total Volume	366	889	133	1	1389	99	209	177	2	487	244	1643	537	16	2440	413	175	462	2	1052	5368
% App. Total	26.3	64	9.6	0.1		20.3	42.9	36.3	0.4		10	67.3	22	0.7		39.3	16.6	43.9	0.2		
PHF	.847	.938	.831	.250	.944	.651	.792	.922	.500	.823	.953	.949	.772	.500	.949	.898	.841	.825	.500	.920	.975
CARS	360	875	132	1	1368	98	208	177	2	485	243	1632									
% CARS	98.4	98.4	99.2	100	98.5	99.0	99.5	100	100	99.6	99.6	99.3	98.3	100	99.1	99.0	99.4	97.2	100	98.3	98.8
HV	6	14	1	0	21	1	1	0	0	2	1	11	9	0	21	4	1	13	0	18	62
% HV	1.6	1.6	0.8	0	1.5	1.0	0.5	0	0	0.4	0.4	0.7	1.7	0	0.9	1.0	0.6	2.8	0	1.7	1.2



2.4 AUTOMATIC TRAFFIC RECORDER STATION VOLUME DATA

2.4.1 Station 34 Volume Data

TWO-WAY VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	1411	1214	759	461	327	428	680	896	1198	1810	2299	2787	3232	3378	3505	3572	3545	3230	2760	2269	1664	1481	1132	839	44877
Jan-15 Friday	2	497	393	260	257	525	1014	2510	4174	4183	4208	4667	5311	5713	5577	5730	6109	5840	5530	4303	3191	2339	2043	1483	1120	76977
Jan-15 Saturday	3	759	483	424	318	392	661	1118	1692	2552	3249	3836	4430	4893	4821	4822	4897	4586	4288	3763	2786	2279	2124	1716	1167	62056
Jan-15 Sunday	4	788	599	469	291	364	498	742	1074	1516	2484	2926	3234	3823	4215	4129	4010	3963	3342	2766	2010	1658	1329	1049	664	47943
Jan-15 Monday	5	431	287	198	270	608	1615	4671	6672	5873	4557	4507	4857	5097	5287	5434	6197	6497	6382	4728	2614	2066	1647	1068	797	82360
Jan-15 Tuesday	6	440	282	217	269	574	1596	4574	6414	5871	4966	4483	4856	5115	5184	5481	6044	4739	4589	5094	3113	2100	1828	1246	837	79912
Jan-15 Wednesday	7	495	295	238	286	583	1603	4584	6455	6039	4714	4439	4763	5065	5291	5582	6142	6536	6366	4701	3022	2266	1679	1203	793	83140
Jan-15 Thursday	8	449	263	204	252	514	1439	3675	5416	5077	3716	4542	4762	5030	5272	5423	6147	6104	6167	4652	3034	2183	1719	1242	789	78071
Jan-15 Friday	9	491	285	240	276	544	1522	4184	6282	5708	4554	4501	5050	5546	5584	6137	6458	6448	6296	4883	3513	2440	2136	1769	1159	86006
Jan-15 Saturday	10	801	515	398	318	424	750	1337	2142	2847	3397	3886	4393	5053	4939	5033	4919	4797	4510	3817	2840	2205	2008	1760	1261	64350
Jan-15 Sunday	11	752	478	408	253	306	478	818	1105	1504	2279	2842	3202	3913	4051	3732	3846	3805	3440	2897	2140	1678	1263	1048	700	46938
Jan-15 Monday	12	346	217	197	264	562	1609	4400	6115	5918	4341	4236	4139	4641	4773	4958	5579	5929	6014	4043	2653	1982	1469	1081	726	76192
Jan-15 Tuesday	13	540	268	220	259	547	1573	4403	6225	5995	4644	4362	4674	4929	5032	5387	5902	6097	6028	4281	2745	2032	1720	1375	776	80014
Jan-15 Wednesday	14	419	258	228	267	517	1569	4471	6623	5983	4445	4389	4679	5009	5127	5466	5915	6495	6372	4583	2921	2271	1839	1349	806	82001
Jan-15 Thursday	15	518	301	201	285	564	1565	4223	6570	5739	4737	4524	5118	5477	5533	5639	6418	6639	6559	4603	2991	2287	1905	1335	858	84589
Jan-15 Friday	16	528	293	263	320	504	1455	3883	5972	5841	4858	4853	5247	5935	5929	6369	6627	6578	6121	5316	3610	2735	2503	1807	1305	88852
Jan-15 Saturday	17	818	484	401	315	381	708	1259	2077	2919	3460	4012	4552	4869	5088	5109	4952	5076	4588	4021	3063	2363	2210	1678	1378	65781
Jan-15 Sunday	18	781	452	397	278	308	496	757	1020	1559	2436	2998	3182	3822	3919	4592	4043	3738	3509	3183	2430	1737	1526	1230	861	49254
Jan-15 Monday	19	520	312	242	272	542	1275	3080	4649	4450	4135	4382	4894	5043	5521	5513	5709	5948	5725	4418	2935	2089	1650	1178	758	75240
Jan-15 Tuesday	20	445	260	196	278	594	1638	4642	6653	6566	4765	4396	3895	4379	5219	5588	6425	6394	6457	4660	2903	2184	1836	1216	742	82331
Jan-15 Wednesday	21	392	282	242	275	536	1621	4583	6661	6292	4810	4546	4819	5305	5272	5451	5980	6482	6079	4796	2872	2367	1965	1268	795	83691
Jan-15 Thursday	22	455	266	210	286	560	1602	4399	6441	6383	4871	4702	5084	5173	5497	5657	6535	6786	6776	4983	3332	2342	1988	1639	1385	87352
Jan-15 Friday	23	556	346	235	283	549	1548	4246	6565	5871	4823	4676	5205	5578	5492	5810	5680	3158	4500	4818	3301	2376	2019	1669	1170	80474
Jan-15 Saturday	24	747	417	358	269	374	604	1153	1793	2804	3403	3922	4519	4943	5062	4976	4890	4852	4685	4222	2957	2183	2303	1806	1259	64501
Jan-15 Sunday	25	838	489	412	264	291	462	818	1062	1677	2506	3164	3489	3963	4358	4416	4206	4068	3834	3427	2406	1840	1431	946	681	51048
Jan-15 Monday	26	381	260	214	267	604	1669	4658	6623	6092	4615	4594	4753	5142	5261	5344	5981	6480	6256	4398	2920	2147	1615	1107	733	82114
Jan-15 Tuesday	27	455	264	202	244	562	1596	4623	6627	6466	4772	4487	4779	4987	5217	5400	6176	6621	6281	4698	3080	2362	1785	1238	794	83716
Jan-15 Wednesday	28	424	263	216	245	547	1558	4539	6603	6347	4754	4481	4788	5168	5212	5469	5785	5923	6361	4880	3147	2423	1863	1256	796	83048
Jan-15 Thursday	29	437	281	222	262	535	1559	4486	6684	6231	4681	4519	5045	5196	5404	5877	6400	6656	6442	4853	3183	2486	1894	1451	845	85629
Jan-15 Friday	30	493	299	272	271	556	1504	4286	6225	6113	5057	5001	5466	5971	5991	6274	6795	6512	6081	5373	3999	2786	2449	2183	1340	91297
Jan-15 Saturday	31	844	540	403	311	393	676	1281	2155	2951	3703	4381	4785	5381	5450	5482	5214	5110	4720	4153	3275	2530	2066	1723	1207	68734
Feb-15 Sunday	1	771	514	447	274	282	443	789	1153	1697	2419	3017	3449	3861	4237	4376	4149	4032	3908	2946	1694	1552	1348	2199	1122	50679
Feb-15 Monday	2	511	309	244	256	548	1608	4237	6484	5990	4439	4346	4570	4998	4886	5139	5890	6374	6254	4476	2757	2196	1759	1057	730	80058
Feb-15 Tuesday	3	450	237	226	257	570	1644	4662	6606	6118	4974	4561	5048	5286	5359	5608	6178	6628	6380	4743	3100	2272	1858	1259	822	84846
Feb-15 Wednesday	4	467	267	202	259	560	1573	4709	6676	6242	4684	4462	4888	5271	5126	5497	5998	5936	5010	4538	3229	2350	1799	1219	761	81723
Feb-15 Thursday	5	473	262	226	276	555	1579	4271	5953	5910	4626	4465	4866	5159	5402	5260	4663	6028	6268	4964	3314	2523	1943	1288	884	81158
Feb-15 Friday	6	560	300	260	278	573	1464	4284	6553	5965	4878	4720	5342	5781	5858	6131	6776	6687	6160	5234	3845	2735	2340	2238	1274	90236
Feb-15 Saturday	7	779	443	406	301	401	698	1336	2174	3098	3659	4277	4775	5379	5185	5251	5177	5078	4942	4344	3237	2435	2281	1730	1205	68591
Feb-15 Sunday	8	838	451	422	259	290	434	873	1136	1733	2513	3134	3453	4183	4377	4529	4412	4330	3949	3638	2620	1831	1424	1102	706	52637
Feb-15 Monday	9	376	251	223	277	608	1690	4611	6476	6252	4705	4572	4822	5125	5084	5329	6136	6666	6413	4454	2970	2107	1632	1172	790	82741
Feb-15 Tuesday	10	464	274	201	260	587	1611	4743	6629	6432	4794	4680	4223	5148	5411	5567	6281	6562	6572	4870	3112	2353	1921	1457	778	84930
Feb-15 Wednesday	11	521	265	252	253	540	1603	4609	6767	6133	5073	4762	5021	5349	5513	5656	6175	6550	6445	4960	3385	2641	2056	1542	865	86936
Feb-15 Thursday	12	537	289	221	252	560	1613	4708	6674	6273	5023	4859	5211	5481	5707	5888	6375	6600	6572	5312	3573	2776	2100	1644	987	89235
Feb-15 Friday	13	582	343	271	317	604	1438	4263	6534	5969	4950	5462	5814	6243	6070	6471	6932	6445	6259	5547	4179	3005	2652	2211	1417	93978
Feb-15 Saturday	14	845	507	415	311	376	620	1178	2014	2979	3830	4519	4897	5256	5456	5454	5264	5264	4870	4402	3480	2452	2140	1948	1723	70200
Feb-15 Sunday	15	865	541	455	274	299	420	683	1094	1671	2523	3338	3645	4290	4579	4661	4412	4264	4008	3343	2562	1860	1505	1344	830	53466
Feb-15 Monday	16	461	277	227	317	603	1371	3567	5278	4870	4403	4627	5179	5535	5657	5853	6095	6261	5926	4091	2768	1935	1664	1125	776	78866
Feb-15 Tuesday	17	476	266	246	260	608	1569	4463	5918	5632	4863	4443	4954	5178	5207	5525	6165	6705	6565	4421	3053	2309	1793	1332	797	82748
Feb-15 Wednesday	18	454	265	214	253	593	1630	4619	6819	6309	4809	4676	4816	5309	5388	5734	6198	6758	6592	4938	3377	2550	2075	1369	829	86574
Feb-15 Thursday	19	526	282	249	262	578	1534	4539	6561	6212	4728	4680	5082	5395	5658	5783	6404	6555	6434	4835	3160	2593	1946	1309	920	86225
Feb-15 Friday	20	511	322	222	284	564	1432	4084	6386	5795	4759	4810	5342	5873	5952	4502	4456	6315	6087	4913	3921	2746	2399	1772	1316	84763
Feb-15 Saturday	21	803	519	397	310	421	668	1343	2270	3175	3837	4513	4906	5540	5511	5488	5385	5208	4949	4473	3270	2506	2462	1792	1296	71042
Feb-15 Sunday	22	790	559	469	310	306	501	888	1230	1742	2639	3282	3668	4172	4401	4655	4443	4021	3848	3381	2577	1987	1516	1093	757	53235
Feb-15 Monday	23	425	273	240	281	594	1627	4510	6536	6021	4661	4438	4809	5072	5152	5355	5980	6440	6152	4230	2839	2154	1617	1128	774	81308
Feb-15 Tuesday	24	450	294	235	232	503	1261	3064	4562	4183	4384	3712	3834	4080	3992	4379	4707	5262	5289	3509	2398	1713	1638	1099	704	65484
Feb-15 Wednesday	25	431	276	235	276	534	1585	4540	6956	6178	4776	4698	4804	5227	5308	5585	6329	6030	5560	4352	2922	2220	1670	1318	800	82610
Feb-15 Thursday	26	423	256	221	270	538	1537	4487	6302	5966	4736	4710	5063	5268	5369	5678	6474	6652	5573	4651	3373	2566	1955	1373	880	84321
Feb-15 Friday	27	580	333	278	277	585	1486	4409	6637	6071	5023	5029	5566	5933	6030	6285	6803	6750	6225	5261	4108	2953	2395	1961	1371	92349
Feb-15 Saturday	28	1081	582	453	346	424	662	1338	2375	3212	3840	4547	5099	5340	5604	5700	5572	5435	4785	4104	3266	2739	2269	1737	1275	71785
Mar-15 Sunday	1	842	515	430	277	291	440	764	1148	1605	2474	3186	3424	3913	4260	4372	3986	3844	3490	2979	2459	1881	1430	1086	668	49764
Mar-15 Monday	2	426	227	210	272	628	1705	4654	6704	6026	4862	4613	4884	5106	5467	5531	6277	6653	6462	4827	3177	2320	1808	1264	820	84923

Mar-15	Tuesday	3	519	269	272	285	604	1645	4659	6608	6378	4945	4834	5204	5524	5593	5697	6470	6801	6588	4822	3461	2402	1923	1313	869	87685
Mar-15	Wednesday	4	477	293	250	255	611	1664	4764	6739	6416	5167	4866	5036	5403	5475	5655	6298	6475	6230	4836	3620	2674	2063	1385	919	87571
Mar-15	Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15	Friday	6	574	354	304	297	584	1509	4474	6225	6136	4895	5004	5536	5825	5946	6181	6805	6543	6336	5087	3967	2973	2587	1950	1287	91379
Mar-15	Saturday	7	860	487	402	316	411	734	1597	2604	3481	4021	4749	5121	5488	5450	5510	5434	5264	4995	4372	3387	2611	2227	1727	1289	72537
Mar-15	Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15	Monday	9	508	280	265	296	618	1585	4216	6357	6088	4717	4512	4867	5299	5547	5823	5792	4696	6227	4932	3391	2676	2011	1333	889	82925
Mar-15	Tuesday	10	562	303	250	265	579	1580	4443	6672	6305	5080	4720	4714	2903	4144	5667	6251	6582	6718	5041	3617	2772	2414	1577	1133	84292
Mar-15	Wednesday	11	579	301	268	272	565	1628	4499	6735	6305	5296	4967	5215	5550	5668	5859	6418	6574	6537	5114	3657	3118	2299	1523	1003	89950
Mar-15	Thursday	12	588	350	234	311	574	1604	4552	6678	6474	5002	4931	5227	5579	5549	5823	6438	6693	6561	5100	3818	2859	2251	1631	1173	90000
Mar-15	Friday	13	616	341	275	324	601	1435	4214	6337	6045	4907	4885	5440	6040	5901	6368	6494	6384	6188	5090	4078	3070	2587	2107	1436	91163
Mar-15	Saturday	14	1014	608	428	333	413	736	1233	2037	3037	3700	4390	5076	5330	5670	5553	5436	5165	4755	4417	3629	2934	2519	2238	1514	72165
Mar-15	Sunday	15	907	585	472	347	380	545	825	1188	1776	2769	3406	3805	4261	4665	4649	4480	4306	4026	3728	3037	2462	1794	1342	829	56584
Mar-15	Monday	16	579	299	253	282	628	1637	4510	6580	6344	5077	4801	5062	5463	5474	5721	6398	6568	6348	5047	3569	2692	1965	1393	913	87603
Mar-15	Tuesday	17	579	307	261	274	585	1622	4693	6479	6336	5251	4887	5030	5405	5547	5680	6265	6581	6479	4936	3633	2901	2218	1493	886	88328
Mar-15	Wednesday	18	614	361	285	276	619	1617	4656	6714	6571	5335	4777	5101	5509	5670	5892	6511	6653	6590	5030	3678	2899	2148	1422	988	89916
Mar-15	Thursday	19	542	281	220	292	587	1626	4381	5863	4913	5420	4905	5129	5153	5336	4151	6047	6415	6559	4802	3381	2588	2220	1637	946	83394
Mar-15	Friday	20	619	321	271	323	568	1483	4219	6085	5634	5092	5051	5480	5826	5987	6407	6566	6690	6189	5240	4296	3361	3055	2184	1532	92479
Mar-15	Saturday	21	924	637	490	364	471	784	1357	2478	3334	3962	4600	4836	5404	5464	5395	5218	5296	4910	4347	3503	2939	2520	2163	1497	72893
Mar-15	Sunday	22	908	560	468	306	369	504	795	1015	1687	2634	3244	3590	4200	4405	4394	4205	3921	3575	3212	2667	1978	1574	1275	863	52349
Mar-15	Monday	23	514	285	214	278	607	1612	4335	6385	6135	4700	4478	4782	5118	5121	4855	6013	6264	6270	4386	3071	2349	1817	1239	860	81688
Mar-15	Tuesday	24	518	286	238	298	596	1578	4667	6645	6489	4788	4642	4979	5306	5551	5712	6412	6487	6317	5322	3532	2735	2244	1400	905	87647
Mar-15	Wednesday	25	516	295	265	272	584	1626	4691	6514	6646	4950	4730	5059	5420	5420	5779	6404	6181	6510	5208	3639	2920	2409	1473	1002	88513
Mar-15	Thursday	26	589	328	283	296	602	1589	4674	6759	6394	5127	5084	5316	5766	5770	5914	6696	6548	6636	5027	3833	2915	2318	1781	1085	91330
Mar-15	Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15	Saturday	28	899	559	490	373	541	1147	1680	2768	3732	4420	5109	5311	5499	5425	5404	5393	5131	4772	4165	3520	2915	2312	1985	1469	75019
Mar-15	Sunday	29	898	592	456	311	379	544	818	1201	1806	2805	3373	3753	4283	4535	4256	4330	4172	3847	3493	2749	2269	1742	1341	907	54860
Mar-15	Monday	30	548	314	238	308	641	1491	3910	6043	5561	4731	4714	5075	5339	5431	5492	5872	6229	6306	4578	3403	2729	2011	1417	973	83354
Mar-15	Tuesday	31	558	332	251	297	566	1527	4096	6312	6023	4884	4980	5323	5616	5667	5998	6175	6466	6619	4847	3627	2891	2213	1572	1010	87850
Apr-15	Wednesday	1	592	354	308	330	604	1523	4037	6089	5974	5063	4977	5297	5613	5812	5994	6326	6480	6372	5234	3747	2991	2495	1669	1052	88933
Apr-15	Thursday	2	627	358	289	317	596	1468	4019	6063	5557	4834	5359	5456	5917	5899	5855	6132	6689	6718	5144	3912	3102	2526	1894	1184	89915
Apr-15	Friday	3	768	365	333	306	586	1219	3254	5230	5184	4940	5277	5880	6234	6153	6431	6246	5409	5701	5087	4303	3259	2637	2132	1516	88450
Apr-15	Saturday	4	985	661	529	346	439	677	1147	2052	2907	3787	4508	4946	5218	5305	5245	5262	5125	4688	4045	3452	2910	2377	1847	1435	69893
Apr-15	Sunday	5	842	598	406	274	280	594	825	1227	1811	2611	3293	3273	3976	4230	3709	3863	4041	3865	3449	3032	2582	1951	1307	843	52882
Apr-15	Monday	6	539	298	281	267	660	1652	4631	6937	6237	5048	5039	5424	5698	5711	5877	6496	6759	6744	4819	3616	2824	2087	1435	981	90060
Apr-15	Tuesday	7	569	344	223	272	596	1671	4714	6874	6653	5166	5059	5236	5600	5796	5881	6491	6509	6585	5075	3718	2844	2285	1531	1052	90744
Apr-15	Wednesday	8	637	345	262	292	600	1628	4746	6859	6209	5304	4108	5008	5231	5576	5730	5963	6304	6406	5276	3964	3185	2391	1710	1036	88770
Apr-15	Thursday	9	604	371	261	303	614	1678	4780	6788	6578	5460	5318	5371	5525	5758	6068	6580	6643	6508	5208	4087	3174	2409	1818	1120	93024
Apr-15	Friday	10	653	390	332	318	654	1598	4532	6643	6427	5318	5598	5661	6090	6033	6437	6642	6482	6195	5174	4275	3430	2745	2128	1656	95411
Apr-15	Saturday	11	1001	611	562	377	487	837	1538	2567	3390	4260	4718	5043	5311	5402	5206	5280	5082	5008	4519	3400	2866	2766	2147	1487	73865
Apr-15	Sunday	12	842	572	452	336	348	622	958	1400	2036	3028	3590	3767	4270	4318	4377	4424	4280	3963	3439	2693	2228	1649	1239	837	55668
Apr-15	Monday	13	474	308	216	275	656	1759	4590	6527	6680	4974	4670	5011	5353	5378	5690	6428	6506	6690	4552	3431	2655	1930	1334	860	86947
Apr-15	Tuesday	14	489	322	247	291	606	1644	4646	6769	6681	4953	4968	5133	5309	5536	5717	6288	6597	6556	4692	3655	2803	2119	1459	964	88444
Apr-15	Wednesday	15	523	304	264	299	630	1649	4746	6752	6363	5247	4881	5025	5380	5444	5719	6271	6604	6226	4938	3293	2609	1928	1347	866	87308
Apr-15	Thursday	16	565	328	220	268	616	1660	4678	6749	6712	4902	4887	5061	5338	5513	5799	6634	6575	6634	4925	3798	2877	2173	1456	1023	89391
Apr-15	Friday	17	618	332	268	345	639	1522	4396	6311	6276	5143	5070	5509	5943	6098	6214	6838	6675	6163	4996	4050	3033	2534	2118	1570	92661
Apr-15	Saturday	18	927	583	487	372	474	741	1462	2429	3219	3868	4415	4927	5171	5244	5303	5061	4890	4558	3916	3304	2911	2564	2039	1437	70302
Apr-15	Sunday	19	836	589	561	391	363	500	831	1180	1788	2550	3325	3571	4126	4491	4436	4140	3945	3793	3122	2249	1906	1462	1141	682	51978
Apr-15	Monday	20	494	316	221	315	672	1644	4811	6669	6422	5024	4769	5051	5337	5415	5639	6426	6582	6690	4640	3264	2398	1909	1365	863	86936
Apr-15	Tuesday	21	523	368	262	268	612	1725	4886	6893	6544	4943	4884	5049	5298	5499	5703	6284	6674	6556	5066	3554	2936	2224	1543	913	89207
Apr-15	Wednesday	22	522	348	253	289	620	1691	4799	6595	6376	5190	4812	5056	5495	5465	5697	6227	6616	6618	5382	4030	3202	2233	1510	1419	90445
Apr-15	Thursday	23	671	400	261	309	605	1748	4847	5881	3675	5483	4932	5321	5592	5668	5894	6499	6448	6103	4775	3901	3128	2457	1680	1094	87372
Apr-15	Friday	24	636	400	278	343	678	1592	4489	6562	6225	5166	5193	5432	5971	6129	6347	6754	6499	6194	5081	4098	3417	2658	2063	1546	93751
Apr-15	Saturday	25	935	564	441	385	429	810	1427	2380	3354	3908	4500	5028	5028	4981	4791	4772	4670	4271	3807	3142	2742	2410	1805	1370	67950
Apr-15	Sunday	26	949	563	400	323	374	550	896	1378	1952	2861	3606	3653	4162	4450	4296	4271	4073	4080	3495	2952	2706	1894	1322	931	56137
Apr-15	Monday	27	503	294	263	296	636	1705	4853	6884	6326	4943	4907	4996	5277	5445	5729	6259	6656	6510	4845	3380	2684	2044	1346	867	87648
Apr-15	Tuesday	28	525	347	230	283	618	1711	4981	7030	6579	5132	4807	5063	5474	5541	5873	5825	5401	6395	5125	3734	3039	2320	1612	992	88637
Apr-15	Wednesday	29	549	324	224	294	598	1571	4449	5824	6012	4825	4521	4844	4982	5168	5412	5688	5926	5791	4649	3136	2480	2092	1414	888	81661
Apr-15	Thursday	30	538	284	250	273	590	1625	4749	6543	6076	5242	4971	5377	5687	5634	5932	6391	5998	6469	5356	3914	3267	2407	1704	1124	90401
May-15	Friday	1	671	482	324	348	669	1618	4636	6657	6029	4953	5297	5735	6020	6021	6540	6788	6604	6393	5514	4218	3339	2999	2135	1553	95543
May-15	Saturday	2	1022	642	462	371	460	833	1631	2579	3310	4084	4522	4972	5175	5221	5266	5152	5051	4678	4063	3484	3111	2764	1907	1363	72123
May-15	Sunday	3	685	1641	705	385	384	561	944	1302	1865	2650	3362	3790	4183	4326	4443	4550	4345	4109	3584	2903	2347	1792	1378	1034	57268
May-15	Monday	4	524	314	258	310	640	1697	4809	6439	6439	4187	4546	5066	5241	5193	5680	6126	6446	6342	4834	3354	2651	1975	1372	848	85291
May-15	Tuesday	5	498	339	244	263	617	1650	4771	6186	5869	5248	5023	5178	5366	5457	5630	6406	6641	6586	5134	3762	2882	2309	1583	1176	88818

May-15	Wednesday	6	600	355	246	273	610	1753	4928	6882	6145	5028	4911	5099	5476	5508	5877	6402	6540	6639	5229	3628	3067	2302	1635	1123	90256
May-15	Thursday	7	600	342	238	311	622	1675	4781	6887	6214	4869	4844	5156	5187	4966	5476	6067	6393	6285	4598	3313	2676	1998	1531	970	85999
May-15	Friday	8	586	385	288	323	618	1507	4467	6331	6032	4999	5259	5674	5950	6094	6199	6635	6286	6207	5082	3786	3054	2532	2219	1486	91999
May-15	Saturday	9	962	645	515	356	443	806	1480	2692	3556	4213	4654	5080	5205	5392	5489	5238	5182	4634	4158	3446	2809	2583	1964	1518	73020
May-15	Sunday	10	905	615	502	305	372	562	819	1171	1817	2842	3491	3695	4137	4464	4661	4638	4383	4060	3665	2954	2582	2150	1505	1070	57365
May-15	Monday	11	554	303	258	281	624	1731	4742	6682	6164	4928	4831	5009	5078	5517	5596	6106	6245	6477	5035	3234	2652	1963	1380	974	86364
May-15	Tuesday	12	538	323	235	320	608	1689	4895	6732	6374	5067	4956	5104	5534	5498	5818	6457	6467	6449	4916	3618	2696	2197	1557	942	88990
May-15	Wednesday	13	555	322	240	316	596	1698	4997	6833	6386	5089	4861	5094	5541	5609	5959	6300	6484	6541	4994	3742	2953	2265	1550	1052	89977
May-15	Thursday	14	575	334	276	318	660	1567	4765	6809	6186	5132	4880	5236	5498	5567	5964	6584	6600	6491	5113	3775	3262	2287	1739	1081	90699
May-15	Friday	15	658	395	321	340	637	1607	4631	6683	6072	5012	5214	5482	5845	5994	6280	6632	5693	6225	5357	4181	3435	2750	2191	1577	93212
May-15	Saturday	16	970	636	493	382	526	847	1582	2563	3424	4256	4683	4912	5080	5083	5054	5145	4991	4562	3945	3595	3038	2706	2191	1614	72278
May-15	Sunday	17	965	652	609	370	385	615	900	1296	1943	2967	3552	3661	4326	4342	4377	4299	3994	3687	3256	2879	2267	1915	1423	884	55564
May-15	Monday	18	548	303	261	292	660	1723	4803	6717	6440	4906	4914	4995	5413	5315	5531	6311	6514	6286	4894	3544	2683	2071	1381	958	87463
May-15	Tuesday	19	593	317	252	301	644	1765	4859	6720	6585	4988	4707	4989	5165	5468	5639	6337	6417	6535	4926	3704	2797	2080	1519	1223	88530
May-15	Wednesday	20	598	345	259	315	615	1712	4970	6704	6281	5240	4900	5345	5533	5305	5379	5053	5797	5790	5108	3487	2716	2330	1574	1005	86361
May-15	Thursday	21	599	406	245	316	659	1732	4826	6654	6490	5273	5200	5319	5697	5747	6167	6678	6539	6376	5193	3950	3443	2503	1779	1154	92945
May-15	Friday	22	681	384	353	327	638	1546	4481	6687	5888	5023	5486	5886	6130	6333	6556	6726	6618	6013	5202	4273	3478	2978	2363	1602	95652
May-15	Saturday	23	1019	629	533	351	421	734	1448	2387	3346	4096	4718	5025	4900	5207	5163	5022	4940	4573	4076	3348	2794	2605	2283	1470	71088
May-15	Sunday	24	1021	590	525	317	271	509	816	1275	1907	2769	3540	3646	4127	4273	4230	4267	3876	3637	3248	2615	2266	1927	1695	1290	54637
May-15	Monday	25	897	460	327	294	384	692	1315	1784	2246	2846	3545	4083	4134	4284	4314	4248	4132	3700	3351	2752	2329	2073	1482	1010	56682
May-15	Tuesday	26	536	337	221	296	685	1769	4968	6636	6500	5214	5124	5284	5611	5878	5786	5788	5323	4801	4648	3929	3018	2139	1425	980	86896
May-15	Wednesday	27	570	318	207	320	626	1732	5020	6851	6457	5055	5058	5239	5519	5640	5678	6310	6423	6599	5133	3643	3033	2346	1617	932	90326
May-15	Thursday	28	646	338	248	304	604	1701	4881	6802	6357	5210	5073	4918	5419	5695	5809	6407	6569	6379	5115	3826	3181	2394	1752	1103	90731
May-15	Friday	29	655	358	299	354	657	1635	4649	6498	6258	5286	5232	5591	6077	5935	6384	6407	6508	6130	5093	4038	3252	2745	2047	1469	93557
May-15	Saturday	30	1006	582	481	361	503	924	1762	2644	3589	4364	4867	4887	5367	5151	5342	5188	5092	4640	4054	3399	2960	2725	2148	1529	73565
May-15	Sunday	31	961	631	518	327	318	542	992	1349	1924	2757	3438	3706	4130	4384	4449	4517	4243	3911	3324	2730	2400	2037	1501	943	56032
Jun-15	Monday	1	546	334	276	340	677	1778	5067	6767	6437	5042	5149	5245	5598	5576	5555	6255	6521	6411	4924	3505	2582	2184	1439	890	89098
Jun-15	Tuesday	2	575	316	237	290	631	1744	5012	6900	6558	4968	5041	5150	5716	5690	5625	6177	6380	6757	4976	3530	2877	2076	1480	1014	89720
Jun-15	Wednesday	3	607	352	291	294	578	1543	4211	5765	6308	5198	5421	4839	5123	5862	6056	6320	6407	6537	4718	3504	2802	2331	1696	1054	87817
Jun-15	Thursday	4	665	414	276	304	620	1667	4767	6424	6108	4885	5182	5509	5879	5993	5323	6193	6621	6191	5268	3799	3107	2534	1846	1127	90702
Jun-15	Friday	5	758	417	315	401	607	1565	4353	6399	5788	5278	5183	5634	6386	6179	5768	6293	6387	6203	5242	4187	3232	2869	2300	1566	93310
Jun-15	Saturday	6	999	634	556	368	474	868	1640	2618	3444	4347	4668	4874	5134	5231	5208	5081	4888	4633	3981	3326	2812	2487	2062	1617	71950
Jun-15	Sunday	7	984	632	531	310	359	569	965	1313	1905	2802	3455	3634	4134	4411	4464	4359	4358	4131	3732	2824	2327	1975	1691	1560	57425
Jun-15	Monday	8	660	367	264	300	635	1708	4538	6592	5977	4872	4935	5000	5395	5498	5636	6042	6386	6507	4870	3373	2696	2103	1489	949	86792
Jun-15	Tuesday	9	575	361	263	319	659	1734	4769	6804	6063	5002	4912	5040	5426	5532	5571	6167	5807	4784	2189	1424	2277	1774	1327	1136	79915
Jun-15	Wednesday	10	626	333	281	312	614	1617	4499	6587	6228	5010	4936	5124	5545	5633	5757	6249	6408	6287	5346	3697	2903	2584	1730	1121	89427
Jun-15	Thursday	11	655	359	289	317	642	1643	4414	6749	5963	5177	5110	5228	5535	5650	5750	6201	6593	6374	4986	3753	3137	2528	1740	1054	89847
Jun-15	Friday	12	728	418	336	308	686	1548	4199	6227	6020	5017	5061	5623	6134	6236	6394	6562	6355	6221	5105	4083	3111	2692	2056	1607	92727
Jun-15	Saturday	13	1042	621	518	389	512	869	1730	2786	3633	4202	4721	5239	5233	5194	5200	4982	4944	4600	4317	3544	2859	2512	2005	1372	73024
Jun-15	Sunday	14	1026	582	485	312	370	582	1064	1520	2071	2960	3523	3883	4375	4389	4468	4414	4305	3778	3548	2690	2267	1925	1390	985	56912
Jun-15	Monday	15	630	342	285	350	693	1750	4465	6649	6266	4957	4841	5060	5704	5637	5389	5997	6532	6477	4691	3438	2710	2270	1534	987	87654
Jun-15	Tuesday	16	644	345	243	316	667	1769	4621	6734	6118	4949	4791	5005	5613	5684	5638	6358	6559	6557	4846	3449	2937	2337	1694	1017	88891
Jun-15	Wednesday	17	735	382	292	343	649	1875	4456	6772	6359	5206	4980	5292	5648	5767	5780	6075	6438	5720	5047	3740	2925	2381	1755	1083	89700
Jun-15	Thursday	18	705	372	254	349	645	1732	4469	6653	6217	5069	5019	5176	5826	5717	5805	6239	6505	6499	4820	3743	2961	2635	1830	1104	90344
Jun-15	Friday	19	708	465	305	367	622	1631	4124	6150	6112	5260	5190	5757	6014	6062	6153	6799	6247	6005	4853	3888	3176	2710	2195	1520	92313
Jun-15	Saturday	20	1041	657	484	386	497	866	1519	2635	3600	4321	4749	5137	5202	5345	5250	5326	4953	4666	4146	3559	2838	2746	2141	1586	73650
Jun-15	Sunday	21	1002	639	541	367	390	543	862	1271	1988	2812	3422	3656	4098	4441	4375	4356	3955	3862	3696	2968	2479	2236	1724	1102	56785
Jun-15	Monday	22	670	390	280	315	733	1751	4381	6422	6115	4670	4679	4930	5348	5330	5641	5955	6123	6268	4561	3275	2480	1887	1388	949	84541
Jun-15	Tuesday	23	570	327	245	325	671	1812	4422	6730	6277	5028	4830	5114	5565	5496	5740	5920	6541	6468	4776	3577	2765	2176	1561	990	87926
Jun-15	Wednesday	24	622	356	267	317	680	1789	4469	6642	6322	4977	4938	5189	5566	5685	5642	6092	6249	6570	5058	3479	2803	2343	1594	1073	88722
Jun-15	Thursday	25	695	356	309	347	634	1703	4342	6499	6327	5029	4966	5282	5728	5714	5836	6200	6613	6431	5260	3881	2919	2277	1780	1161	90289
Jun-15	Friday	26	761	453	365	347	672	1702	4094	6288	5970	5205	5193	5427	5901	5614	5913	6187	5163	5510	4790	3888	3071	2648	2119	1508	88789
Jun-15	Saturday	27	1044	623	469	350	520	847	1547	2661	3466	4097	4766	5015	5262	5367	5240	4963	4799	4328	4055	3407	2655	2570	2272	1463	71786
Jun-15	Sunday	28	1038	646	568	342	385	568	904	1236	1932	2778	3421	3693	4240	4328	4238	4214	3919	3869	3186	2755	2103	1838	1409	918	54528
Jun-15	Monday	29	566	344	275	306	716	1760	4367	6127	6454	4853	4861	5099	5600	5472	4971	5787	6452	6311	4878	3465	2587	2095	1413	1031	85790
Jun-15	Tuesday	30	644	370	253	295	645	1714	4475	6590	6288	5075	5099	5218	5608	5555	5718	6247	6483	6582	5036	3858	2555	2233	1588	1087	89216
Jul-15	Wednesday	1	641	338	291	343	633	1771	4303	6559	6284	5181	5058	5330	5839	5803	6138	6459	6541	6745	5255	3804	3059	2543	1899	1156	91973
Jul-15	Thursday	2	693	439	281	325	668	1567	4123	6239	5936	5364	5175	5749	5654	5857	6329	6783	6546	6257	5113	4063	3036	2517	1924	1383	92021
Jul-15	Friday	3	916	448	313	354	538	870	2021	2958	3606	4110	4759	5386	5611	5635	5450	5398	4983	4503	4288	3563	2981	2689	1988	1522	74890
Jul-15	Saturday	4	964	622	485	372	383	576	1074	1449	2154	2928	3508	3869	3796	3765	4017	3882	3517	3308	3060	2784	2334	2159	2266	1703	54975
Jul-15	Sunday	5	1021	596	487	287	343	492	849	1221	1871	2723	3350	3717	4163	4461	4405	4368	4139	3920	3526	2618	2186	1982	1518	1083	55326
Jul-15	Monday	6	578	360	272	310	706	1655	4123	6311	5973	4871	4945	5216	5481	5431	5635	6316	6525	6482	4651	3319	2581	2109	1493	977	86320
Jul-15	Tuesday	7	586	362	275	323	665	1664	4368	6679	6083	4791	4818	5093	5492	5593	5340	5680	6144	6473	4721	3272	2565	2115	1573	1033	85708
Jul-15	Wednesday	8	541	361	271	295	653	1632	4396	6623	6273	5000	4853	5223	5593	5707	5836	6124	6461	6736	4916	3487	2852	2333	1711	1126	89003

Jul-15	Thursday	9	653	410	264	366	649	1665	4295	6427	6229	5044	4956	5366	5652	5616	5706	6180	6349	6530	4930	3683	3029	2460	1686	1128	89273
Jul-15	Friday	10	661	418	330	325	650	1588	4055	6265	6110	5076	5094	5817	6082	6057	6248	6614	6527	6209	4853	3998	3379	2812	2251	1601	93020
Jul-15	Saturday	11	986	600	466	381	519	858	1571	2625	3350	4108	4551	5000	5116	5072	5059	5049	4905	4419	4062	3280	2857	2571	2019	1436	70860
Jul-15	Sunday	12	996	605	470	348	398	506	962	1259	1891	2698	3387	3533	4002	4303	4194	4268	4031	3782	3367	2693	2302	2011	1518	957	54481
Jul-15	Monday	13	604	343	268	314	642	1732	4375	6503	6090	4967	4862	5222	5443	5423	5612	6116	6505	6522	4818	3345	2624	1900	1344	915	86489
Jul-15	Tuesday	14	587	340	270	308	658	1655	4107	6157	5524	5097	4867	5089	5460	5539	5732	6129	6397	6650	4922	3513	2793	2176	1452	965	86387
Jul-15	Wednesday	15	564	359	277	339	593	1757	4354	6641	6408	5045	5094	5231	5734	5666	5816	6238	6589	6478	4789	3509	2784	2380	1634	1124	89403
Jul-15	Thursday	16	610	370	311	307	635	1641	4209	6626	6232	5009	4976	5367	5814	5839	5898	4593	6308	6490	5024	3744	2934	2412	1732	1172	88253
Jul-15	Friday	17	677	369	348	379	611	1592	3975	6201	5949	5020	5214	5570	5954	6182	5801	6359	6289	6078	5068	3999	3047	2795	2207	1521	91205
Jul-15	Saturday	18	1025	626	475	373	519	840	1519	2626	3441	4120	4637	5045	5132	5260	5219	5330	5217	4536	4199	3473	2859	2702	2014	1266	72453
Jul-15	Sunday	19	943	541	417	324	389	569	928	1313	1864	2781	3520	3702	4154	4337	4346	4162	3962	3431	3349	2604	2095	1854	1368	934	53887
Jul-15	Monday	20	663	324	275	322	672	1724	4269	6584	6103	4813	4867	5126	5497	5618	5601	6693	7126	6441	4783	3329	2604	2106	1438	1009	87987
Jul-15	Tuesday	21	625	352	249	326	667	1716	4401	6633	6345	5078	4868	5247	5604	5704	5755	6007	6285	6440	4929	3422	2739	2246	1501	985	88124
Jul-15	Wednesday	22	623	330	272	315	663	1706	4381	6487	6382	4925	4822	5237	5661	5635	5819	6288	6488	6537	5186	3529	2713	2337	1653	1063	89052
Jul-15	Thursday	23	672	378	281	342	667	1682	4525	6525	6368	5097	5165	5275	5378	5792	5861	6293	6582	6320	5044	3708	2820	2330	1635	1165	89905
Jul-15	Friday	24	665	412	317	350	653	1579	3959	6099	5834	4844	5091	5498	6079	6014	6212	6355	6441	6134	4993	3814	2960	2531	2022	1558	90414
Jul-15	Saturday	25	962	608	501	407	494	853	1478	2544	3417	4149	4615	5108	5222	5305	5233	5136	4917	4623	4102	3490	2967	2604	2014	1428	72177
Jul-15	Sunday	26	935	642	530	382	383	523	860	1274	1928	2724	3430	3705	4091	4408	4323	4297	3990	3733	3317	2776	2262	2047	1410	917	54887
Jul-15	Monday	27	634	326	276	322	671	1740	4245	6322	6022	4654	4683	5107	5601	5449	5382	5743	6555	6321	4811	3405	2592	2044	1393	940	85238
Jul-15	Tuesday	28	624	340	278	295	674	1722	4311	6472	6282	4884	4890	4958	5451	5560	5761	6078	6351	6586	4835	3522	2802	2137	1608	992	87413
Jul-15	Wednesday	29	662	310	298	306	638	1683	4277	6544	6192	5034	5029	5078	5518	5530	5723	6099	6451	6731	5417	3777	3025	2343	1587	1114	89366
Jul-15	Thursday	30	706	372	276	361	667	1636	4374	6451	6298	5143	4991	5346	5914	5911	5691	6362	6193	6272	5183	3944	2966	2448	1629	1173	90307
Jul-15	Friday	31	745	471	376	356	669	1618	3923	6153	5985	5236	5250	5734	6180	6219	6409	6664	6479	6264	5259	4289	3217	2750	2065	1598	93909
Aug-15	Saturday	1	1014	663	547	423	523	843	1508	2395	3193	4017	4657	4986	4580	4612	5133	5292	4944	4596	4288	3511	2843	2625	2200	1570	70963
Aug-15	Sunday	2	1009	712	528	341	372	520	873	1262	1897	2705	3319	3701	4164	4465	4279	4316	3961	3602	3512	2704	2264	1935	1403	900	54744
Aug-15	Monday	3	574	360	235	319	656	1696	4237	6510	5926	4862	5016	5273	5708	5645	5841	5937	5776	5949	4845	3137	2576	2115	1444	1027	85664
Aug-15	Tuesday	4	632	330	232	298	634	1634	4284	6754	6124	4976	4929	5224	5465	5802	5748	6344	6537	6468	5025	3613	2820	2228	1560	1063	88724
Aug-15	Wednesday	5	639	377	303	312	648	1707	4370	6822	6482	5084	4924	5210	5695	5772	5841	6342	6515	6589	5300	3773	3029	2268	1748	1316	91066
Aug-15	Thursday	6	733	422	271	323	699	1657	4363	6543	6221	5108	5104	5408	5703	5601	5692	5451	5948	5584	5078	3467	2802	2188	1533	1061	86960
Aug-15	Friday	7	683	385	297	340	612	1525	3961	6122	5916	5089	5289	5679	6110	6206	6385	6446	6507	6317	5377	4146	3345	2767	2221	1821	93546
Aug-15	Saturday	8	1047	627	480	391	490	903	1616	2725	3508	4070	4921	4488	5438	5488	5537	5307	5430	5012	4450	3636	2973	2535	2141	1543	74756
Aug-15	Sunday	9	956	605	493	367	358	582	991	1252	1919	2732	3625	3938	4297	4641	4492	4469	4390	4087	3718	3026	2496	2070	1473	955	57932
Aug-15	Monday	10	581	395	256	331	666	1722	4416	6709	6037	4916	4966	5098	5631	5535	5846	6313	6445	6404	5031	3401	2700	2197	1387	913	87896
Aug-15	Tuesday	11	571	369	267	312	653	1715	4538	7079	6324	4733	4891	5332	5561	5501	5848	6318	6538	6291	4935	3574	2741	2119	1549	1037	88796
Aug-15	Wednesday	12	552	348	300	295	664	1750	4435	6799	6311	5099	4965	5221	5534	5567	5840	6347	6773	6556	5066	3594	2948	2236	1661	1203	90064
Aug-15	Thursday	13	732	408	278	302	668	1719	4371	6876	6134	4942	4799	5284	5593	5773	5931	6454	6456	6431	5044	3720	2926	2318	1780	1214	90153
Aug-15	Friday	14	760	404	339	332	638	1574	4124	6256	6117	5172	5194	5687	6176	6273	6377	6813	6789	6320	5145	4090	3279	2654	2133	1749	94395
Aug-15	Saturday	15	1063	589	501	392	528	862	1489	2572	3494	4286	4465	5063	5241	5377	5464	5267	5040	4714	4303	3526	2981	2551	1990	1359	73117
Aug-15	Sunday	16	945	596	505	382	388	540	843	1294	1848	2723	3393	3830	4373	4545	4509	4523	4224	3935	3563	2855	2246	1838	1274	893	56065
Aug-15	Monday	17	570	347	211	308	738	1860	5091	6562	5966	5010	4751	4980	5250	5230	5562	5948	6310	6178	4676	3188	2392	1839	1221	845	85033
Aug-15	Tuesday	18	520	291	219	296	660	1784	5122	6834	5986	4699	4678	4922	5214	5357	5611	5694	5411	5837	5067	3121	2336	1790	1349	940	83738
Aug-15	Wednesday	19	532	342	249	279	653	1807	4981	6570	6428	5149	4707	5065	5453	5454	5719	6245	6280	6277	4710	3453	2483	1981	1383	914	87114
Aug-15	Thursday	20	572	339	262	288	609	1801	5057	6822	6277	4970	4759	5118	5481	5660	5851	5657	6105	6159	4811	3467	2619	2029	1424	968	87105
Aug-15	Friday	21	639	375	317	333	581	1734	4884	6614	5803	5190	4912	5613	5996	6027	6130	6467	6079	5864	4635	3859	2902	2453	1944	1338	90689
Aug-15	Saturday	22	855	580	435	347	455	845	1525	2544	3233	3926	4580	4828	5070	5170	5251	4963	4836	4608	4142	3132	2675	2176	1762	1379	69317
Aug-15	Sunday	23	847	577	474	323	326	513	898	1233	1816	2705	3381	3616	4266	4295	4402	4293	4113	3789	3435	2640	2125	1556	1162	807	53592
Aug-15	Monday	24	468	286	234	299	681	1871	5118	6805	6434	4861	4747	4940	5462	5454	5536	6087	6430	6258	4716	3288	2414	1931	1261	868	86449
Aug-15	Tuesday	25	493	279	244	286	617	1846	5085	6824	6546	4995	4789	4931	5287	5337	5730	6098	6555	6469	4828	3267	2667	1923	1281	892	87269
Aug-15	Wednesday	26	541	281	239	286	635	1816	5019	6839	6541	4868	4702	4923	5360	5410	5732	6011	6503	6468	4983	3448	2761	2105	1416	1004	87891
Aug-15	Thursday	27	558	338	251	303	646	1850	5017	6973	6435	4992	4965	5355	5459	5525	3974	3475	5208	6216	5194	3792	2759	2024	1468	980	83757
Aug-15	Friday	28	535	321	300	355	588	1729	4770	6749	6112	5186	5179	5526	6129	6062	6452	5763	5897	5798	5474	3964	2859	2571	2110	1440	91869
Aug-15	Saturday	29	856	558	426	345	437	859	1419	2591	3230	4013	4657	4983	5295	5448	5403	5175	4990	4546	3979	3187	2759	2314	1878	1326	70674
Aug-15	Sunday	30	818	555	460	304	330	536	824	1195	1723	2510	3228	3610	4264	4574	4389	4192	3731	3408	2959	2324	1956	1449	1149	729	51217
Aug-15	Monday	31	398	263	192	334	667	1579	4077	4925	5404	4359	4641	4667	5090	5208	5409	5932	6180	6141	4555	3189	2457	1910	1273	890	79740
Sep-15	Tuesday	1	472	320	214	342	629	1812	4986	6317	6256	4843	4710	4848	5206	5306	5612	6035	6174	6034	4598	3261	2476	1895	1375	904	84625
Sep-15	Wednesday	2	464	267	240	287	582	1727	4851	6173	6091	5094	4671	5002	5377	5437	5561	6111	5762	6079	4850	3335	2849	2022	1383	946	85161
Sep-15	Thursday	3	523	263	246	299	634	1818	4885	6569	6387	5059	5005	5371	5736	5783	6015	6261	6480	6325	5019	3678	2751	2206	1664	1049	90026
Sep-15	Friday	4	703	384	311	347	610	1675	4616	6561	5877	5120	5372	5676	6287	6420	6448	5567	5743	5862	5108	3943	3102	2688	2064	1503	91987
Sep-15	Saturday	5	1040	617	482	400	428	770	1388	2226	3109	3797	4574	4815	4956	5054	4971	4955	4923	4480	3771	3228	2737	2339	1903	1392	68355
Sep-15	Sunday	6	886	535	456	301	263	478	782	1174	1715	2562	3237	3484	4027	4342	4340	4279	3857	3828	3165	2439	2084	1736	1535	1077	52582
Sep-15	Monday	7	670	393	349	330	383	628	1107	1474	2061	2856	3655	3977	4470	4461	4508	4424	4221	3708	3220	2938	2258	1761	1350	860	56062
Sep-15	Tuesday	8	449	263	214	294	685	1901	4961	6925	6427	5077	4951	5134	5620	5661	5861	6447	6685	6409	4845	3425	2599	1861	1314	893	88901
Sep-15	Wednesday	9	489	277	238	319	644	1821	5023	6698	6527	5202	4798	5148	5409	5511	5709	6359	6549	5984	5109	3573	2885	2116	1398	932	88718
Sep-15	Thursday	10	503	313	244	286	636	1824	5001	6044	6143	5332	5098	5275	5606	5710	5966	6150	6390	6542	5202	3724	3066	1933	1409	958	89355

Sep-15	Friday	11	577	333	285	324	617	1737	4668	6508	6058	5084	5167	5532	5841	6034	6319	6616	6457	6020	4964	4072	3110	2503	1994	1471	92291
Sep-15	Saturday	12	936	546	468	351	515	935	1636	2536	3443	3911	4393	4931	5185	5038	5025	4802	4771	4276	3949	3055	2455	2361	1658	1324	68500
Sep-15	Sunday	13	799	602	518	304	303	565	930	1279	1854	2762	3437	3740	4276	4432	4470	4327	4124	3842	3418	2916	2378	1737	1257	825	55095
Sep-15	Monday	14	537	310	215	301	674	1840	4986	6508	6267	4768	4781	5312	5444	5388	5685	6167	6397	6153	4999	3412	2658	1977	1295	892	86966
Sep-15	Tuesday	15	495	282	235	292	645	1838	4987	6590	6236	4892	4752	5137	5497	5502	5788	6418	6531	6187	4592	3523	2807	1963	1327	896	87412
Sep-15	Wednesday	16	538	279	233	297	617	1853	5083	6702	6535	5191	4975	5091	5378	5607	5804	6366	6467	6253	4966	3506	2789	2071	1378	888	88867
Sep-15	Thursday	17	473	316	241	288	659	1804	4996	5973	6348	5079	4813	5148	5485	5519	5674	5054	5694	6113	5199	3602	2667	2040	1503	974	85662
Sep-15	Friday	18	630	318	282	307	641	1687	4708	6566	5942	4825	4842	5323	5999	6066	6379	6655	6556	6238	5063	3939	2942	2408	2201	1547	92064
Sep-15	Saturday	19	920	570	428	343	511	812	1451	2531	3278	3972	4518	4781	5176	5164	5256	4958	4798	4322	3880	3226	2680	2436	1799	1294	69104
Sep-15	Sunday	20	810	525	488	312	372	620	864	1262	1818	2767	3532	3708	4319	4456	4103	4070	3967	3720	3278	2914	2306	1664	1266	804	53945
Sep-15	Monday	21	465	291	225	320	677	1861	4986	6527	6164	4854	4567	5039	5327	5240	5672	6193	6661	6458	4744	3354	2336	1921	1212	814	85908
Sep-15	Tuesday	22	473	322	232	305	648	1819	5090	6651	6625	4948	4647	5100	5345	5458	5741	6417	6556	6393	4770	3462	2562	1886	1348	884	87682
Sep-15	Wednesday	23	496	303	235	343	637	1844	4999	6761	5997	4936	4757	5145	5538	5429	5625	6211	6431	6504	4829	3465	2700	1924	1300	858	87267
Sep-15	Thursday	24	498	306	238	290	663	1816	5051	6619	6103	4867	4907	5119	5178	5376	5537	5989	5927	5843	4457	3500	2487	1862	1401	951	84985
Sep-15	Friday	25	595	366	287	298	598	1673	4556	6170	5783	4826	4984	5408	5798	5905	6311	6712	6038	6283	5133	4078	3069	2618	2015	1421	90925
Sep-15	Saturday	26	977	637	521	341	504	830	1571	2613	3312	3904	4425	4755	4941	5059	5025	4872	4764	4494	4080	3315	2618	2280	1901	1280	69019
Sep-15	Sunday	27	917	548	432	304	383	618	866	1285	1931	2703	3480	3754	4283	4387	4222	4203	4143	3704	3212	2785	2112	1598	1236	748	53854
Sep-15	Monday	28	445	259	222	308	713	1867	4942	6438	6132	4847	4767	4965	5418	5301	5451	6165	6508	6503	4576	3422	2452	1862	1277	787	85627
Sep-15	Tuesday	29	491	271	218	285	673	1846	5056	6620	6369	5047	4793	4889	5427	5317	5303	6069	6334	6438	4762	3418	2621	1948	1271	839	86305
Sep-15	Wednesday	30	494	294	206	285	619	1790	5126	6537	6636	5098	4885	5091	5565	5584	5811	6207	5915	5399	4817	3620	2675	1849	1353	923	86779
Oct-15	Thursday	1	540	321	248	314	664	1825	4971	6717	6355	5012	4910	5315	5713	5345	5889	5670	5658	5570	4696	3161	2214	1895	1360	860	85223
Oct-15	Friday	2	611	342	240	340	649	1512	3758	5394	5010	4705	4148	5604	5873	5931	6119	6034	5844	5089	3976	2846	2033	1783	1477	1007	80325
Oct-15	Saturday	3	697	443	332	271	386	636	1148	1766	2143	2324	2561	2809	2829	2660	2560	2479	2297	2309	2072	1500	1024	761	703	297	37007
Oct-15	Sunday	4	224	137	79	134	211	419	669	931	1175	1558	2148	2505	2645	2579	2540	2548	2449	2262	1993	1408	1005	842	616	387	31464
Oct-15	Monday	5	290	159	116	180	441	1063	2602	3834	3631	3366	3553	3843	4104	3957	4123	4491	4437	3796	3000	2642	1719	1359	1022	704	58432
Oct-15	Tuesday	6	450	266	205	313	558	1662	4090	5840	5632	4570	4408	4847	5209	5118	5259	5775	6257	6379	4620	3351	2448	1852	1365	886	81360
Oct-15	Wednesday	7	437	297	235	300	651	1838	4666	5889	6010	5075	4874	4955	5300	5371	5763	6159	6178	6345	4782	3677	2897	1966	1413	859	85937
Oct-15	Thursday	8	554	301	243	315	659	1857	4598	6102	6038	5407	5022	4978	5052	5596	5886	6357	6391	6465	4956	3854	2862	2086	1628	1003	88210
Oct-15	Friday	9	686	360	312	369	664	1778	4719	6265	5568	5234	5242	5672	6089	6251	6406	6729	6615	6399	5267	4238	2922	2639	2214	1737	94375
Oct-15	Saturday	10	1004	616	458	383	505	845	1461	2495	3389	3847	4444	4905	5314	4982	4961	4858	4499	4183	3759	3291	2658	2174	1883	1295	68209
Oct-15	Sunday	11	821	568	474	305	339	606	911	1334	1822	2659	3307	3823	4245	4522	4557	4348	4162	3862	3471	2777	2183	1590	1225	885	54796
Oct-15	Monday	12	570	305	240	332	708	1771	4822	6463	5785	4784	4898	5117	5616	5580	5961	6408	6702	6504	4893	3480	2430	1912	1305	888	87474
Oct-15	Tuesday	13	527	304	240	324	699	1888	5062	6650	6590	5173	5047	5245	5570	5776	5929	6336	6674	6688	5097	3550	2602	1975	1274	896	90116
Oct-15	Wednesday	14	517	302	251	339	678	1885	5098	6654	6466	5240	5015	5467	5626	5666	5886	6415	5970	5747	5118	3743	2888	2063	1457	918	89409
Oct-15	Thursday	15	598	341	255	345	666	1826	4956	6479	6318	5037	4937	5199	5627	5714	5911	6429	6564	6369	5299	3933	2814	2215	1576	1080	90488
Oct-15	Friday	16	604	348	316	368	593	1702	4797	6157	6211	5096	5187	5642	6178	6238	6389	6607	6435	5988	5279	4230	2944	2478	2193	1410	93390
Oct-15	Saturday	17	952	613	417	361	506	836	1640	2653	3349	3993	4501	4856	5294	5292	5274	5120	4869	4555	4122	3497	2739	2533	1890	1432	71294
Oct-15	Sunday	18	918	603	418	309	329	569	939	1358	1796	2711	3369	3880	4250	4515	4561	4302	4437	4052	3696	2856	2150	1688	1299	791	55796
Oct-15	Monday	19	442	291	204	292	709	1846	4894	6614	6186	4734	4842	5024	5443	5425	5708	6371	5659	6057	4827	3521	2503	1919	1398	852	85761
Oct-15	Tuesday	20	439	315	262	315	654	1841	4989	6231	6535	4842	4875	5061	5501	5542	5820	6486	6618	6485	4952	3592	2516	1969	1329	959	88128
Oct-15	Wednesday	21	476	292	253	332	672	1847	5062	6692	6533	5130	4879	5161	5479	5522	5933	6418	6139	6356	4728	3639	2806	2100	1533	950	88932
Oct-15	Thursday	22	557	354	275	341	649	1861	5020	6468	6496	5139	4994	5426	5599	5630	6134	6444	6497	6027	5005	3935	3066	2157	1669	1116	90859
Oct-15	Friday	23	627	405	316	333	635	1700	4822	6461	5886	5217	5117	5801	6092	6180	6466	6607	6300	5895	4817	4214	2873	2576	2140	1511	92991
Oct-15	Saturday	24	931	578	475	367	506	857	1528	2466	3497	4128	4593	4879	4921	4951	5144	5119	5300	4603	4322	3490	2631	2612	2443	1405	71746
Oct-15	Sunday	25	936	545	463	311	357	515	945	1233	1843	2667	3382	3758	4322	4506	4465	4363	4102	4069	3622	2878	2100	1668	1333	767	55150
Oct-15	Monday	26	487	315	203	315	735	1915	4816	6463	6212	4950	4823	4979	5393	5335	5946	6352	6545	6175	4732	3102	2291	1807	1365	895	86151
Oct-15	Tuesday	27	489	288	223	316	645	1841	4864	5963	6004	5398	4864	5065	5390	5315	5534	6227	6128	5953	4751	3193	2335	1713	1282	837	84618
Oct-15	Wednesday	28	492	285	265	289	635	1799	4906	6594	6268	4884	4948	5137	5530	5575	5795	6214	6285	6418	4827	3580	2636	2009	1500	983	87854
Oct-15	Thursday	29	504	307	296	328	672	1873	5026	6736	6394	5198	4948	5408	5630	5819	6150	6695	6647	6442	5061	3889	3071	2233	1560	1048	91935
Oct-15	Friday	30	580	348	293	351	656	1827	4738	6007	6429	5274	5274	5720	6081	5900	6564	6706	6382	5788	5428	4220	3040	2516	2346	1658	94126
Oct-15	Saturday	31	1041	618	473	343	486	825	1550	2359	3161	3818	4348	4957	4946	5028	5060	5188	4957	4448	3805	3038	2581	2493	1887	1459	68869
Nov-15	Sunday	1	958	581	510	387	599	579	844	1366	1939	2751	3470	3935	4234	4244	4513	4204	4086	3911	3305	2700	1917	1443	1021	761	54258
Nov-15	Monday	2	419	275	201	313	668	1838	5165	6790	6440	5124	4970	5111	5410	5392	5747	5991	6415	6189	4483	2973	2140	1747	1221	816	85838
Nov-15	Tuesday	3	478	263	238	316	622	1738	5018	5896	6034	4949	4394	4056	4944	5231	5355	5930	6379	6217	4690	2953	2246	1372	1460	887	81666
Nov-15	Wednesday	4	523	276	245	321	679	1768	4691	6593	6600	5165	4880	5039	5381	5403	5883	6253	6446	6285	5093	3222	2513	1939	1535	904	87637
Nov-15	Thursday	5	548	323	274	332	659	1742	5160	6493	6462	5116	5181	5304	5606	5816	6044	6593	6794	6513	5116	3468	2696	2203	1694	1115	91252
Nov-15	Friday	6	576	315	276	335	612	1701	4875	6614	5931	5032	5295	5618	6057	6156	6617	6487	6268	6175	5201	3730	2744	2439	2056	1524	92634
Nov-15	Saturday	7	1044	554	386	428	386	836	1653	2805	3500	4328	4444	5157	5422	5227	5442	5266	4959	4769	4164	3006	2451	2259	1887	1498	71871
Nov-15	Sunday	8	1018	683	441	299	331	554	853	1326	1908	2800	3516	3755	4288	4377	4294	4208	4003	3731	3278	2414	1787	1362	1070	727	53023
Nov-15	Monday	9	457	274	188	264	632	1674	4473	3770	4150	4994	4473	4513	5030	5172	5363	5861	6054	6102	4312	2889	2047	1746	1229	799	76466
Nov-15	Tuesday	10	480	268	216	275	673	1713	5044	6218	6564	4947	4761	5199	5497	5601	5859	4927	6315	6488	5121	3308	2368	1782	1310	831	85765
Nov-15	Wednesday	11	512	327	209	319	608	1618	4957	6544	5613	4914	4944	5055	5577	5618	5664	5066	5452	5252	5215	3309	2523	2023	1414	887	83620
Nov-15	Thursday	12	502	334	217	296	638	1754	5249	6697	6444	5069	5032	5385	5705	5632	6026	6420	6331	6427	5043	3492	2623	2110	1520	991	89937
Nov-15	Friday	13	604	354	292	311	623	1641	4796	6539	6188	5384	5363	5475	6121	6140	6395	6343	6273	5983	5373	3796	2877	2545	2058	1386	92860

Nov-15	Saturday	14	904	564	434	333	483	808	1637	2716	3583	4174	4698	5040	5227	5227	5354	5302	4968	4821	4223	3097	2334	2139	1889	1273	71228
Nov-15	Sunday	15	819	563	489	274	322	528	888	1229	1843	2774	3459	3702	4467	4536	4388	4361	4302	4038	3354	2446	1900	1496	1226	714	54118
Nov-15	Monday	16	478	270	207	306	670	1807	4822	6634	6598	5185	4989	5259	5619	5591	6027	6542	6722	6511	5107	3129	2336	1875	1223	836	88743
Nov-15	Tuesday	17	494	293	216	306	592	1735	5243	6697	6310	5360	5125	5258	5673	5917	5997	6534	6760	6407	5025	3199	2388	1862	1322	906	89619
Nov-15	Wednesday	18	467	359	212	296	617	1800	4823	6493	6595	5307	5280	5216	5906	5816	6086	6404	6449	6005	5008	3402	2504	1988	1387	868	89288
Nov-15	Thursday	19	509	306	226	297	573	1636	4639	6368	6376	5022	4939	4786	5554	5740	6063	6627	6569	6155	4530	3436	2589	2230	1456	980	87606
Nov-15	Friday	20	579	355	336	328	661	1746	4780	6624	6327	5376	5342	5813	6416	6187	6644	6417	6419	6202	5202	3912	2784	2557	2051	1428	94486
Nov-15	Saturday	21	913	538	423	351	488	892	1530	2636	3457	3959	4676	4859	5228	5317	5110	5153	4909	4590	3844	3148	2527	2120	1706	1209	69583
Nov-15	Sunday	22	773	553	510	285	363	546	804	1273	1854	2593	3355	3708	4259	4461	4209	4178	4259	3806	3161	2655	1860	1514	1206	776	52961
Nov-15	Monday	23	464	273	219	275	658	1725	4505	5140	5805	4800	5148	5407	5786	5617	4914	5704	6078	6350	5066	3290	2345	1905	1364	898	83736
Nov-15	Tuesday	24	484	291	231	297	651	1594	4374	6422	5932	5275	5397	5861	5963	6153	6210	6593	6591	6457	5140	3513	2677	2086	1584	1186	90962
Nov-15	Wednesday	25	678	431	307	315	699	1550	4009	5461	5390	5108	5594	5941	6454	6587	6595	6455	6091	5640	4729	3564	2757	2098	1764	1285	89502
Nov-15	Thursday	26	795	466	380	273	343	495	831	1013	1435	1984	2437	3115	3470	3186	3088	3206	3251	3353	3239	3212	3024	2536	2093	1479	48704
Nov-15	Friday	27	1021	631	478	403	574	962	1822	2585	3127	3769	4333	4840	5218	5338	5412	5270	4954	4715	4222	3278	2437	2104	1804	1220	70517
Nov-15	Saturday	28	764	485	467	340	495	713	1254	1894	2759	3351	4101	4407	4483	4545	4468	4446	4669	4487	3837	3020	2429	1943	1796	1226	62379
Nov-15	Sunday	29	816	513	446	376	436	637	905	1312	1934	2854	3784	3863	4266	4478	4454	4349	4194	3971	3301	2570	1974	1514	1217	771	54935
Nov-15	Monday	30	497	324	244	265	693	1781	4931	6778	6180	5043	5128	5289	5692	5676	6077	6389	6518	6396	4870	2869	2382	1749	1234	861	87866
Dec-15	Tuesday	1	531	306	243	291	653	1879	4956	6690	6576	4889	4778	5260	5587	5857	5864	5984	6513	6183	5003	3116	2428	1909	1340	950	87786
Dec-15	Wednesday	2	467	316	220	236	622	1801	5040	6760	6480	4846	5057	5279	5446	5585	5829	5956	5727	6095	4455	3042	2345	1793	1300	900	85597
Dec-15	Thursday	3	498	310	239	304	623	1722	5000	6864	6372	5155	4945	5289	5716	5794	5985	6674	6698	6603	4959	3590	2652	2058	1597	997	90644
Dec-15	Friday	4	581	324	301	334	648	1660	4790	6622	6013	5030	5064	5462	6196	6260	6610	6593	6442	6112	5185	3796	2813	2462	2149	1470	92917
Dec-15	Saturday	5	882	540	414	339	431	785	1556	2423	3381	4120	4736	5039	5391	5407	5216	5265	5193	4782	4203	3148	2472	2043	1891	1323	70980
Dec-15	Sunday	6	903	536	428	272	336	538	971	1191	1739	2556	3374	3443	4105	4442	4352	4403	4127	3736	3220	2422	1968	1519	1193	720	52494
Dec-15	Monday	7	437	218	204	283	612	1689	4608	5993	6074	4800	4522	4900	5405	5443	5813	6397	6387	6268	4831	3189	2310	1757	1476	1189	84805
Dec-15	Tuesday	8	535	332	273	323	615	1724	4943	6640	6177	5161	4864	5049	5481	5609	6074	6230	6450	6366	5139	3395	2503	1910	1521	877	88191
Dec-15	Wednesday	9	508	315	252	285	587	1780	4991	6623	6456	5031	5060	5136	5492	5606	5921	6393	6502	6432	4987	3355	2634	2108	1449	953	88856
Dec-15	Thursday	10	504	295	248	288	673	1737	4920	6601	6500	5184	4640	4923	5635	5844	5964	6374	6431	6181	5133	3512	2728	2181	1537	1054	89087
Dec-15	Friday	11	565	340	294	315	652	1697	4688	6586	6093	5023	5067	5736	6157	6232	4856	6167	6016	6147	5596	3866	3022	2618	2125	1571	91429
Dec-15	Saturday	12	901	559	435	347	519	959	1613	2391	3399	4069	4553	4963	5280	5451	5494	5472	5443	5327	4275	3342	2666	2584	2107	1509	73658
Dec-15	Sunday	13	892	577	439	326	310	525	865	1252	1950	2750	3648	3762	4235	4594	4492	4338	4254	4073	3505	2679	2026	1729	1228	802	55251
Dec-15	Monday	14	437	236	197	295	605	1776	4809	6762	6326	4799	4739	5161	5398	5528	5855	6584	5728	5836	4953	3135	2359	1825	1407	872	85622
Dec-15	Tuesday	15	462	303	266	320	620	1776	4985	6722	6448	5160	4978	5410	5844	5985	5935	6325	6226	6373	4759	3500	2691	1962	1476	998	89524
Dec-15	Wednesday	16	514	320	280	280	611	1702	4934	6621	6478	5295	5132	5568	5673	6039	6307	6471	6390	6346	4954	3639	2731	2129	1487	985	90886
Dec-15	Thursday	17	523	339	265	350	636	1755	4881	6537	6267	5056	5298	5671	5906	6001	6222	6315	5984	5194	4455	3608	2689	2272	1709	1078	89011
Dec-15	Friday	18	616	365	278	369	624	1587	4532	6374	6023	5265	5461	5877	6351	6542	6824	6684	6377	6100	5448	4047	3106	2683	2276	1644	95453
Dec-15	Saturday	19	1047	635	514	380	507	821	1448	2377	3204	3991	4832	5136	5673	5663	5758	5772	5533	5358	4694	3441	2659	2539	2199	1510	75691
Dec-15	Sunday	20	1004	628	480	294	342	480	854	1146	1706	2694	3504	3760	4438	4767	4753	4646	4336	4291	3580	2787	2260	1858	1434	1010	57052
Dec-15	Monday	21	546	340	236	313	613	1599	4144	5817	5694	5035	5389	5848	6224	6393	6425	6814	6789	6490	5149	3485	2728	2058	1687	1096	90912
Dec-15	Tuesday	22	617	379	285	333	580	1493	3936	5680	5577	4945	5245	5853	6166	6192	6386	6655	6644	6236	4910	3456	2736	2223	1859	1166	89552
Dec-15	Wednesday	23	704	389	269	319	610	1413	3655	5213	5336	5169	5879	6147	6282	6597	6679	6678	6375	6152	4839	3921	3224	2475	2129	1366	91820
Dec-15	Thursday	24	903	563	430	342	504	929	1997	2982	3452	4220	4941	5586	5839	5564	5461	5044	4351	4007	3611	2713	2360	2026	1666	1162	70653
Dec-15	Friday	25	751	487	325	237	209	322	543	695	1009	1439	1910	2393	2751	2843	3145	3141	2987	2979	3085	2545	2295	2066	1691	1190	41038
Dec-15	Saturday	26	712	451	319	287	416	651	969	1479	2180	2923	3714	4223	4711	4771	4877	4764	4608	4405	4160	3141	2440	2336	1689	1270	61496
Dec-15	Sunday	27	831	532	486	330	366	510	799	1057	1720	2559	3170	3444	4058	4058	4293	4162	4075	3998	3679	2641	2069	1810	1314	929	52890
Dec-15	Monday	28	652	366	283	295	582	1379	3274	4748	4730	4558	4836	5326	5485	5640	5465	6073	6009	5733	4442	3001	2215	1802	1292	936	79122
Dec-15	Tuesday	29	640	355	289	290	555	1339	3416	5016	5189	4863	5247	5556	5803	5789	5961	6096	6210	6302	4730	3147	2457	1945	1542	1064	83801
Dec-15	Wednesday	30	582	341	285	303	570	1357	3415	5045	5227	4745	5152	5755	6050	6098	6059	6312	6369	6457	4698	3341	2661	2143	1638	1099	85702
Dec-15	Thursday	31	676	452	270	340	520	1155	2786	4315	4482	4628	5084	5566	6159	6057	6181	6041	5130	4426	3730	2756	2223	1830	1678	1023	77508

30 Highest Hours of the year

100 Highest Hours of the year

AADT 79500

EASTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	666	637	371	240	165	219	297	435	547	818	1052	1456	1723	1796	1744	1829	1812	1705	1428	1214	886	766	586	456	22848
Jan-15 Friday	2	247	178	132	137	301	659	1398	2276	2168	2079	2351	2689	2945	2844	2863	3069	2816	2703	2252	1634	1224	1045	730	563	39303
Jan-15 Saturday	3	355	218	209	156	223	395	539	846	1239	1698	1984	2336	2486	2473	2487	2480	2387	2384	2079	1451	1167	995	787	612	31986
Jan-15 Sunday	4	389	277	210	133	203	278	355	643	800	1316	1521	1674	2004	2136	2106	2061	1904	1694	1406	997	828	692	511	306	24444
Jan-15 Monday	5	201	133	112	135	408	1091	2798	3983	3122	2358	2227	2435	2642	2739	2664	2849	2875	2874	2253	1295	1083	850	489	363	41979
Jan-15 Tuesday	6	160	123	108	130	385	1080	2765	3730	3153	2494	2256	2432	2643	2691	2776	2829	2840	2633	2150	1594	1043	894	570	391	41870
Jan-15 Wednesday	7	199	127	100	151	382	1059	2717	3833	3230	2377	2226	2395	2598	2825	2808	2876	2902	2897	2286	1504	1116	842	570	347	42367
Jan-15 Thursday	8	183	106	97	136	343	993	2227	3209	2727	2479	2394	2468	2536	2827	2758	2836	2761	2830	2197	1479	1056	801	585	368	40396
Jan-15 Friday	9	185	113	111	137	367	1002	2513	3719	3014	2304	2304	2464	2879	2905	3113	2938	2797	2791	2540	1746	1233	1010	846	574	43605
Jan-15 Saturday	10	352	219	188	156	277	467	725	1055	1383	1669	1963	2248	2555	2547	2500	2508	2382	2417	1998	1498	1055	1011	816	642	32631
Jan-15 Sunday	11	342	224	167	114	180	319	426	617	804	1139	1457	1669	2030	2009	1865	1791	1831	1753	1513	1054	838	619	496	307	23564
Jan-15 Monday	12	157	104	119	136	386	1078	2704	3678	3263	2200	2112	2122	2352	2535	2389	2555	2563	2690	1963	1293	947	716	479	321	38862
Jan-15 Tuesday	13	231	112	99	143	349	1097	2678	3751	3277	2364	2193	2295	2539	2588	2709	2669	2748	2734	2033	1338	987	771	522	359	40586
Jan-15 Wednesday	14	172	103	103	136	342	1070	2747	4003	3215	2221	2196	2329	2597	2588	2757	2727	2868	2839	2318	1481	1047	874	519	364	41616
Jan-15 Thursday	15	172	130	102	153	369	1077	2656	3851	3076	2406	2270	2514	2824	2889	2770	2987	2906	2914	2253	1446	1103	906	613	365	42752
Jan-15 Friday	16	212	121	131	156	327	967	2345	3449	3115	2456	2467	2568	3057	2996	3131	3046	2957	2746	2634	1760	1349	1139	844	592	44565
Jan-15 Saturday	17	350	227	180	166	222	436	613	990	1478	1724	2016	2266	2473	2523	2568	2520	2468	2441	2200	1616	1188	1047	772	611	33095
Jan-15 Sunday	18	369	201	174	129	177	298	335	599	806	1234	1536	1672	1984	2160	2212	2021	1903	1758	1637	1219	815	796	597	432	25064
Jan-15 Monday	19	257	138	138	135	333	805	1688	2502	2166	2027	2169	2425	2609	2836	2813	2838	2969	2745	2321	1470	1064	831	570	370	38219
Jan-15 Tuesday	20	176	120	105	152	415	1091	2780	3959	3535	2364	2278	2329	2432	2741	2758	2996	2918	2947	2293	1402	1001	892	548	329	42561
Jan-15 Wednesday	21	162	109	123	142	360	1109	2756	3978	3323	2381	2292	2420	2680	2753	2772	2744	2908	2951	2258	1467	1190	928	583	364	42753
Jan-15 Thursday	22	178	112	103	142	372	1080	2664	3981	3448	2383	2265	2626	2712	2846	2831	3058	3025	3203	2541	1644	1146	956	649	426	44391
Jan-15 Friday	23	211	145	119	131	354	1062	2525	3890	3096	2480	2395	2645	2793	2858	2926	2753	1911	2191	2136	1630	1206	966	739	552	41714
Jan-15 Saturday	24	327	205	176	129	209	368	581	880	1329	1641	2025	2269	2517	2546	2588	2438	2496	2470	2332	1500	1067	929	846	634	32502
Jan-15 Sunday	25	415	249	198	120	160	274	414	623	936	1294	1637	1817	2032	2231	2276	2075	1936	1916	1777	1272	900	697	441	309	25999
Jan-15 Monday	26	191	140	120	152	407	1117	2839	3936	3253	2312	2311	2405	2644	2670	2688	2696	2929	2856	2157	1432	1036	766	461	334	41852
Jan-15 Tuesday	27	181	118	104	126	368	1090	2804	3894	3577	2519	2242	2400	2529	2652	2638	2783	2978	2834	2356	1537	1103	809	564	355	42561
Jan-15 Wednesday	28	166	100	101	127	367	1061	2716	3894	3417	2382	2254	2366	2605	2645	2716	2785	2940	2899	2336	1562	1201	832	565	362	42399
Jan-15 Thursday	29	148	116	108	148	344	1070	2723	3937	3351	2338	2273	2509	2705	2832	2893	2947	3004	2869	2345	1542	1202	967	594	358	43323
Jan-15 Friday	30	198	119	148	117	368	1028	2544	3929	3164	2514	2476	2672	3070	3132	3109	3170	2947	2690	2731	2029	1371	1170	1035	617	46348
Jan-15 Saturday	31	384	216	171	148	223	415	594	1003	1453	1807	2098	2369	2690	2701	2768	2666	2631	2414	2135	1762	1335	1052	870	603	34508
Feb-15 Sunday	1	384	246	199	128	171	262	383	669	926	1159	1473	1749	1932	2152	2191	2130	2016	1975	1434	847	806	681	1173	539	25625
Feb-15 Monday	2	238	135	133	146	367	1098	2553	3876	3207	2281	2261	2247	2538	2493	2576	2804	2909	2781	2127	1364	1093	861	478	326	40892
Feb-15 Tuesday	3	175	89	107	135	380	1131	2830	3926	3300	2490	2254	2551	2719	2777	2826	2775	3044	2782	2220	1487	1091	955	591	391	43026
Feb-15 Wednesday	4	188	120	88	142	362	1069	2847	4019	3261	2398	2248	2457	2701	2662	2735	2784	2912	2485	2081	1407	1158	845	556	312	41837
Feb-15 Thursday	5	180	109	112	147	371	1058	2665	3466	3130	2297	2157	2486	2624	2748	2720	2651	2716	2871	2323	1625	1237	1021	585	373	41672
Feb-15 Friday	6	219	107	113	154	376	982	2572	3908	3117	2416	2327	2676	2887	3052	2953	3142	3001	2794	2738	1891	1363	1141	946	535	45410
Feb-15 Saturday	7	345	203	193	155	242	451	678	1018	1511	1820	2155	2350	2594	2583	2559	2576	2562	2544	2257	1638	1233	1099	837	580	34183
Feb-15 Sunday	8	392	234	186	107	157	259	402	631	890	1272	1574	1776	2132	2180	2356	2370	2085	2045	1901	1306	859	694	544	309	26661
Feb-15 Monday	9	173	123	120	144	403	1143	2768	3869	3329	2417	2272	2411	2670	2595	2657	2795	3045	2883	2186	1394	1000	806	528	351	42082
Feb-15 Tuesday	10	190	120	94	151	396	1114	2852	3883	3477	2409	2400	2507	2471	2866	2738	2928	2878	2988	2374	1548	1108	911	606	357	43366
Feb-15 Wednesday	11	206	105	128	127	368	1092	2754	4074	3358	2406	2449	2506	2779	2832	2791	2799	3047	2920	2462	1669	1276	1016	649	391	44204
Feb-15 Thursday	12	188	140	107	134	369	1073	2802	4037	3201	2623	2402	2627	2797	2942	2907	2930	3002	3040	2567	1789	1326	1062	639	432	45136
Feb-15 Friday	13	236	143	126	172	389	973	2523	3789	3159	2460	2567	2861	3103	3113	3158	3284	2904	2790	2937	2149	1512	1239	968	662	47217
Feb-15 Saturday	14	383	239	177	162	230	383	526	882	1471	1861	2249	2499	2625	2816	2722	2746	2607	2665	2461	1862	1253	1164	874	661	35518
Feb-15 Sunday	15	393	249	192	131	168	254	344	599	894	1221	1679	1924	2258	2399	2398	2279	2120	1987	1788	1320	903	749	605	368	27222
Feb-15 Monday	16	211	125	115	157	401	913	2041	2912	2426	2225	2268	2662	2813	2919	2894	2987	3031	2742	2057	1416	948	840	531	338	39972
Feb-15 Tuesday	17	193	123	120	130	401	1111	2781	3738	3193	2317	2259	2509	2646	2707	2746	2790	3078	2931	2172	1450	1022	819	578	366	42180
Feb-15 Wednesday	18	161	116	96	133	404	1115	2796	4035	3396	2414	2317	2419	2713	2771	2851	2778	3049	2915	2422	1704	1222	939	652	384	43802
Feb-15 Thursday	19	200	129	131	133	393	1067	2693	3904	3335	2379	2302	2529	2720	2928	2915	2908	3000	2919	2312	1509	1140	920	643	392	43501
Feb-15 Friday	20	199	138	109	153	392	949	2426	3789	3252	2364	2333	2561	2963	3014	3013	2759	2829	2653	2430	1985	1336	1239	885	627	44398
Feb-15 Saturday	21	330	222	182	143	257	418	626	1096	1559	2012	2287	2425	2798	2892	2779	2783	2685	2696	2387	1620	1257	1120	863	657	36094
Feb-15 Sunday	22	400	259	198	139	178	285	407	697	909	1374	1706	1904	2154	2188	2340	2266	2065	1964	1721	1267	961	766	533	376	27057
Feb-15 Monday	23	193	125	107	163	378	1105	2735	3874	3237	2395	2181	2360	2595	2666	2648	2783	2956	2785	1984	1378	1032	822	540	347	41389
Feb-15 Tuesday	24	171	126	119	114	322	876	1769	2551	2178	2507	1911	2025	2120	2110	2127	2153	2290	2439	1802	1170	826	729	494	310	33239
Feb-15 Wednesday	25	159	113	109	142	352	1068	2746	4096	3333	2437	2369	2368	2620	2814	2767	2888	3002	2426	2026	1392	1041	800	547	359	41974
Feb-15 Thursday	26	148	114	103	126	350	1063	2708	3582	3091	2417	2285	2563	2685	2758	2890	2995	3033	2048	2251	1688	1202	999	626	399	42124
Feb-15 Friday	27	216	142	123	143	372	998	2640	3839	3192	2644	2471	2762	2968	3181	3248	3127	3054	2761	2624	2052	1453	1182	957	599	46748
Feb-15 Saturday	28	388	248	174	164	245	430	619	1119	1630	1882	2293	2535	2676	2817	2902	2807	2871	2550	2135	1645	1361	1107	846	629	36073
Mar-15 Sunday	1	365	224	186	124	180	255	365	623	852	1202	1633	1742	2017	2209	2238	2058	1959	1816	1493	1231	945	700	502	334	25253
Mar-15 Monday	2	191	112	109	150	396	1155	2861	3951	3192	2444	2276	2414	2576	2849	2777	2878	3060	2942	2307	1533	1134	914	597	364	43182

Mar-15 Tuesday	3	211	122	135	156	394	1117	2825	3989	3394	2484	2454	2637	2717	2853	2887	2990	3099	2970	2368	1662	1142	985	629	404	44624
Mar-15 Wednesday	4	183	125	117	137	403	1122	2841	3987	3434	2534	2451	2479	2810	2769	2798	2883	2991	2765	2466	1877	1286	1006	623	417	44504
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	222	139	135	149	379	1033	2677	3800	3108	2501	2485	2756	2983	3020	3123	3125	2932	2783	2625	1990	1476	1195	917	646	46199
Mar-15 Saturday	7	350	212	187	137	242	464	860	1218	1737	2023	2361	2589	2794	2767	2761	2706	2603	2581	2226	1658	1308	1148	835	676	36443
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	234	127	152	158	388	1068	2632	3804	3080	2350	2231	2460	2733	2869	2911	2887	2690	2833	2282	1685	1316	1000	603	426	42919
Mar-15 Tuesday	10	224	141	111	136	381	1067	2665	3863	3404	2621	2451	2283	2328	2423	2865	2906	3079	3108	2637	1876	1362	975	701	444	44051
Mar-15 Wednesday	11	229	129	125	155	369	1088	2727	3983	3351	2645	2441	2593	2764	2889	2887	2996	3041	3029	2588	1860	1606	1043	698	436	45672
Mar-15 Thursday	12	254	155	108	169	383	1086	2754	3990	3453	2485	2482	2652	2865	2838	3003	2911	2999	2999	2537	1953	1376	1079	738	458	45727
Mar-15 Friday	13	227	143	123	152	378	959	2477	3728	3242	2558	2424	2669	3036	3048	3185	3142	2928	2735	2476	2024	1515	1275	915	693	46052
Mar-15 Saturday	14	460	297	190	162	232	426	590	1024	1527	1805	2187	2615	2732	2978	2884	2776	2580	2418	2318	1896	1402	1200	1022	742	36463
Mar-15 Sunday	15	474	252	196	176	231	294	399	666	913	1386	1690	1956	2161	2442	2461	2311	2178	2080	1860	1557	1320	952	652	415	29022
Mar-15 Monday	16	283	137	127	157	422	1086	2756	3824	3465	2565	2391	2547	2693	2810	2894	2965	2972	2972	2410	1803	1318	957	632	427	44613
Mar-15 Tuesday	17	222	137	115	162	372	1070	2827	3813	3356	2712	2463	2597	2771	2811	2849	2894	3064	2984	2409	1822	1366	1030	687	421	44954
Mar-15 Wednesday	18	266	176	149	136	390	1104	2747	3937	3519	2774	2331	2558	2780	2952	2954	3077	3032	2976	2436	1840	1439	1006	664	464	45707
Mar-15 Thursday	19	213	128	98	137	381	1115	2739	3391	2285	2806	2465	2617	2665	2741	1504	2788	2838	3017	2306	1639	1201	1042	681	431	41228
Mar-15 Friday	20	243	138	133	171	391	990	2525	3387	2810	2627	2485	2708	2871	3010	3192	3058	3167	2747	2738	2278	1700	1405	1070	703	46547
Mar-15 Saturday	21	402	270	226	174	268	489	661	1243	1640	2000	2308	2415	2691	2774	2759	2636	2713	2707	2347	1779	1465	1199	1019	758	36943
Mar-15 Sunday	22	469	283	201	135	204	291	391	562	888	1344	1678	1868	2186	2262	2220	2138	1999	1874	1600	1386	970	746	552	437	26684
Mar-15 Monday	23	203	117	108	154	398	1087	2674	3795	3323	2387	2259	2400	2596	2674	2553	2600	2803	2752	2076	1501	1165	897	568	378	41468
Mar-15 Tuesday	24	188	120	118	166	384	1083	2820	3862	3447	2434	2299	2510	2739	2805	2853	2973	3105	3084	2545	1738	1331	986	618	412	44620
Mar-15 Wednesday	25	195	126	131	142	372	1095	2780	3861	3579	2616	2337	2481	2725	2848	2910	2878	2911	3055	2456	1809	1464	1087	673	458	44989
Mar-15 Thursday	26	242	149	130	168	385	1077	2801	3985	3330	2642	2601	2608	2962	2958	2875	3183	3079	2964	2448	1912	1369	1124	738	500	46230
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	398	238	209	188	325	767	914	1296	1812	2148	2508	2599	2663	2691	2638	2692	2556	2397	2162	1772	1438	1116	1002	722	37251
Mar-15 Sunday	29	458	291	199	152	215	313	368	664	940	1427	1698	1926	2168	2241	2137	2197	2063	1939	1788	1379	1109	901	606	454	27633
Mar-15 Monday	30	247	151	129	160	407	1011	2360	3461	2971	2397	2348	2521	2667	2831	2721	2718	2869	2837	2212	1660	1382	955	634	445	42094
Mar-15 Tuesday	31	231	154	128	147	357	1045	2504	3657	3119	2489	2432	2610	2891	2924	2994	2969	2970	3068	2344	1802	1447	1089	738	480	44589
Apr-15 Wednesday	1	239	148	144	177	376	1018	2425	3571	3089	2582	2493	2617	2828	3028	3022	2930	2961	2941	2575	1868	1495	1202	757	482	44968
Apr-15 Thursday	2	240	150	141	170	384	996	2387	3367	2976	2290	2811	2696	3011	2987	2938	2942	3061	3076	2602	1935	1474	1201	808	544	45187
Apr-15 Friday	3	349	146	153	153	375	784	1885	2874	2675	2503	2527	2843	3034	3177	3234	2923	2810	2714	2596	2242	1733	1308	1012	768	44818
Apr-15 Saturday	4	477	305	251	162	258	413	550	1000	1444	1876	2333	2591	2591	2605	2583	2666	2590	2432	2106	1798	1428	1220	953	783	35415
Apr-15 Sunday	5	410	259	186	116	142	292	374	674	1027	1356	1657	1720	2062	2068	1895	1972	2117	1985	1719	1558	1341	962	640	407	26939
Apr-15 Monday	6	224	136	148	142	432	1108	2767	4077	3411	2596	2511	2749	2915	2925	2915	3075	3087	3108	2284	1796	1398	1095	628	477	46004
Apr-15 Tuesday	7	242	144	104	145	385	1128	2820	4008	3517	2570	2615	2609	2926	3032	2937	3095	3037	3071	2372	1842	1374	1030	698	463	46164
Apr-15 Wednesday	8	265	150	122	160	383	1109	2893	4045	3414	2650	2479	2412	2600	2822	2901	2920	3057	2920	2548	1950	1595	1136	741	483	45755
Apr-15 Thursday	9	257	157	124	165	404	1140	2882	4021	3555	2705	2587	2718	2834	2986	3090	3171	3208	3133	2511	2067	1546	1155	822	504	47742
Apr-15 Friday	10	290	170	134	165	424	1062	2676	3867	3400	2714	2833	2830	3115	3124	3200	3204	2966	2886	2569	2165	1714	1394	1078	821	48801
Apr-15 Saturday	11	460	293	229	193	304	539	822	1319	1769	2191	2457	2608	2707	2748	2618	2591	2528	2699	2525	1808	1443	1335	1037	711	37934
Apr-15 Sunday	12	402	280	206	142	220	376	520	777	1080	1539	1847	1926	2184	2214	2185	2159	2061	2095	1815	1354	1120	850	609	375	28336
Apr-15 Monday	13	229	138	115	131	422	1190	2815	3902	3543	2591	2341	2465	2711	2722	2827	2985	3023	3032	2194	1693	1244	1017	596	421	44347
Apr-15 Tuesday	14	198	139	111	168	405	1122	2831	3918	3564	2439	2452	2615	2707	2870	2897	2983	3047	2982	2283	1799	1333	1052	700	451	45066
Apr-15 Wednesday	15	193	135	130	149	401	1122	2812	3954	3537	2545	2427	2537	2804	2787	2834	2869	3095	2990	2353	1569	1239	923	610	407	44422
Apr-15 Thursday	16	235	136	107	137	395	1147	2735	3949	3596	2513	2407	2545	2701	2837	2841	3075	3047	3070	2394	1882	1390	1037	690	487	45353
Apr-15 Friday	17	239	150	116	183	400	1029	2587	3734	3343	2567	2472	2704	3034	3120	2993	3286	3050	2805	2548	2109	1461	1234	900	755	46819
Apr-15 Saturday	18	428	272	222	177	294	455	695	1166	1569	1935	2168	2524	2586	2708	2630	2630	2527	2380	2168	1677	1463	1185	993	707	35559
Apr-15 Sunday	19	413	258	241	188	228	292	369	649	942	1234	1698	1871	2178	2308	2279	2156	1947	1911	1581	1107	906	760	562	354	26432
Apr-15 Monday	20	224	159	114	173	442	1111	2864	3917	3479	2452	2398	2445	2722	2852	2814	2885	3077	3127	2252	1598	1144	977	644	392	44262
Apr-15 Tuesday	21	226	142	128	144	422	1164	2905	4002	3585	2409	2388	2471	2665	2864	2931	2970	3115	3055	2420	1756	1386	1066	729	443	45386
Apr-15 Wednesday	22	224	142	126	156	409	1137	2850	3964	3405	2625	2401	2458	2789	2823	2818	2915	3033	3126	2655	2145	1578	1114	654	507	46054
Apr-15 Thursday	23	245	175	132	164	380	1194	2874	3208	1395	2974	2542	2622	2842	2904	2937	2954	2935	2879	2270	1904	1541	1216	777	530	43594
Apr-15 Friday	24	272	181	137	175	447	1050	2637	3874	3241	2588	2563	2669	2909	3136	3120	3239	3005	2773	2598	2058	1733	1354	1022	782	47563
Apr-15 Saturday	25	430	242	206	181	258	511	685	1178	1660	1995	2266	2618	2526	2452	2384	2381	2324	2159	1871	1586	1463	1317	932	734	34359
Apr-15 Sunday	26	466	260	177	153	218	327	429	813	1061	1361	1738	1881	2136	2227	2262	2161	2015	1972	1744	1465	1411	977	657	445	28356
Apr-15 Monday	27	227	140	144	159	407	1175	2902	4081	3350	2482	2426	2481	2696	2887	2868	2838	3035	2936	2341	1653	1337	975	637	391	44568
Apr-15 Tuesday	28	227	150	113	163	404	1161	3006	4102	3560	2559	2385	2537	2782	2878	2946	3090	2943	2910	2445	1815	1493	1066	714	497	45946
Apr-15 Wednesday	29	241	156	103	166	384	1062	2741	3415	3339	2364	2316	2329	2558	2630	2674	2584	2737	2714	2185	1564	1260	897	616	431	41466
Apr-15 Thursday	30	225	128	117	158	389	1110	2830	3917	3351	2500	2427	2625	2871	2958	2976	3012	2949	3040	2529	2018	1645	1197	821	548	46341
May-15 Friday	1	271	279	156	182	421	1054	2744	3991	3216	2484	2641	2799	3028	3064	3302	3200	3024	2968	2899	2136	1666	1385	965	788	48663
May-15 Saturday	2	453	321	206	175	276	491	836	1242	1654	1954	2322	2585	2652	2653	2662	2641	2545	2401	2091	1777	1518	1453	964	711	36583
May-15 Sunday	3	355	800	309	160	217	351	497	744	995	1317	1684	1903	2170	2170	2228	2246	2092	2042	1891	1453	1163	928	679	462	28856
May-15 Monday	4	218	155	153	165	424	1151	2824	3827	3466	2281	2255	2463	2648	2698	2863	2764	2922	2975	2360	1645	1296	1011	626	399	43589
May-15 Tuesday	5	210	150	120	135	403	1124	2948	3911	3364	2398	2315	2573	2730	2872	2841	2914	3025	3015	2520	1984	1481	1086	707	498	45324

May-15 Wednesday	6	235	168	110	138	366	1191	2943	3989	3347	2368	2488	2489	2828	2842	3066	3012	2967	3092	2624	1842	1502	1179	736	467	45989
May-15 Thursday	7	241	153	115	162	394	1144	2921	4040	3283	2444	2470	2608	2590	2618	2761	2774	2768	2689	2224	1663	1341	1049	734	478	43664
May-15 Friday	8	237	167	134	156	397	1017	2724	3852	3114	2435	2639	2847	2940	3116	3161	3128	2845	2856	2607	1924	1575	1317	963	683	46834
May-15 Saturday	9	447	269	236	179	266	484	727	1215	1785	2106	2380	2565	2630	2743	2768	2525	2622	2470	2205	1772	1446	1281	966	762	36849
May-15 Sunday	10	457	299	175	128	216	315	415	681	941	1369	1773	1869	2087	2249	2324	2374	2255	2043	1867	1501	1325	1155	702	506	29026
May-15 Monday	11	244	137	134	145	402	1186	2770	3930	3198	2499	2396	2484	2476	2886	2795	2922	3027	3214	2285	1680	1311	987	602	439	44149
May-15 Tuesday	12	208	136	113	171	394	1112	2922	3976	3476	2515	2401	2524	2856	2809	2960	3009	3004	2963	2500	1881	1342	1064	685	436	45457
May-15 Wednesday	13	216	147	109	180	372	1132	2918	4040	3366	2513	2442	2461	2826	2885	2994	2927	2984	3010	2466	1883	1498	1119	686	479	45653
May-15 Thursday	14	223	161	127	165	428	1064	2819	3959	3311	2549	2419	2638	2770	2902	3047	3104	3067	2933	2530	1814	1569	1134	829	526	46088
May-15 Friday	15	273	178	143	171	408	1043	2707	3937	3169	2513	2589	2751	2914	3084	3160	3184	2953	2853	2681	2112	1723	1381	1031	778	47736
May-15 Saturday	16	429	321	242	195	303	527	778	1195	1722	2095	2352	2437	2592	2548	2624	2421	2421	2388	2078	1848	1537	1434	1110	750	36347
May-15 Sunday	17	491	324	314	175	226	372	447	757	1003	1467	1816	1923	2304	2143	2191	2126	1934	1854	1629	1384	1151	982	679	455	28147
May-15 Monday	18	239	144	127	152	433	1134	2851	3938	3426	2408	2368	2471	2749	2806	2737	2928	2988	2885	2293	1819	1272	1054	602	465	44289
May-15 Tuesday	19	230	131	111	162	429	1167	2886	3980	3509	2509	2331	2557	2529	2851	2838	2981	2953	3081	2396	1925	1346	1010	695	484	45091
May-15 Wednesday	20	220	149	112	164	397	1121	2915	3920	3440	2499	2406	2712	2845	2830	2728	2538	2890	2797	2409	1810	1366	1074	620	461	44423
May-15 Thursday	21	258	158	102	183	416	1183	2810	3913	3516	2641	2583	2671	2862	2970	3034	3150	3058	2966	2492	1942	1656	1290	747	490	47091
May-15 Friday	22	302	162	171	170	400	997	2513	3825	3056	2433	2688	2814	3036	3123	3298	3104	3089	2832	2685	2093	1734	1348	998	749	47620
May-15 Saturday	23	441	285	254	170	240	449	707	1127	1609	2031	2289	2494	2362	2592	2521	2524	2549	2378	2273	1685	1406	1306	1064	782	35538
May-15 Sunday	24	498	278	239	158	151	275	394	687	964	1346	1700	1744	1993	2168	2120	2145	1966	1870	1686	1379	1145	1024	873	726	27529
May-15 Monday	25	502	222	180	142	201	379	577	830	1099	1437	1888	2280	2102	2232	2235	2215	2166	1941	1786	1425	1203	1103	703	551	29399
May-15 Tuesday	26	262	166	111	163	433	1202	3004	3987	3521	2598	2549	2695	3019	2974	2895	2497	2037	1777	2180	2013	1469	1111	707	499	43869
May-15 Wednesday	27	232	116	95	165	415	1135	3006	4035	3527	2535	2490	2621	2807	2939	2847	2909	2932	3081	2458	1812	1432	1117	699	430	45835
May-15 Thursday	28	295	139	115	159	389	1173	2842	4028	3413	2493	2549	2688	2857	2979	2906	2984	3006	2954	2464	1848	1525	1187	786	520	46299
May-15 Friday	29	266	149	154	182	404	1079	2703	3841	3321	2666	2664	2792	3041	3005	3141	2806	2924	2704	2534	2044	1642	1375	988	780	47205
May-15 Saturday	30	457	264	229	177	314	553	869	1259	1795	2251	2443	2463	2729	2653	2575	2576	2500	2462	2181	1708	1512	1390	1016	827	37203
May-15 Sunday	31	485	316	222	174	178	309	494	760	993	1339	1760	1880	2134	2165	2281	2249	2086	1993	1741	1378	1160	1051	702	459	28309
Jun-15 Monday	1	254	160	135	190	432	1202	3001	3926	3464	2523	2521	2602	2955	2856	2732	2906	2959	2972	2336	1746	1246	1099	694	429	45340
Jun-15 Tuesday	2	240	149	108	162	424	1177	2970	4053	3522	2546	2582	2508	2952	2951	2779	2869	2898	3082	2368	1733	1468	1031	671	487	45730
Jun-15 Wednesday	3	229	157	146	156	387	1044	2574	3382	3411	2700	3009	2499	2660	2842	2795	2920	2875	2943	2357	1693	1361	1124	774	495	44533
Jun-15 Thursday	4	302	194	137	156	406	1141	2854	3742	3295	2380	2658	2733	3007	3084	2845	2961	3081	2912	2552	1870	1554	1226	774	534	46398
Jun-15 Friday	5	321	193	161	216	390	1017	2542	3659	3097	2652	2573	2723	3215	3213	3164	2975	2863	2780	2684	2059	1629	1450	1098	804	47478
Jun-15 Saturday	6	436	312	285	178	274	535	832	1251	1769	2259	2394	2448	2529	2575	2564	2457	2501	2426	2127	1641	1356	1341	1008	752	36250
Jun-15 Sunday	7	467	302	267	162	219	338	483	733	1014	1401	1772	1816	2107	2246	2199	2124	2109	2096	1991	1406	1107	1009	869	618	28855
Jun-15 Monday	8	317	164	134	160	408	1120	2695	3826	3162	2454	2443	2488	2725	2795	2852	2882	2969	2976	2336	1680	1362	1041	668	496	44153
Jun-15 Tuesday	9	249	155	111	170	421	1158	2789	3912	3296	2555	2438	2505	2778	2843	2717	2972	2819	2166	1465	1413	1103	866	623	403	41927
Jun-15 Wednesday	10	248	123	126	168	411	1097	2695	3794	3290	2524	2487	2542	2850	2850	2909	2966	2935	2982	2677	1881	1438	1134	720	517	45364
Jun-15 Thursday	11	249	159	132	186	392	1135	2603	3923	3251	2533	2538	2593	2799	2991	2829	2944	2967	2943	2456	1880	1492	1304	770	535	45604
Jun-15 Friday	12	322	176	169	157	439	1056	2422	3578	3097	2586	2437	2834	3094	3134	3260	3113	2939	2774	2627	2104	1582	1363	957	773	46993
Jun-15 Saturday	13	479	300	227	194	304	557	875	1323	1810	2069	2414	2656	2567	2568	2600	2434	2400	2269	2263	1858	1440	1320	956	691	36574
Jun-15 Sunday	14	516	295	219	157	219	334	460	750	1062	1392	1791	1901	2246	2225	2291	2296	2171	1933	1845	1315	1141	991	658	506	28714
Jun-15 Monday	15	327	173	140	187	436	1157	2675	3867	3314	2479	2385	2519	2916	2931	2705	2914	2978	2960	2305	1725	1337	1137	722	494	44783
Jun-15 Tuesday	16	275	147	126	171	439	1184	2657	3961	3324	2441	2365	2551	2888	2947	2807	2954	3006	3006	2338	1791	1400	1177	786	462	45203
Jun-15 Wednesday	17	326	169	146	158	424	1218	2570	3924	3325	2634	2476	2636	2945	2939	2954	2909	2910	2965	2348	1852	1468	1200	753	550	45799
Jun-15 Thursday	18	298	163	114	179	424	1175	2600	3763	3287	2490	2489	2612	2982	2920	2931	3020	2996	2990	2361	1909	1453	1369	866	512	45903
Jun-15 Friday	19	325	175	136	190	415	1062	2310	3446	3224	2606	2615	2863	3029	3105	3073	3252	2864	2837	2508	2003	1551	1341	1062	762	46754
Jun-15 Saturday	20	475	278	212	190	294	531	733	1332	1779	2196	2504	2656	2598	2641	2569	2534	2413	2298	2127	1809	1391	1429	1099	869	36957
Jun-15 Sunday	21	529	300	279	149	233	306	407	731	1034	1446	1735	1808	2017	2186	2235	2226	1949	1912	1876	1485	1231	1176	882	571	28703
Jun-15 Monday	22	311	194	132	158	478	1200	2514	3729	3266	2382	2251	2494	2844	2667	2817	2886	2776	2853	2191	1647	1219	937	667	437	43050
Jun-15 Tuesday	23	238	135	121	174	440	1225	2541	3923	3410	2538	2425	2599	2775	2864	2841	2800	2957	2920	2354	1722	1381	1109	724	473	44689
Jun-15 Wednesday	24	262	152	118	171	442	1209	2555	3890	3353	2490	2463	2611	2798	2957	2879	2923	2776	2957	2491	1723	1390	1140	794	507	45051
Jun-15 Thursday	25	297	138	135	180	412	1162	2544	3753	3385	2562	2501	2645	3003	2940	2889	3033	3006	2996	2461	1849	1429	1216	762	555	45853
Jun-15 Friday	26	284	190	177	183	449	1115	2313	3606	3164	2497	2588	2745	2961	2902	2874	2923	2699	2611	2451	1938	1573	1380	1002	771	45396
Jun-15 Saturday	27	467	290	213	164	319	508	741	1352	1774	2111	2537	2656	2641	2621	2634	2379	2384	2213	2044	1751	1333	1316	1084	729	36261
Jun-15 Sunday	28	529	289	253	150	228	311	426	678	1071	1441	1688	1839	2161	2207	2111	2083	1916	2001	1612	1368	1022	929	634	485	27432
Jun-15 Monday	29	241	155	128	165	463	1140	2501	3371	3584	2500	2346	2569	2881	2809	2179	2705	2931	2771	2430	1670	1269	1089	660	514	43071
Jun-15 Tuesday	30	267	164	126	152	411	1171	2570	3809	3290	2558	2477	2622	2850	2843	2854	3101	2904	2944	2597	1858	1263	1107	754	491	45183
Jul-15 Wednesday	1	265	149	142	188	390	1177	2499	3756	3327	2606	2520	2698	2964	2947	3044	3146	2943	3151	2538	1938	1535	1236	760	590	46509
Jul-15 Thursday	2	274	192	138	178	413	1046	2271	3593	3079	2647	2520	2908	2670	2835	3135	3270	3138	3074	2609	2086	1453	1220	882	579	46210
Jul-15 Friday	3	353	181	145	156	322	486	941	1397	1749	1975	2326	2719	2807	2853	2753	2816	2442	2335	2221	1800	1529	1336	962	803	37407
Jul-15 Saturday	4	465	286	257	194	224	331	557	765	1083	1511	1796	1910	1857	1767	1883	1865	1745	1670	1541	1530	1203	1165	1155	880	27640
Jul-15 Sunday	5	531	306	259	138	207	262	439	742	1017	1427	1798	1901	2184	2279	2214	2246	2133	2013	1809	1360	1120	1021	796	536	28738
Jul-15 Monday	6	276	163	156	179	461	1104	2365	3620	3197	2476	2492	2691	2836	2746	2864	3002	2922	3028	2306	1626	1283	1072	700	470	44035
Jul-15 Tuesday	7	252	163	130	165	428	1145	2527	3828	3274	2406	2427	2549	2864	2869	2735	2670	2899	2913	2301	1638	1262	1057	722	492	43716
Jul-15 Wednesday	8	214	149	132	148	419	1079	2559	3774	3355	2549	2383	2617	2880	2963	2920	2965	2868	3125	2412	1748	1400	1115	787	524	45085

Jul-15 Thursday	9	276	186	114	186	407	1159	2505	3660	3325	2517	2484	2722	2991	2824	2878	3046	2932	2958	2425	1851	1476	1229	817	502	45470
Jul-15 Friday	10	297	186	147	167	417	1065	2326	3504	3207	2542	2560	2967	3109	3109	3101	3170	2999	2780	2452	2023	1681	1505	1142	818	47274
Jul-15 Saturday	11	452	269	221	203	304	512	819	1281	1769	2133	2399	2610	2584	2557	2536	2399	2346	2232	2034	1624	1434	1323	1024	729	35794
Jul-15 Sunday	12	480	312	178	151	232	293	503	712	1001	1346	1789	1812	2077	2157	2058	2111	1941	1890	1679	1337	1122	996	760	499	27436
Jul-15 Monday	13	270	165	126	183	425	1164	2610	3746	3223	2409	2446	2662	2755	2728	2787	2877	2951	2946	2337	1649	1264	986	608	454	43771
Jul-15 Tuesday	14	241	153	118	163	425	1142	2528	3822	2512	2353	2433	2635	2833	2853	2890	2932	2937	2975	2403	1721	1333	1101	659	447	43609
Jul-15 Wednesday	15	224	158	116	169	378	1180	2581	3909	3321	2536	2565	2626	2938	2885	2926	3001	2975	2951	2325	1715	1390	1166	753	548	45336
Jul-15 Thursday	16	262	149	136	164	421	1128	2519	3713	3295	2538	2400	2708	2954	3015	2959	1341	2895	3063	2357	1890	1474	1264	802	518	43965
Jul-15 Friday	17	291	153	159	204	376	1056	2304	3509	3162	2449	2609	2748	2993	3203	2941	3050	2928	2812	2576	2049	1498	1348	1028	763	46209
Jul-15 Saturday	18	474	278	218	170	325	517	774	1344	1789	2150	2390	2680	2617	2531	2517	2473	2531	2286	2119	1815	1385	1333	1069	854	36639
Jul-15 Sunday	19	607	308	229	153	228	324	472	753	994	1356	1774	1869	2180	2212	2224	2111	2001	1721	1689	1321	998	886	656	460	27526
Jul-15 Monday	20	260	161	134	169	422	1171	2497	3826	3288	2439	2474	2549	2770	2865	2747	3320	3638	2931	2262	1618	1338	1093	654	481	45107
Jul-15 Tuesday	21	244	168	126	165	428	1171	2554	3837	3418	2530	2421	2642	2847	2929	2820	3008	2909	2870	2360	1637	1386	1134	683	480	44767
Jul-15 Wednesday	22	248	145	130	164	426	1126	2602	3807	3327	2491	2454	2570	2944	2893	2898	2914	3020	3047	2376	1721	1416	1167	736	515	45137
Jul-15 Thursday	23	271	144	135	175	435	1147	2645	3826	3307	2598	2554	2606	2559	3046	2930	2955	3025	3184	2362	1825	1323	1160	733	569	45514
Jul-15 Friday	24	266	169	151	181	428	1056	2357	3482	3077	2432	2608	2817	3075	3092	3154	2998	2890	2730	2508	1941	1562	1249	961	785	45969
Jul-15 Saturday	25	494	286	223	203	306	540	721	1298	1744	2066	2410	2597	2645	2695	2582	2498	2437	2291	2113	1792	1461	1376	1020	751	36549
Jul-15 Sunday	26	486	329	245	191	206	287	423	709	996	1382	1761	1943	2107	2248	2169	2126	1968	1912	1662	1348	1114	1093	692	440	27837
Jul-15 Monday	27	265	150	149	169	451	1176	2542	3647	3264	2375	2348	2562	2881	2797	2734	2789	3024	2901	2238	1666	1316	1009	603	480	43536
Jul-15 Tuesday	28	252	156	149	159	459	1179	2558	3768	3371	2406	2417	2480	2762	2852	2842	2880	2948	3056	2424	1731	1350	1100	747	468	44514
Jul-15 Wednesday	29	276	136	143	172	446	1136	2511	3781	3334	2438	2477	2483	2852	2840	2807	2879	2882	3225	2812	1924	1443	1183	769	527	45476
Jul-15 Thursday	30	315	182	122	193	429	1117	2542	3689	3238	2648	2445	2663	3088	3030	2958	3053	2942	3022	2424	1984	1439	1228	719	568	46038
Jul-15 Friday	31	324	211	179	185	425	1108	2275	3506	3179	2596	2667	2890	3161	3257	3202	3097	2897	2773	2591	2188	1668	1408	1012	771	47570
Aug-15 Saturday	1	514	310	237	182	312	535	742	1158	1630	2086	2383	2583	2095	2062	2551	2657	2452	2357	2328	1752	1473	1287	989	687	35362
Aug-15 Sunday	2	486	273	239	164	216	293	408	721	1003	1343	1762	1870	2074	2263	2142	2217	1995	1803	1722	1347	1127	968	684	434	27554
Aug-15 Monday	3	239	169	120	180	423	1170	2518	3744	3224	2351	2504	2601	2944	2840	2941	2930	2977	2880	2271	1537	1221	1082	673	476	44015
Aug-15 Tuesday	4	240	143	108	153	425	1101	2464	3797	3316	2461	2388	2679	2774	3054	2851	3102	2993	3028	2418	1704	1370	1152	760	497	44978
Aug-15 Wednesday	5	262	176	146	170	424	1174	2561	3864	3368	2523	2505	2626	2884	3020	2863	3031	2945	3093	2613	1894	1460	1136	722	512	45972
Aug-15 Thursday	6	298	185	125	173	451	1153	2594	3730	3307	2511	2522	2768	2931	2936	2874	2721	2853	2799	2243	1689	1414	1124	703	503	44607
Aug-15 Friday	7	291	182	141	181	401	1046	2307	3461	3130	2487	2714	2836	3111	3175	3129	3233	3044	2909	2757	2160	1709	1324	1063	804	47595
Aug-15 Saturday	8	470	298	224	198	309	582	848	1444	1791	2135	2607	2708	2547	2755	2663	2599	2602	2597	2294	1822	1484	1295	1001	693	37966
Aug-15 Sunday	9	441	286	203	184	206	348	528	719	992	1342	1880	2050	2230	2305	2221	2225	2145	2058	1899	1483	1297	966	701	454	29163
Aug-15 Monday	10	251	179	135	189	433	1181	2631	3896	3216	2442	2435	2495	2881	2856	2923	3071	2984	2928	2462	1667	1338	1037	642	451	44723
Aug-15 Tuesday	11	230	157	143	166	437	1167	2689	4025	3301	2473	2490	2732	2799	2899	2980	2979	3049	2985	2375	1789	1299	1056	729	487	45436
Aug-15 Wednesday	12	218	157	152	148	427	1204	2623	3872	3413	2540	2511	2650	2923	2840	2988	2989	3048	3031	2546	1770	1477	1090	743	501	45861
Aug-15 Thursday	13	294	172	150	147	434	1192	2564	3957	3259	2552	2386	2699	2848	2978	2859	3043	2995	2917	2351	1821	1484	1167	861	597	45727
Aug-15 Friday	14	324	171	160	161	406	1054	2491	3663	3241	2595	2600	2875	3174	3175	3236	3224	3014	2918	2606	2135	1579	1294	1014	723	47833
Aug-15 Saturday	15	466	256	235	199	309	513	750	1305	1886	2162	2237	2640	2583	2638	2660	2605	2494	2498	2263	1820	1455	1257	949	646	36826
Aug-15 Sunday	16	470	264	229	177	226	336	420	742	969	1332	1782	2047	2246	2300	2232	2223	2074	1935	1695	1456	1089	933	622	444	28243
Aug-15 Monday	17	267	157	99	161	476	1250	3077	3916	3149	2489	2416	2486	2707	2685	2860	2709	2817	2741	2232	1565	1209	873	584	411	43336
Aug-15 Tuesday	18	197	111	109	152	424	1225	3080	4073	3181	2362	2251	2522	2692	2730	2882	2775	2720	2754	2189	1529	1129	914	653	430	43084
Aug-15 Wednesday	19	210	162	113	152	405	1227	2980	4002	3368	2473	2339	2541	2827	2848	2888	2972	2917	2758	2245	1698	1232	964	637	434	44392
Aug-15 Thursday	20	246	153	125	163	393	1262	2978	4041	3273	2494	2428	2497	2803	2870	2904	2802	2925	2853	2255	1722	1262	1003	664	451	44567
Aug-15 Friday	21	258	176	153	179	389	1183	2857	3899	3066	2601	2461	2778	3102	3074	3105	3079	2820	2684	2341	1837	1470	1241	962	664	46379
Aug-15 Saturday	22	389	273	201	167	272	501	730	1273	1693	1991	2293	2461	2510	2577	2671	2504	2474	2467	2259	1604	1256	1128	873	703	35270
Aug-15 Sunday	23	420	276	186	161	188	293	454	669	962	1257	1766	1845	2174	2155	2162	2194	2038	1977	1780	1297	1010	796	583	404	27047
Aug-15 Monday	24	212	117	125	163	449	1237	3067	4028	3428	2421	2390	2406	2867	2807	2827	2760	2844	2854	2286	1576	1152	910	595	393	43914
Aug-15 Tuesday	25	208	120	112	152	419	1241	3057	4087	3548	2461	2365	2520	2740	2725	2811	2786	2982	2967	2349	1598	1226	890	575	405	44344
Aug-15 Wednesday	26	209	132	121	145	417	1216	2972	4043	3455	2450	2348	2536	2676	2849	2882	2730	2942	3058	2358	1752	1354	962	607	479	44693
Aug-15 Thursday	27	244	146	124	167	407	1268	2949	4141	3465	2594	2512	2633	2798	2845	2763	2151	2520	2881	2358	1829	1301	979	639	435	44149
Aug-15 Friday	28	211	153	141	188	389	1120	2830	3995	3149	2632	2622	2798	3080	3131	3218	2844	2875	2640	2460	2006	1410	1292	978	699	46861
Aug-15 Saturday	29	378	247	197	175	256	495	684	1252	1644	2022	2406	2561	2695	2687	2616	2592	2632	2408	2074	1564	1360	1135	953	657	35690
Aug-15 Sunday	30	389	268	206	148	187	327	390	674	957	1277	1681	1876	2179	2351	2207	2100	1893	1775	1472	1142	899	702	561	352	26013
Aug-15 Monday	31	178	121	105	172	443	1119	2614	3055	3107	2123	2185	2333	2532	2613	2655	2639	2669	2721	2198	1535	1204	917	600	427	40265
Sep-15 Tuesday	1	209	157	109	194	409	1215	2997	3689	3298	2423	2380	2409	2622	2675	2724	2735	2705	2635	2048	1587	1229	905	640	411	42405
Sep-15 Wednesday	2	182	110	123	145	370	1182	2915	3673	3218	2740	2332	2499	2725	2901	2766	2823	2644	2610	2246	1652	1351	900	658	426	43191
Sep-15 Thursday	3	207	114	106	157	401	1250	2914	3976	3377	2538	2462	2610	2877	3018	2999	2760	2983	2937	2427	1832	1348	1097	708	460	45558
Sep-15 Friday	4	300	177	148	174	401	1105	2639	3834	3023	2619	2663	2821	3207	3188	3207	2822	2669	2579	2554	1980	1541	1239	826	693	46409
Sep-15 Saturday	5	486	271	217	200	263	440	687	1095	1545	1887	2319	2422	2470	2480	2390	2419	2449	2288	1957	1613	1395	1160	1010	723	34186
Sep-15 Sunday	6	440	260	197	128	133	269	364	652	906	1190	1663	1794	2074	2212	2160	2177	1917	1905	1580	1188	1099	883	757	507	26455
Sep-15 Monday	7	331	184	158	158	191	330	521	746	1012	1505	1972	2127	2410	2303	2377	2312	2101	1924	1621	1418	1116	884	668	427	28796
Sep-15 Tuesday	8	210	131	117	155	458	1289	3036	4052	3344	2555	2490	2555	2862	2939	2982	2935	3066	2964	2294	1666	1274	896	608	420	45298
Sep-15 Wednesday	9	204	126	108	170	432	1198	3024	3983	3538	2554	2442	2575	2922	2857	2876	2912	2929	2996	2381	1762	1390	958	635	440	45412
Sep-15 Thursday	10	195	132	123	151	436	1238	3022	3819	3253	2545	2435	2612	2814	2940	2974	2919	2894	3064	2407	1833	1539	956	652	464	45417

Sep-15	Friday	11	256	150	112	180	409	1164	2809	3847	3149	2504	2653	2740	2955	3147	3119	3036	2876	2672	2514	2060	1551	1277	908	707	46795
Sep-15	Saturday	12	440	241	249	179	307	589	835	1240	1738	1952	2247	2486	2766	2668	2505	2403	2328	2276	2061	1520	1188	1123	816	656	34813
Sep-15	Sunday	13	378	254	195	150	184	340	442	739	1006	1380	1778	1895	2197	2193	2172	2112	1859	1942	1669	1416	1164	872	608	421	27366
Sep-15	Monday	14	229	143	111	174	453	1254	2996	3903	3309	2443	2297	2710	2796	2799	2822	2831	2927	2905	2368	1669	1287	978	609	419	44432
Sep-15	Tuesday	15	196	95	120	156	420	1263	2989	3839	3395	2308	2411	2552	2837	2831	2873	2908	3078	2883	2384	1684	1311	952	632	417	44534
Sep-15	Wednesday	16	220	115	109	158	414	1261	3052	4042	3478	2616	2500	2520	2740	2774	2912	2908	2884	2746	2356	1824	1346	990	594	429	44988
Sep-15	Thursday	17	187	134	113	157	445	1250	3039	3526	3512	2408	2382	2619	2831	2859	2762	2857	2804	2920	2283	1727	1272	996	672	437	44192
Sep-15	Friday	18	252	143	147	165	425	1127	2844	3945	3077	2462	2530	2668	3029	3095	3162	3114	2979	2787	2596	1983	1489	1168	1013	724	46924
Sep-15	Saturday	19	395	268	210	174	314	465	721	1275	1680	1976	2308	2418	2559	2567	2634	2473	2371	2178	2058	1633	1366	1225	870	673	34811
Sep-15	Sunday	20	397	234	221	164	191	317	404	729	986	1381	1856	1872	2225	2232	2059	2119	1921	1904	1598	1427	1088	840	596	382	27143
Sep-15	Monday	21	198	139	103	177	437	1251	3044	3913	3249	2459	2296	2501	2676	2739	2817	2845	2951	2928	2341	1643	1133	927	540	366	43673
Sep-15	Tuesday	22	194	138	122	169	431	1240	3091	3894	3458	2458	2284	2652	2722	2874	2812	2918	2979	2952	2334	1700	1294	866	615	402	44599
Sep-15	Wednesday	23	198	111	112	175	418	1242	3042	4045	3162	2411	2353	2589	2827	2841	2823	2869	2882	2924	2300	1708	1304	916	576	387	44215
Sep-15	Thursday	24	214	115	123	158	447	1255	3023	3988	3285	2468	2505	2590	2627	2767	2759	2796	2628	2659	2132	1648	1198	897	638	485	43405
Sep-15	Friday	25	223	135	140	156	394	1148	2694	3787	2998	2391	2484	2652	2955	3014	3047	3068	2843	2870	2649	2078	1467	1256	906	684	46039
Sep-15	Saturday	26	495	290	251	176	301	514	798	1237	1571	1968	2286	2379	2434	2595	2557	2455	2345	2316	2098	1703	1310	1122	908	645	34754
Sep-15	Sunday	27	462	251	230	141	233	362	427	743	1043	1393	1872	1982	2255	2169	2098	2110	2060	1859	1541	1403	1042	768	557	365	27366
Sep-15	Monday	28	189	121	109	159	489	1270	3027	3880	3256	2405	2438	2432	2738	2698	2664	2814	2836	2937	2171	1671	1180	921	580	356	43341
Sep-15	Tuesday	29	194	123	106	149	445	1262	3115	3956	3331	2488	2480	2447	2740	2767	2843	2751	2794	2877	2260	1684	1230	951	573	405	43971
Sep-15	Wednesday	30	195	125	101	154	396	1235	3111	3872	3538	2552	2495	2475	2875	2855	2980	2857	2836	2618	2165	1748	1329	894	617	424	44447
Oct-15	Thursday	1	224	137	115	183	434	1274	3083	4000	3384	2447	2438	2649	2929	2730	2955	2819	2780	2528	1906	1454	1077	940	608	399	43493
Oct-15	Friday	2	240	164	125	177	425	1065	2208	3037	2642	2335	1828	2801	2991	3035	2983	2804	2710	2382	2054	1415	1009	891	681	514	40516
Oct-15	Saturday	3	279	194	153	132	216	393	535	876	1103	1143	1378	1429	1570	1384	1272	1289	1160	1162	1030	755	505	393	314	13	18678
Oct-15	Sunday	4	7	15	5	72	137	253	319	554	646	934	1145	1344	1382	1297	1238	1311	1179	1116	954	703	519	406	271	196	16003
Oct-15	Monday	5	98	82	58	88	288	698	1492	2156	1895	1702	1752	1920	2047	1983	2001	2119	2074	2086	1547	1155	895	730	486	335	29687
Oct-15	Tuesday	6	208	122	105	146	382	1158	2421	3342	2884	2278	2138	2393	2593	2561	2557	2651	2767	2917	2238	1696	1211	935	579	412	40694
Oct-15	Wednesday	7	157	117	125	142	439	1253	2769	3683	3245	2343	2256	2437	2707	2741	2779	2772	2783	3056	2233	1757	1437	946	628	419	43224
Oct-15	Thursday	8	218	127	118	168	438	1236	2807	3684	3300	2769	2463	2485	2478	2805	2899	2979	2955	3111	2365	1838	1403	1054	734	454	44888
Oct-15	Friday	9	266	164	154	217	428	1175	2765	3772	2868	2400	2702	2740	3066	3171	3166	3224	3100	3026	2731	2182	1424	1255	924	810	47730
Oct-15	Saturday	10	447	282	202	190	311	518	696	1144	1667	1914	2249	2497	2703	2496	2497	2490	2206	2159	1972	1695	1348	1064	922	627	34296
Oct-15	Sunday	11	418	260	196	141	206	341	422	769	948	1340	1654	1943	2238	2261	2290	2271	2085	1992	1712	1377	1052	760	590	434	27700
Oct-15	Monday	12	227	139	128	166	479	1179	2812	3722	2867	2352	2403	2546	2878	2834	3107	3041	3095	3102	2526	1726	1157	979	563	403	44431
Oct-15	Tuesday	13	218	125	115	168	466	1294	3069	3920	3511	2544	2548	2621	2873	2898	2998	2944	3066	3050	2498	1764	1287	973	603	415	45968
Oct-15	Wednesday	14	221	119	119	180	455	1285	3021	3895	3384	2687	2444	2757	2786	2902	3041	2947	3000	2709	2480	1875	1381	963	680	405	45736
Oct-15	Thursday	15	227	132	124	198	442	1254	2964	3835	3333	2443	2484	2610	2881	2875	2929	3038	3113	3040	2473	1864	1401	1118	777	502	46057
Oct-15	Friday	16	240	153	144	187	400	1141	2781	3806	3175	2589	2556	2820	3100	3173	3192	3117	2961	2720	2648	2149	1519	1197	1018	670	47456
Oct-15	Saturday	17	433	307	192	174	291	513	879	1330	1645	2102	2262	2437	2664	2544	2611	2577	2421	2351	2156	1796	1371	1167	880	688	35791
Oct-15	Sunday	18	443	273	212	147	206	331	469	768	937	1354	1786	2055	2171	2334	2305	2176	2066	2037	1784	1412	1029	812	580	380	28067
Oct-15	Monday	19	187	133	103	159	470	1256	2908	3864	3273	2406	2388	2558	2819	2772	2866	2935	2937	2963	2148	1717	1206	939	646	373	44026
Oct-15	Tuesday	20	190	152	128	163	445	1273	2991	3519	3517	2460	2435	2577	2869	2894	2871	2951	3157	3000	2363	1751	1216	993	556	421	44892
Oct-15	Wednesday	21	170	119	128	175	448	1282	3001	4038	3339	2586	2460	2625	2809	2792	2965	2932	2861	2860	2244	1817	1302	1000	671	433	45057
Oct-15	Thursday	22	233	150	145	173	439	1295	3060	3777	3538	2529	2511	2698	2850	2938	3033	2978	3037	2755	2242	1948	1497	1090	790	514	46220
Oct-15	Friday	23	276	182	153	178	427	1153	2854	3746	3120	2629	2560	2863	3038	3066	3206	3099	2897	2761	2511	2034	1415	1273	1016	785	47242
Oct-15	Saturday	24	425	278	216	193	281	499	750	1197	1742	2014	2274	2570	2541	2541	2532	2565	2729	2352	2317	1818	1305	1266	1437	731	36573
Oct-15	Sunday	25	448	255	201	149	208	300	451	694	963	1383	1745	2039	2172	2309	2271	2197	2012	2054	1786	1439	1026	802	558	352	27814
Oct-15	Monday	26	199	149	114	165	489	1309	3093	3999	3127	2459	2437	2531	2699	2725	2926	2861	3045	2887	2209	1538	1112	892	539	387	43891
Oct-15	Tuesday	27	207	120	105	170	423	1246	2909	3446	3112	2831	2493	2618	2807	2790	2729	2872	2993	2663	2173	1532	1070	817	546	331	43003
Oct-15	Wednesday	28	191	104	128	157	416	1229	2934	3986	3330	2461	2523	2560	2811	2808	2972	2850	2855	2940	2289	1801	1277	944	594	418	44578
Oct-15	Thursday	29	173	130	155	151	440	1278	2989	4009	3343	2540	2446	2618	2904	2999	3162	3054	3085	3026	2386	1886	1477	1022	675	451	46399
Oct-15	Friday	30	260	156	155	176	424	1252	2853	3444	3424	2616	2640	2837	3060	2994	3210	3112	2927	2737	2718	2180	1536	1205	961	711	47588
Oct-15	Saturday	31	444	274	224	161	277	495	710	1081	1568	1888	2168	2553	2471	2544	2537	2650	2663	2426	1940	1565	1309	1187	874	655	34664
Nov-15	Sunday	1	430	289	243	199	322	313	407	796	1041	1367	1786	2078	2323	2222	2267	2176	2058	1996	1626	1284	862	618	467	339	27509
Nov-15	Monday	2	162	123	102	164	457	1218	3096	4033	3344	2599	2519	2538	2760	2744	2917	2756	3026	2880	2206	1361	1000	824	538	358	43725
Nov-15	Tuesday	3	187	116	107	163	427	1182	3072	3397	3313	2487	2105	1706	2554	2776	2693	2628	2881	2832	2234	1524	1024	770	580	377	41135
Nov-15	Wednesday	4	221	108	117	174	460	1197	2815	3964	3596	2533	2357	2491	2753	2842	2895	2811	3043	2982	2340	1532	1185	843	593	379	44231
Nov-15	Thursday	5	219	151	129	163	441	1181	3121	3984	3356	2470	2589	2668	2860	3013	2980	3056	3186	3055	2348	1690	1256	1037	655	461	46069
Nov-15	Friday	6	233	143	132	177	412	1166	2880	3959	3138	2520	2674	2706	3114	3109	3402	3155	2983	2940	2506	1933	1366	1081	811	672	47212
Nov-15	Saturday	7	447	241	230	177	210	461	775	1219	1763	2240	2469	2725	2805	2553	2696	2645	2733	2665	2273	1527	1187	1019	780	639	36479
Nov-15	Sunday	8	381	276	196	159	189	328	394	721	997	1399	1772	1958	2254	2276	2174	2222	2008	1800	1600	1202	853	608	490	308	26565
Nov-15	Monday	9	201	144	94	140	421	1108	2806	1407	1743	2879	2380	2306	2505	2691	2715	2653	2780	2749	2035	1378	989	849	522	351	37846
Nov-15	Tuesday	10	168	120	84	135	461	1148	3058	3785	3394	2387	2379	2646	2818	2782	2935	2871	2935	3064	2353	1627	1109	825	592	382	44058
Nov-15	Wednesday	11	209	131	111	172	402	1075	2820	3776	2848	2467	2525	2500	2824	2836	3028	2829	2883	2987	2329	1635	1183	982	618	420	43590
Nov-15	Thursday	12	194	161	110	163	420	1166	3147	3951	3380	2522	2474	2618	2926	2915	2967	3042	3051	3019	2380	1653	1211	1036	644	470	45620
Nov-15	Friday	13	245	142	148	168	401	1101	2817	3864	3066	2752	2644	2792	3150	3153	3212	2995	2898	2866	2605	1882	1389	1163	981	679	47113

Nov-15 Saturday	14	392	263	208	156	290	502	818	1294	1801	2190	2427	2545	2705	2661	2642	2546	2480	2475	2231	1513	1119	1047	845	672	35822
Nov-15 Sunday	15	420	249	225	122	199	317	411	681	955	1430	1838	1928	2296	2344	2192	2245	2154	2058	1650	1169	924	658	562	348	27375
Nov-15 Monday	16	210	125	102	176	433	1217	3082	4034	3435	2573	2498	2623	2848	2840	2962	3001	3133	3137	2225	1473	1080	930	571	392	45100
Nov-15 Tuesday	17	205	128	106	157	406	1147	3131	4040	3369	2606	2489	2653	2917	3033	2960	3028	3200	3099	2363	1539	1150	904	593	413	45636
Nov-15 Wednesday	18	197	152	100	151	403	1197	2818	4003	3475	2662	2597	2641	2993	3018	2988	2956	3060	2764	2297	1657	1202	946	665	382	45324
Nov-15 Thursday	19	208	131	112	165	384	1115	2863	3775	3405	2479	2534	2611	2800	2983	2943	3084	3104	3034	2323	1562	1206	1026	647	475	44969
Nov-15 Friday	20	247	145	143	179	431	1182	2839	3810	3308	2709	2663	2951	3218	3393	3226	3178	3057	2956	2715	1916	1313	1239	998	685	48501
Nov-15 Saturday	21	425	230	197	177	303	553	742	1276	1769	1968	2530	2477	2580	2668	2560	2559	2388	2387	1977	1594	1195	1103	816	604	35078
Nov-15 Sunday	22	370	264	246	133	211	326	387	715	981	1280	1717	1909	2173	2261	2088	2009	2243	1920	1595	1255	924	722	557	365	26651
Nov-15 Monday	23	191	120	112	149	431	1134	2748	3550	2865	2384	2546	2644	3007	2880	2646	2766	2791	3055	2459	1630	1106	937	642	410	43203
Nov-15 Tuesday	24	215	112	101	154	444	1056	2595	3616	3042	2537	2682	2901	3098	3152	3018	2987	3031	3102	2461	1719	1313	1050	723	536	45645
Nov-15 Wednesday	25	276	194	131	156	446	1011	2258	2907	2743	2457	2872	2916	3155	3210	3148	3110	2923	2773	2485	1827	1386	1044	817	647	44892
Nov-15 Thursday	26	334	210	171	123	196	273	403	516	774	1075	1242	1507	1638	1468	1418	1565	1633	1735	1676	1690	1511	1361	1105	724	24348
Nov-15 Friday	27	513	272	217	193	308	523	857	1240	1449	1865	2209	2443	2613	2750	2730	2629	2490	2524	2203	1712	1286	1085	921	622	35654
Nov-15 Saturday	28	380	230	207	154	309	388	637	934	1354	1638	2063	2316	2275	2435	2205	2277	2452	2337	1942	1453	1290	1019	889	618	31802
Nov-15 Sunday	29	394	246	189	196	263	380	451	732	1095	1511	2024	2052	2156	2239	2261	2195	2055	2026	1629	1334	1001	716	587	352	28084
Nov-15 Monday	30	215	148	122	141	455	1183	2966	3896	3260	2591	2544	2664	2954	2930	2996	2866	3038	3083	2192	1325	1205	889	531	394	44588
Dec-15 Tuesday	1	209	138	125	159	446	1269	2996	3897	3485	2389	2350	2664	2897	3064	2930	2839	3064	2995	2163	1548	1215	906	618	434	44800
Dec-15 Wednesday	2	213	139	100	114	406	1220	3029	3937	3483	2463	2477	2653	2831	2956	2821	2878	2759	2837	1948	1439	1089	895	637	389	43713
Dec-15 Thursday	3	188	128	115	164	406	1171	3007	4028	3378	2596	2459	2584	2912	3020	2954	3147	3178	3150	2298	1582	1261	1040	777	469	46012
Dec-15 Friday	4	260	142	148	174	425	1115	2886	3878	3041	2583	2577	2734	3139	3257	3256	3148	2888	2815	2449	1881	1373	1262	1018	682	47131
Dec-15 Saturday	5	391	246	189	162	268	502	779	1138	1553	2066	2448	2641	2824	2873	2691	2602	2570	2457	2078	1501	1210	1004	1026	673	35892
Dec-15 Sunday	6	427	235	185	139	215	330	485	659	899	1306	1714	1736	2090	2216	2153	2138	2013	1903	1658	1200	1002	755	576	346	26380
Dec-15 Monday	7	196	116	101	154	415	1168	2906	3517	3269	2366	2224	2450	2737	2802	2857	2927	2931	2940	2376	1527	1123	857	635	400	42994
Dec-15 Tuesday	8	210	160	107	167	416	1188	2978	3916	3313	2464	2468	2571	2800	2907	2972	2964	3040	3018	2389	1676	1251	909	684	385	44953
Dec-15 Wednesday	9	222	147	114	145	368	1202	3019	3856	3495	2517	2591	2538	2777	2851	2986	2935	3033	3049	2297	1552	1317	1039	729	412	45191
Dec-15 Thursday	10	213	124	126	149	448	1179	2971	3891	3346	2595	2167	2303	2879	3008	2961	2919	3085	2897	2367	1635	1256	1016	761	464	44760
Dec-15 Friday	11	238	152	137	166	414	1146	2769	3881	3069	2538	2558	2782	3095	3154	2918	3069	2784	2863	2655	1912	1399	1237	1005	764	46705
Dec-15 Saturday	12	390	264	206	170	294	498	799	1151	1613	1988	2280	2488	2754	2834	2806	2826	2708	2808	2202	1695	1336	1253	1024	741	37128
Dec-15 Sunday	13	452	283	194	139	192	311	438	715	1116	1395	1991	2093	2244	2345	2332	2167	2174	1964	1695	1270	955	851	613	403	28332
Dec-15 Monday	14	216	109	89	160	405	1184	2890	3965	3224	2424	2347	2666	2870	2908	2836	3092	2837	2944	2149	1521	1219	889	658	400	44002
Dec-15 Tuesday	15	217	128	124	149	430	1205	2984	3898	3417	2489	2469	2738	3023	3036	2968	3060	3009	3019	2384	1679	1351	976	673	482	45908
Dec-15 Wednesday	16	225	141	123	163	393	1168	2998	3792	3482	2601	2587	2770	2907	3100	3142	3055	3071	2998	2292	1826	1313	1025	695	416	46283
Dec-15 Thursday	17	251	157	127	180	432	1173	2935	3835	3307	2454	2660	2815	2991	3148	3064	3098	2979	2209	1777	1781	1351	1121	793	479	45117
Dec-15 Friday	18	301	166	146	196	419	1058	2734	3710	3026	2547	2738	2988	3226	3350	3284	3147	3038	2945	2687	2076	1571	1277	1070	770	48470
Dec-15 Saturday	19	537	303	229	177	301	509	687	1083	1559	1977	2458	2713	2728	2908	2925	2909	2800	2790	2427	1743	1373	1158	1068	803	38165
Dec-15 Sunday	20	517	258	214	144	215	277	420	612	925	1317	1756	1921	2192	2391	2413	2352	2241	2152	1782	1347	1050	926	744	526	28692
Dec-15 Monday	21	274	152	110	179	405	1030	2349	3194	2877	2415	2742	2893	3103	3232	3186	3309	3208	3105	2582	1717	1405	1052	783	547	45849
Dec-15 Tuesday	22	282	173	133	183	373	963	2210	3112	2856	2402	2604	2933	3107	3221	3124	3259	3120	3071	2535	1770	1368	1102	780	550	45231
Dec-15 Wednesday	23	327	189	116	174	390	925	2038	2764	2669	2518	2884	3149	3032	3350	3296	3304	3091	3159	2535	2062	1607	1185	975	681	46420
Dec-15 Thursday	24	427	267	198	156	269	520	1004	1470	1715	2144	2557	2900	2960	2866	2767	2724	2250	2018	1740	1250	1193	1025	844	587	35851
Dec-15 Friday	25	348	231	152	121	120	181	257	351	540	766	932	1219	1331	1332	1455	1522	1404	1432	1466	1268	1178	1084	898	660	20248
Dec-15 Saturday	26	377	220	157	141	240	357	425	661	1046	1440	1830	2176	2379	2399	2366	2314	2273	2222	2133	1611	1192	1082	850	652	30543
Dec-15 Sunday	27	383	214	227	155	224	290	332	586	893	1220	1567	1678	2119	1985	2140	2072	1980	1891	1721	1350	997	866	618	473	25981
Dec-15 Monday	28	254	178	133	141	360	843	1749	2426	2267	2197	2358	2724	2768	2950	2668	2902	2896	2781	2239	1533	1089	893	567	472	39388
Dec-15 Tuesday	29	301	149	139	154	345	821	1881	2607	2514	2395	2608	2795	2936	2969	2917	3002	2997	3105	2418	1511	1216	979	699	502	41960
Dec-15 Wednesday	30	260	154	158	167	347	837	1862	2579	2620	2284	2563	2828	3099	3068	3044	3122	3053	3137	2398	1672	1324	1065	746	530	42917
Dec-15 Thursday	31	302	205	135	168	317	686	1473	2209	2208	2287	2565	2779	3072	3031	3055	3037	2572	2235	1944	1399	1110	900	841	497	39027

30 Highest Hours of the year

100 Highest Hours of the year

AADT 40400

WESTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	745	577	388	221	162	209	383	461	651	992	1247	1331	1509	1582	1761	1743	1733	1525	1332	1055	778	715	546	383	22029
Jan-15 Friday	2	250	215	128	120	224	355	1112	1898	2015	2129	2316	2622	2768	2733	2867	3040	3024	2827	2051	1557	1115	998	753	557	37674
Jan-15 Saturday	3	404	265	215	162	169	266	579	846	1313	1551	1852	2094	2407	2348	2335	2417	2199	1904	1684	1335	1112	1129	929	555	30070
Jan-15 Sunday	4	399	322	259	158	161	220	387	431	716	1168	1405	1560	1819	2079	2023	1949	2059	1648	1360	1013	830	637	538	358	23499
Jan-15 Monday	5	230	154	86	135	200	524	1873	2689	2751	2199	2280	2422	2455	2548	2770	3348	3622	3508	2475	1319	983	797	579	434	40381
Jan-15 Tuesday	6	280	159	109	139	189	516	1809	2684	2718	2472	2227	2424	2472	2493	2705	3215	1899	1956	2944	1519	1057	934	676	446	38042
Jan-15 Wednesday	7	296	168	138	135	201	544	1867	2622	2809	2337	2213	2368	2467	2466	2774	3266	3634	3469	2415	1518	1150	837	633	446	40773
Jan-15 Thursday	8	266	157	107	116	171	446	1448	2207	2350	1237	2148	2294	2494	2445	2665	3311	3343	3337	2455	1555	1127	918	657	421	37675
Jan-15 Friday	9	306	172	129	139	177	520	1671	2563	2694	2250	2197	2586	2667	2679	3024	3520	3651	3505	2343	1767	1207	1126	923	585	42401
Jan-15 Saturday	10	449	296	210	162	147	283	612	1087	1464	1728	1923	2145	2498	2392	2533	2411	2415	2093	1819	1342	1150	997	944	619	31719
Jan-15 Sunday	11	410	254	241	139	126	159	392	488	700	1140	1385	1533	1883	2042	1867	2055	1974	1687	1384	1086	840	644	552	393	23374
Jan-15 Monday	12	189	113	78	128	176	531	1696	2437	2655	2141	2124	2017	2289	2238	2569	3024	3366	3324	2080	1360	1035	753	602	405	37330
Jan-15 Tuesday	13	309	156	121	116	198	476	1725	2474	2718	2280	2169	2379	2390	2444	2678	3233	3349	3294	2248	1407	1045	949	853	417	39428
Jan-15 Wednesday	14	247	155	125	131	175	499	1724	2620	2768	2224	2193	2350	2412	2539	2709	3188	3627	3533	2265	1440	1224	965	830	442	40385
Jan-15 Thursday	15	346	171	99	132	195	488	1567	2719	2663	2331	2254	2604	2653	2644	2869	3431	3733	3645	2350	1545	1184	999	722	493	41837
Jan-15 Friday	16	316	172	132	164	177	488	1538	2523	2726	2402	2386	2679	2878	2933	3238	3581	3621	3375	2682	1850	1386	1364	963	713	44287
Jan-15 Saturday	17	468	257	221	149	159	272	646	1087	1441	1736	1996	2286	2396	2565	2541	2432	2608	2147	1821	1447	1175	1163	906	767	32686
Jan-15 Sunday	18	412	251	223	149	131	198	422	421	753	1202	1462	1510	1838	1759	2380	2022	1835	1751	1546	1211	922	730	633	429	24190
Jan-15 Monday	19	263	174	104	137	209	470	1392	2147	2284	2108	2213	2469	2434	2685	2700	2871	2979	2980	2097	1465	1025	819	608	388	37021
Jan-15 Tuesday	20	269	140	91	126	179	547	1862	2694	3031	2401	2118	1566	1947	2478	2830	3429	3476	3510	2367	1501	1183	944	668	413	39770
Jan-15 Wednesday	21	230	173	119	133	176	512	1827	2683	2969	2429	2254	2399	2625	2519	2679	3236	3574	3128	2538	1405	1177	1037	685	431	40938
Jan-15 Thursday	22	277	154	107	144	188	522	1735	2460	2935	2488	2437	2458	2461	2651	2826	3477	3761	3573	2442	1688	1196	1032	990	959	42961
Jan-15 Friday	23	345	201	116	152	195	486	1721	2675	2775	2343	2281	2560	2785	2634	2884	2927	1247	2309	2682	1671	1170	1053	930	618	38760
Jan-15 Saturday	24	420	212	182	140	165	236	572	913	1475	1762	1897	2250	2426	2516	2388	2452	2356	2215	1890	1457	1116	1374	960	625	31999
Jan-15 Sunday	25	423	240	214	144	131	188	404	439	741	1212	1527	1672	1931	2127	2140	2131	2132	1918	1650	1134	940	734	505	372	25049
Jan-15 Monday	26	190	120	94	115	197	552	1819	2687	2839	2303	2283	2348	2498	2591	2656	3285	3551	3400	2241	1488	1111	849	646	399	40262
Jan-15 Tuesday	27	274	146	98	118	194	506	1819	2733	2889	2253	2245	2379	2458	2565	2762	3393	3643	3447	2342	1543	1259	976	674	439	41155
Jan-15 Wednesday	28	258	163	115	118	180	497	1823	2709	2930	2372	2227	2422	2563	2567	2753	3000	2983	3462	2544	1585	1222	1031	691	434	40649
Jan-15 Thursday	29	289	165	114	114	191	489	1763	2747	2880	2343	2246	2536	2491	2572	2984	3453	3652	3573	2508	1641	1284	927	857	487	42306
Jan-15 Friday	30	295	180	124	154	188	476	1742	2296	2949	2543	2525	2794	2901	2859	3165	3625	3565	3391	2642	1970	1415	1279	1148	723	44949
Jan-15 Saturday	31	460	324	232	163	170	261	687	1152	1498	1896	2283	2416	2691	2749	2714	2548	2479	2306	2018	1513	1195	1014	853	604	34226
Feb-15 Sunday	1	387	268	248	146	111	181	406	484	771	1260	1544	1700	1929	2085	2185	2019	2016	1933	1512	847	746	667	1026	583	25054
Feb-15 Monday	2	273	174	111	110	181	510	1684	2608	2783	2158	2085	2323	2460	2393	2563	3086	3465	3473	2349	1393	1103	898	579	404	39166
Feb-15 Tuesday	3	275	148	119	122	190	513	1832	2680	2818	2484	2307	2497	2567	2582	2782	3403	3584	3598	2523	1613	1181	903	668	431	41820
Feb-15 Wednesday	4	279	147	114	117	198	504	1862	2657	2981	2286	2214	2431	2570	2464	2762	3214	3024	2525	2457	1822	1192	954	663	449	39886
Feb-15 Thursday	5	293	153	114	129	184	521	1606	2487	2780	2329	2308	2380	2535	2654	2540	2012	3312	3397	2641	1689	1286	922	703	511	39486
Feb-15 Friday	6	341	193	147	124	197	482	1712	2645	2848	2462	2393	2666	2894	2806	3178	3634	3686	3366	2496	1954	1372	1199	1292	739	44826
Feb-15 Saturday	7	434	240	213	146	159	247	658	1156	1587	1839	2122	2425	2785	2602	2692	2601	2516	2398	2087	1599	1202	1182	893	625	34408
Feb-15 Sunday	8	446	217	236	152	133	175	471	505	843	1241	1560	1677	2051	2197	2173	2042	2245	1904	1737	1314	972	730	558	397	25976
Feb-15 Monday	9	203	128	103	133	205	547	1843	2607	2923	2288	2300	2411	2455	2489	2672	3341	3621	3530	2268	1576	1107	826	644	439	40659
Feb-15 Tuesday	10	274	154	107	109	191	497	1891	2746	2955	2385	2280	1716	2677	2545	2829	3353	3684	3584	2496	1564	1245	1010	851	421	41564
Feb-15 Wednesday	11	315	160	124	126	172	511	1855	2693	2775	2667	2313	2515	2570	2681	2865	3376	3503	3525	2498	1716	1365	1040	893	474	42732
Feb-15 Thursday	12	349	149	114	118	191	540	1906	2637	3072	2400	2457	2584	2684	2765	2981	3445	3598	3532	2745	1784	1450	1038	1005	555	44099
Feb-15 Friday	13	346	200	145	145	215	465	1740	2745	2810	2490	2895	2953	3140	2957	3313	3648	3541	3469	2610	2030	1493	1413	1243	755	46761
Feb-15 Saturday	14	462	268	238	149	146	237	652	1132	1508	1969	2270	2398	2631	2640	2732	2518	2657	2205	1941	1618	1199	976	1074	1062	34682
Feb-15 Sunday	15	472	292	263	143	131	166	339	495	777	1302	1659	1721	2032	2180	2263	2133	2144	2021	1555	1242	957	756	739	462	26244
Feb-15 Monday	16	250	152	112	160	202	458	1526	2366	2444	2178	2359	2517	2722	2738	2959	3108	3230	3184	2034	1352	987	824	594	438	38894
Feb-15 Tuesday	17	283	143	126	130	207	458	1682	2180	2439	2546	2184	2445	2532	2500	2779	3375	3627	3634	2249	1603	1287	974	754	431	40568
Feb-15 Wednesday	18	293	149	118	120	189	515	1823	2784	2913	2395	2359	2397	2596	2617	2883	3420	3709	3677	2516	1673	1328	1136	717	445	42772
Feb-15 Thursday	19	326	153	118	129	185	467	1846	2657	2877	2349	2378	2553	2675	2730	2868	3496	3555	3515	2523	1651	1453	1026	666	528	42724
Feb-15 Friday	20	312	184	113	131	172	483	1658	2597	2543	2395	2477	2781	2910	2938	1489	1697	3486	3434	2483	1936	1410	1160	887	689	40365
Feb-15 Saturday	21	473	297	215	167	164	250	717	1174	1616	1825	2226	2481	2742	2619	2709	2602	2523	2253	2086	1650	1249	1342	929	639	34948
Feb-15 Sunday	22	390	300	271	171	128	216	481	533	833	1265	1576	1764	2018	2213	2315	2177	1956	1884	1660	1310	1026	750	560	381	26178
Feb-15 Monday	23	232	148	133	118	216	522	1775	2662	2784	2266	2257	2449	2477	2486	2707	3197	3484	3367	2246	1461	1122	795	588	427	39919
Feb-15 Tuesday	24	279	168	116	118	181	385	1295	2011	2005	1877	1801	1809	1960	1882	2252	2554	2972	2850	1707	1228	887	909	605	394	32245
Feb-15 Wednesday	25	272	163	126	134	182	517	1794	2860	2845	2339	2329	2436	2607	2494	2818	3441	3028	3134	2326	1530	1179	870	771	441	40636
Feb-15 Thursday	26	275	142	118	144	188	474	1779	2720	2875	2319	2425	2500	2583	2611	2788	3479	3619	3525	2400	1685	1364	956	747	481	42197
Feb-15 Friday	27	364	191	155	134	213	488	1769	2798	2879	2379	2558	2804	2965	2849	3037	3676	3696	3464	2637	2056	1500	1213	1004	772	45601
Feb-15 Saturday	28	693	334	279	182	179	232	719	1256	1582	1958	2254	2564	2664	2787	2798	2765	2564	2235	1969	1621	1378	1162	891	646	35712
Mar-15 Sunday	1	477	291	244	153	111	185	399	525	753	1272	1553	1682	1896	2051	2134	1928	1885	1674	1486	1228	936	730	584	334	24511
Mar-15 Monday	2	235	115	101	122	232	550	1793	2753	2834	2418	2337	2470	2530	2618	2754	3399	3593	3520	2520	1644	1186	894	667	456	41741

Mar-15 Tuesday	3	308	147	137	129	210	528	1834	2619	2984	2461	2380	2567	2807	2740	2810	3480	3702	3618	2454	1799	1260	938	684	465	43061
Mar-15 Wednesday	4	294	168	133	118	208	542	1923	2752	2982	2633	2415	2557	2593	2706	2857	3415	3484	3465	2370	1743	1388	1057	762	502	43067
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	352	215	169	148	205	476	1797	2425	3028	2394	2519	2780	2842	2926	3058	3680	3611	3553	2462	1977	1497	1392	1033	641	45180
Mar-15 Saturday	7	510	275	215	179	169	270	737	1386	1744	1998	2388	2532	2694	2683	2749	2728	2661	2414	2146	1729	1303	1079	892	613	36094
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	274	153	113	138	230	517	1584	2553	3008	2367	2281	2407	2566	2678	2912	2905	2006	3394	2650	1706	1360	1011	730	463	40006
Mar-15 Tuesday	10	338	162	139	129	198	513	1778	2809	2901	2459	2269	2431	575	1721	2802	3345	3503	3610	2404	1741	1410	1439	876	689	40241
Mar-15 Wednesday	11	350	172	143	117	196	540	1772	2752	2954	2651	2526	2622	2786	2779	2972	3422	3533	3508	2526	1797	1512	1256	825	567	44278
Mar-15 Thursday	12	334	195	126	142	191	518	1798	2688	3021	2517	2449	2575	2714	2711	2820	3527	3694	3562	2563	1865	1483	1172	893	715	44273
Mar-15 Friday	13	389	198	152	172	223	476	1737	2609	2803	2349	2461	2771	3004	2853	3183	3352	3456	3453	2614	2054	1555	1312	1192	743	45111
Mar-15 Saturday	14	554	311	238	171	181	310	643	1013	1510	1895	2203	2461	2598	2692	2669	2660	2585	2337	2099	1733	1532	1319	1216	772	35702
Mar-15 Sunday	15	433	333	276	171	149	251	426	522	863	1383	1716	1849	2100	2223	2188	2169	2128	1946	1868	1480	1142	842	690	414	27562
Mar-15 Monday	16	296	162	126	125	206	551	1754	2756	2879	2512	2410	2515	2770	2664	2827	3433	3596	3376	2637	1766	1374	1008	761	486	42990
Mar-15 Tuesday	17	357	170	146	112	213	552	1866	2666	2980	2539	2424	2433	2634	2736	2831	3371	3517	3495	2527	1811	1535	1188	806	465	43374
Mar-15 Wednesday	18	348	185	136	140	229	513	1909	2777	3052	2561	2446	2543	2729	2718	2938	3434	3621	3614	2594	1838	1460	1142	758	524	44209
Mar-15 Thursday	19	329	153	122	155	206	511	1642	2472	2628	2614	2440	2512	2488	2595	2647	3259	3577	3542	2496	1742	1387	1178	956	515	42166
Mar-15 Friday	20	376	183	138	152	177	493	1694	2698	2824	2465	2566	2772	2955	2977	3215	3508	3523	3442	2502	2018	1661	1650	1114	829	45932
Mar-15 Saturday	21	522	367	264	190	203	295	696	1235	1694	1962	2292	2421	2713	2690	2636	2582	2583	2203	2000	1724	1474	1321	1144	739	35950
Mar-15 Sunday	22	439	277	267	171	165	213	404	453	799	1290	1566	1722	2014	2143	2174	2067	1922	1701	1612	1281	1008	828	723	426	25665
Mar-15 Monday	23	311	168	106	124	209	525	1661	2590	2812	2313	2219	2382	2522	2447	2302	3413	3461	3518	2310	1570	1184	920	671	482	40220
Mar-15 Tuesday	24	330	166	120	132	212	495	1847	2783	3042	2354	2343	2469	2567	2746	2859	3439	3382	3233	2777	1794	1404	1258	782	493	43027
Mar-15 Wednesday	25	321	169	134	130	212	531	1911	2653	3067	2334	2393	2578	2695	2572	2869	3526	3270	3455	2752	1830	1456	1322	800	544	43524
Mar-15 Thursday	26	347	179	153	128	217	512	1873	2774	3064	2485	2483	2708	2804	2812	3039	3513	3469	3672	2579	1921	1546	1194	1043	585	45100
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	501	321	281	185	216	380	766	1472	1920	2272	2601	2712	2836	2734	2766	2701	2575	2375	2003	1748	1477	1196	983	747	37768
Mar-15 Sunday	29	440	301	257	159	164	231	450	537	866	1378	1675	1827	2115	2294	2119	2133	2109	1908	1705	1370	1160	841	735	453	27227
Mar-15 Monday	30	301	163	109	148	234	480	1550	2582	2590	2334	2366	2554	2672	2600	2771	3154	3360	3469	2366	1743	1347	1056	783	528	41260
Mar-15 Tuesday	31	327	178	123	150	209	482	1592	2655	2904	2395	2548	2713	2725	2743	3004	3206	3496	3551	2503	1825	1444	1124	834	530	43261
Apr-15 Wednesday	1	353	206	164	153	228	505	1612	2518	2885	2481	2484	2680	2785	2784	2972	3396	3519	3431	2659	1879	1496	1293	912	570	43965
Apr-15 Thursday	2	387	208	148	147	212	472	1632	2696	2581	2544	2548	2760	2906	2912	2917	3190	3628	3642	2542	1977	1628	1325	1086	640	44728
Apr-15 Friday	3	419	219	180	153	211	435	1369	2356	2509	2437	2750	3037	3200	2976	3197	3323	2599	2987	2491	2061	1526	1329	1120	748	43632
Apr-15 Saturday	4	508	356	278	184	181	264	597	1052	1463	1911	2175	2355	2627	2700	2662	2596	2535	2256	1939	1654	1482	1157	894	652	34478
Apr-15 Sunday	5	432	339	220	158	138	302	451	553	784	1255	1636	1553	1914	2162	1814	1891	1924	1880	1730	1474	1241	989	667	436	25943
Apr-15 Monday	6	315	162	133	125	228	544	1864	2860	2826	2452	2528	2675	2783	2786	2962	3421	3672	3636	2535	1820	1426	992	807	504	44056
Apr-15 Tuesday	7	327	200	119	127	211	543	1894	2866	3136	2596	2444	2627	2674	2764	2944	3396	3472	3514	2703	1876	1470	1255	833	589	44580
Apr-15 Wednesday	8	372	195	140	132	217	519	1853	2814	2795	2654	1629	2596	2631	2754	2829	3043	3247	3486	2728	2014	1590	1255	969	553	43015
Apr-15 Thursday	9	347	214	137	138	210	538	1898	2767	3023	2755	2731	2653	2691	2772	2978	3409	3435	3375	2697	2020	1628	1254	996	616	45282
Apr-15 Friday	10	363	220	198	153	230	536	1856	2776	3027	2604	2765	2831	2975	2909	3237	3438	3516	3309	2605	2110	1716	1351	1050	835	46610
Apr-15 Saturday	11	541	318	333	184	183	298	716	1248	1621	2069	2261	2435	2604	2654	2588	2689	2554	2309	1994	1592	1423	1431	1110	776	35931
Apr-15 Sunday	12	440	292	246	194	128	246	438	623	956	1489	1743	1841	2086	2104	2192	2265	2219	1868	1624	1339	1108	799	630	462	27332
Apr-15 Monday	13	245	170	101	144	234	569	1775	2625	3137	2383	2329	2546	2642	2656	2863	3443	3483	3658	2358	1738	1411	913	738	439	42600
Apr-15 Tuesday	14	291	183	136	123	201	522	1815	2851	3117	2514	2516	2518	2602	2666	2820	3305	3550	3574	2409	1856	1470	1067	759	513	43378
Apr-15 Wednesday	15	330	169	134	150	229	527	1934	2798	2826	2702	2454	2488	2576	2657	2885	3402	3509	3236	2585	1724	1370	1005	737	459	42886
Apr-15 Thursday	16	330	192	113	131	221	513	1943	2800	3116	2389	2480	2516	2637	2676	2958	3559	3528	3564	2531	1916	1487	1136	766	536	44038
Apr-15 Friday	17	379	182	152	162	239	493	1809	2577	2933	2576	2598	2805	2909	2978	3221	3552	3625	3358	2448	1941	1572	1300	1218	815	45842
Apr-15 Saturday	18	499	311	265	195	180	286	767	1263	1650	1933	2247	2403	2585	2536	2673	2431	2363	2178	1748	1627	1448	1379	1046	730	34743
Apr-15 Sunday	19	423	331	320	203	135	208	462	531	846	1316	1627	1700	1948	2183	2157	1984	1998	1882	1541	1142	1000	702	579	328	25546
Apr-15 Monday	20	270	157	107	142	230	533	1947	2752	2943	2572	2371	2606	2615	2563	2825	3541	3505	3563	2388	1666	1254	932	721	471	42674
Apr-15 Tuesday	21	297	226	134	124	190	561	1981	2891	2959	2534	2496	2578	2633	2635	2772	3314	3559	3501	2646	1798	1550	1158	814	470	43821
Apr-15 Wednesday	22	298	206	127	133	211	554	1949	2631	2971	2565	2411	2598	2706	2642	2879	3312	3583	3492	2727	1885	1624	1119	856	912	44391
Apr-15 Thursday	23	426	225	129	145	225	554	1973	2673	2280	2509	2390	2699	2750	2764	2957	3545	3513	3224	2505	1997	1587	1241	903	564	43778
Apr-15 Friday	24	364	219	141	168	231	542	1852	2688	2984	2578	2630	2763	3062	2993	3227	3515	3494	3421	2483	2040	1684	1304	1041	764	46188
Apr-15 Saturday	25	505	322	235	204	171	299	742	1202	1694	1913	2234	2410	2502	2529	2407	2391	2346	2112	1936	1556	1279	1093	873	636	33591
Apr-15 Sunday	26	483	303	223	170	156	223	467	565	891	1500	1868	1772	2026	2223	2034	2110	2058	2108	1751	1487	1295	917	665	486	27781
Apr-15 Monday	27	276	154	119	137	229	530	1951	2803	2976	2461	2481	2515	2581	2558	2861	3421	3621	3574	2504	1727	1347	1069	709	476	43080
Apr-15 Tuesday	28	298	197	117	120	214	550	1975	2928	3019	2573	2422	2526	2692	2663	2927	2735	2458	3485	2680	1919	1546	1254	898	495	42691
Apr-15 Wednesday	29	308	168	121	128	214	509	1708	2409	2673	2461	2205	2515	2424	2538	2738	3104	3189	3077	2464	1572	1220	1195	798	457	40195
Apr-15 Thursday	30	313	156	133	115	201	515	1919	2626	2725	2742	2544	2752	2816	2676	2956	3379	3049	3429	2827	1896	1622	1210	883	576	44060
May-15 Friday	1	400	203	168	166	248	564	1892	2666	2813	2469	2656	2936	2992	2957	3238	3588	3580	3425	2615	2082	1673	1614	1170	765	46880
May-15 Saturday	2	569	321	256	196	184	342	795	1337	1656	2130	2200	2387	2523	2568	2604	2511	2506	2277	1972	1707	1593	1311	943	652	35540
May-15 Sunday	3	330	841	396	225	167	210	447	558	870	1333	1678	1887	2013	2156	2215	2304	2253	2067	1693	1450	1184	864	699	572	28412
May-15 Monday	4	306	159	105	145	216	546	1985	2612	2973	1906	2291	2603	2593	2495	2817	3362	3524	3367	2474	1709	1355	964	746	449	41702
May-15 Tuesday	5	288	189	124	128	214	526	1823	2275	2505	2850	2708	2605	2636	2585	2789	3492	3616	3571	2614	1778	1401	1223	876	678	43494

May-15	Wednesday	6	365	187	136	135	244	562	1985	2893	2798	2660	2423	2610	2648	2666	2811	3390	3573	3547	2605	1786	1565	1123	899	656	44267
May-15	Thursday	7	359	189	123	149	228	531	1860	2847	2931	2425	2374	2548	2597	2348	2715	3293	3625	3596	2374	1650	1335	949	797	492	42335
May-15	Friday	8	349	218	154	167	221	490	1743	2479	2918	2564	2620	2827	3010	2978	3038	3507	3441	3351	2475	1862	1479	1215	1256	803	45165
May-15	Saturday	9	515	376	279	177	177	322	753	1477	1771	2107	2274	2515	2575	2649	2721	2713	2560	2164	1953	1674	1363	1302	998	756	36171
May-15	Sunday	10	448	316	327	177	156	247	404	490	876	1473	1718	1826	2050	2215	2337	2264	2128	2017	1798	1453	1257	995	803	564	28339
May-15	Monday	11	310	166	124	136	222	545	1972	2752	2966	2429	2435	2525	2602	2631	2801	3184	3218	3263	2750	1554	1341	976	778	535	42215
May-15	Tuesday	12	330	187	122	149	214	577	1973	2756	2898	2552	2555	2580	2678	2689	2858	3448	3463	3486	2416	1737	1354	1133	872	506	43533
May-15	Wednesday	13	339	175	131	136	224	566	2079	2793	3020	2576	2419	2633	2715	2724	2965	3373	3500	3531	2528	1859	1455	1146	864	573	44324
May-15	Thursday	14	352	173	149	153	232	503	1946	2850	2875	2583	2461	2598	2728	2665	2917	3480	3533	3558	2583	1961	1693	1153	910	555	44611
May-15	Friday	15	385	217	178	169	229	564	1924	2746	2903	2499	2625	2731	2931	2910	3120	3448	2740	3372	2676	2069	1712	1369	1160	799	45476
May-15	Saturday	16	541	315	251	187	223	320	804	1368	1702	2161	2331	2475	2488	2535	2430	2724	2570	2174	1867	1747	1501	1272	1081	864	35931
May-15	Sunday	17	474	328	295	195	159	243	453	539	940	1500	1736	1738	2022	2199	2186	2173	2060	1833	1627	1495	1116	933	744	429	27417
May-15	Monday	18	309	159	134	140	227	589	1952	2779	3014	2498	2546	2524	2664	2509	2794	3383	3526	3401	2601	1725	1411	1017	779	493	43174
May-15	Tuesday	19	363	186	141	139	215	598	1973	2740	3076	2479	2376	2432	2636	2617	2801	3356	3464	3454	2530	1779	1451	1070	824	739	43439
May-15	Wednesday	20	378	196	147	151	218	591	2055	2784	2841	2741	2494	2633	2688	2475	2651	2515	2907	2993	2699	1677	1350	1256	954	544	41938
May-15	Thursday	21	341	248	143	133	243	549	2016	2741	2974	2632	2617	2648	2835	2777	3133	3528	3481	3410	2701	2008	1787	1213	1032	664	45854
May-15	Friday	22	379	222	182	157	238	549	1968	2862	2832	2590	2798	3072	3094	3210	3258	3622	3529	3181	2517	2180	1744	1630	1365	853	48032
May-15	Saturday	23	578	344	279	181	181	285	741	1260	1737	2065	2429	2531	2538	2615	2642	2498	2391	2195	1803	1663	1388	1299	1219	688	35550
May-15	Sunday	24	523	312	286	159	120	234	422	588	943	1423	1840	1902	2134	2105	2110	2122	1910	1767	1562	1236	1121	903	822	564	27108
May-15	Monday	25	395	238	147	152	183	313	738	954	1147	1409	1657	1803	2032	2052	2079	2033	1966	1759	1565	1327	1126	970	779	459	27283
May-15	Tuesday	26	274	171	110	133	252	567	1964	2649	2979	2616	2575	2589	2592	2904	2891	3291	3286	3024	2468	1916	1549	1028	718	481	43027
May-15	Wednesday	27	338	202	112	155	211	597	2014	2816	2930	2520	2568	2618	2712	2701	2831	3401	3491	3518	2675	1831	1601	1229	918	502	44491
May-15	Thursday	28	351	199	133	145	215	528	2039	2774	2944	2717	2524	2230	2562	2716	2903	3423	3563	3425	2651	1978	1656	1207	966	583	44432
May-15	Friday	29	389	209	145	172	253	556	1946	2657	2937	2620	2568	2799	3036	2930	3243	3601	3584	3426	2559	1994	1610	1370	1059	689	46352
May-15	Saturday	30	549	318	252	184	189	371	893	1385	1794	2113	2424	2424	2638	2498	2767	2612	2592	2178	1873	1691	1448	1335	1132	702	36362
May-15	Sunday	31	476	315	296	153	140	233	498	589	931	1418	1678	1826	1996	2219	2168	2268	2157	1918	1583	1352	1240	986	799	484	27723
Jun-15	Monday	1	292	174	141	150	245	576	2066	2841	2973	2519	2628	2643	2643	2720	2823	3349	3562	3439	2588	1759	1336	1085	745	461	43758
Jun-15	Tuesday	2	335	167	129	128	207	567	2042	2847	3036	2422	2459	2642	2764	2739	2846	3308	3482	3675	2608	1797	1409	1045	809	527	43990
Jun-15	Wednesday	3	378	195	145	138	191	499	1637	2383	2897	2498	2412	2340	2463	3020	3261	3400	3532	3594	2361	1811	1441	1207	922	559	43284
Jun-15	Thursday	4	363	220	139	148	214	526	1913	2682	2813	2505	2524	2776	2872	2909	2478	3232	3540	3279	2716	1929	1553	1308	1072	593	44304
Jun-15	Friday	5	437	224	154	185	217	548	1811	2740	2691	2626	2610	2911	3171	2966	2604	3318	3524	3423	2558	2128	1603	1419	1202	762	45832
Jun-15	Saturday	6	563	322	271	190	200	333	808	1367	1675	2088	2274	2426	2605	2656	2644	2624	2387	2207	1854	1685	1456	1146	1054	865	35700
Jun-15	Sunday	7	517	330	264	148	140	231	482	580	891	1401	1683	1818	2027	2165	2265	2235	2249	2035	1741	1418	1220	966	822	942	28570
Jun-15	Monday	8	343	203	130	140	227	588	1843	2766	2815	2418	2492	2512	2670	2703	2784	3160	3417	3531	2534	1693	1334	1062	821	453	42639
Jun-15	Tuesday	9	326	206	152	149	238	576	1980	2892	2767	2447	2474	2535	2648	2689	2854	3195	2988	2618	724	11	1174	908	704	733	37988
Jun-15	Wednesday	10	378	210	155	144	203	520	1804	2793	2938	2486	2449	2582	2695	2783	2848	3283	3473	3305	2669	1816	1465	1450	1010	604	44063
Jun-15	Thursday	11	406	200	157	131	250	508	1811	2826	2712	2644	2572	2635	2736	2659	2921	3257	3626	3431	2530	1873	1645	1224	970	519	44243
Jun-15	Friday	12	406	242	167	151	247	492	1777	2649	2923	2431	2624	2789	3040	3102	3134	3449	3416	3447	2478	1979	1529	1329	1099	834	45734
Jun-15	Saturday	13	563	321	291	195	208	312	855	1463	1823	2133	2307	2583	2666	2626	2600	2548	2544	2331	2054	1686	1419	1192	1049	681	36450
Jun-15	Sunday	14	510	287	266	155	151	248	604	770	1009	1568	1732	1982	2129	2164	2177	2118	2134	1845	1703	1375	1126	934	732	479	28198
Jun-15	Monday	15	303	169	145	163	257	593	1790	2782	2952	2478	2456	2541	2788	2706	2684	3083	3554	3517	2386	1713	1373	1133	812	493	42871
Jun-15	Tuesday	16	369	198	117	145	228	585	1964	2773	2794	2508	2426	2454	2725	2737	2831	3404	3553	3551	2508	1658	1537	1160	908	555	43688
Jun-15	Wednesday	17	409	213	146	185	225	657	1886	2848	3034	2572	2504	2656	2703	2828	2826	3166	3528	2755	2699	1888	1457	1181	1002	533	43901
Jun-15	Thursday	18	407	209	140	170	221	557	1869	2890	2930	2579	2530	2564	2844	2797	2874	3219	3509	3509	2459	1834	1508	1266	964	592	44441
Jun-15	Friday	19	383	290	169	177	207	569	1814	2704	2888	2654	2575	2894	2985	2957	3080	3547	3383	3168	2345	1885	1625	1369	1133	758	45559
Jun-15	Saturday	20	566	379	272	196	203	335	786	1303	1821	2125	2245	2481	2604	2704	2681	2792	2540	2368	2019	1750	1447	1317	1042	717	36693
Jun-15	Sunday	21	473	339	262	218	157	237	455	540	954	1366	1687	1848	2081	2255	2140	2130	2006	1950	1820	1483	1248	1060	842	531	28082
Jun-15	Monday	22	359	196	148	157	255	551	1867	2693	2849	2288	2428	2436	2504	2663	2824	3069	3347	3415	2370	1628	1261	950	721	512	41491
Jun-15	Tuesday	23	332	192	124	151	231	587	1881	2807	2867	2490	2405	2515	2790	2632	2899	3120	3584	3548	2422	1855	1384	1067	837	517	43237
Jun-15	Wednesday	24	360	204	149	146	238	580	1914	2752	2969	2487	2475	2578	2768	2728	2763	3169	3473	3613	2567	1756	1413	1203	800	566	43671
Jun-15	Thursday	25	398	218	174	167	222	541	1798	2746	2942	2467	2465	2637	2725	2774	2947	3167	3607	3435	2799	2032	1490	1061	1018	606	44436
Jun-15	Friday	26	477	263	188	164	223	587	1781	2682	2806	2708	2605	2682	2940	2712	3039	3264	2464	2899	2339	1950	1498	1268	1117	737	43393
Jun-15	Saturday	27	577	333	256	186	201	339	806	1309	1692	1986	2229	2359	2621	2746	2606	2584	2415	2115	2011	1656	1322	1254	1188	734	35525
Jun-15	Sunday	28	509	357	315	192	157	257	478	558	861	1337	1733	1854	2079	2121	2127	2131	2003	1868	1574	1387	1081	909	775	433	27096
Jun-15	Monday	29	325	189	147	141	253	620	1866	2756	2870	2353	2515	2530	2719	2663	2792	3082	3521	3540	2448	1795	1318	1006	753	517	42719
Jun-15	Tuesday	30	377	206	127	143	234	543	1905	2781	2998	2517	2622	2596	2758	2712	2864	3146	3579	3638	2439	2000	1292	1126	834	596	44033
Jul-15	Wednesday	1	376	189	149	155	243	594	1804	2803	2957	2575	2538	2632	2875	2856	3094	3313	3598	3594	2717	1866	1524	1307	1139	566	45464
Jul-15	Thursday	2	419	247	143	147	255	521	1852	2646	2857	2717	2655	2841	2984	3022	3194	3513	3408	3183	2504	1977	1583	1297	1042	804	45811
Jul-15	Friday	3	563	267	168	198	216	384	1080	1561	1857	2135	2433	2667	2804	2782	2697	2582	2541	2168	2067	1763	1452	1353	1026	719	37483
Jul-15	Saturday	4	499	336	228	178	159	245	517	684	1071	1417	1712	1959	1939	1998	2134	2017	1772	1638	1519	1254	1131	994	1111	823	27335
Jul-15	Sunday	5	490	290	228	149	136	230	410	479	854	1296	1552	1816	1979	2182	2191	2122	2006	1907	1717	1258	1066	961	722	547	26588
Jul-15	Monday	6	302	197	116	131	245	551	1758	2691	2776	2395	2453	2525	2645	2685	2771	3314	3603	3454	2345	1693	1298	1037	793	507	42285
Jul-15	Tuesday	7	334	199	145	158	237	519	1841	2851	2809	2385	2391	2544	2628	2724	2605	3010	3245	3560	2420	1634	1303	1058	851	541	41992
Jul-15	Wednesday	8	327	212	139	147	234	553	1837	2849	2918	2451	2470	2606	2713	2744	2916	3159	3593	3611	2504	1739	1452	1218	924	602	43918

Jul-15 Thursday	9	377	224	150	180	242	506	1790	2767	2904	2527	2472	2644	2661	2792	2828	3134	3417	3572	2505	1832	1553	1231	869	626	43803
Jul-15 Friday	10	364	232	183	158	233	523	1729	2761	2903	2534	2534	2850	2973	2948	3147	3444	3528	3429	2401	1975	1698	1307	1109	783	45746
Jul-15 Saturday	11	534	331	245	178	215	346	752	1344	1581	1975	2152	2390	2532	2515	2523	2650	2559	2187	2028	1656	1423	1248	995	707	35066
Jul-15 Sunday	12	516	293	292	197	166	213	459	547	890	1352	1598	1721	1925	2146	2136	2157	2090	1892	1688	1356	1180	1015	758	458	27045
Jul-15 Monday	13	334	178	142	131	217	568	1765	2757	2867	2558	2416	2560	2688	2695	2825	3239	3554	3576	2481	1696	1360	914	736	461	42718
Jul-15 Tuesday	14	346	187	152	145	233	513	1579	2335	3012	2744	2434	2454	2627	2686	2842	3197	3460	3675	2519	1792	1460	1075	793	518	42778
Jul-15 Wednesday	15	340	201	161	170	215	577	1773	2732	3087	2509	2529	2605	2796	2781	2890	3237	3614	3527	2464	1794	1394	1214	881	576	44067
Jul-15 Thursday	16	348	221	175	143	214	513	1690	2913	2937	2471	2576	2659	2860	2824	2939	3252	3413	3427	2667	1854	1460	1148	930	654	44288
Jul-15 Friday	17	386	216	189	175	235	536	1671	2692	2787	2571	2605	2822	2961	2979	2860	3309	3361	3266	2492	1950	1549	1447	1179	758	44996
Jul-15 Saturday	18	551	348	257	203	194	323	745	1282	1652	1970	2247	2365	2515	2729	2702	2857	2686	2250	2080	1658	1474	1369	945	412	35814
Jul-15 Sunday	19	336	233	188	171	161	245	456	560	870	1425	1746	1833	1974	2125	2122	2051	1961	1710	1660	1283	1097	968	712	474	26361
Jul-15 Monday	20	403	163	141	153	250	553	1772	2758	2815	2374	2393	2577	2727	2753	2854	3373	3488	3510	2521	1711	1266	1013	784	528	42880
Jul-15 Tuesday	21	381	184	123	161	239	545	1847	2796	2927	2548	2447	2605	2757	2775	2935	2999	3376	3570	2569	1785	1353	1112	818	505	43357
Jul-15 Wednesday	22	375	185	142	151	237	580	1779	2680	3055	2434	2368	2667	2717	2742	2921	3374	3468	3490	2810	1808	1297	1170	917	548	43915
Jul-15 Thursday	23	401	234	146	167	232	535	1880	2699	3061	2499	2611	2669	2819	2746	2931	3338	3557	3136	2682	1883	1497	1170	902	596	44391
Jul-15 Friday	24	399	243	166	169	225	523	1602	2617	2757	2412	2483	2681	3004	2922	3058	3357	3551	3404	2485	1873	1398	1282	1061	773	44445
Jul-15 Saturday	25	468	322	278	204	188	313	757	1246	1673	2083	2205	2511	2577	2610	2651	2638	2480	2332	1989	1698	1506	1228	994	677	35628
Jul-15 Sunday	26	449	313	285	191	177	236	437	565	932	1342	1669	1762	1984	2160	2154	2171	2022	1821	1655	1428	1148	954	718	477	27050
Jul-15 Monday	27	369	176	127	153	220	564	1703	2675	2758	2279	2335	2545	2720	2652	2648	2954	3531	3420	2573	1739	1276	1035	790	460	41702
Jul-15 Tuesday	28	372	184	129	136	215	543	1753	2704	2911	2478	2473	2478	2689	2708	2919	3198	3403	3530	2411	1791	1452	1037	861	524	42899
Jul-15 Wednesday	29	386	174	155	134	192	547	1766	2763	2858	2596	2552	2595	2666	2690	2916	3220	3569	3506	2605	1853	1582	1160	818	587	43890
Jul-15 Thursday	30	391	190	154	168	238	519	1832	2762	3060	2495	2546	2683	2826	2881	2733	3309	3251	3250	2759	1960	1527	1220	910	605	44269
Jul-15 Friday	31	421	260	197	171	244	510	1648	2647	2806	2640	2583	2844	3019	2962	3207	3567	3582	3491	2668	2101	1549	1342	1053	827	46339
Aug-15 Saturday	1	500	353	310	241	211	308	766	1237	1563	1931	2274	2403	2485	2550	2582	2635	2492	2239	1960	1759	1370	1338	1211	883	35601
Aug-15 Sunday	2	523	439	289	177	156	227	465	541	894	1362	1557	1831	2090	2202	2137	2099	1966	1799	1790	1357	1137	967	719	466	27190
Aug-15 Monday	3	335	191	115	139	233	526	1719	2766	2702	2511	2512	2672	2764	2805	2900	3007	2799	3069	2574	1600	1355	1033	771	551	41649
Aug-15 Tuesday	4	392	187	124	145	209	533	1820	2957	2808	2515	2541	2545	2691	2748	2897	3242	3544	3440	2607	1909	1450	1076	800	566	43746
Aug-15 Wednesday	5	377	201	157	142	224	533	1809	2958	3114	2561	2419	2584	2811	2752	2978	3311	3570	3496	2687	1879	1569	1132	1026	804	45094
Aug-15 Thursday	6	435	237	146	150	248	504	1769	2813	2914	2597	2582	2640	2772	2665	2818	2730	3095	2785	2835	1778	1388	1064	830	558	42353
Aug-15 Friday	7	392	203	156	159	211	479	1654	2661	2786	2602	2575	2843	2999	3031	3256	3213	3463	3408	2620	1986	1636	1443	1158	1017	45951
Aug-15 Saturday	8	577	329	256	193	181	321	768	1281	1717	1935	2314	1780	2891	2733	2874	2708	2828	2415	2156	1814	1489	1240	1140	850	36790
Aug-15 Sunday	9	515	319	290	183	152	234	463	533	927	1390	1745	1888	2067	2336	2271	2244	2245	2029	1819	1543	1199	1104	772	501	28769
Aug-15 Monday	10	330	216	121	142	233	541	1785	2813	2821	2474	2531	2603	2750	2679	2923	3242	3461	3476	2569	1734	1362	1160	745	462	43173
Aug-15 Tuesday	11	341	212	124	146	216	548	1849	3054	3023	2260	2401	2600	2762	2602	2868	3339	3489	3306	2560	1785	1442	1063	820	550	43360
Aug-15 Wednesday	12	334	191	148	147	237	546	1812	2927	2898	2559	2454	2571	2611	2727	2852	3358	3725	3525	2520	1824	1471	1146	918	702	44203
Aug-15 Thursday	13	438	236	128	155	234	527	1807	2919	2875	2390	2413	2585	2745	2795	3072	3411	3461	3514	2693	1899	1442	1151	919	617	44426
Aug-15 Friday	14	436	233	179	171	232	520	1633	2593	2876	2577	2594	2812	3002	3098	3141	3589	3775	3402	2539	1955	1700	1360	1119	1026	46562
Aug-15 Saturday	15	597	333	266	193	219	349	739	1267	1608	2124	2228	2423	2658	2739	2804	2662	2546	2216	2040	1706	1526	1294	1041	713	36291
Aug-15 Sunday	16	475	332	276	205	162	204	423	552	879	1391	1611	1783	2127	2245	2277	2300	2150	2000	1868	1399	1157	905	652	449	27822
Aug-15 Monday	17	303	190	112	147	262	610	2014	2646	2817	2521	2335	2494	2543	2545	2702	3239	3493	3437	2444	1623	1183	966	637	434	41697
Aug-15 Tuesday	18	323	180	110	144	236	559	2042	2761	2805	2337	2427	2400	2522	2627	2729	2919	2691	3083	2878	1592	1207	876	696	510	40654
Aug-15 Wednesday	19	322	180	136	127	248	580	2001	2568	3060	2676	2368	2524	2626	2606	2831	3273	3363	3519	2465	1755	1251	1017	746	480	42722
Aug-15 Thursday	20	326	186	137	125	216	539	2079	2781	3004	2476	2331	2621	2678	2790	2947	2855	3180	3306	2556	1745	1357	1026	760	517	42538
Aug-15 Friday	21	381	199	164	154	192	551	2027	2715	2737	2589	2451	2835	2894	2953	3025	3388	3259	3180	2294	2022	1432	1212	982	674	44310
Aug-15 Saturday	22	466	307	234	180	183	344	795	1271	1540	1935	2287	2367	2560	2593	2580	2459	2362	2141	1883	1528	1419	1048	889	676	34047
Aug-15 Sunday	23	427	301	288	162	138	220	444	564	854	1448	1615	1771	2092	2140	2240	2099	2075	1812	1655	1343	1115	760	579	403	26545
Aug-15 Monday	24	256	169	109	136	232	634	2051	2777	3006	2440	2357	2534	2595	2647	2709	3327	3586	3404	2430	1712	1262	1021	666	475	42535
Aug-15 Tuesday	25	285	159	132	134	198	605	2028	2737	2998	2534	2424	2411	2547	2612	2919	3312	3573	3502	2479	1669	1441	1033	706	487	42925
Aug-15 Wednesday	26	332	149	118	141	218	600	2047	2796	3086	2418	2354	2387	2684	2561	2850	3281	3561	3410	2625	1696	1407	1143	809	525	43198
Aug-15 Thursday	27	314	192	127	136	239	582	2068	2832	2970	2398	2453	2722	2661	2680	1211	1324	2688	3335	2836	1963	1458	1045	829	545	39608
Aug-15 Friday	28	324	168	159	167	199	609	1940	2754	2963	2554	2557	2728	3049	2931	3234	2919	3022	3158	3014	1958	1449	1279	1132	741	45008
Aug-15 Saturday	29	478	311	229	170	181	364	735	1339	1586	1991	2251	2422	2600	2761	2787	2583	2358	2138	1905	1623	1399	1179	925	669	34984
Aug-15 Sunday	30	429	287	254	156	143	209	434	521	766	1233	1547	1734	2085	2223	2182	2092	1838	1633	1487	1182	1057	747	588	377	25204
Aug-15 Monday	31	220	142	87	162	224	460	1463	1870	2297	2236	2456	2334	2558	2595	2754	3293	3511	3420	2357	1654	1253	993	673	463	39475
Sep-15 Tuesday	1	263	163	105	148	220	597	1989	2628	2958	2420	2330	2439	2584	2631	2888	3300	3469	3399	2550	1674	1247	990	735	493	42220
Sep-15 Wednesday	2	282	157	117	142	212	545	1936	2500	2873	2354	2339	2503	2652	2536	2795	3288	3118	3469	2604	1683	1498	1122	725	520	41970
Sep-15 Thursday	3	316	149	140	142	233	568	1971	2593	3010	2521	2543	2761	2859	2765	3016	3501	3497	3388	2592	1846	1403	1109	956	589	44468
Sep-15 Friday	4	403	207	163	173	209	570	1977	2727	2854	2501	2709	2855	3080	3232	3241	2745	3074	3283	2554	1963	1561	1449	1238	810	45578
Sep-15 Saturday	5	554	346	265	200	165	330	701	1131	1564	1910	2255	2393	2486	2574	2581	2536	2474	2192	1814	1615	1342	1179	893	669	34169
Sep-15 Sunday	6	446	275	259	173	130	209	418	522	809	1372	1574	1690	1953	2130	2180	2102	1940	1923	1585	1251	985	853	778	570	26127
Sep-15 Monday	7	339	209	191	172	192	298	586	728	1049	1351	1683	1850	2060	2158	2131	2112	2120	1784	1599	1520	1142	877	682	433	27266
Sep-15 Tuesday	8	239	132	97	139	227	612	1925	2873	3083	2522	2461	2579	2758	2722	2879	3512	3619	3445	2551	1759	1325	965	706	473	43603
Sep-15 Wednesday	9	285	151	130	149	212	623	1999	2715	2989	2648	2356	2573	2487	2654	2833	3447	3620	2988	2728	1811	1495	1158	763	492	43306
Sep-15 Thursday	10	308	181	121	135	200	586	1979	2225	2890	2787	2663	2663	2792	2770	2992	3231	3496	3478	2795	1891	1527	977	757	494	43938

Sep-15 Friday	11	321	183	173	144	208	573	1859	2661	2909	2580	2514	2792	2886	2887	3200	3580	3581	3348	2450	2012	1559	1226	1086	764	45496
Sep-15 Saturday	12	496	305	219	172	208	346	801	1296	1705	1959	2146	2445	2419	2370	2520	2399	2443	2000	1888	1535	1267	1238	842	668	33687
Sep-15 Sunday	13	421	348	323	154	119	225	488	540	848	1382	1659	1845	2079	2239	2298	2215	2265	1900	1749	1500	1214	865	649	404	27729
Sep-15 Monday	14	308	167	104	127	221	586	1990	2605	2958	2325	2484	2602	2648	2589	2863	3336	3470	3248	2631	1743	1371	999	686	473	42534
Sep-15 Tuesday	15	299	187	115	136	225	575	1998	2751	2841	2584	2341	2585	2660	2671	2915	3510	3453	3304	2208	1839	1496	1011	695	479	42878
Sep-15 Wednesday	16	318	164	124	139	203	592	2031	2660	3057	2575	2475	2571	2638	2833	2892	3458	3583	3507	2610	1682	1443	1081	784	459	43879
Sep-15 Thursday	17	286	182	128	131	214	554	1957	2447	2836	2671	2431	2529	2654	2660	2912	2197	2890	3193	2916	1875	1395	1044	831	537	41470
Sep-15 Friday	18	378	175	135	142	216	560	1864	2621	2865	2363	2312	2655	2970	2971	3217	3541	3577	3451	2467	1956	1453	1240	1188	823	45140
Sep-15 Saturday	19	525	302	218	169	197	347	730	1256	1598	1996	2210	2363	2617	2597	2622	2485	2427	2144	1822	1593	1314	1211	929	621	34293
Sep-15 Sunday	20	413	291	267	148	181	303	460	533	832	1386	1676	1836	2094	2224	2044	1951	2046	1816	1680	1487	1218	824	670	422	26802
Sep-15 Monday	21	267	152	122	143	240	610	1942	2614	2915	2395	2271	2538	2651	2501	2855	3348	3710	3530	2403	1711	1203	994	672	448	42235
Sep-15 Tuesday	22	279	184	110	136	217	579	1999	2757	3167	2490	2363	2448	2623	2584	2929	3499	3577	3441	2436	1762	1268	1020	733	482	43083
Sep-15 Wednesday	23	298	192	123	168	219	602	1957	2716	2835	2525	2404	2556	2711	2588	2802	3342	3549	3580	2529	1757	1396	1008	724	471	43052
Sep-15 Thursday	24	284	191	115	132	216	561	2028	2631	2818	2399	2402	2529	2551	2609	2778	3193	3299	3184	2325	1852	1289	965	763	466	41580
Sep-15 Friday	25	372	231	147	142	204	525	1862	2383	2785	2435	2500	2756	2843	2891	3264	3644	3195	3413	2484	2000	1602	1362	1109	737	44886
Sep-15 Saturday	26	482	347	270	165	203	316	773	1376	1741	1936	2139	2376	2507	2464	2468	2417	2419	2178	1982	1612	1308	1158	993	635	34265
Sep-15 Sunday	27	455	297	202	163	150	256	439	542	888	1310	1608	1772	2028	2218	2124	2093	2083	1845	1671	1382	1070	830	679	383	26488
Sep-15 Monday	28	256	138	113	149	224	597	1915	2558	2876	2442	2329	2533	2680	2603	2787	3351	3672	3566	2405	1751	1272	941	697	431	42286
Sep-15 Tuesday	29	297	148	112	136	228	584	1941	2664	3038	2559	2313	2442	2687	2550	2460	3318	3540	3561	2502	1734	1391	997	698	434	42334
Sep-15 Wednesday	30	299	169	105	131	223	555	2015	2665	3098	2546	2390	2616	2690	2729	2831	3350	3079	2781	2652	1872	1346	955	736	499	42332
Oct-15 Thursday	1	316	184	133	131	230	551	1888	2717	2971	2565	2472	2666	2784	2615	2934	2851	2878	3042	2790	1707	1137	955	752	461	41730
Oct-15 Friday	2	371	178	115	163	224	447	1550	2357	2368	2370	2320	2803	2882	2896	3136	3230	3134	2707	1922	1431	1024	892	796	493	39809
Oct-15 Saturday	3	418	249	179	139	170	243	613	890	1040	1181	1183	1380	1259	1276	1288	1190	1137	1147	1042	745	519	368	389	284	18329
Oct-15 Sunday	4	217	122	74	62	74	166	350	377	529	624	1003	1161	1263	1282	1302	1237	1270	1146	1039	705	486	436	345	191	15461
Oct-15 Monday	5	192	77	58	92	153	365	1110	1678	1736	1664	1801	1923	2057	1974	2122	2372	2363	1710	1453	1487	824	629	536	369	28745
Oct-15 Tuesday	6	242	144	100	167	176	504	1669	2498	2748	2292	2270	2454	2616	2557	2702	3124	3490	3462	2382	1655	1237	917	786	474	40666
Oct-15 Wednesday	7	280	180	110	158	212	585	1897	2206	2765	2732	2618	2518	2593	2630	2984	3387	3395	3289	2549	1920	1460	1020	785	440	42713
Oct-15 Thursday	8	336	174	125	147	221	621	1791	2418	2738	2638	2559	2493	2574	2791	2987	3378	3436	3354	2591	2016	1459	1032	894	549	43322
Oct-15 Friday	9	420	196	158	152	236	603	1954	2493	2700	2834	2540	2932	3023	3080	3240	3505	3515	3373	2536	2056	1498	1384	1290	927	46645
Oct-15 Saturday	10	557	334	256	193	194	327	765	1351	1722	1933	2195	2408	2611	2486	2464	2368	2293	2024	1787	1596	1310	1110	961	668	33913
Oct-15 Sunday	11	403	308	278	164	133	265	489	565	874	1319	1653	1880	2007	2261	2267	2077	2077	1870	1759	1400	1131	830	635	451	27096
Oct-15 Monday	12	343	166	112	166	229	592	2010	2741	2918	2432	2495	2571	2738	2746	2854	3367	3607	3402	2367	1754	1273	933	742	485	43043
Oct-15 Tuesday	13	309	179	125	156	233	594	1993	2730	3079	2629	2499	2624	2697	2878	2931	3392	3608	3638	2599	1786	1315	1002	671	481	44148
Oct-15 Wednesday	14	296	183	132	159	223	600	2077	2759	3082	2553	2571	2710	2840	2764	2845	3468	2970	3038	2638	1868	1507	1100	777	513	43673
Oct-15 Thursday	15	371	209	131	147	224	572	1992	2644	2985	2594	2453	2589	2746	2839	2982	3391	3451	3329	2826	2069	1413	1097	799	578	44431
Oct-15 Friday	16	364	195	172	181	193	561	2016	2351	3036	2507	2631	2822	3078	3065	3197	3490	3474	3268	2631	2081	1425	1281	1175	740	45934
Oct-15 Saturday	17	519	306	225	187	215	323	761	1323	1704	1891	2239	2419	2630	2748	2663	2543	2448	2204	1966	1701	1368	1366	1010	744	35503
Oct-15 Sunday	18	475	330	206	162	123	238	470	590	859	1357	1583	1825	2079	2181	2256	2126	2371	2015	1912	1444	1121	876	719	411	27729
Oct-15 Monday	19	255	158	101	133	239	590	1986	2750	2913	2328	2454	2466	2624	2653	2842	3436	2722	3094	2679	1804	1297	980	752	479	41735
Oct-15 Tuesday	20	249	163	134	152	209	568	1998	2712	3018	2382	2440	2484	2632	2648	2949	3535	3461	3485	2589	1841	1300	976	773	538	43236
Oct-15 Wednesday	21	306	173	125	157	224	565	2061	2654	3194	2544	2419	2536	2670	2730	2968	3486	3278	3496	2484	1822	1504	1100	862	517	43875
Oct-15 Thursday	22	324	204	130	168	210	566	1960	2691	2958	2610	2483	2728	2749	2692	3101	3466	3460	3272	2763	1987	1569	1067	879	602	44639
Oct-15 Friday	23	351	223	163	155	208	547	1968	2715	2766	2588	2557	2938	3054	3114	3260	3508	3403	3134	2306	2180	1458	1303	1124	726	45749
Oct-15 Saturday	24	506	300	259	174	225	358	778	1269	1755	2114	2319	2309	2380	2410	2612	2554	2571	2251	2005	1672	1326	1346	1006	674	35173
Oct-15 Sunday	25	488	290	262	162	149	215	494	539	880	1284	1637	1719	2150	2197	2194	2166	2090	2015	1836	1439	1074	866	775	415	27336
Oct-15 Monday	26	288	166	89	150	246	606	1723	2464	3085	2491	2386	2448	2694	2610	3020	3491	3500	3288	2523	1564	1179	915	826	508	42260
Oct-15 Tuesday	27	282	168	118	146	222	595	1955	2517	2892	2567	2371	2447	2583	2525	2805	3355	3135	3290	2578	1661	1265	896	736	506	41615
Oct-15 Wednesday	28	301	181	137	132	219	570	1972	2608	2938	2423	2425	2577	2719	2767	2823	3364	3430	3478	2538	1779	1359	1065	906	565	43276
Oct-15 Thursday	29	331	177	141	177	232	595	2037	2727	3051	2658	2502	2790	2726	2820	2988	3641	3562	3416	2675	2003	1594	1211	885	597	45536
Oct-15 Friday	30	320	192	138	175	232	575	1885	2563	3005	2658	2634	2883	3021	2906	3354	3594	3455	3051	2710	2040	1504	1311	1385	947	46538
Oct-15 Saturday	31	597	344	249	182	209	330	840	1278	1593	1930	2180	2404	2475	2484	2523	2538	2294	2022	1865	1473	1272	1306	1013	804	34205
Nov-15 Sunday	1	528	292	267	188	277	266	437	570	898	1384	1684	1857	1911	2022	2246	2028	2028	1915	1679	1416	1055	825	554	422	26749
Nov-15 Monday	2	257	152	99	149	211	620	2069	2757	3096	2525	2451	2573	2650	2648	2830	3235	3389	3309	2277	1612	1140	923	683	458	42113
Nov-15 Tuesday	3	291	147	131	153	195	556	1946	2499	2721	2462	2289	2350	2390	2455	2662	3302	3498	3385	2456	1429	1222	602	880	510	40531
Nov-15 Wednesday	4	302	168	128	147	219	571	1876	2629	3004	2632	2523	2548	2628	2561	2988	3442	3403	3303	2753	1690	1328	1096	942	525	43406
Nov-15 Thursday	5	329	172	145	169	218	561	2039	2509	3106	2646	2592	2636	2746	2803	3064	3537	3608	3458	2768	1778	1440	1166	1039	654	45183
Nov-15 Friday	6	343	172	144	158	200	535	1995	2655	2793	2512	2621	2912	2943	3047	3215	3332	3285	3235	2695	1797	1378	1358	1245	852	45422
Nov-15 Saturday	7	597	313	156	251	176	375	878	1586	1737	2088	1975	2432	2617	2674	2746	2621	2226	2104	1891	1479	1264	1240	1107	859	35392
Nov-15 Sunday	8	637	407	245	140	142	226	459	605	911	1401	1744	1797	2034	2101	2120	1986	1995	1931	1678	1212	934	754	580	419	26458
Nov-15 Monday	9	256	130	94	124	211	566	1667	2363	2407	2115	2093	2207	2525	2481	2648	3208	3274	3353	2277	1511	1058	897	707	448	38620
Nov-15 Tuesday	10	312	148	132	140	212	565	1986	2433	3170	2560	2382	2553	2679	2819	2924	2056	3380	3424	2768	1681	1259	957	718	449	41707
Nov-15 Wednesday	11	303	196	98	147	206	543	2137	2768	2765	2447	2419	2555	2753	2782	2636	2237	2569	2265	2886	1674	1340	1041	796	467	40030
Nov-15 Thursday	12	308	173	107	133	218	588	2102	2746	3064	2547	2558	2767	2779	2717	3059	3378	3280	3408	2663	1839	1412	1074	876	521	44317
Nov-15 Friday	13	359	212	144	143	222	540	1979	2675	3122	2632	2719	2683	2971	2987	3183	3348	3375	3117	2768	1914	1488	1382	1077	707	45747

Nov-15	Saturday	14	512	301	226	177	193	306	819	1422	1782	1984	2271	2495	2522	2566	2712	2756	2488	2346	1992	1584	1215	1092	1044	601	35406
Nov-15	Sunday	15	399	314	264	152	123	211	477	548	888	1344	1621	1774	2171	2192	2196	2116	2148	1980	1704	1277	976	838	664	366	26743
Nov-15	Monday	16	268	145	105	130	237	590	1740	2600	3163	2612	2491	2636	2771	2751	3065	3541	3589	3374	2882	1656	1256	945	652	444	43643
Nov-15	Tuesday	17	289	165	110	149	186	588	2112	2657	2941	2754	2636	2605	2756	2884	3037	3506	3560	3308	2662	1660	1238	958	729	493	43983
Nov-15	Wednesday	18	270	207	112	145	214	603	2005	2490	3120	2645	2683	2575	2913	2798	3098	3448	3389	3241	2711	1745	1302	1042	722	486	43964
Nov-15	Thursday	19	301	175	114	132	189	521	1776	2593	2971	2543	2405	2175	2754	2757	3120	3543	3465	3121	2207	1874	1383	1204	809	505	42637
Nov-15	Friday	20	332	210	193	149	230	564	1941	2814	3019	2667	2679	2862	3198	2794	3418	3239	3362	3246	2487	1996	1471	1318	1053	743	45985
Nov-15	Saturday	21	488	308	226	174	185	339	788	1360	1688	1991	2146	2382	2648	2649	2550	2594	2521	2203	1867	1554	1332	1017	890	605	34505
Nov-15	Sunday	22	403	289	264	152	152	220	417	558	873	1313	1638	1799	2086	2200	2121	2169	2016	1886	1566	1400	936	792	649	411	26310
Nov-15	Monday	23	273	153	107	126	227	591	1757	1590	2940	2416	2602	2763	2779	2737	2268	2938	3287	3295	2607	1660	1239	968	722	488	40533
Nov-15	Tuesday	24	269	179	130	143	207	538	1779	2806	2890	2738	2715	2960	2865	3001	3192	3606	3560	3355	2679	1794	1364	1036	861	650	45317
Nov-15	Wednesday	25	402	237	176	159	253	539	1751	2554	2647	2651	2722	3025	3299	3377	3447	3345	3168	2867	2244	1737	1371	1054	947	638	44610
Nov-15	Thursday	26	461	256	209	150	147	222	428	497	661	909	1195	1608	1832	1718	1670	1641	1618	1618	1563	1522	1513	1175	988	755	24356
Nov-15	Friday	27	508	359	261	210	266	439	965	1345	1678	1904	2124	2397	2605	2588	2682	2641	2464	2191	2019	1566	1151	1019	883	598	34863
Nov-15	Saturday	28	384	255	260	186	186	325	617	960	1405	1713	2038	2091	2208	2110	2263	2169	2217	2150	1895	1567	1139	924	907	608	30577
Nov-15	Sunday	29	422	267	257	180	173	257	454	580	839	1343	1760	1811	2110	2239	2193	2154	2139	1945	1672	1236	973	798	630	419	26851
Nov-15	Monday	30	282	176	122	124	238	598	1965	2882	2920	2452	2584	2625	2738	2746	3081	3523	3480	3313	2678	1544	1177	860	703	467	43278
Dec-15	Tuesday	1	322	168	118	132	207	610	1960	2793	3091	2500	2428	2596	2690	2793	2934	3145	3449	3188	2840	1568	1213	1003	722	516	42986
Dec-15	Wednesday	2	254	177	120	122	216	581	2011	2823	2997	2383	2580	2626	2615	2629	3008	3078	2968	3258	2507	1603	1256	898	663	511	41884
Dec-15	Thursday	3	310	182	124	140	217	551	1993	2836	2994	2559	2486	2705	2804	2774	3031	3527	3520	3453	2661	2008	1391	1018	820	528	44632
Dec-15	Friday	4	321	182	153	160	223	545	1904	2744	2972	2447	2487	2728	3057	3003	3354	3445	3554	3297	2736	1915	1440	1200	1131	788	45786
Dec-15	Saturday	5	491	294	225	177	163	283	777	1285	1828	2054	2288	2398	2567	2534	2525	2663	2623	2325	2125	1647	1262	1039	865	650	35088
Dec-15	Sunday	6	476	301	243	133	121	208	486	532	840	1250	1660	1707	2015	2226	2199	2265	2114	1833	1562	1222	966	764	617	374	26114
Dec-15	Monday	7	241	102	103	129	197	521	1702	2476	2805	2434	2298	2450	2668	2641	2956	3470	3456	3328	2455	1662	1187	900	841	789	41811
Dec-15	Tuesday	8	325	172	166	156	199	536	1965	2724	2864	2697	2396	2478	2681	2702	3102	3266	3410	3348	2750	1719	1252	1001	837	492	43238
Dec-15	Wednesday	9	286	168	138	140	219	578	1972	2767	2961	2514	2469	2598	2715	2755	2935	3458	3469	3383	2690	1803	1317	1069	720	541	43665
Dec-15	Thursday	10	291	171	122	139	225	558	1949	2710	3154	2589	2473	2620	2756	2836	3003	3455	3346	3284	2766	1877	1472	1165	776	590	44327
Dec-15	Friday	11	327	188	157	149	238	551	1919	2705	3024	2485	2509	2954	3062	3078	1938	3098	3232	3284	2941	1954	1623	1381	1120	807	44724
Dec-15	Saturday	12	511	295	229	177	225	461	814	1240	1786	2081	2273	2475	2526	2617	2688	2646	2735	2519	2073	1647	1330	1331	1083	768	36530
Dec-15	Sunday	13	440	294	245	187	118	214	427	537	834	1355	1657	1669	1991	2249	2160	2171	2080	2109	1810	1409	1071	878	615	399	26919
Dec-15	Monday	14	221	127	108	135	200	592	1919	2797	3102	2375	2392	2495	2528	2620	3019	3492	2891	2892	2804	1614	1140	936	749	472	41620
Dec-15	Tuesday	15	245	175	142	171	190	571	2001	2824	3031	2671	2509	2672	2821	2949	2967	3265	3217	3354	2375	1821	1340	986	803	516	43616
Dec-15	Wednesday	16	289	179	157	117	218	534	1936	2829	2996	2694	2545	2798	2766	2939	3165	3416	3319	3348	2662	1813	1418	1104	792	569	44603
Dec-15	Thursday	17	272	182	138	170	204	582	1946	2702	2960	2602	2638	2856	2915	2853	3158	3217	3005	2985	2678	1827	1338	1151	916	599	43894
Dec-15	Friday	18	315	199	132	173	205	529	1798	2664	2997	2718	2723	2889	3125	3192	3540	3537	3339	3155	2761	1971	1535	1406	1206	874	46983
Dec-15	Saturday	19	510	332	285	203	206	312	761	1294	1645	2014	2374	2423	2945	2755	2833	2863	2733	2568	2267	1698	1286	1381	1131	707	37526
Dec-15	Sunday	20	487	370	266	150	127	203	434	534	781	1377	1748	1839	2246	2376	2340	2294	2095	2139	1798	1440	1210	932	690	484	28360
Dec-15	Monday	21	272	188	126	134	208	569	1795	2623	2817	2620	2647	2955	3121	3161	3239	3505	3581	3385	2567	1768	1323	1006	904	549	45063
Dec-15	Tuesday	22	335	206	152	150	207	530	1726	2568	2721	2543	2641	2920	3059	2971	3262	3396	3524	3165	2375	1686	1368	1121	1079	616	44321
Dec-15	Wednesday	23	377	200	153	145	220	488	1617	2449	2667	2651	2995	2998	3250	3247	3383	3374	3284	2993	2304	1859	1617	1290	1154	685	45400
Dec-15	Thursday	24	476	296	232	186	235	409	993	1512	1737	2076	2384	2686	2879	2698	2694	2320	2101	1989	1871	1463	1167	1001	822	575	34802
Dec-15	Friday	25	403	256	173	116	89	141	286	344	469	673	978	1174	1420	1511	1690	1619	1583	1547	1619	1277	1117	982	793	530	20790
Dec-15	Saturday	26	335	231	162	146	176	294	544	818	1134	1483	1884	2047	2332	2372	2511	2450	2335	2183	2027	1530	1248	1254	839	618	30953
Dec-15	Sunday	27	448	318	259	175	142	220	467	471	827	1339	1603	1766	1939	2073	2153	2090	2095	2107	1958	1291	1072	944	696	456	26909
Dec-15	Monday	28	398	188	150	154	222	536	1525	2322	2463	2361	2478	2602	2717	2690	2797	3171	3113	2952	2203	1468	1126	909	725	464	39734
Dec-15	Tuesday	29	339	206	150	136	210	518	1535	2409	2675	2468	2639	2761	2867	2820	3044	3094	3213	3197	2312	1636	1241	966	843	562	41841
Dec-15	Wednesday	30	322	187	127	136	223	520	1553	2466	2607	2461	2589	2927	2951	3030	3015	3190	3316	3320	2300	1669	1337	1078	892	569	42785
Dec-15	Thursday	31	374	247	135	172	203	469	1313	2106	2274	2341	2519	2787	3087	3026	3126	3004	2558	2191	1786	1357	1113	930	837	526	38481

30 Highest Hours of the year
100 Highest Hours of the year

AADT 39100

2.4.2 Station 46 Volume Data

TWO-WAY VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	412	226	215	241	505	1553	3365	3996	5108	5046	4199	3939	4067	4180	4751	5359	5630	6377	4687	2515	1756	1349	1026	680	71182
Jan-15 Friday	9	430	225	165	196	495	1419	4212	6956	5957	4329	3882	4330	4455	4559	5036	6362	6550	6532	4366	2634	1866	1556	1302	874	78688
Jan-15 Saturday	10	604	324	262	213	296	697	1402	2098	2444	2808	2975	3473	3835	3753	3716	3870	3736	3612	2965	2102	1471	1340	1245	824	50065
Jan-15 Sunday	11	512	295	234	140	210	468	793	997	1232	1807	2166	2580	2858	2935	2911	2911	2824	2667	2173	1568	1202	900	717	497	35597
Jan-15 Monday	12	247	166	140	190	514	1771	4410	6713	5963	4190	3720	3662	3961	3711	4360	5328	6085	6045	3821	2091	1542	1153	971	573	71327
Jan-15 Tuesday	13	412	234	175	225	518	1633	4459	6652	6312	4330	3811	4014	4032	4304	4663	5351	6199	6073	4496	2286	1647	1467	1281	618	75192
Jan-15 Wednesday	14	391	220	168	207	560	1697	4497	7212	6373	4341	3883	3908	3990	4250	4454	5264	6218	6241	4270	2365	1702	1373	1193	603	75380
Jan-15 Thursday	15	464	213	152	248	645	1663	4331	6992	6128	4476	4036	4253	4383	4316	4939	5988	6326	6732	4426	2529	1729	1592	1181	741	78483
Jan-15 Friday	16	488	215	166	273	536	1582	4060	6616	5741	4371	4220	4411	4651	4806	5489	6156	6385	6405	5273	2975	1898	1866	1433	1004	81020
Jan-15 Saturday	17	591	315	237	179	297	594	1347	1926	2727	2976	3243	3612	3796	3785	3719	3938	3848	3569	3049	2146	1570	1428	1157	970	51019
Jan-15 Sunday	18	567	303	267	162	233	442	784	932	1230	1803	2190	2603	2824	3043	3449	3045	2961	2672	2359	1741	1231	1025	930	630	37426
Jan-15 Monday	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	20	350	186	176	234	582	1765	4766	7073	6553	3991	3910	4012	4301	4308	4882	5783	6427	6621	4548	2461	1781	1461	1082	615	77868
Jan-15 Wednesday	21	355	187	187	213	516	1724	4600	7117	6441	4415	3842	3955	4112	4454	4870	5819	6581	6597	4682	2523	1850	1489	1095	667	78291
Jan-15 Thursday	22	390	226	185	258	603	1642	4407	6606	6073	4658	3865	4093	4339	4596	5055	5975	6709	7101	4780	2727	1906	1546	1431	1072	80243
Jan-15 Friday	23	436	246	197	234	532	1610	4428	6928	5981	4249	4133	4288	4886	4616	5221	5839	5972	5630	3843	2402	1593	1467	1366	874	76971
Jan-15 Saturday	24	613	293	253	179	305	582	1226	1593	2298	2742	3048	3374	3767	3772	3823	3673	3632	3544	3182	2192	1515	1429	1223	910	49168
Jan-15 Sunday	25	589	312	281	151	220	489	842	1063	1423	2237	2695	2948	3191	3425	3488	3601	3446	3162	2531	1816	1225	1036	726	578	41475
Jan-15 Monday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	28	359	215	184	210	522	1637	4501	6906	6510	4490	3862	4049	4061	4282	5008	5909	6327	6737	4774	2730	1793	1507	991	610	78174
Jan-15 Thursday	29	378	252	198	207	564	1617	4585	6994	6496	4624	3987	4159	4316	4540	5144	6042	6771	6962	4364	2630	1850	1568	1359	777	80384
Jan-15 Friday	30	415	229	170	245	553	1539	4386	6661	6326	4988	4356	4540	4751	4853	5376	6519	6528	6101	4673	2809	1914	1912	1684	1009	82537
Jan-15 Saturday	31	620	347	237	184	287	617	1390	1951	2682	2892	3222	3733	3933	3832	4155	4040	4006	3617	3110	2249	1735	1420	1197	856	52312
Feb-15 Sunday	1	541	344	219	157	213	442	744	1044	1279	1930	2313	2701	2842	3307	3116	3231	2982	2986	2063	1213	1170	996	1461	713	38007
Feb-15 Monday	2	312	198	150	216	533	1680	4431	6637	5928	4079	3660	3872	4069	4053	4571	5293	6011	6263	4346	2279	1579	1298	911	569	72938
Feb-15 Tuesday	3	379	254	201	221	580	1710	4747	7025	5677	5162	3796	4087	4026	4206	4843	5739	6327	6713	4845	2527	1802	1450	1109	669	78095
Feb-15 Wednesday	4	408	222	194	201	530	1719	4646	7104	6535	4419	3982	3862	4045	4273	4776	5916	5904	5846	4678	2847	1778	1411	1094	614	77004
Feb-15 Thursday	5	405	201	187	206	599	1673	3979	6713	6231	4552	3927	4156	4180	4405	4926	5541	5390	6084	4796	2673	1827	1418	1138	719	75926
Feb-15 Friday	6	479	237	156	227	566	1545	4365	6869	6262	4359	4117	4271	4737	4785	5417	6394	6634	5743	4715	3156	1985	1658	1669	926	81272
Feb-15 Saturday	7	580	302	217	182	334	632	1390	2195	2820	3245	3440	3820	4186	3989	4009	4020	4000	3779	3354	2374	1611	1537	1234	946	54196
Feb-15 Sunday	8	527	344	242	144	195	414	801	1065	1295	1974	2417	2894	3165	3517	3485	3385	3297	3046	2639	1884	1343	1006	790	548	40417
Feb-15 Monday	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	10	365	190	182	227	561	1709	4678	7130	6308	4672	4054	4204	4188	3755	4273	4959	6662	6653	4578	2560	1796	1451	1253	664	77072
Feb-15 Wednesday	11	400	182	158	221	581	1616	4697	6743	6291	4643	4024	4153	4251	4581	4969	5757	5382	6533	5314	2795	2071	1610	1347	674	78993
Feb-15 Thursday	12	414	203	167	240	599	1727	4702	7140	6265	4679	4199	4294	4187	4711	5010	6001	6718	6526	5074	2884	1914	1588	1469	752	81463
Feb-15 Friday	13	486	256	198	271	560	1492	4150	6764	5856	4544	4432	4556	4959	4874	5549	6378	6657	6382	4847	3024	2215	1882	1834	1095	83261
Feb-15 Saturday	14	631	354	261	179	286	544	1160	1883	2560	3030	3462	3641	3940	3888	3899	3892	3959	3657	3297	2342	1689	1437	1457	1320	52768
Feb-15 Sunday	15	604	388	272	161	239	372	730	1026	1375	2001	2498	3032	3288	3656	3518	3357	3347	3141	2563	1925	1474	1144	1013	653	41777
Feb-15 Monday	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Thursday	19	493	263	189	258	601	1585	4540	6861	6079	4488	4013	4204	4150	4538	5032	5969	6446	6490	4701	2604	2001	1369	1124	717	78715
Feb-15 Friday	20	414	246	190	231	557	1517	3996	6508	6086	4506	4416	4457	4586	4942	5482	5825	6051	6433	4629	3005	2035	1689	1330	926	80057
Feb-15 Saturday	21	621	318	217	177	303	588	1304	2219	2888	3343	3566	3895	4216	4017	4218	4205	4210	4067	3499	2412	1729	2130	1411	960	56513
Feb-15 Sunday	22	516	302	240	171	235	533	824	1244	1550	2247	2651	3099	3233	3578	3552	3642	3202	3114	2520	1878	1339	1016	800	558	42044
Feb-15 Monday	23	317	227	148	200	591	1663	4564	7068	6013	4345	3949	3848	4179	4070	4556	5527	6098	6491	3964	2260	1638	1216	962	605	74499
Feb-15 Tuesday	24	353	221	140	225	504	1367	3308	4925	4316	4037	3161	3011	3388	3305	3704	4179	4886	4916	3142	1812	1202	1208	842	505	58657
Feb-15 Wednesday	25	427	204	159	227	567	1655	4406	7232	6489	4407	4023	4079	4287	4309	5061	5951	4219	6010	5235	2605	1732	1273	1140	580	76277
Feb-15 Thursday	26	443	223	176	212	548	1593	4452	7158	6174	4464	4067	4114	4361	4512	4863	5601	6395	6629	4355	2673	1960	1416	1123	681	78193
Feb-15 Friday	27	558	282	238	256	534	1489	4375	6690	6648	4571	4265	4574	4809	4902	5531	6346	6324	6606	4572	3227	1971	1783	1342	1015	82908
Feb-15 Saturday	28	698	384	265	193	298	658	1271	2335	2951	3322	3567	3983	4197	4120	4268	4616	4493	3848	3095	2438	2013	1964	1422	904	57303
Mar-15 Sunday	1	513	333	243	164	230	446	722	1127	1409	2043	2414	2893	2877	3330	3305	3172	2837	2653	2171	1762	1340	1005	714	521	38224
Mar-15 Monday	2	312	178	151	209	605	1745	4555	7307	6266	4479	3902	3949	4103	4380	4937	5712	6386	6709	4553	2625	1708	1321	995	621	77708

Mar-15 Tuesday	3	435	261	165	278	625	1789	4625	7236	6462	4531	3819	3975	4527	4460	4844	5688	6636	6720	4392	2721	1796	1526	1035	680	79226
Mar-15 Wednesday	4	483	266	182	233	591	1694	4698	6900	6484	4903	3959	4389	4229	4674	5133	5954	5851	6263	4917	3274	2115	1585	1237	685	80699
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	555	260	184	261	538	1616	4310	6775	6199	4682	4379	4521	4837	4898	5670	6517	6847	6507	4453	2919	2139	1785	1621	1019	83492
Mar-15 Saturday	7	703	360	281	203	341	659	1620	2612	3371	3787	4117	4275	4523	4236	4430	4497	4350	3897	3306	2567	1821	1630	1323	994	59903
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	379	207	159	242	640	1815	4090	6914	6513	4555	4012	4172	4252	4433	5104	5731	6617	6745	4282	2885	2049	1411	1151	669	79027
Mar-15 Tuesday	10	451	264	209	259	607	1766	4544	6927	6571	4684	4105	4208	4407	4613	4820	6011	6629	6790	4865	2518	2416	1940	1263	908	81775
Mar-15 Wednesday	11	506	253	218	250	564	1739	4495	7040	6603	4842	4144	4491	4503	4770	5378	5939	6004	6529	5506	3223	2337	1843	1318	769	83264
Mar-15 Thursday	12	572	328	232	339	623	1785	4541	6957	6435	4868	4223	4537	4707	4775	5201	6094	6136	5418	5303	3261	2245	1668	1287	898	82433
Mar-15 Friday	13	584	282	254	272	603	1623	4287	6861	6444	4655	4348	4883	4914	4964	5751	6438	6584	6387	4382	3217	2164	1740	1528	1063	84228
Mar-15 Saturday	14	719	390	336	210	357	649	1206	1909	2722	3085	3343	3859	4046	4168	4180	4157	3914	3658	3051	2539	1985	1704	1407	1106	54700
Mar-15 Sunday	15	630	355	228	178	267	540	828	1170	1630	2249	2759	3379	3587	3772	3787	3926	3628	3376	2900	2319	1885	1353	933	610	46289
Mar-15 Monday	16	357	232	162	219	626	1829	4586	6922	6276	4835	4232	4145	4477	4632	4948	5822	6385	6639	4828	2886	2025	1486	1164	645	80358
Mar-15 Tuesday	17	460	251	165	264	603	1748	4611	6904	6603	4954	4260	4305	4469	4534	4997	5896	6375	5947	4953	3149	2128	1573	1105	703	80957
Mar-15 Wednesday	18	514	283	200	258	589	1764	4583	7021	6583	4767	4101	4286	4562	4658	5064	6080	6680	6916	4800	3207	2125	1631	1173	751	82596
Mar-15 Thursday	19	489	242	155	248	558	1711	4499	6653	6069	5410	4172	4385	4388	4703	4988	5534	6449	6576	4345	2719	1985	1780	1350	720	80128
Mar-15 Friday	20	605	270	200	279	607	1634	4426	6997	6161	4816	4349	4758	5146	5091	5662	6360	6089	6372	4719	3245	2488	2040	1631	1162	85107
Mar-15 Saturday	21	819	395	248	225	402	712	1315	2559	3257	3525	3755	3895	4137	4323	4274	4019	4062	3897	3391	2787	2046	2128	1693	1116	58980
Mar-15 Sunday	22	616	377	298	177	328	517	753	1099	1476	2203	2642	3070	3311	3581	3454	3280	3145	2866	2543	1947	1442	1167	931	643	41866
Mar-15 Monday	23	379	183	154	231	661	1804	4480	7095	6363	4434	4106	4303	4080	4094	4714	5715	6233	6556	4152	2363	1891	1382	1070	684	77127
Mar-15 Tuesday	24	445	240	175	259	613	1824	4692	7457	6691	4664	4068	4246	4436	4668	5122	6072	6661	6830	5042	3027	2052	1675	1190	764	82913
Mar-15 Wednesday	25	481	244	201	281	619	1813	4651	7412	6747	4943	4347	4276	4556	4588	5171	6215	6602	6867	4776	3173	2212	1944	1263	697	84079
Mar-15 Thursday	26	538	247	203	265	645	1666	4667	7165	6634	4816	4355	4670	4775	5008	5406	6222	6745	6892	5139	3369	2279	1791	1563	852	85912
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	758	339	254	231	549	1076	2395	4294	4780	5301	5981	4839	4566	4310	4282	4207	4047	3735	3103	2643	1957	1717	1366	1015	67745
Mar-15 Sunday	29	583	362	297	171	315	496	842	1239	1661	2465	2943	3352	3457	3687	3617	3509	3470	2945	2571	2176	1703	1273	966	625	44725
Mar-15 Monday	30	464	254	148	236	697	1571	4082	6475	5943	4631	4221	4433	4719	4648	4906	5663	6392	6289	4387	2816	1978	1529	1160	770	78412
Mar-15 Tuesday	31	465	299	194	284	683	1617	4126	6555	6224	4635	4388	4648	4526	4500	5154	5842	6679	6733	4532	3080	2109	1655	1301	825	81054
Apr-15 Wednesday	1	545	304	239	270	654	1593	4212	6264	5978	4720	4435	4560	4599	4438	5066	5988	5764	6787	4513	3118	2264	1791	1338	829	80269
Apr-15 Thursday	2	570	288	240	308	665	1582	4167	6383	5507	4838	4557	4616	4772	5037	5293	6054	6666	6756	4599	3296	2413	1898	1477	951	82933
Apr-15 Friday	3	639	286	238	264	619	1323	3323	5382	4998	4609	4946	4958	5476	5319	5720	6173	5884	5238	4412	3243	2330	1953	1716	1107	80156
Apr-15 Saturday	4	647	466	272	224	338	647	1178	2049	2604	3131	3532	3632	3740	3963	3885	3800	3965	3704	3262	2674	2138	1950	1424	1116	54341
Apr-15 Sunday	5	624	306	270	129	206	534	768	1182	1569	2146	2638	2888	3050	3349	3261	3408	3454	3378	2947	2531	1877	1364	891	617	43387
Apr-15 Monday	6	437	250	185	255	663	1746	4410	7517	6222	4807	4308	4402	4715	4666	5170	6138	6655	6900	4672	3123	2152	1577	1085	728	82783
Apr-15 Tuesday	7	512	252	173	242	730	1775	4798	7554	6789	4921	4510	4281	4458	4651	5261	6061	6854	5859	5724	3399	2307	1873	1350	917	85251
Apr-15 Wednesday	8	501	256	205	242	630	1743	4630	7161	6484	4720	2993	2849	4130	4961	5182	6271	6632	7054	5596	3485	2605	2019	1723	842	82914
Apr-15 Thursday	9	594	267	178	277	680	1804	4723	7337	6701	5202	4924	4994	4623	4949	5456	6079	6475	6697	5519	3585	2636	2027	1694	927	88348
Apr-15 Friday	10	642	310	248	292	683	1622	4445	7100	6337	5165	4879	5165	5364	5162	5838	5167	6104	6434	4886	3584	2531	2087	1612	1329	86986
Apr-15 Saturday	11	817	418	316	234	374	712	1490	2499	3207	3715	4055	4173	4456	4138	4137	4195	4240	4127	3247	2466	1988	1863	1659	1111	59637
Apr-15 Sunday	12	611	410	306	208	298	605	922	1359	1861	2675	3227	3434	3533	3688	3691	4110	3948	3109	2549	2110	1636	1200	880	663	47033
Apr-15 Monday	13	355	217	145	290	737	1773	4367	6957	6736	4792	4169	4106	4203	4438	4984	6006	6583	6289	4650	2772	1963	1429	1018	650	79629
Apr-15 Tuesday	14	456	223	153	257	736	1777	4773	7375	6632	4688	4033	4168	4252	4387	4972	5914	6612	6711	4490	2975	2301	1631	1239	802	81557
Apr-15 Wednesday	15	539	274	215	282	646	1716	4633	6754	6766	4843	4044	4129	4354	4548	4971	6155	6432	6487	4864	2812	1850	1478	1166	733	80691
Apr-15 Thursday	16	511	266	197	246	694	1686	4655	7534	6803	4740	4364	4367	4474	4643	5267	6463	6628	6818	4667	3034	2233	1693	1225	789	83997
Apr-15 Friday	17	570	308	241	315	710	1544	4349	6713	6449	4865	4358	4662	5097	5119	5586	6460	6475	6393	4421	3063	2163	1858	1646	1097	84462
Apr-15 Saturday	18	689	380	260	225	476	718	1338	2229	2814	3368	3489	3941	4026	4105	4047	4277	4009	3793	3223	2478	2183	2145	1549	1087	56849
Apr-15 Sunday	19	636	355	305	193	315	528	852	1233	1542	2256	2787	3021	3200	3404	3484	3543	3147	2882	2432	1789	1369	1036	835	551	41695
Apr-15 Monday	20	393	198	170	255	753	1734	4615	7340	5587	5295	4169	4214	4057	4380	4843	5716	6773	6938	4224	2712	1815	1470	1041	639	79331
Apr-15 Tuesday	21	460	289	179	253	701	1894	4883	7476	6224	5070	4147	4184	4319	4750	5067	6072	6607	6775	5159	3038	2260	1687	1161	702	83357
Apr-15 Wednesday	22	451	282	230	291	695	1906	4742	7039	6657	4997	4220	4318	4656	4725	5357	6296	6522	6702	5783	3397	2466	1782	1240	949	85703
Apr-15 Thursday	23	540	280	227	275	683	1864	4770	7260	6536	4795	4269	4608	4572	4861	5250	6417	2978	2997	6216	3526	2428	1842	1361	803	79358
Apr-15 Friday	24	594	285	238	273	665	1738	4441	6784	6487	4776	4331	4869	5094	5134	5617	6711	6215	6457	4280	3518	2492	1984	1555	1160	85698
Apr-15 Saturday	25	783	370	266	213	425	727	1461	2364	3114	3373	3640	4074	3934	3780	3782	3747	3697	3269	2819	2465	1800	1644	1327	918	53992
Apr-15 Sunday	26	584	339	230	168	323	646	992	1389	1816	2752	3205	3533	3711	4142	4007	4308	3961	3671	3113	2667	1932	1475	972	684	50620
Apr-15 Monday	27	402	219	150	227	665	1872	4755	7373	6526	4593	4194	4139	4396	4488	4952	5966	6480	6529	4851	2832	2113	1517	1094	662	80995
Apr-15 Tuesday	28	442	196	214	259	680	1804	4979	7498	6558	4690	4096	4255	4395	4472	4992	6156	6361	5787	5314	3361	2269	1673	1305	693	82449
Apr-15 Wednesday	29	525	236	205	275	657	1723	4291	6696	6029	4735	4130	4080	4083	4051	4009	5370	6021	6220	4271	2627	1808	1547	1150	609	75348
Apr-15 Thursday	30	535	240	180	293	648	1699	4663	6328	5967	5422	4402	4337	4987	4786	5812	6521	6648	6675	4887	3258	2550	1907	1439	906	85090
May-15 Friday	1	587	334	238	309	683	1622	4549	6402	5290	4200	4552	4755	4984	5101	5372	6494	6767	6364	4659	3202	2354	2070	1652	1210	83750
May-15 Saturday	2	841	426	337	213	388	693	1584	2665	3079	3448	3843	3923	4160	4099	4336	4167	4247	3794	3260	2617	2284	1800	1471	1050	58725
May-15 Sunday	3	519	921	388	219	345	565	888	1313	1678	2501	2981	3395	3507	3772	3850	3778	3914	3718	3198	2583	1897	1415	1100	1212	49657
May-15 Monday	4	468	248	184	249	677	1762	4656	7206	6456	3499	3013	4177	4106	4293	4925	5900	6202	6895	4593	2826	2153	1532	1169	723	77912
May-15 Tuesday	5	475	257	218	264	687	1825	4665	6773	6381	5164	4474	4278	4477	4544	5062	6172	6213	6952	5036	3112	2194	1772	1267	978	83240

May-15	Wednesday	6	529	298	248	274	632	1717	4805	6953	6147	5244	4383	4529	4475	4964	5284	5522	6065	6746	5562	3232	2395	1791	1372	921	84088
May-15	Thursday	7	571	273	208	279	708	1684	4767	7320	6637	4758	4728	4893	4408	4689	4668	6017	6450	6361	4067	2576	2069	1571	1220	785	81707
May-15	Friday	8	565	307	237	278	628	1572	4476	6931	6316	4779	4594	4743	5068	5214	5682	6282	6488	6061	4109	2937	2244	1800	1608	1212	84131
May-15	Saturday	9	771	402	324	226	351	703	1462	2767	3108	3595	3979	3941	4025	4049	3902	4072	3974	3614	3134	2547	1962	2040	1458	967	57373
May-15	Sunday	10	598	344	264	200	278	516	777	1133	1467	2320	2668	2910	3085	3450	3433	3478	3297	3065	2754	2289	1921	1488	1075	723	43533
May-15	Monday	11	433	197	159	257	703	1838	4798	7193	6244	4838	4197	4610	4552	4718	5140	5789	6130	6692	4464	2710	1988	1499	1195	698	81042
May-15	Tuesday	12	451	272	211	276	751	1717	4941	7274	6495	4937	4328	4468	4439	4818	5285	6226	6585	6031	5280	3223	2273	1678	1304	773	84036
May-15	Wednesday	13	504	241	216	291	694	1780	4983	7231	6759	4860	4488	4374	4600	4733	5284	6142	6544	6206	4649	3784	2317	1858	1370	852	84760
May-15	Thursday	14	503	304	210	267	728	1722	4818	7125	6391	4966	4405	4413	4642	4818	5297	6366	6470	6891	4917	3221	2441	1832	1536	866	85149
May-15	Friday	15	610	359	227	303	702	1591	4638	6997	6351	4781	4647	4779	5015	5115	5592	6562	6466	6269	4444	3319	2530	2074	1663	1243	86277
May-15	Saturday	16	762	428	304	274	389	643	1508	2702	3538	3924	4175	4180	4063	4266	4197	4521	4565	4177	3624	3120	2339	1966	1834	1827	63326
May-15	Sunday	17	675	391	367	217	329	572	886	1426	2002	2721	3365	3413	3669	3843	3824	3938	3954	3343	2955	2391	1908	1499	1124	705	49517
May-15	Monday	18	486	218	174	271	775	1807	4752	7348	6650	4699	4303	4501	4515	4663	5127	6181	6428	6365	4888	2934	2185	1483	1127	735	82615
May-15	Tuesday	19	529	294	187	281	725	1774	5030	7124	6755	5020	4338	4493	4460	4879	5193	5991	6695	6839	5006	3210	2207	1663	1305	1031	85029
May-15	Wednesday	20	587	273	234	276	672	1647	5032	7274	6664	5089	4449	4638	4716	4534	4705	3876	5767	6687	4949	2822	2023	1807	1315	808	80844
May-15	Thursday	21	578	332	220	263	769	1745	4767	7269	6274	5031	4614	4680	4856	4883	5318	6273	6845	6743	4882	3406	2499	1894	1520	902	86563
May-15	Friday	22	672	320	277	314	669	1558	4610	6970	6046	4660	4780	4902	5387	5452	6074	6646	6712	5648	4448	3432	2525	2225	1882	1302	87511
May-15	Saturday	23	863	403	307	244	348	648	1327	2288	3233	3834	4184	4128	4138	4248	4159	4218	4268	4058	3552	3012	2279	2388	1785	1204	61116
May-15	Sunday	24	771	400	336	242	244	506	785	1180	1703	2604	3120	3150	3197	3429	3507	3549	3383	3261	2921	2424	1959	1544	1350	962	46527
May-15	Monday	25	617	358	236	216	330	757	1286	1685	2219	2909	3517	3691	3655	3763	3910	3893	3615	3338	2971	2465	1961	1569	1035	652	50648
May-15	Tuesday	26	359	218	179	262	772	1787	4983	7293	6735	5173	4621	5228	5544	6690	6284	6362	6031	5664	6784	6868	4853	1771	1298	801	96560
May-15	Wednesday	27	552	280	202	274	689	1781	4923	7356	6700	5074	4725	4511	4631	4922	5592	6344	6703	6840	5094	3283	2259	1897	1336	726	86694
May-15	Thursday	28	542	309	222	301	672	1779	4755	7214	6657	5014	4563	4572	4674	4956	5428	6277	6580	6750	5211	3425	2436	1867	1524	932	86660
May-15	Friday	29	629	337	271	342	671	1634	4676	6935	6192	4892	4681	5096	5176	5343	5790	6373	6202	6515	4493	3267	2326	2088	1772	1172	86873
May-15	Saturday	30	847	374	331	273	415	743	1685	2583	3360	3988	4076	4306	4176	4145	4245	4410	4268	4021	3626	2994	2010	2315	1727	1156	62074
May-15	Sunday	31	707	400	315	231	305	575	943	1282	1776	2476	2973	3306	3489	3683	3753	3676	3779	3474	2826	2408	1909	1518	1195	777	47776
Jun-15	Monday	1	432	255	194	273	694	1761	4843	7304	6348	4729	4432	4452	4560	4541	4978	5849	6895	6817	4554	2830	2036	1650	1209	718	82354
Jun-15	Tuesday	2	497	257	204	284	681	1736	4894	7490	6578	5025	4605	4578	4717	4879	5247	5980	6836	6740	4500	2963	2124	1588	1230	803	84436
Jun-15	Wednesday	3	629	309	217	266	659	1576	4405	6565	6177	4854	4315	4293	4384	4617	4887	5643	6502	6867	4282	2863	2271	1858	1297	798	80534
Jun-15	Thursday	4	556	332	215	274	636	1664	4965	6728	6189	4688	4375	4714	5032	5530	5697	6038	6125	5974	6122	3377	2367	1962	1551	869	85980
Jun-15	Friday	5	721	319	230	311	657	1579	4431	6859	6076	4833	4426	5032	5453	5519	5095	5276	6172	6135	4465	3322	2456	2018	1756	1225	84366
Jun-15	Saturday	6	808	322	429	283	418	751	1608	2668	3377	3925	4135	4086	4442	4113	4311	4381	4427	4078	3654	2840	2253	1930	1954	1764	62957
Jun-15	Sunday	7	758	483	312	211	320	587	991	1359	1729	2465	2984	3311	3507	3715	3777	3713	3675	3495	3233	2392	1829	1648	1302	1112	48908
Jun-15	Monday	8	558	304	191	273	690	1701	4643	7046	6221	4888	4450	4413	4627	4863	4896	5819	6578	6596	4573	2932	2121	1664	1191	732	81970
Jun-15	Tuesday	9	481	269	204	304	734	1716	4867	7465	6507	4847	4392	4598	4714	4969	4959	5814	4842	4900	4475	3635	1801	1379	1123	818	79813
Jun-15	Wednesday	10	585	315	237	260	727	1793	4670	6927	6438	4798	4469	4579	4858	4971	5273	6093	6605	6481	5219	3300	2170	2168	1623	949	85508
Jun-15	Thursday	11	639	289	246	285	740	1725	4625	7220	6431	5124	4748	4780	4721	4959	5394	6051	5990	6396	5216	3264	2459	1947	1462	919	85630
Jun-15	Friday	12	624	331	241	276	706	1622	4338	6537	5786	3748	4820	5247	5238	5452	6012	6283	6495	5901	4279	3265	2252	1949	1638	1170	84210
Jun-15	Saturday	13	773	424	362	268	450	774	1714	2724	3419	3979	3343	4749	4232	4338	4340	4303	4125	3978	3471	2743	2094	1934	1586	1181	61304
Jun-15	Sunday	14	701	441	362	219	350	636	1008	1400	1851	2562	3056	3335	3377	3714	3551	3608	3588	3343	2987	2349	1879	1562	1106	783	47768
Jun-15	Monday	15	506	245	216	282	761	1873	4677	6867	6508	4776	4153	4363	4880	4706	3821	5211	6352	6520	4578	2849	2214	1614	1232	785	79989
Jun-15	Tuesday	16	534	285	232	275	702	1716	4754	7325	6419	4904	4283	4528	4703	4870	5177	5855	6578	6861	4523	3041	2318	1912	1401	817	84013
Jun-15	Wednesday	17	634	269	234	256	710	1791	4716	7085	6562	4906	4401	4594	4880	4852	5119	5509	5940	6791	5090	3456	2351	1929	1880	842	84797
Jun-15	Thursday	18	644	285	231	272	635	1846	4563	6999	6529	4992	4491	4585	4786	4915	5289	5998	6634	6066	4165	3642	2351	2008	1558	925	84409
Jun-15	Friday	19	612	385	274	322	667	1739	4431	6723	6093	4985	4600	4667	5194	5224	5620	6230	6572	5955	4082	3099	2279	1910	1651	1181	84495
Jun-15	Saturday	20	882	507	345	286	477	797	1548	2557	3342	3834	4093	4001	4235	4285	4066	4341	4193	3938	3155	2620	2152	2009	1605	1136	60404
Jun-15	Sunday	21	771	411	343	254	333	493	903	1244	1643	2374	2792	3096	3063	3338	3400	3553	3498	3252	3138	2510	2271	2038	1329	850	46897
Jun-15	Monday	22	485	276	223	262	701	1889	4559	7043	5437	4429	4358	4421	4703	4752	5015	5588	6717	6263	4702	2725	1828	1496	1179	690	79741
Jun-15	Tuesday	23	500	283	205	294	684	1830	4640	7020	6704	4972	4454	4633	4745	4982	5395	5868	6852	6598	4669	3159	2173	1864	1358	764	84646
Jun-15	Wednesday	24	601	282	262	265	664	1837	4654	7071	6603	5120	4528	4731	4826	4936	5359	6265	6690	6562	5019	2948	2280	1830	1389	889	85611
Jun-15	Thursday	25	643	291	268	280	635	1789	4603	7036	6694	5131	4677	4593	4928	5158	5250	5969	6812	6779	4814	3251	2321	1833	1450	900	86105
Jun-15	Friday	26	683	366	258	355	702	1730	4370	6614	6300	5098	4902	5063	5452	5435	5569	6526	6244	5549	4159	3175	2281	2028	1538	1159	85556
Jun-15	Saturday	27	850	457	313	285	518	727	1505	2540	3261	3718	4066	4210	4254	4318	4447	4266	4170	3856	3563	2850	2137	2235	2254	1324	62124
Jun-15	Sunday	28	782	475	308	229	330	584	811	1202	1673	2422	2883	3124	3297	3593	3446	3613	3555	3151	2827	2100	1528	1352	1069	709	45063
Jun-15	Monday	29	508	237	233	283	759	1855	4408	6957	6237	4850	4234	4186	4826	4745	4875	4433	6144	6346	4892	3023	2084	1576	1242	795	79728
Jun-15	Tuesday	30	585	307	217	278	688	1861	4620	6850	6586	4971	4631	4585	4678	4991	5117	5698	6750	6147	5188	3401	1930	1646	1345	879	83949
Jul-15	Wednesday	1	578	268	219	324	672	1848	4485	7012	6523	5091	4573	4725	4901	4991	5547	6138	6686	7131	4830	3252	2438	1820	1698	832	86582
Jul-15	Thursday	2	667	305	245	287	639	1692	4379	6523	6069	4854	4516	4738	5035	5404	5902	6359	7039	6357	4489	3247	2642	2166	1742	1252	86548
Jul-15	Friday	3	918	381	269	245	501	943	2223	3241	3604	3913	4150	4452	4524	4469	4238	4692	4024	3687	3308	2610	2157	2101	1835	1156	63641
Jul-15	Saturday	4	735	405	300	226	301	519	1025	1432	1943	2732	2943	2987	3005	3016	3137	3232	2948	2613	2371	2118	2009	1544	1896	1381	44818
Jul-15	Sunday	5	665	407	307	199	306	529	855	1156	1633	2365	2901	3169	3398	3554	3564	3464	3516	3130	2773	2183	1589	1547	1117	756	45083
Jul-15	Monday	6	487	314	171	250	740	1645	4150	6501	5902	4700	4215	4455	4467	4786	4578	5610	6273	6604	4385	2668	2060	1681	1142	748	78532
Jul-15	Tuesday	7	505	297	210	267	683	1870	4385	7114	5311	4699	4482	4584	4711	4751	4861	5512	6597	6731	4320	2837	2041	1688	1433	864	80753
Jul-15	Wednesday	8	523	255	205	274	659	1846	4420	6975	6346	5030	4346	4472	4805	4643	5142	5694	6418	6931	4393	3067	2287	1791	1466	870	82858

Jul-15	Thursday	9	568	310	239	302	633	1791	3805	7051	6504	5063	4662	4572	4387	4929	5320	5963	5773	6212	4941	3178	2341	1951	1531	999	83025
Jul-15	Friday	10	623	335	276	310	676	1632	4188	6601	6076	4801	4552	4877	5285	5159	5717	6181	5730	6346	4243	3145	2326	2043	1575	1241	83938
Jul-15	Saturday	11	834	451	315	252	402	821	1440	2579	3088	3932	4200	4205	4079	4057	4213	4289	4354	3785	3244	2621	2042	1842	1615	1106	59766
Jul-15	Sunday	12	694	435	304	227	294	528	886	1287	1619	2317	2757	3159	3233	3520	3491	3623	3507	3121	2797	2184	1819	1599	1211	781	45393
Jul-15	Monday	13	503	282	200	285	740	1775	4454	7009	6274	4887	4376	4319	4566	4952	4946	5549	6257	6819	4379	2803	2040	1442	1194	706	80757
Jul-15	Tuesday	14	559	262	239	264	692	1829	4305	6374	6581	5212	4346	4505	4714	4615	5162	5917	6451	6797	4793	3166	2142	1591	1262	822	82600
Jul-15	Wednesday	15	571	269	241	286	711	1759	4443	7267	6680	4906	4393	4622	4655	5157	5263	6034	6405	6341	5000	3051	2276	1811	1469	864	84474
Jul-15	Thursday	16	623	260	252	257	655	1785	4298	7094	6656	4973	4590	4688	4716	4985	5324	5805	6491	6516	4948	3165	2277	1805	1463	930	84556
Jul-15	Friday	17	674	289	250	300	660	1605	4170	6608	6145	4860	4566	4768	5307	5354	5691	5761	5955	6202	4787	3167	2362	2418	1905	1262	85066
Jul-15	Saturday	18	818	469	347	263	397	758	1471	2413	3372	3830	4152	4086	4064	4078	4246	4414	4457	4099	3481	2714	2216	2145	1561	1141	60992
Jul-15	Sunday	19	759	498	350	250	317	510	851	1205	1636	2338	2781	3192	3319	3581	3642	3549	3480	3119	2805	2091	1661	1443	1115	731	45223
Jul-15	Monday	20	564	261	182	256	700	1813	4552	7035	6248	4786	4503	4398	4456	4547	5083	5691	5803	6497	5015	2925	2076	1642	1283	820	81136
Jul-15	Tuesday	21	527	247	203	287	679	1784	4525	7059	6585	5218	4484	4271	4504	4811	5172	5596	5767	6819	4655	2966	2210	1673	1359	788	82189
Jul-15	Wednesday	22	559	263	230	272	671	1779	4456	6945	6759	4023	4666	4529	4559	4977	5271	5811	6388	6674	4794	3113	2178	1848	1439	817	83021
Jul-15	Thursday	23	605	321	230	293	685	1762	4401	6402	6898	5055	4612	4642	4652	4817	5426	5909	6172	5856	5216	3182	2210	1787	1395	947	83475
Jul-15	Friday	24	613	288	263	293	639	1642	4039	6390	6134	4873	4700	4873	5301	5368	5562	5913	6551	5716	4256	3033	2262	1856	1529	1128	83222
Jul-15	Saturday	25	744	397	310	204	395	713	1315	2442	3277	3828	4166	4240	4234	4188	4243	4309	4219	3917	3517	2635	2245	1952	1434	1273	60197
Jul-15	Sunday	26	768	470	354	238	312	518	847	1176	1687	2495	2781	3194	3225	3488	3647	3677	3625	3337	2876	2323	1834	1587	1220	712	46391
Jul-15	Monday	27	506	242	209	252	691	1809	4369	6831	6413	4655	4272	4275	4687	4736	5122	5484	6197	6443	4836	2780	2030	1498	1243	749	80329
Jul-15	Tuesday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-15	Wednesday	29	557	263	223	288	678	1808	4451	7049	6577	4762	4493	4586	4535	4896	5353	5896	6406	6444	5075	3058	2410	1745	1332	881	83766
Jul-15	Thursday	30	641	261	245	277	663	1724	4428	6853	6351	5173	4809	4746	4865	5085	5317	5705	5488	6286	4933	3330	2369	1893	1441	867	83750
Jul-15	Friday	31	659	314	236	303	679	1643	4125	6098	5918	4992	4713	5030	5188	5266	5653	6251	6387	5929	4392	3149	2283	1809	1555	1257	83829
Aug-15	Saturday	1	807	444	359	292	412	679	1499	2403	3103	3573	3892	3939	4292	3876	4020	4175	4156	3840	3594	2803	2186	2154	1952	1259	59709
Aug-15	Sunday	2	799	486	354	205	356	506	830	1186	1569	2338	2741	3114	3176	3526	3420	3364	3225	3015	2687	2154	1727	1354	1044	726	43902
Aug-15	Monday	3	493	235	186	269	664	1811	4307	5503	4022	4974	4476	4330	4614	4890	5048	5760	6268	6373	4875	2694	2060	1536	1231	792	77411
Aug-15	Tuesday	4	508	265	192	268	649	1803	4345	6973	6266	4985	4377	4344	4738	4920	4981	5640	6501	6152	5316	3103	2134	1692	1385	839	82376
Aug-15	Wednesday	5	598	310	243	286	685	1731	4413	7193	6508	3498	5006	4573	4857	5039	5464	6036	6166	6801	5698	3489	2411	1845	1736	1695	86281
Aug-15	Thursday	6	690	346	240	274	615	1758	4429	6792	6606	5119	4703	4662	4912	4918	5182	4956	5051	6090	4632	2875	2162	1657	1351	838	80858
Aug-15	Friday	7	585	303	226	307	621	1677	4030	6683	6138	4817	4837	4832	5309	5314	5789	6356	6663	6015	4889	3285	2377	2024	1904	1932	86913
Aug-15	Saturday	8	920	468	330	243	372	740	1407	2463	3127	3596	4244	4257	4150	4306	4371	4662	4595	4313	3671	2892	2268	1983	1912	1829	63119
Aug-15	Sunday	9	882	546	329	263	294	549	868	1223	1599	2479	2927	3369	3353	3607	3640	3719	3712	3370	3058	2406	1970	1612	1239	758	47772
Aug-15	Monday	10	514	282	173	274	665	1818	4316	7004	6331	4848	4447	4389	4644	4803	5344	5856	6642	6419	4762	2970	2240	1637	1236	741	82355
Aug-15	Tuesday	11	468	301	219	313	660	1870	4465	7346	5918	4383	4320	4424	4721	4854	5276	4842	4850	6745	5424	3133	2278	1671	1333	832	80646
Aug-15	Wednesday	12	556	276	211	243	607	1899	4533	7140	6511	4809	4405	4440	4596	4882	5260	6127	6971	6971	5051	3312	2273	1830	1592	1427	85922
Aug-15	Thursday	13	725	351	271	264	650	1821	4379	7217	6492	4743	4475	4479	4808	5010	5421	6045	6813	6686	4678	3200	2398	1834	1504	998	85262
Aug-15	Friday	14	642	300	226	305	631	1671	4043	6607	6327	4958	4666	5001	5495	5358	5963	6258	6680	5939	4615	3233	2377	1914	1601	1250	86060
Aug-15	Saturday	15	784	431	320	235	402	774	1424	2469	3140	3718	3988	4161	4240	5097	4680	4328	4386	3935	3640	2792	2295	2222	1668	1215	62344
Aug-15	Sunday	16	722	416	328	227	292	559	859	1153	1643	2353	2732	3159	3311	3485	3451	3606	3396	3135	2885	2294	1794	1371	1018	700	44889
Aug-15	Monday	17	461	248	188	265	619	1815	4734	7058	6525	4683	3977	4311	4378	4763	5013	5742	6395	6617	4326	2677	1925	1359	1094	738	79911
Aug-15	Tuesday	18	483	270	210	291	672	1904	4827	7450	6422	4584	4261	4302	4422	4652	5139	5423	6032	6421	4641	2637	1800	1330	1089	746	80008
Aug-15	Wednesday	19	551	263	197	275	609	1852	4819	7027	6785	4956	4252	4429	4360	4740	5440	6116	6280	4845	5101	2839	1916	1466	1216	729	81063
Aug-15	Thursday	20	570	258	198	245	578	1839	4735	7317	6680	4516	4277	4183	4266	4666	5332	5529	5654	6091	5128	2834	2087	1561	1369	754	80667
Aug-15	Friday	21	595	275	276	304	558	1702	4511	7013	4985	4950	4340	4624	5118	5296	5700	6241	6687	5705	4753	3021	2159	1727	1582	1078	83200
Aug-15	Saturday	22	734	394	292	226	386	663	1429	2477	3042	3532	3762	4045	4187	4223	4152	4015	3996	3671	3253	2452	2021	1600	1359	1340	57251
Aug-15	Sunday	23	709	369	286	184	234	529	813	1182	1540	2299	2679	3092	3161	3377	3443	3405	3304	3124	2836	2064	1654	1241	964	628	43117
Aug-15	Monday	24	391	194	166	241	638	1897	4824	7232	6634	4522	4232	4184	4575	4554	4827	5684	5653	6570	4584	2837	2116	1385	1100	685	79725
Aug-15	Tuesday	25	459	213	220	286	643	1880	5003	7399	6732	5045	4148	4112	4568	4547	5146	6035	6596	6716	4623	2945	2090	1497	1237	755	82895
Aug-15	Wednesday	26	506	237	237	327	617	1866	4785	7194	7017	4633	4232	4183	4499	4561	5318	6074	6627	6657	4911	3166	2180	1614	1269	745	83455
Aug-15	Thursday	27	518	257	221	236	609	1834	4810	7338	6837	4728	4198	4528	4737	4663	5207	5976	6324	6645	4528	3293	2160	1591	1311	755	83304
Aug-15	Friday	28	538	287	254	277	576	1618	4644	6936	6509	4702	4427	4703	5142	4870	5816	6435	6309	5779	4792	3228	2267	1769	1777	1119	84774
Aug-15	Saturday	29	829	407	302	253	363	724	1426	2298	2968	3482	3773	3903	4070	4296	4100	4016	3954	3460	3098	2470	2014	1712	1400	1012	56330
Aug-15	Sunday	30	607	365	289	199	240	529	792	1001	1404	2070	2587	2903	3153	3292	3237	3265	2916	2686	2252	1822	1351	1083	864	569	39476
Aug-15	Monday	31	337	176	158	258	646	1727	3853	5369	5182	3544	4041	3970	3996	4098	4519	5421	5802	6056	4098	2567	1832	1389	1013	669	70721
Sep-15	Tuesday	1	405	261	202	251	648	1849	4810	7122	6752	4812	4175	4390	4637	4609	5199	6110	6118	6123	5266	3027	2010	1448	1214	695	82133
Sep-15	Wednesday	2	419	247	208	270	559	1809	4785	7296	6649	4967	4206	4305	4512	4712	5161	5980	6463	6821	4806	3048	2327	1693	1272	822	83337
Sep-15	Thursday	3	540	290	265	299	616	1915	4830	7324	6881	4874	4512	4590	4697	4850	5346	6259	6685	6205	4726	3231	2210	1504	1689	886	85224
Sep-15	Friday	4	575	331	240	279	606	1661	4443	6855	6233	4722	4552	4766	5353	5615	6007	6069	5156	5961	4545	3384	2380	2124	2081	1171	85109
Sep-15	Saturday	5	792	470	347	244	314	654	1244	2208	2869	3194	3752	3752	3985	3893	4007	3812	3759	3482	2882	2334	1887	1621	1322	1013	53837
Sep-15	Sunday	6	688	367	337	193	232	411	701	1065	1376	2021	2458	2830	2956	3199	3326	3181	3147	2855	2538	1954	1535	1413	1088	822	40693
Sep-15	Monday	7	498	322	220	204	318	599	1063	1500	1850	2336	2995	3383	3561	3592	3575	3779	3370	3033	2704	2278	1710	1382	987	618	45877
Sep-15	Tuesday	8	349	172	142	237	677	1968	4779	7537	6891	4794	4366	4346	4518	4642	5041	5968	6766	6697	4695	3075	2024	1524	1178	630	83016
Sep-15	Wednesday	9	435	211	188	274	656	1873	4804	7259	6917	5134	4327	4400	4615	4604	5313	6058	6584	6882	4527	3123	2338	1706	1266	758	84252
Sep-15	Thursday	10	440	249	201	272	651	1851	4531	4818	6551	5564	4492	4459	4856	4719	5389	5000	6536	7002	5480	3355	2683	1655	1336	738	82828

Sep-15	Friday	11	510	256	267	256	620	1835	4507	6890	6491	4965	4524	4834	5155	5238	5804	6529	6542	6039	5024	3197	2280	1748	1561	1150	86222
Sep-15	Saturday	12	632	365	352	213	383	887	1769	2710	3109	3328	3644	3839	3985	3934	3805	3754	3610	3436	3153	2414	1786	2052	1322	1050	55532
Sep-15	Sunday	13	645	451	318	205	251	550	866	1194	1605	2272	2701	3308	3425	3398	3635	3664	3605	3233	2852	2326	1812	1318	1028	640	45302
Sep-15	Monday	14	518	246	190	247	683	1891	4820	7144	6680	4679	4360	4276	4480	4534	5000	5607	5337	6613	5002	3083	2117	1498	1146	644	80795
Sep-15	Tuesday	15	390	236	199	282	688	1854	4910	6659	6455	5037	4314	4305	4483	4647	5144	6132	6539	5402	3953	3695	2628	1632	1189	724	81497
Sep-15	Wednesday	16	468	273	227	286	634	1919	4854	7345	6756	5038	4228	4368	4660	4708	5199	6290	6908	6780	4968	3263	2292	1651	1308	768	85191
Sep-15	Thursday	17	395	257	214	252	621	1902	4588	6108	6249	5292	4470	4607	4684	4780	5119	5958	6779	6668	4594	3131	2317	1629	1440	876	82930
Sep-15	Friday	18	555	247	197	247	662	1731	4543	6932	6344	3933	3404	3945	5107	5055	5711	5890	6777	6242	4661	3423	2316	1817	1898	1252	82889
Sep-15	Saturday	19	757	360	313	228	379	904	1535	2582	3217	3667	3974	4033	4189	4240	4170	4071	3929	3960	3472	2897	1985	2017	1629	1005	59513
Sep-15	Sunday	20	646	400	308	208	272	569	893	1288	1687	2523	2908	3209	3488	3696	3703	3795	3608	3433	2870	2339	1843	1303	998	645	46632
Sep-15	Monday	21	380	239	178	280	727	1818	4577	6312	6389	4624	4289	4228	4548	4545	5044	6043	6772	7019	4459	3207	1948	1403	1132	693	80854
Sep-15	Tuesday	22	430	228	202	277	738	1912	5065	7403	6822	4739	4204	4175	4313	4518	5020	5969	6715	6787	4998	3031	2165	1457	1206	666	83040
Sep-15	Wednesday	23	469	230	216	260	639	1891	5021	7053	6079	4829	4175	4324	4586	4805	5026	6142	6769	6958	4597	3154	2114	1548	1226	658	82769
Sep-15	Thursday	24	446	222	173	267	678	1893	4893	7198	6261	4960	4506	4725	4564	4626	4970	5730	6152	6201	4409	3040	2080	1560	1215	765	81534
Sep-15	Friday	25	533	238	210	269	652	1828	4501	7036	6280	4535	4381	4736	5022	5072	5843	6469	6738	6087	5556	3572	2304	1967	1932	1147	86908
Sep-15	Saturday	26	807	414	281	234	414	942	1733	2601	3283	3395	3698	3932	3890	3899	3792	3699	3775	3764	3248	2792	1832	1776	1859	1136	57196
Sep-15	Sunday	27	623	346	295	191	272	582	937	1344	1734	2471	2958	3413	3469	3695	3584	3657	3544	3297	2685	2139	1664	1294	998	627	45819
Sep-15	Monday	28	392	167	148	243	759	1901	4858	7206	6442	4831	4256	4293	4400	4527	4806	5888	6610	6706	4576	2902	1844	1348	1073	614	80790
Sep-15	Tuesday	29	421	228	201	284	709	1889	4800	7061	6715	4961	4136	4258	4494	4515	4636	5854	5908	6397	5130	3162	2082	1424	1161	714	81140
Sep-15	Wednesday	30	493	246	193	260	606	1864	4919	7003	6648	5022	4294	4534	4645	4597	5235	6247	6001	5481	4611	2873	2049	1502	1234	744	81301
Oct-15	Thursday	1	519	267	206	270	648	1856	4749	7169	6779	5031	4349	4536	4683	4390	5256	5446	5345	5612	4698	2803	1837	1476	1232	643	79800
Oct-15	Friday	2	561	248	204	252	656	1528	3742	5647	5036	4333	4181	4551	4891	4854	5241	5251	5341	4764	3267	2199	1477	1238	1124	780	71366
Oct-15	Saturday	3	525	294	241	167	306	574	1014	1419	1858	1941	2079	2236	2177	2090	2004	1851	1740	1619	1404	1121	761	654	616	416	29107
Oct-15	Sunday	4	278	144	109	89	172	406	588	816	952	1240	1673	1915	1878	1940	1918	1854	1865	1795	1490	1125	772	644	501	287	24451
Oct-15	Monday	5	249	73	82	129	427	1083	2630	4066	3731	3143	3178	3147	3279	3234	3474	3792	4231	4692	2896	1941	1323	1012	771	528	53111
Oct-15	Tuesday	6	356	186	138	184	634	1705	4296	6455	5945	4448	4094	4003	4192	4424	4535	5227	6260	6392	4554	3030	1924	1390	1245	655	76272
Oct-15	Wednesday	7	351	229	194	295	581	1874	4258	4351	6162	5278	4490	4137	4407	4594	5148	5956	6547	6088	4697	4032	2275	1645	1294	798	79681
Oct-15	Thursday	8	577	242	218	296	663	1872	4736	6576	5827	5288	4492	4354	4511	4790	5401	6279	6549	6676	4864	3721	2427	1663	1431	896	84349
Oct-15	Friday	9	604	282	227	299	657	1736	4606	5436	5098	5188	4537	4919	5225	5528	5993	6520	6784	6366	5102	3927	2443	2223	2059	1896	87655
Oct-15	Saturday	10	914	462	400	234	429	798	1432	2439	3129	3397	3623	3953	3988	4296	3869	3689	3438	3088	2827	2538	1947	1659	1326	1106	54981
Oct-15	Sunday	11	672	328	315	190	278	570	850	1187	1572	2187	2789	3203	3447	3653	3369	3555	3432	3212	2904	2342	1634	1325	1094	673	44781
Oct-15	Monday	12	438	233	185	254	640	1779	4654	6615	6033	4560	4403	4480	4560	4769	5240	6156	6367	6754	4641	2961	1998	1568	1240	701	81229
Oct-15	Tuesday	13	442	219	185	275	654	1946	4972	6975	6839	4997	4469	4428	4610	4699	5213	6125	6515	6790	5277	3164	2082	1496	1195	694	84261
Oct-15	Wednesday	14	499	245	193	261	632	1917	4959	7014	6683	5087	4427	4480	4773	4700	5419	6275	6581	6529	5315	3313	2327	1711	1236	697	85273
Oct-15	Thursday	15	516	293	220	291	668	1914	4786	6883	6731	4941	4466	4461	4735	5012	5515	6149	6692	6110	5851	3671	2283	1766	1396	803	86153
Oct-15	Friday	16	629	263	247	314	646	1795	4627	6669	6323	5053	4465	4750	5266	5377	6049	6025	5901	5765	5044	3765	2270	1974	1919	1265	86401
Oct-15	Saturday	17	825	397	282	214	396	864	1869	2906	3315	3522	4038	4356	4256	4182	4208	4191	4043	3760	3466	2787	2061	1886	1566	1240	60630
Oct-15	Sunday	18	814	361	243	159	261	520	894	1203	1507	2315	2828	3408	3663	3789	3778	3862	3823	3524	3050	2404	1729	1394	1133	635	47297
Oct-15	Monday	19	410	206	176	278	695	1894	4798	6836	6662	4589	4261	4320	4558	4650	4907	5976	6746	6551	4851	3019	1987	1559	1164	670	81763
Oct-15	Tuesday	20	400	223	197	284	658	1937	4810	6938	6770	4549	4299	4237	4542	4771	5121	6068	6027	6280	5546	3243	2113	1594	1260	733	82600
Oct-15	Wednesday	21	427	236	181	267	609	1862	4886	7061	6775	4755	4306	4286	4573	4568	5293	6244	6529	5773	4534	2522	2620	1577	1368	689	81941
Oct-15	Thursday	22	475	255	197	258	602	1927	4777	6688	6670	5249	4449	4681	4821	4960	5412	6290	6664	5575	5516	3450	2403	1824	1428	784	85355
Oct-15	Friday	23	553	257	250	297	634	1771	4614	6693	5956	5032	4574	4796	5225	5501	6090	5894	6603	6237	4706	3563	2230	2010	1986	1233	86705
Oct-15	Saturday	24	835	410	304	213	351	751	1511	2364	3382	3410	3353	2610	2742	3425	3811	3888	3980	3580	3311	2751	2148	2055	1616	1304	54105
Oct-15	Sunday	25	863	491	314	218	289	514	863	1189	1616	2279	2881	3342	3463	3817	3853	3790	3651	3364	3124	2504	1649	1303	1108	604	47089
Oct-15	Monday	26	401	203	177	222	667	1953	4675	7087	6617	5083	4373	4205	4448	4608	5206	6175	6842	6566	4757	2740	1729	1404	1201	639	81978
Oct-15	Tuesday	27	422	199	161	228	664	1938	4757	6965	6120	5311	4343	4264	4405	4366	5082	5771	5626	5945	4685	2764	1964	1319	1189	884	79372
Oct-15	Wednesday	28	636	297	248	234	594	1894	4525	7114	6191	4896	4247	4379	4466	4801	5364	5709	6665	6546	4511	3109	2050	1617	1333	733	82159
Oct-15	Thursday	29	422	240	217	243	665	1901	4848	7008	6723	4977	4360	4726	4728	4912	5227	6282	6574	5260	5520	3505	2306	1792	1514	789	84739
Oct-15	Friday	30	517	244	227	288	638	1817	4465	6754	6457	5070	4518	4778	5041	5090	5955	6214	6661	5940	4877	3609	2268	2061	1944	1319	86752
Oct-15	Saturday	31	784	404	282	212	308	654	1378	2109	2926	3108	3455	3651	3722	3879	3673	3765	3717	3278	2822	2109	1994	1773	1447	1160	52610
Nov-15	Sunday	1	693	357	297	205	453	531	859	1279	1645	2322	2649	3181	3095	3281	3372	3366	3209	2973	2509	1843	1370	1120	728	545	41882
Nov-15	Monday	2	335	219	139	248	725	2223	5388	7339	6634	4670	4266	4242	4421	4512	5122	6002	6501	4953	4469	2868	1699	1356	1025	578	79934
Nov-15	Tuesday	3	397	184	207	271	665	2070	4994	6892	6168	4744	4159	4042	4270	4469	4860	5625	6541	6212	3977	2289	1672	1343	1148	609	77808
Nov-15	Wednesday	4	404	201	192	246	682	2075	4994	7166	6380	4925	4327	4334	4411	4623	5164	6198	6630	6237	4964	2651	2091	1621	1339	692	82547
Nov-15	Thursday	5	416	218	270	298	736	2078	5240	7006	6636	4737	4339	4447	4685	4772	5518	6219	6637	6703	4797	2906	2135	1653	1523	729	84698
Nov-15	Friday	6	502	278	234	278	729	1956	5138	7183	6095	4722	4569	4713	5163	5394	5899	6375	6366	6265	4420	2847	1946	1746	1576	1092	85486
Nov-15	Saturday	7	724	424	266	232	418	945	1728	2548	3114	3655	3691	3767	4095	4035	4085	4118	3696	3511	2921	2279	1714	1482	1332	1101	55881
Nov-15	Sunday	8	780	404	212	185	342	579	914	1269	1685	2335	2726	3014	3300	3302	3256	3170	3037	2941	2591	1785	1310	1172	794	532	41635
Nov-15	Monday	9	352	178	132	232	737	1981	4552	6342	5599	4378	3902	3876	4182	4169	4720	5402	6086	6147	3788	2342	1622	1258	1017	542	73536
Nov-15	Tuesday	10	402	187	150	256	693	2043	5112	7163	6703	4687	4145	4424	4397	4758	5338	6100	6378	6596	4714	2709	1879	1372	1106	632	81944
Nov-15	Wednesday	11	444	220	183	232	585	1831	4924	6568	6048	4543	4324	4531	4624	4665	5363	5866	6208	5966	4582	2553	2000	1549	1177	651	79637
Nov-15	Thursday	12	428	203	171	277	651	2057	5320	7131	6792	4956	4437	4536	4702	4822	5550	5944	5943	6140	5162	2859	2055	1526	1224	735	83621
Nov-15	Friday	13	530	212	221	282	612	1904	4943	6927	6449	5017	4655	4803	5207	5340	5458	5911	5968	5874	4919	2938	2007	1945	1608	981	84711

Nov-15	Saturday	14	656	336	290	229	371	784	1740	2725	3311	3468	3783	3897	3999	3960	4049	4023	3927	3636	3155	2248	1696	1492	1357	867	55999
Nov-15	Sunday	15	467	305	241	224	300	545	807	1221	1445	2135	2707	3062	3226	3520	3493	3423	3514	3125	2683	2010	1348	1160	821	524	42306
Nov-15	Monday	16	334	187	156	255	742	2071	4885	7088	6515	4940	4301	4394	4528	4625	5131	6075	6509	6587	4530	2470	1757	1384	1010	575	81049
Nov-15	Tuesday	17	366	187	171	273	645	2059	5281	6595	6166	4988	4280	4255	4559	4579	5331	6232	6350	5361	4252	3187	1826	1438	1084	629	80094
Nov-15	Wednesday	18	415	240	170	239	643	1965	4542	7021	6604	4954	4384	4372	4455	4641	5314	6153	4830	4776	5558	2724	1953	1607	1091	691	79342
Nov-15	Thursday	19	412	211	173	233	601	1893	4385	6762	6305	4524	3971	4316	4493	4628	5278	6023	6634	6406	4051	2694	1935	1693	1145	727	79493
Nov-15	Friday	20	433	302	305	252	611	1943	4912	6892	6333	4889	4637	4689	5214	5198	5943	6642	6449	4271	3808	3473	1970	1767	1542	1077	83552
Nov-15	Saturday	21	652	329	280	224	411	849	1665	2512	3238	3427	3656	3691	3691	4112	4073	3866	3776	3518	2836	2272	1658	1439	1258	883	54316
Nov-15	Sunday	22	496	326	218	161	273	592	866	1152	1517	2134	2497	2920	3150	3379	3361	3392	3181	2906	2397	1990	1347	1191	962	551	40959
Nov-15	Monday	23	296	181	158	241	645	2013	4796	6527	6002	4519	4479	4469	4773	4770	5265	5915	6214	6427	4678	2652	1838	1380	1178	657	80073
Nov-15	Tuesday	24	376	213	195	266	656	1876	4768	6620	6098	4880	4673	4751	4888	5076	5619	6208	6627	6394	4462	2829	1976	1593	1361	920	83325
Nov-15	Wednesday	25	619	315	264	278	618	1780	4294	5750	5202	4507	4487	5015	5304	5447	5948	5915	5446	4830	3617	2456	1821	1564	1366	881	77724
Nov-15	Thursday	26	546	313	206	203	248	431	787	1116	1322	1676	2109	2369	2803	2497	2253	2277	2298	2348	2364	2159	1966	1524	1141	803	35759
Nov-15	Friday	27	582	325	245	213	391	933	1802	2391	2784	3078	3448	3704	3946	4024	4106	4020	3742	3766	3036	2180	1558	1414	1342	853	53883
Nov-15	Saturday	28	516	296	255	254	358	782	1361	1856	2455	2884	3282	3552	3366	3235	3390	3318	3598	3288	2763	2273	1778	1471	1292	818	48441
Nov-15	Sunday	29	505	303	242	197	297	648	864	1259	1700	2519	2953	3167	3356	3312	3473	3542	3265	3043	2519	1885	1324	1158	804	608	42943
Nov-15	Monday	30	393	205	165	222	687	2125	4992	7328	6184	4597	4305	4254	4367	4666	5248	6166	6491	6629	4469	2483	1727	1352	985	582	80622
Dec-15	Tuesday	1	404	231	162	254	639	2117	5101	7163	6640	4575	4318	4114	4461	4633	5277	6175	6468	5898	5066	2511	1844	1457	1138	609	81255
Dec-15	Wednesday	2	374	246	180	264	607	2047	5090	7272	5355	4874	4289	4490	4511	4646	5297	5741	5510	5712	4855	2582	1975	1416	1117	698	79148
Dec-15	Thursday	3	410	219	200	236	623	2019	4993	7226	6552	4744	4144	4249	4486	4610	5415	6218	6788	6514	4371	2897	2043	1600	1208	726	82491
Dec-15	Friday	4	480	226	206	296	650	1965	4774	7056	6295	4520	3933	4565	5111	5130	5918	6376	6577	6193	4280	2842	1905	1716	1598	999	83611
Dec-15	Saturday	5	595	336	251	230	340	849	1545	2254	3033	3271	3578	3966	3807	3876	3910	4019	4090	3682	3084	2286	1547	1423	1233	961	54166
Dec-15	Sunday	6	671	320	253	204	230	604	881	1118	1539	2006	2573	2895	3090	3242	3263	3189	3280	3054	2432	1870	1399	1108	827	559	40607
Dec-15	Monday	7	292	176	143	234	622	2072	4632	6320	5839	4564	4113	4128	4227	4351	4869	5877	6268	6108	4415	2558	1663	1322	1164	776	76733
Dec-15	Tuesday	8	409	214	190	275	618	2006	4967	6496	6735	4752	4253	4269	4358	4607	5206	5744	6303	6389	4769	2727	1908	1386	1143	668	80392
Dec-15	Wednesday	9	384	224	214	246	594	2017	4927	6960	6695	4618	4287	4320	4498	4722	5143	6202	6521	6408	4584	2561	1972	1556	1180	727	81560
Dec-15	Thursday	10	413	213	212	277	657	2002	4930	7019	6551	4802	4314	4400	4743	4879	5565	6301	5542	6483	5143	2916	2248	1783	1267	809	83469
Dec-15	Friday	11	454	268	199	270	665	1892	4695	6928	6130	4661	4621	4694	5090	5221	5661	6502	6390	6013	4571	3025	2108	2004	1660	1138	84860
Dec-15	Saturday	12	651	318	274	218	343	822	1495	2356	3102	3222	3523	3843	4049	4099	4066	4050	4062	4045	3334	2383	1731	1880	1574	1157	56597
Dec-15	Sunday	13	598	360	266	186	227	504	733	1131	1633	2161	2681	2949	3166	3409	3376	3397	3472	3184	2692	2075	1805	1410	892	629	42936
Dec-15	Monday	14	342	192	148	236	679	2074	4946	7165	6504	3781	4215	4449	4522	4642	4957	6012	6477	6434	4096	2537	1807	1388	1038	631	79272
Dec-15	Tuesday	15	389	239	167	255	628	2022	4948	7101	6636	4837	4441	4500	4573	4797	5346	6212	5888	5023	5278	2797	2048	1475	1178	698	81476
Dec-15	Wednesday	16	481	243	220	239	605	1949	4797	6997	6597	4734	4568	4549	4855	4835	5415	6293	6646	6403	4739	2700	2191	1631	1205	816	83708
Dec-15	Thursday	17	469	258	182	316	669	1998	4821	6605	5741	4588	4872	4754	4964	5049	5733	5820	5634	5883	4550	3035	2005	1678	1450	876	81950
Dec-15	Friday	18	498	273	230	251	643	1827	4451	6630	6271	4825	4746	5077	5299	5574	6059	6246	6596	5789	4204	2961	2141	1900	1743	1165	85399
Dec-15	Saturday	19	638	404	273	246	432	843	1374	2141	2805	3406	3636	3807	4184	4096	4143	4032	4026	3882	3308	2380	1800	1737	1539	1087	56219
Dec-15	Sunday	20	742	373	279	197	277	522	760	1128	1485	2137	2496	2847	3148	3323	3434	3350	3392	3430	2539	2038	1573	1390	1021	742	42623
Dec-15	Monday	21	447	239	172	292	644	1755	4245	6314	5748	4769	4664	4808	4923	5102	5566	6017	6532	6240	4258	2650	1870	1469	1212	833	80769
Dec-15	Tuesday	22	452	225	196	293	599	1746	4117	6013	5529	4590	4627	4707	4908	5018	5407	5847	6115	5848	3915	2533	1981	1489	1484	790	78429
Dec-15	Wednesday	23	547	246	224	265	606	1575	3789	5488	5221	4581	4639	5002	5183	5493	5729	6127	5617	5152	3657	2646	1918	1625	1581	978	77889
Dec-15	Thursday	24	625	363	272	230	398	913	1976	2836	2977	3141	3637	4052	4331	3938	3939	3525	3135	2781	2427	1793	1649	1487	1073	766	52264
Dec-15	Friday	25	489	248	112	104	150	237	427	541	909	1164	1503	1912	2282	2450	2461	2360	2388	2285	2139	1716	1529	1290	1024	625	30345
Dec-15	Saturday	26	400	224	173	178	346	633	947	1352	1810	2501	2841	3176	3325	3404	3503	3488	3346	3273	2782	2104	1629	1438	1183	803	44859
Dec-15	Sunday	27	512	303	268	203	305	557	823	1078	1464	2063	2436	2790	3045	3129	3264	3025	3213	3054	2727	1927	1511	1166	980	653	40496
Dec-15	Monday	28	481	215	175	254	581	1556	3580	5131	4851	4124	4319	4505	4693	4743	4962	5414	5662	5607	3728	2285	1594	1341	1135	686	71622
Dec-15	Tuesday	29	496	268	227	260	601	1586	3748	5287	5310	4291	4451	4558	4728	4987	5244	5488	6102	5913	4045	2335	1678	1401	1290	769	75063
Dec-15	Wednesday	30	502	257	236	244	546	1567	3643	5437	5291	4479	4595	4827	5100	5258	5617	5677	6100	6027	4079	2590	1860	1520	1331	807	77590
Dec-15	Thursday	31	553	290	181	249	490	1232	2869	4199	4379	3763	4039	4421	4999	4769	4923	4959	3995	3125	2596	1795	1468	1297	1061	721	62373

30 Highest Hours of the year
100 Highest Hours of the year

AADT 71700

EASTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	174	111	100	137	244	828	1625	1033	2593	2582	2031	1864	1920	2010	2324	2772	3039	3267	1951	1145	828	644	422	317	33961
Jan-15 Friday	9	174	112	93	93	255	748	2250	3537	3053	2224	1892	2037	2176	2095	2489	3124	3255	3041	1934	1213	846	686	579	399	38305
Jan-15 Saturday	10	253	135	148	105	155	360	837	1189	1383	1372	1349	1614	1814	1849	1917	1913	1923	1795	1400	952	652	610	602	373	24700
Jan-15 Sunday	11	230	127	92	61	131	271	422	457	602	992	1074	1172	1334	1309	1414	1419	1464	1376	1067	738	546	408	363	239	17308
Jan-15 Monday	12	114	85	68	102	254	937	2282	3268	2843	2057	1729	1714	1834	1790	2039	2610	2955	3189	1818	1030	685	541	379	266	34589
Jan-15 Tuesday	13	156	101	86	132	263	886	2276	3250	3179	2222	1859	1884	1889	2047	2242	2647	3054	3043	1859	1096	786	743	674	300	36674
Jan-15 Wednesday	14	152	120	68	98	290	890	2304	3512	3348	2157	1884	1877	1863	2008	2211	2725	2839	2974	1950	1110	816	650	601	288	36735
Jan-15 Thursday	15	184	107	68	130	311	844	2317	3596	3151	2278	1952	1991	2072	2086	2277	2755	3195	3121	2049	1195	812	758	516	378	38143
Jan-15 Friday	16	200	93	85	134	284	799	2267	3402	3035	2214	1945	2093	2086	2357	2675	2990	3317	3015	2314	1416	952	940	669	446	39728
Jan-15 Saturday	17	245	154	116	95	140	331	796	1090	1511	1482	1619	1780	1861	1936	1900	2007	1950	1767	1367	984	701	722	512	474	25540
Jan-15 Sunday	18	241	126	110	81	127	252	432	492	604	976	1075	1260	1255	1283	1791	1509	1532	1381	1129	830	553	495	426	276	18236
Jan-15 Monday	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	20	141	95	85	108	281	911	2396	3351	3297	1853	1914	1854	1978	2068	2311	2850	3229	3215	2071	1152	785	722	460	291	37418
Jan-15 Wednesday	21	144	96	79	114	263	963	2465	3439	3368	2206	1918	1894	2027	2174	2371	2760	3300	3298	2007	1164	916	690	502	297	38455
Jan-15 Thursday	22	148	112	81	138	286	914	2345	3244	2997	2613	1913	2012	2089	2233	2345	2931	3310	3280	1984	1323	861	824	768	687	39438
Jan-15 Friday	23	204	137	92	116	282	906	2404	3495	3055	2131	2009	1998	2136	2141	2509	2942	2971	2802	1875	1155	794	785	628	405	37972
Jan-15 Saturday	24	268	142	124	87	160	333	695	825	1144	1310	1355	1513	1775	1937	1978	1957	1886	1801	1577	1094	682	738	618	398	24397
Jan-15 Sunday	25	235	130	99	73	121	296	468	531	771	1311	1353	1463	1535	1605	1611	1782	1593	1530	1170	820	556	502	344	258	20157
Jan-15 Monday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	28	162	103	85	100	290	896	2439	3344	3388	2256	1901	1918	1913	1985	2394	2862	3184	3343	2096	1254	832	700	440	277	38162
Jan-15 Thursday	29	163	104	74	116	301	875	2446	3351	3448	2386	1995	2074	2053	2191	2478	2927	3359	3307	1951	1248	897	679	570	313	39306
Jan-15 Friday	30	173	117	82	126	293	838	2395	3260	3431	2697	2116	2067	2261	2269	2625	3140	3287	2905	2062	1285	909	862	877	455	40532
Jan-15 Saturday	31	254	179	131	97	178	335	843	1102	1446	1461	1567	1779	1929	2019	2159	2042	2022	1851	1517	1069	788	672	543	381	26364
Feb-15 Sunday	1	231	149	103	80	126	280	407	560	644	1028	1145	1311	1332	1522	1553	1604	1563	1510	1025	623	537	428	629	278	18668
Feb-15 Monday	2	159	99	77	115	285	892	2340	3200	2812	1994	1804	1812	1912	1948	2046	2572	2868	3196	1943	1017	719	593	387	262	35052
Feb-15 Tuesday	3	164	112	94	117	276	941	2504	3306	3193	2395	1850	2001	1902	1979	2279	2718	3296	3299	2034	1153	806	655	440	350	37864
Feb-15 Wednesday	4	167	108	79	110	273	944	2502	3432	3466	2259	1928	1811	1712	2130	2373	2749	3132	3077	2040	1098	788	636	476	280	37570
Feb-15 Thursday	5	161	103	92	110	314	961	1848	3138	3150	2307	1897	1990	2005	2092	2341	2727	2248	2794	2400	1274	850	680	510	324	36316
Feb-15 Friday	6	215	108	76	119	298	820	2323	3248	3343	2223	1976	2106	2194	2245	2668	3161	3220	2673	2319	1374	938	809	885	430	39771
Feb-15 Saturday	7	227	133	99	98	183	346	866	1284	1609	1644	1705	1846	2083	2025	2075	1999	1991	1910	1622	1138	724	772	503	429	27311
Feb-15 Sunday	8	242	155	102	69	110	244	432	527	648	1073	1163	1487	1557	1639	1699	1662	1634	1519	1249	874	596	518	395	279	19873
Feb-15 Monday	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	10	158	93	84	123	303	917	2498	3516	3188	2328	1849	1946	1939	1736	1974	2324	3227	3188	2023	1182	843	640	648	320	37047
Feb-15 Wednesday	11	164	84	74	117	302	922	2510	3271	3088	2504	1899	1987	1988	2206	2309	2849	3132	3364	2066	1257	932	792	694	290	38801
Feb-15 Thursday	12	188	108	83	142	285	972	2551	3414	3367	2462	2022	2161	2029	2266	2388	2970	3369	3149	2081	1335	924	750	802	360	40178
Feb-15 Friday	13	234	132	100	143	290	840	2379	3229	3066	2267	2116	2252	2349	2365	2602	3294	3348	2999	2152	1471	1104	1000	902	546	41180
Feb-15 Saturday	14	274	165	128	107	137	312	746	1110	1381	1438	1667	1833	1957	1812	2028	1950	2016	1788	1504	1001	795	660	676	735	26220
Feb-15 Sunday	15	242	157	110	89	124	236	458	505	638	1018	1130	1376	1413	1436	1648	1628	1699	1702	1263	890	696	494	545	282	19779
Feb-15 Monday	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Thursday	19	223	131	90	111	306	839	2331	3200	3318	2311	1927	1993	1930	2149	2340	2960	3207	3220	2040	1222	1029	633	506	346	38362
Feb-15 Friday	20	177	125	101	126	288	812	2151	3038	3109	2271	2163	2119	2233	2357	2646	2973	3398	3301	2013	1348	991	859	593	407	39599
Feb-15 Saturday	21	290	161	107	97	171	310	784	1249	1559	1603	1691	1777	1961	1994	2048	2159	2237	2118	1592	1085	775	863	563	444	27638
Feb-15 Sunday	22	210	139	135	82	131	312	477	635	762	1184	1240	1411	1481	1690	1668	1685	1517	1461	1209	905	682	522	386	261	20185
Feb-15 Monday	23	155	122	93	107	271	902	2353	3417	3009	2083	1862	1913	1926	1896	2053	2751	2987	3204	1832	1090	783	579	406	293	36087
Feb-15 Tuesday	24	155	120	71	111	279	788	1852	2582	2117	1755	1462	1375	1533	1494	1669	1930	2424	2476	1472	787	575	643	367	232	28269
Feb-15 Wednesday	25	185	112	76	104	274	880	2279	3493	3328	2144	1981	1926	2005	2138	2340	2952	1478	3054	2410	1121	820	582	563	264	36509
Feb-15 Thursday	26	191	103	86	114	263	878	2415	3516	3084	2270	1966	1933	2020	2116	2313	2841	3236	3060	2007	1234	979	636	510	318	38089
Feb-15 Friday	27	246	131	126	123	268	820	2352	3500	3290	2249	2101	2132	2197	2422	2654	3191	3397	2945	2118	1449	968	870	573	494	40616
Feb-15 Saturday	28	357	185	128	101	161	380	777	1333	1625	1641	1673	1875	2074	2014	2165	2304	2356	2029	1490	1167	847	683	576	375	28316
Mar-15 Sunday	1	239	152	120	90	117	279	423	564	697	1003	1078	1313	1308	1458	1605	1579	1467	1391	1138	853	639	491	338	253	18595
Mar-15 Monday	2	143	96	77	118	292	956	2414	3640	3204	2205	1895	1893	1885	2098	2321	2766	3145	3349	1992	1141	808	619	440	270	37767

Mar-15 Tuesday	3	191	143	85	128	308	951	2462	3454	3384	2327	1890	1909	2014	2064	2204	2793	3301	3277	1986	1244	872	730	479	318	38514
Mar-15 Wednesday	4	208	133	101	112	307	898	2445	3226	3450	2702	2044	2084	1972	2217	2447	3015	2754	2963	2259	1263	938	736	568	306	39148
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	236	145	105	132	268	890	2331	3214	3343	2405	2103	2235	2266	2373	2695	3268	3460	3290	2025	1338	1060	894	765	450	41291
Mar-15 Saturday	7	350	180	135	94	179	377	998	1529	1896	2057	2019	2158	2200	2078	2198	2140	2025	1884	1620	1156	829	729	602	412	29845
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	195	118	70	139	305	980	1923	3346	3424	2387	1905	1994	1971	2149	2478	2865	3220	3280	1985	1212	932	626	511	284	38299
Mar-15 Tuesday	10	213	139	104	137	313	956	2389	3458	3413	2422	2070	1940	2054	2288	2485	2985	3250	3357	2072	1219	983	1045	581	473	40346
Mar-15 Wednesday	11	226	127	112	130	269	986	2355	3458	3331	2493	2063	2166	2291	2385	2611	2954	3334	3369	2214	1388	1025	876	572	351	41086
Mar-15 Thursday	12	273	199	117	190	327	979	2448	3404	3375	2609	2009	2116	2249	2400	2601	2955	3260	3026	2248	1446	1038	816	574	469	41128
Mar-15 Friday	13	281	140	117	137	305	914	2355	3413	3384	2322	2099	2263	2344	2448	2803	3209	3372	2982	2156	1497	1070	861	745	471	41688
Mar-15 Saturday	14	348	154	150	120	177	340	703	1029	1453	1515	1564	1859	1929	2116	2114	2072	1984	1889	1542	1177	942	773	694	487	27131
Mar-15 Sunday	15	276	166	114	93	114	318	489	609	820	1153	1345	1659	1774	1908	1853	1799	1658	1551	1457	1111	879	660	458	297	22561
Mar-15 Monday	16	183	109	100	124	291	969	2407	3304	3193	2572	2058	2035	2159	2217	2399	2910	3311	3167	2078	1241	924	684	524	288	39247
Mar-15 Tuesday	17	202	120	74	142	287	929	2487	3306	3337	2580	2142	2075	2116	2240	2406	2928	3256	3120	1996	1328	959	753	472	303	39558
Mar-15 Wednesday	18	231	147	82	126	292	969	2385	3393	3322	2506	1962	2040	2194	2270	2388	3011	3353	3397	2144	1401	940	772	529	377	40231
Mar-15 Thursday	19	220	127	72	128	263	958	2361	3203	2972	2811	1943	2004	2005	2214	2366	3001	3354	3237	2090	1252	943	883	693	356	39456
Mar-15 Friday	20	322	141	104	140	284	899	2448	3529	3192	2365	2108	2333	2440	2452	2798	3206	3273	3067	2148	1482	1122	990	688	553	42084
Mar-15 Saturday	21	354	178	126	104	193	406	797	1550	1827	1766	1905	2029	2101	2079	2074	1860	1888	1835	1734	1333	948	838	790	455	29170
Mar-15 Sunday	22	250	160	128	83	160	298	447	576	788	1139	1207	1335	1385	1565	1619	1535	1540	1324	1249	892	686	572	516	347	19801
Mar-15 Monday	23	181	102	72	137	307	992	2266	3435	3254	2272	1864	2095	1838	1786	2229	2723	3081	3161	1995	1061	878	647	433	265	37074
Mar-15 Tuesday	24	197	124	85	122	301	990	2547	3646	3529	2392	1981	1965	2097	2204	2532	2957	3415	3295	2081	1285	921	859	542	350	40417
Mar-15 Wednesday	25	206	129	94	150	292	1000	2479	3679	3519	2539	2101	2035	2189	2201	2488	3022	3325	3304	2024	1331	1071	1030	529	327	41064
Mar-15 Thursday	26	265	120	97	137	322	920	2492	3714	3464	2538	2144	2283	2281	2475	2657	3213	3542	3510	2189	1453	1089	923	829	390	43047
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	375	167	132	123	346	643	1550	2060	2300	2423	2804	2238	2157	2056	2117	2011	2047	1966	1529	1171	924	812	674	453	33078
Mar-15 Sunday	29	257	171	140	67	138	295	464	604	780	1129	1237	1347	1490	1659	1739	1794	1750	1435	1318	982	795	593	501	272	20957
Mar-15 Monday	30	218	134	81	139	357	816	2333	3477	3068	2273	2049	2045	2244	2249	2355	2639	3070	2998	1925	1231	900	708	508	304	38121
Mar-15 Tuesday	31	217	158	97	150	379	887	2316	3346	3331	2431	2130	2250	2220	2142	2491	2750	3192	3154	1974	1318	947	727	584	373	39564
Apr-15 Wednesday	1	236	128	110	147	346	853	2363	3389	3126	2327	2195	2194	2166	2221	2446	2734	2626	3337	2185	1342	996	810	592	381	39250
Apr-15 Thursday	2	260	161	126	156	362	861	2413	3308	2860	2502	2266	2272	2409	2533	2566	2868	3112	3149	2142	1419	1083	984	730	445	40987
Apr-15 Friday	3	322	148	120	162	314	717	1992	2942	2591	2382	2595	2676	2782	2727	2860	2922	2840	2406	1997	1358	1066	927	761	460	40067
Apr-15 Saturday	4	256	248	140	133	194	385	711	1189	1469	1558	1713	1937	1840	1979	2003	1971	2039	1867	1591	1249	973	721	607	482	27255
Apr-15 Sunday	5	271	130	117	59	114	364	473	681	903	1090	1297	1407	1536	1551	1501	1520	1561	1621	1423	1151	838	630	429	319	20986
Apr-15 Monday	6	220	122	80	138	293	902	2331	3678	3219	2381	2266	2249	2318	2338	2601	3057	3345	3236	2009	1340	1001	743	518	326	40711
Apr-15 Tuesday	7	234	128	91	119	370	958	2524	3680	3511	2582	2217	2128	2106	2241	2567	3020	3413	2474	2753	1493	1033	826	522	333	41323
Apr-15 Wednesday	8	224	122	107	124	329	950	2487	3434	3321	2344	824	982	2063	2737	2547	3145	3414	3660	2383	1422	1092	785	621	355	39472
Apr-15 Thursday	9	264	137	89	139	344	973	2551	3539	3520	2945	2556	2560	2372	2408	2685	3276	3326	3276	2261	1530	1187	833	652	420	43843
Apr-15 Friday	10	294	157	121	154	370	880	2411	3575	3391	2753	2557	2555	2608	2599	2739	3135	3308	2988	2113	1542	1178	961	665	466	43520
Apr-15 Saturday	11	313	216	164	123	195	387	805	1332	1727	1825	1979	2123	2300	2096	2044	1989	1956	1866	1433	1124	904	856	845	469	29071
Apr-15 Sunday	12	251	151	131	103	154	333	485	681	954	1432	1629	1753	1646	1640	1670	1803	1637	1437	1229	1002	776	579	426	340	22242
Apr-15 Monday	13	170	98	86	153	346	930	2201	3457	3416	2415	2010	1969	2066	2088	2370	2929	3279	2984	2247	1165	924	654	466	239	38662
Apr-15 Tuesday	14	199	121	61	138	380	967	2509	3663	3445	2425	2018	2029	2003	2087	2335	2987	3305	3181	1991	1264	1110	763	546	367	39894
Apr-15 Wednesday	15	225	136	116	150	331	958	2516	3554	3289	2648	1992	2038	2052	2213	2409	3063	3092	3243	2019	1249	895	659	460	330	39637
Apr-15 Thursday	16	267	128	102	126	348	904	2542	3765	3530	2441	2061	2120	2101	2311	2515	3165	3358	3246	2053	1387	1134	867	493	374	41338
Apr-15 Friday	17	272	159	112	169	373	799	2338	3287	3306	2602	2096	2278	2329	2508	2640	3429	3222	2977	2075	1376	1035	862	776	490	41510
Apr-15 Saturday	18	296	185	120	117	306	406	772	1251	1549	1714	1799	1990	2024	1917	1937	2029	2107	1893	1632	1202	970	851	625	441	28133
Apr-15 Sunday	19	247	146	151	92	151	292	431	601	731	1138	1332	1415	1432	1516	1728	1820	1561	1419	1133	872	654	457	424	252	19995
Apr-15 Monday	20	192	98	90	138	380	913	2490	3602	3055	2533	1989	2017	2033	2137	2376	2899	3261	3351	1939	1147	814	659	475	272	38860
Apr-15 Tuesday	21	185	162	92	136	363	993	2561	3630	3106	2809	2095	1993	2149	2241	2420	3042	3298	3335	2163	1357	946	738	519	305	40638
Apr-15 Wednesday	22	179	146	113	159	365	1065	2515	3396	3471	2677	2129	2160	2136	2235	2528	2967	3174	3403	2813	1398	1062	822	563	533	42009
Apr-15 Thursday	23	272	139	124	146	344	1014	2560	3499	3273	2501	2116	2262	2261	2295	2523	3220	1678	1507	2812	1453	1103	973	624	368	39067
Apr-15 Friday	24	248	152	126	143	356	952	2362	3366	3344	2419	2190	2371	2432	2579	2734	3363	3124	3079	1987	1521	1135	952	655	479	42069
Apr-15 Saturday	25	339	158	116	121	262	470	887	1393	1700	1668	1705	1910	1858	1795	1935	1936	1859	1655	1418	1063	808	736	563	368	26723
Apr-15 Sunday	26	232	150	102	80	148	398	546	643	915	1535	1700	1849	1902	2170	1908	1796	1661	1612	1341	1074	919	646	466	330	24123
Apr-15 Monday	27	180	99	71	126	319	1009	2539	3652	3322	2349	2131	2064	2070	2137	2312	3002	3321	3110	1879	1154	922	746	483	274	39271
Apr-15 Tuesday	28	194	92	109	140	353	961	2618	3744	3441	2485	2005	2081	2053	2208	2334	3029	3330	3151	2084	1367	964	797	569	306	40415
Apr-15 Wednesday	29	224	127	102	135	306	944	2218	3159	2946	2532	2097	1919	1832	1699	1469	2607	2982	2966	1894	1195	841	706	501	272	35673
Apr-15 Thursday	30	267	122	86	145	348	939	2466	2960	2998	2894	2219	2140	2262	2377	2535	3345	3358	3355	2240	1383	1157	857	609	408	41470
May-15 Friday	1	302	159	113	158	336	869	2520	3646	3393	2340	2194	2328	2294	2478	2754	3266	3305	3007	2149	1454	1098	1062	801	519	42545
May-15 Saturday	2	344	172	127	92	219	427	897	1591	1673	1771	1894	1998	2142	2068	2203	2094	2070	1822	1474	1144	955	778	622	411	28988
May-15 Sunday	3	231	419	183	106	165	324	464	650	841	1300	1460	1700	1794	1832	1914	1801	1968	1790	1603	1220	836	618	473	312	24004
May-15 Monday	4	218	103	83	140	343	957	2483	3520	3460	1904	2041	1860	2063	2174	2340	2984	2982	3368	2053	1184	913	682	506	274	38635
May-15 Tuesday	5	221	121	99	134	349	1002	2395	3198	3135	2988	2475	2141	2188	2213	2456	2935	3130	3454	2024	1285	951	798	558	460	40710

May-15	Wednesday	6	204	135	103	152	331	924	2664	3482	3036	2772	2161	2214	2151	2342	2538	2959	3101	3235	2573	1342	1120	823	591	417	41370
May-15	Thursday	7	265	152	109	147	407	921	2583	3590	3494	2476	2126	2049	1885	2148	2214	2960	3209	3148	1894	1226	958	764	534	355	39614
May-15	Friday	8	292	143	114	144	346	834	2429	3415	3429	2424	2187	2275	2404	2470	2694	2939	3227	2812	1872	1294	1114	864	756	529	41007
May-15	Saturday	9	368	184	168	118	196	392	881	1634	1606	1694	1762	1899	1960	2083	2042	1947	2003	1875	1628	1227	945	767	614	391	28384
May-15	Sunday	10	258	150	137	94	148	305	422	565	707	1204	1317	1378	1474	1655	1641	1632	1627	1538	1457	1033	892	645	493	345	21117
May-15	Monday	11	215	95	83	150	377	964	2568	3621	3192	2525	2009	2286	2169	2194	2373	2919	3154	3219	1917	1189	852	655	524	304	39554
May-15	Tuesday	12	197	142	99	147	392	928	2681	3656	3301	2688	2179	2206	2164	2351	2494	3106	3348	3218	2062	1305	923	742	615	341	41285
May-15	Wednesday	13	209	119	100	160	373	987	2735	3665	3525	2498	2177	2185	2143	2337	2547	3075	3328	3290	2271	1337	968	824	592	397	41842
May-15	Thursday	14	243	159	95	129	368	975	2624	3534	3296	2707	2193	2212	2282	2330	2611	3196	3449	3396	2081	1374	1227	898	667	373	42419
May-15	Friday	15	294	175	114	171	409	883	2591	3439	3398	2545	2167	2326	2516	2495	2829	3258	3368	2951	2009	1540	1177	950	711	532	42848
May-15	Saturday	16	323	186	153	143	219	386	891	1623	1960	2091	2115	2244	2144	2199	2024	2288	2303	1912	1780	1508	1000	846	678	484	31500
May-15	Sunday	17	250	153	154	89	150	330	482	686	994	1414	1688	1742	1803	1867	1806	1871	1936	1510	1388	1069	799	643	509	317	23650
May-15	Monday	18	240	104	93	150	385	984	2426	3625	3445	2432	2126	2120	2075	2313	2444	3153	3301	3252	1994	1239	963	622	463	270	40219
May-15	Tuesday	19	196	153	85	158	375	966	2711	3580	3520	2686	2229	2168	2141	2338	2474	3016	3346	3419	2041	1268	950	688	591	511	41610
May-15	Wednesday	20	275	140	97	142	370	925	2682	3624	3357	2804	2258	2253	2246	2103	1631	1539	2993	3524	2208	1266	982	833	601	345	39198
May-15	Thursday	21	244	182	124	137	399	984	2629	3532	3151	2726	2247	2281	2342	2399	2649	3056	3449	3411	2101	1520	1208	863	696	461	42791
May-15	Friday	22	300	151	122	161	384	855	2646	3707	3195	2536	2390	2410	2600	2629	2962	3343	3152	2887	2046	1662	1275	1157	964	562	44096
May-15	Saturday	23	398	210	145	126	193	391	796	1327	1852	2074	2253	2241	2269	2328	2137	2161	2130	1975	1754	1318	853	797	698	432	30858
May-15	Sunday	24	303	177	138	95	115	306	424	609	968	1604	1744	1695	1637	1716	1786	1721	1629	1543	1338	1034	776	569	561	385	22873
May-15	Monday	25	266	157	94	129	177	459	758	926	1126	1513	1583	1768	1798	1770	1828	1757	1566	1398	1199	945	783	632	428	280	23340
May-15	Tuesday	26	166	120	99	136	390	938	2651	3415	3405	2733	2211	2885	2801	3226	3141	3145	3287	3283	3508	3478	2826	811	544	357	49556
May-15	Wednesday	27	220	132	94	148	387	944	2651	3562	3444	2690	2360	2166	2291	2328	2579	3165	3380	3402	2209	1420	1004	767	537	272	42152
May-15	Thursday	28	258	145	111	165	362	1007	2629	3525	3377	2679	2242	2232	2266	2419	2585	3106	3353	3216	2148	1524	1141	837	706	428	42461
May-15	Friday	29	274	173	132	185	363	891	2564	3520	3272	2506	2286	2485	2480	2631	2689	3267	3000	3068	1964	1390	1093	979	807	496	42515
May-15	Saturday	30	352	160	143	131	231	441	1054	1515	1796	2027	2070	2236	2134	2141	2153	2202	2024	2038	1869	1512	988	800	641	462	31120
May-15	Sunday	31	283	192	142	112	164	335	521	649	902	1321	1478	1677	1773	1799	1756	1828	1784	1630	1331	1052	774	606	526	356	22991
Jun-15	Monday	1	196	113	100	152	358	929	2603	3658	3199	2402	2217	2278	2212	2250	2231	2920	3376	3270	2041	1179	895	744	560	286	40169
Jun-15	Tuesday	2	210	119	108	145	362	931	2629	3647	3477	2706	2137	2187	2141	2406	2476	2946	3336	3230	1995	1255	918	691	519	326	40897
Jun-15	Wednesday	3	269	143	113	126	350	850	2255	3050	3111	2581	1912	1987	1962	2232	2287	2882	3287	3635	2109	1262	1008	843	531	320	39105
Jun-15	Thursday	4	262	177	98	138	342	894	2738	3308	3140	2459	2112	2367	2363	2528	2389	2778	3269	3181	2779	1572	1106	962	746	359	42067
Jun-15	Friday	5	335	161	110	172	346	867	2531	3608	3201	2475	2246	2488	2522	2657	2733	2892	3049	2816	1957	1488	1150	919	888	501	42112
Jun-15	Saturday	6	332	192	158	143	222	419	989	1510	1788	1944	2056	2130	2259	2077	2149	2227	2338	2181	2039	1417	984	843	700	459	31556
Jun-15	Sunday	7	286	173	116	87	167	323	510	720	846	1303	1436	1648	1696	1749	1867	1894	1756	1639	1364	1069	786	749	681	641	23506
Jun-15	Monday	8	238	141	94	153	349	910	2605	3649	3269	2521	2266	2273	2201	2393	2249	2764	3161	3188	2024	1251	920	673	507	307	40106
Jun-15	Tuesday	9	174	157	102	145	409	913	2750	3736	3482	2511	2210	2334	2201	2332	2470	2873	2752	2726	1852	1205	836	644	532	429	39775
Jun-15	Wednesday	10	252	171	104	141	386	952	2672	3528	3429	2509	2210	2169	2319	2471	2559	2915	3426	3169	2188	1467	1014	891	723	406	42071
Jun-15	Thursday	11	281	146	130	147	372	906	2654	3641	3405	2672	2296	2405	2328	2410	2447	2957	3355	3069	2139	1381	1162	865	664	417	42249
Jun-15	Friday	12	283	179	120	144	374	883	2568	3549	3106	1395	2782	2589	2502	2649	2792	3122	3173	2737	1966	1468	1048	885	723	474	41511
Jun-15	Saturday	13	350	196	155	126	252	410	978	1482	1843	2042	2037	2154	2239	2186	2230	2207	2061	1950	1665	1226	913	749	707	483	30641
Jun-15	Sunday	14	323	182	145	86	149	362	500	679	905	1372	1519	1622	1628	1789	1841	1729	1710	1698	1460	1054	828	657	494	329	23061
Jun-15	Monday	15	224	119	124	147	399	970	2554	3601	3417	2435	2025	2203	2319	2317	2222	2603	3234	3278	1995	1225	949	718	540	283	39901
Jun-15	Tuesday	16	206	144	113	135	364	969	2684	3690	3340	2530	2102	2318	2358	2300	2355	2877	3301	3402	2116	1312	1059	775	538	321	41309
Jun-15	Wednesday	17	271	126	116	143	386	981	2619	3655	3394	2484	2299	2311	2258	2304	2413	2744	2880	3498	2338	1616	1082	810	639	319	41686
Jun-15	Thursday	18	278	139	98	141	326	1091	2594	3567	3474	2550	2132	2215	2308	2318	2497	2859	3286	3319	1992	1321	1084	995	739	430	41753
Jun-15	Friday	19	264	233	144	159	331	994	2522	3613	3289	2484	2375	2327	2429	2475	2528	2928	3325	2760	1880	1449	1076	860	706	474	41625
Jun-15	Saturday	20	367	217	147	148	253	471	872	1414	1763	2000	1987	1988	2123	2148	2167	2265	2182	2019	1543	1169	989	834	707	441	30214
Jun-15	Sunday	21	352	177	139	112	167	304	493	600	815	1283	1361	1508	1428	1657	1769	1789	1780	1673	1593	1260	1052	747	537	343	22939
Jun-15	Monday	22	222	127	111	153	356	1063	2517	3580	2573	2140	2282	2210	2160	2269	2329	2745	3277	3059	1929	1224	840	659	510	296	38631
Jun-15	Tuesday	23	206	127	101	157	341	1052	2576	3379	3553	2608	2238	2310	2191	2344	2554	2751	3379	3257	2115	1372	981	804	617	298	41311
Jun-15	Wednesday	24	261	143	120	151	359	1045	2678	3618	3478	2736	2267	2307	2252	2380	2465	3032	3319	3239	2054	1248	1032	854	611	384	42033
Jun-15	Thursday	25	262	139	148	144	338	1026	2590	3624	3552	2585	2279	2203	2327	2448	2511	2841	3380	3198	2107	1385	1039	835	611	429	42001
Jun-15	Friday	26	336	190	152	175	354	959	2532	3485	3368	2679	2496	2460	2717	2660	2658	3060	3087	2606	1978	1413	1066	939	679	490	42539
Jun-15	Saturday	27	402	193	146	139	287	385	839	1436	1752	1890	1858	2067	2100	2110	2128	2138	2194	2109	2111	1556	1023	813	663	478	30817
Jun-15	Sunday	28	332	208	128	77	157	327	438	619	815	1269	1377	1582	1596	1739	1764	1802	1658	1595	1307	1022	792	642	510	329	22085
Jun-15	Monday	29	253	113	113	160	388	1054	2494	3542	3333	2598	2105	2178	2169	2291	2129	2199	2887	3160	2101	1353	912	700	564	322	39118
Jun-15	Tuesday	30	242	134	105	161	359	1066	2625	3538	3496	2664	2418	2217	2263	2390	2376	2700	3306	3463	2129	1379	837	727	596	350	41541
Jul-15	Wednesday	1	227	105	114	159	353	1070	2633	3661	3465	2687	2285	2290	2348	2453	2533	2802	3298	3451	2205	1394	1103	865	825	355	42681
Jul-15	Thursday	2	338	158	135	159	333	998	2517	3553	3279	2569	2279	2263	2401	2595	2830	3085	3432	3204	2107	1472	1249	1018	733	673	43380
Jul-15	Friday	3	407	199	146	145	284	574	1457	2014	1895	1981	2058	2232	2209	2322	2103	2136	1800	1808	1692	1368	1042	859	662	430	31823
Jul-15	Saturday	4	273	174	122	114	179	279	568	781	1101	1568	1522	1697	1701	1681	1696	1702	1492	1286	1109	975	703	578	639	433	22373
Jul-15	Sunday	5	248	182	127	90	147	315	465	541	765	1131	1264	1337	1487	1641	1664	1632	1682	1550	1322	1026	667	658	446	317	20704
Jul-15	Monday	6	228	157	73	153	302	868	2276	3368	2916	2343	2076	2163	2132	2194	2120	2729	3100	3231	1972	1164	890	765	533	308	38061
Jul-15	Tuesday	7	208	160	102	148	322	1077	2424	3650	2263	2456	2255	2220	2221	2303	2269	2712	3058	3256	1989	1182	915	735	574	363	38862
Jul-15	Wednesday	8	210	120	98	163	361	1046	2473	3568	3524	2507	2199	2206	2261	2301	2362	2758	3218	3446	2175	1320	994	800	607	357	41074

Jul-15 Thursday	9	204	161	134	157	325	1059	1980	3671	3456	2624	2294	2208	2212	2311	2435	2841	3142	3082	2163	1326	1129	908	651	500	40973
Jul-15 Friday	10	236	163	171	157	343	960	2404	3498	3184	2564	2216	2346	2405	2436	2719	2961	3175	2887	2001	1433	1072	930	667	509	41437
Jul-15 Saturday	11	377	204	154	117	208	442	788	1443	1715	2059	1998	2087	2130	1992	2083	2215	2157	1928	1631	1220	893	760	688	422	29711
Jul-15 Sunday	12	296	182	130	107	150	318	457	644	815	1251	1415	1527	1500	1715	1718	1778	1689	1537	1411	1028	826	731	552	331	22108
Jul-15 Monday	13	265	129	103	165	376	1031	2445	3533	3349	2464	2127	2197	2135	2377	2274	2591	3094	3301	2057	1256	858	626	496	297	39546
Jul-15 Tuesday	14	245	113	125	140	360	1038	2310	2935	3524	3011	2139	2240	2228	2350	2443	2769	3212	3342	2143	1432	957	718	509	302	40585
Jul-15 Wednesday	15	240	139	124	158	354	1016	2474	3588	3559	2575	2155	2216	2256	2536	2485	2839	3257	3335	2110	1293	990	839	631	370	41539
Jul-15 Thursday	16	264	132	130	145	344	1010	2359	3664	3536	2548	2313	2247	2302	2417	2553	2593	3139	3408	2139	1418	1033	843	663	462	41662
Jul-15 Friday	17	316	147	115	155	360	920	2416	3548	3250	2483	2366	2435	2501	2548	2536	2824	2954	2937	2461	1616	1085	914	677	522	42086
Jul-15 Saturday	18	365	180	157	138	220	421	847	1399	1770	1923	2004	2059	2112	2051	2191	2316	2289	2107	1815	1267	963	749	626	451	30420
Jul-15 Sunday	19	324	218	133	89	160	312	454	591	818	1243	1378	1552	1631	1653	1811	1692	1680	1477	1397	1039	763	656	556	324	21951
Jul-15 Monday	20	280	114	99	153	332	1018	2466	3542	3273	2549	2203	2174	2110	2167	2339	2745	3062	3303	2140	1231	912	737	522	350	39821
Jul-15 Tuesday	21	222	123	112	153	336	1007	2551	3558	3615	2983	2166	2121	2159	2343	2465	2695	3127	3264	2151	1291	992	739	570	347	41090
Jul-15 Wednesday	22	250	125	114	141	345	1032	2488	3501	3624	1763	2364	2202	2152	2339	2408	2750	3245	3375	2119	1369	1003	838	597	358	40502
Jul-15 Thursday	23	260	174	111	130	374	1039	2507	3435	3528	2713	2270	2195	2245	2365	2484	2746	3132	3057	2263	1332	1067	864	568	457	41316
Jul-15 Friday	24	278	145	130	143	345	962	2337	3497	3325	2549	2318	2245	2424	2525	2539	2807	3185	2886	2072	1355	1082	899	626	489	41163
Jul-15 Saturday	25	321	179	153	90	204	379	731	1364	1728	1967	2042	2212	2247	2065	2223	2255	2191	1899	1740	1211	975	834	601	532	30143
Jul-15 Sunday	26	313	167	140	97	157	287	472	616	878	1340	1404	1545	1531	1682	1833	1808	1771	1635	1447	1124	783	689	534	306	22559
Jul-15 Monday	27	240	120	120	154	332	1046	2380	3521	3307	2354	2121	2112	2215	2294	2306	2677	3083	3308	2034	1209	849	637	526	324	39269
Jul-15 Tuesday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-15 Wednesday	29	231	122	112	155	353	1041	2517	3579	3543	2383	2250	2228	2096	2299	2456	2821	3228	3282	2112	1369	1120	796	582	366	41041
Jul-15 Thursday	30	227	136	117	149	348	997	2470	3445	3304	2650	2399	2305	2269	2458	2365	2574	2437	2753	2479	1428	1058	909	638	380	40295
Jul-15 Friday	31	286	155	123	150	362	949	2330	3071	3071	2581	2226	2397	2407	2520	2512	2908	3114	2811	2055	1398	1154	877	680	527	40664
Aug-15 Saturday	1	351	218	164	145	228	360	793	1363	1684	1714	1809	1900	2008	1854	1995	2181	2245	2029	2009	1445	993	841	670	499	29498
Aug-15 Sunday	2	301	231	149	102	170	297	459	593	812	1199	1342	1457	1456	1660	1554	1568	1694	1553	1383	1059	814	583	491	293	21220
Aug-15 Monday	3	214	123	100	167	325	1015	2319	2488	1062	2833	2248	2106	2113	2394	2281	2740	3033	3182	2053	1179	958	727	570	351	36581
Aug-15 Tuesday	4	216	136	96	136	355	1028	2361	3463	3099	2622	2147	2036	2166	2381	2298	2620	3284	3319	2292	1302	954	772	582	349	40014
Aug-15 Wednesday	5	249	152	126	151	354	991	2406	3635	3373	1127	2764	2169	2361	2403	2598	2852	2989	3627	2827	1616	1111	829	661	394	41765
Aug-15 Thursday	6	264	158	112	141	291	1017	2442	3451	3509	2587	2309	2213	2256	2351	2448	2520	2738	3039	1968	1342	1056	809	613	359	39993
Aug-15 Friday	7	264	170	114	173	314	959	2286	3586	3273	2446	2336	2392	2428	2539	2654	3071	3342	3326	2433	1551	1156	949	760	619	43141
Aug-15 Saturday	8	367	179	155	106	186	414	721	1338	1675	1810	2005	2125	2143	2176	2209	2322	2492	2293	1900	1301	1001	894	812	542	31166
Aug-15 Sunday	9	320	208	135	115	149	327	444	618	769	1310	1363	1510	1577	1709	1756	1804	1765	1644	1533	1161	875	719	517	348	22676
Aug-15 Monday	10	218	150	90	158	288	1035	2309	3318	3308	2536	2219	2074	2178	2321	2412	2752	3315	3337	2091	1318	935	734	555	330	39981
Aug-15 Tuesday	11	185	162	117	173	327	1043	2413	3456	2792	2130	2156	2096	2196	2280	2375	2664	2975	3485	2218	1332	1022	748	578	322	39245
Aug-15 Wednesday	12	230	132	111	143	295	1076	2466	3477	3485	2430	2155	2138	2202	2336	2465	2918	3528	3679	2393	1473	1037	864	588	397	42018
Aug-15 Thursday	13	288	165	134	140	313	1052	2444	3562	3422	2424	2093	2226	2274	2429	2477	2909	3328	3223	2148	1424	1151	874	685	480	41665
Aug-15 Friday	14	276	146	106	158	324	989	2277	3289	3305	2532	2317	2401	2635	2594	2692	2984	3282	2983	2170	1414	1100	905	689	559	42127
Aug-15 Saturday	15	343	185	129	118	195	409	816	1437	1703	1896	1898	2087	2099	2187	2122	2072	2185	1987	1895	1383	1061	818	610	417	30052
Aug-15 Sunday	16	309	176	142	104	143	335	482	589	817	1248	1307	1472	1471	1642	1692	1753	1621	1557	1390	1117	769	606	477	334	21553
Aug-15 Monday	17	233	124	105	140	290	981	2513	3493	3275	2373	1952	1978	2003	2261	2335	2687	3181	3279	2106	1134	800	641	467	293	38644
Aug-15 Tuesday	18	215	141	123	149	331	1043	2567	3664	3140	2355	2125	2050	2049	2160	2334	2648	3219	3221	2153	1213	820	610	466	338	39134
Aug-15 Wednesday	19	210	137	101	146	298	1047	2578	3336	3465	2661	1990	2146	2062	2353	2474	2839	3071	2071	2335	1312	907	666	538	331	39074
Aug-15 Thursday	20	233	138	95	134	296	1054	2524	3629	3523	2284	2103	1866	1861	2262	2499	2753	3232	3253	2111	1244	984	732	611	327	39748
Aug-15 Friday	21	255	147	144	167	286	986	2439	3571	2627	2545	2118	2176	2406	2496	2649	3119	3300	2930	2051	1397	988	827	808	475	40907
Aug-15 Saturday	22	334	195	130	110	244	380	800	1412	1674	1838	1777	2087	2097	2017	2022	1980	1893	1886	1593	1144	964	746	521	399	28243
Aug-15 Sunday	23	256	138	127	89	119	288	407	590	785	1190	1274	1473	1413	1605	1718	1753	1672	1487	1417	977	716	593	426	278	20791
Aug-15 Monday	24	177	100	79	142	298	1053	2506	3472	3387	2325	2079	2026	2121	2238	2231	2749	3002	3233	2074	1241	946	617	449	287	38832
Aug-15 Tuesday	25	187	112	105	156	296	1034	2656	3550	3269	2778	1960	1912	2145	2150	2459	2852	3318	3289	2087	1256	916	707	542	300	40036
Aug-15 Wednesday	26	211	122	127	153	290	1082	2594	3604	3515	2419	2045	1945	2125	2250	2468	2974	3292	3393	2201	1333	1041	702	515	305	40706
Aug-15 Thursday	27	226	132	103	116	305	1092	2658	3624	3600	2424	2106	2103	2139	2203	2483	2798	3103	3180	2164	1465	987	786	558	376	40731
Aug-15 Friday	28	252	137	139	159	279	904	2570	3482	3294	2367	2161	2233	2307	2144	2893	3128	3168	2526	2505	1462	1090	875	892	490	41457
Aug-15 Saturday	29	372	204	144	126	198	401	848	1374	1685	1734	1803	1926	1916	2184	1991	2023	1899	1713	1485	1154	848	777	553	388	27746
Aug-15 Sunday	30	241	161	110	104	128	303	402	497	769	1082	1162	1267	1305	1494	1585	1699	1487	1388	1170	856	628	510	396	249	18993
Aug-15 Monday	31	162	83	85	144	307	897	1818	2394	2417	1681	2177	1926	1898	1984	2158	2677	3015	3022	2015	1173	809	602	414	295	34153
Sep-15 Tuesday	1	171	131	110	130	311	1081	2494	3356	3496	2613	2115	2127	2171	2157	2448	2891	3274	3302	2000	1268	853	690	513	291	39993
Sep-15 Wednesday	2	181	122	115	143	300	1052	2516	3515	3426	2663	1994	2085	2129	2265	2405	2891	3472	3299	2107	1308	996	796	541	361	40682
Sep-15 Thursday	3	243	152	122	160	310	1118	2668	3505	3566	2595	2181	2143	2149	2340	2571	3030	3452	3300	2015	1262	1034	782	817	448	41963
Sep-15 Friday	4	309	193	147	163	288	942	2531	3419	3330	2415	2224	2287	2565	2703	2935	3027	1855	3119	2247	1689	1218	1181	1008	578	42373
Sep-15 Saturday	5	379	241	146	117	164	388	715	1312	1575	1561	1838	1986	2062	1964	2065	1893	1876	1706	1362	1049	839	758	601	411	27008
Sep-15 Sunday	6	283	165	115	87	133	243	414	565	700	1081	1240	1449	1388	1518	1618	1563	1656	1419	1272	919	676	582	483	316	19885
Sep-15 Monday	7	211	153	106	116	165	343	626	807	883	1074	1282	1353	1528	1619	1740	1767	1696	1437	1265	1117	779	639	477	268	21451
Sep-15 Tuesday	8	160	79	78	128	327	1105	2488	3564	3592	2425	2059	2047	2178	2238	2474	2856	3328	3308	2056	1316	926	734	507	264	40237
Sep-15 Wednesday	9	177	112	96	162	321	1060	2469	3516	3451	2724	2098	2112	2199	2251	2481	2902	3241	3474	2207	1311	1044	725	542	328	41003
Sep-15 Thursday	10	178	139	106	125	311	1040	2439	1880	3020	3210	2213	2133	2210	2291	2509	2970	3271	3396	2164	1445	1360	773	599	321	40103

Sep-15 Friday	11	256	140	155	147	306	1061	2411	3345	3346	2576	2189	2268	2484	2443	2707	3216	3332	2958	2151	1433	1042	834	702	489	41991
Sep-15 Saturday	12	271	163	222	108	213	475	1069	1595	1687	1595	1564	1677	1815	1904	1935	1884	1873	1805	1623	1143	821	824	557	437	27260
Sep-15 Sunday	13	284	261	177	111	138	328	454	581	797	1195	1252	1590	1656	1636	1983	1884	1823	1647	1385	1068	804	598	491	260	22403
Sep-15 Monday	14	216	105	97	123	334	1040	2583	3450	3304	2349	2036	2033	2098	2214	2436	2500	2935	3041	2148	1288	924	663	448	236	38601
Sep-15 Tuesday	15	178	109	97	135	325	1028	2649	2854	3155	2816	2146	2015	2216	2215	2365	2965	3339	3273	2079	1399	1039	736	476	281	39890
Sep-15 Wednesday	16	221	130	111	156	337	1052	2613	3501	3421	2623	2065	2101	2201	2268	2510	3068	3415	3371	2224	1377	989	719	531	300	41304
Sep-15 Thursday	17	167	121	96	154	323	1094	2409	2706	3030	2950	2121	2153	2171	2225	2299	2947	3329	3232	2176	1415	1125	763	689	416	40111
Sep-15 Friday	18	273	132	93	133	353	1014	2519	3424	3467	2349	1964	2101	2321	2436	2725	3254	3323	3069	2235	1471	1013	914	954	547	42084
Sep-15 Saturday	19	313	170	128	112	220	526	936	1528	1805	1906	1984	2118	2070	2083	2053	1935	1821	2053	1714	1341	830	746	551	380	29323
Sep-15 Sunday	20	250	162	145	106	142	316	477	690	825	1338	1412	1576	1685	1788	1887	1886	1754	1589	1368	1070	773	613	457	266	22575
Sep-15 Monday	21	193	118	75	149	365	1037	2659	2659	3334	2456	2054	2058	2184	2116	2347	2840	3296	3400	2111	1374	878	620	487	287	39097
Sep-15 Tuesday	22	187	113	100	143	379	1032	2749	3579	3545	2533	2038	2035	1937	2087	2330	2885	3410	3359	2256	1249	957	677	507	299	40386
Sep-15 Wednesday	23	209	102	108	134	331	1066	2693	3437	2873	2602	2027	2095	2128	2331	2237	2910	3297	3415	2138	1312	938	733	528	266	39910
Sep-15 Thursday	24	205	117	96	138	378	1055	2717	3468	3124	2500	2106	2107	2067	2055	2265	2853	3228	3171	2047	1331	967	769	561	366	39691
Sep-15 Friday	25	283	136	103	146	355	1086	2507	3516	3228	2365	2058	2229	2358	2584	2749	3209	3373	3125	3144	1643	1088	940	865	514	43604
Sep-15 Saturday	26	329	184	134	113	250	620	1112	1501	1722	1700	1683	1909	1933	1889	1887	1783	1801	1860	1729	1279	858	851	664	408	28199
Sep-15 Sunday	27	233	140	109	85	137	335	539	699	907	1366	1374	1723	1642	1666	1667	1708	1721	1465	1303	1017	792	598	445	238	21909
Sep-15 Monday	28	147	77	79	147	374	1051	2588	3640	3170	2501	2015	1992	1999	2177	2258	2821	3236	3291	2110	1265	850	581	454	257	39080
Sep-15 Tuesday	29	201	108	98	147	381	1031	2539	3485	3376	2582	2032	2012	2096	2182	1975	2928	3418	3418	2111	1251	927	656	468	295	39717
Sep-15 Wednesday	30	190	110	92	149	337	1049	2666	3353	3390	2593	2064	2124	2193	2196	2477	2940	3069	2868	2114	1319	992	699	549	335	39868
Oct-15 Thursday	1	257	135	91	168	357	1009	2579	3457	3554	2641	2122	2185	2082	2046	2488	2911	2936	2988	2038	1230	823	720	569	300	39686
Oct-15 Friday	2	257	157	91	143	390	881	2100	2964	2499	2103	1842	2033	2249	2252	2406	2457	2555	2249	1544	974	632	552	510	334	34174
Oct-15 Saturday	3	223	142	128	75	187	383	605	765	934	947	932	1119	1054	1052	965	897	864	780	662	520	350	306	233	175	14298
Oct-15 Sunday	4	129	67	53	49	94	221	304	362	442	563	734	888	875	989	995	1006	1004	971	818	607	385	308	268	102	12234
Oct-15 Monday	5	117	35	50	69	192	616	1455	2076	1886	1558	1541	1442	1497	1521	1704	1847	2040	2288	1401	868	596	502	332	227	25860
Oct-15 Tuesday	6	178	95	71	106	359	950	2384	3289	3113	2340	1996	1900	1963	2136	2038	2474	2980	3129	2076	1323	862	631	578	278	37249
Oct-15 Wednesday	7	149	117	93	156	284	1088	2214	1173	2811	3176	2592	2001	2117	2239	2416	2901	3228	3412	2251	1385	929	780	590	332	38434
Oct-15 Thursday	8	264	116	101	169	341	1054	2555	3036	2917	2918	2280	2119	2186	2417	2639	3049	3316	3258	2393	1535	1067	776	655	391	41552
Oct-15 Friday	9	315	134	104	157	337	1003	2677	2061	2214	3035	2302	2308	2469	2743	2832	3274	3413	3122	2372	1904	1217	1134	943	558	42628
Oct-15 Saturday	10	392	208	152	115	234	479	826	1443	1709	1710	1772	1865	1931	1822	1912	1955	1735	1513	1443	1165	896	792	576	449	27094
Oct-15 Sunday	11	283	157	117	90	147	324	475	616	816	1099	1297	1509	1549	1821	1714	1628	1700	1663	1484	1103	771	700	512	296	21871
Oct-15 Monday	12	212	99	87	129	323	1036	2639	3317	3075	2313	2112	2108	2164	2215	2458	3001	3043	3122	2000	1301	946	715	502	302	39219
Oct-15 Tuesday	13	187	107	74	138	316	1051	2699	3330	3433	2705	2099	2063	2160	2231	2434	2988	3344	3391	2235	1430	939	704	499	273	40830
Oct-15 Wednesday	14	218	115	102	144	309	1092	2657	3351	3285	2759	2180	2165	2278	2238	2563	2955	3225	3221	2346	1410	1122	850	545	287	41417
Oct-15 Thursday	15	214	131	107	136	320	1067	2564	3275	3340	2581	2216	2121	2237	2429	2612	3071	3505	3242	2538	1566	1063	795	608	372	42110
Oct-15 Friday	16	310	141	145	167	296	1003	2525	3325	3282	2678	2127	2254	2504	2585	2886	3092	3266	2882	2051	1616	1108	892	926	478	42539
Oct-15 Saturday	17	327	194	138	97	233	525	1156	1828	1843	1710	1696	1921	2001	2077	2100	2105	2006	1798	1614	1302	1026	928	748	491	29864
Oct-15 Sunday	18	282	153	123	76	135	293	455	594	785	1156	1333	1780	1829	1939	1905	1862	1836	1698	1500	1168	866	685	559	259	23271
Oct-15 Monday	19	207	103	86	168	352	1021	2534	3309	3350	2312	2059	1980	2191	2139	2385	2848	3380	3286	2096	1385	932	713	520	285	39641
Oct-15 Tuesday	20	188	116	111	154	351	1089	2576	3272	3321	2236	2085	2051	2175	2255	2328	3015	3309	3385	2167	1379	1013	760	562	346	40244
Oct-15 Wednesday	21	210	115	90	136	287	1045	2609	3399	3415	2391	2068	2048	2173	2107	2550	2992	3315	3029	2228	1437	917	791	645	308	40305
Oct-15 Thursday	22	230	136	105	138	309	1101	2562	3072	3348	2906	2182	2284	2330	2345	2550	3004	3471	2496	2525	1597	1110	841	633	356	41631
Oct-15 Friday	23	287	129	110	141	319	1000	2552	3279	2933	2655	2245	2264	2447	2590	2921	3220	3229	2956	2102	1648	1147	984	996	484	42638
Oct-15 Saturday	24	341	175	147	105	188	422	900	1413	1872	1714	1704	1898	2054	1960	2003	1807	1964	1769	1604	1338	1018	1077	746	525	28744
Oct-15 Sunday	25	278	187	101	92	143	286	476	582	798	1164	1299	1658	1641	1852	1882	1840	1780	1668	1526	1216	802	591	541	272	22675
Oct-15 Monday	26	196	78	96	132	300	1062	2367	3357	3419	2719	2072	1968	2106	2156	2498	2976	3344	3280	2031	1260	813	644	601	272	39747
Oct-15 Tuesday	27	191	105	75	117	345	1081	2430	3321	2961	2728	2050	1943	2032	2052	2280	2846	3044	3168	2005	1279	933	658	561	275	38480
Oct-15 Wednesday	28	207	109	82	128	315	1079	2388	3474	3329	2420	2129	2048	2120	2296	2551	2829	3274	3339	2181	1471	959	793	579	348	40448
Oct-15 Thursday	29	185	126	118	140	345	1061	2629	3412	3364	2626	2170	2266	2233	2309	2499	2989	3513	2444	2469	1551	1138	851	671	348	41457
Oct-15 Friday	30	258	112	103	149	327	1005	2407	3405	3354	2718	2165	2224	2303	2407	2821	3109	3303	2804	2334	1701	1152	1002	852	537	42552
Oct-15 Saturday	31	304	208	133	100	155	387	831	1205	1584	1543	1621	1821	1791	1845	1777	1871	1823	1692	1468	1037	881	825	667	497	26066
Nov-15 Sunday	1	290	173	139	94	229	312	448	645	813	1144	1224	1429	1398	1436	1612	1648	1682	1539	1309	990	749	545	351	237	20436
Nov-15 Monday	2	175	96	79	135	347	1221	2882	3520	3297	2277	2021	2011	2068	2023	2502	2910	3309	2847	1972	1107	833	666	454	245	38997
Nov-15 Tuesday	3	166	95	126	152	322	1131	2574	3267	3018	2290	1962	1857	2018	2185	2206	2768	3259	3087	1880	1071	763	667	560	252	37676
Nov-15 Wednesday	4	185	86	109	127	376	1146	2628	3321	3227	2593	2080	2098	2005	2200	2458	3033	3352	3378	2018	1159	981	841	691	303	40395
Nov-15 Thursday	5	211	96	122	165	386	1202	2895	3410	3428	2484	2073	2141	2121	2282	2584	3010	3420	3330	2008	1276	1099	870	758	354	41725
Nov-15 Friday	6	223	158	125	154	408	1111	2909	3648	3097	2410	2270	2134	2434	2442	2801	3186	3242	2933	1913	1334	908	870	787	511	42008
Nov-15 Saturday	7	380	212	126	114	280	589	1014	1465	1623	1588	1565	1775	1994	1968	2018	2100	1800	1689	1349	1027	830	730	684	536	27456
Nov-15 Sunday	8	422	227	99	99	189	344	497	588	709	1078	1145	1360	1482	1540	1627	1671	1610	1573	1425	850	728	605	422	264	20554
Nov-15 Monday	9	180	90	64	136	394	1052	2230	2813	2546	2277	1898	1891	1990	1956	2293	2627	3148	3148	1751	1065	767	590	476	240	35622
Nov-15 Tuesday	10	176	98	65	149	379	1088	2731	3406	3492	2368	2075	2126	2070	2291	2437	2962	3360	3308	2030	1197	858	646	445	266	40023
Nov-15 Wednesday	11	190	109	91	121	287	1081	2823	3303	3231	2270	2124	2209	2165	2248	2433	2765	2932	2922	1953	1216	895	718	520	267	38873
Nov-15 Thursday	12	180	91	84	163	321	1100	2876	3476	3500	2598	2176	2186	2213	2273	2597	2882	3307	3242	2101	1239	944	699	556	331	41135
Nov-15 Friday	13	250	91	121	156	307	1085	2772	3387	3336	2657	2228	2212	2487	2586	2686	2977	3221	2930	1949	1378	983	922	783	427	41931

Nov-15	Saturday	14	314	169	140	111	200	424	999	1454	1605	1615	1824	1929	1938	1869	1968	1986	1924	1753	1562	1061	772	744	657	405	27423
Nov-15	Sunday	15	192	146	120	106	143	315	429	568	716	1067	1245	1446	1503	1656	1722	1756	1867	1559	1334	1008	676	595	413	247	20829
Nov-15	Monday	16	163	100	81	146	327	1136	2473	3344	3345	2672	2148	2044	2107	2189	2345	3026	3257	3262	1964	1155	814	636	429	271	39434
Nov-15	Tuesday	17	157	92	77	159	330	1126	2847	2804	2850	2838	2075	1963	2139	2158	2546	2889	3342	3212	2067	1142	864	687	422	295	39081
Nov-15	Wednesday	18	211	111	76	145	333	1092	2150	3248	3507	2573	2187	2150	2024	2264	2549	2920	2118	2027	2701	1271	912	723	479	320	38091
Nov-15	Thursday	19	197	99	91	139	327	1107	2407	3280	3148	2445	1892	2000	2079	2239	2585	2932	3409	3197	1951	1300	940	877	500	326	39467
Nov-15	Friday	20	198	176	142	131	334	1058	2718	3386	3253	2433	2216	2259	2419	2384	2793	3296	3171	2902	1842	1332	939	843	698	499	41422
Nov-15	Saturday	21	309	153	108	119	214	488	964	1391	1649	1588	1600	1789	1745	1988	2006	1890	1847	1820	1491	1074	805	660	531	405	26634
Nov-15	Sunday	22	202	161	115	76	145	331	499	565	739	1084	1165	1342	1450	1627	1721	1841	1668	1478	1202	1040	684	606	448	272	20461
Nov-15	Monday	23	134	84	91	154	311	1134	2663	3283	3052	2247	2123	2168	2229	2330	2479	2815	3175	3188	1966	1251	873	614	531	326	39221
Nov-15	Tuesday	24	155	109	103	157	338	1053	2609	3323	3094	2389	2304	2275	2312	2465	2612	2928	3265	3097	1985	1403	987	781	641	461	40846
Nov-15	Wednesday	25	328	151	121	162	322	979	2518	3181	2635	2176	2150	2335	2447	2521	2779	2694	2649	2252	1759	1240	917	805	672	407	38200
Nov-15	Thursday	26	272	131	98	80	107	222	382	504	573	746	1036	1310	1550	1385	1230	1150	1133	1119	1058	971	862	706	592	356	17573
Nov-15	Friday	27	277	179	132	118	223	588	1094	1309	1410	1502	1564	1741	1826	1979	1952	1916	1858	1726	1405	1059	720	642	587	368	26175
Nov-15	Saturday	28	230	149	113	126	166	444	715	939	1136	1273	1475	1743	1668	1609	1662	1624	1808	1753	1444	1147	828	628	574	327	23581
Nov-15	Sunday	29	237	164	130	94	138	346	427	540	678	1077	1332	1398	1538	1494	1746	1818	1726	1594	1305	918	698	612	414	297	20721
Nov-15	Monday	30	182	99	87	135	315	1126	2645	3612	2967	2245	2067	2001	2088	2203	2484	3012	3303	3309	2005	1151	781	614	431	251	39113
Dec-15	Tuesday	1	172	97	86	127	318	1185	2727	3483	3282	2189	2160	1925	2120	2276	2471	3001	3307	3119	2162	1144	873	666	477	306	39673
Dec-15	Wednesday	2	137	106	91	127	309	1125	2738	3550	2920	2599	1940	2166	2206	2220	2487	2993	3083	3098	2002	1141	857	640	474	338	39347
Dec-15	Thursday	3	186	97	93	126	356	1141	2726	3461	3363	2416	2024	2006	2123	2221	2510	2970	3468	3294	1834	1418	936	719	531	330	40349
Dec-15	Friday	4	243	104	101	157	336	1103	2681	3604	3170	2242	1642	2225	2388	2509	2743	3277	3329	2842	2022	1286	917	829	699	423	40872
Dec-15	Saturday	5	268	157	128	116	178	490	937	1321	1578	1587	1660	1865	1826	1904	1923	1999	2103	1846	1516	1005	692	633	521	366	26619
Dec-15	Sunday	6	260	144	114	98	129	387	502	595	774	1049	1203	1442	1481	1500	1661	1591	1649	1520	1195	850	664	530	413	276	20027
Dec-15	Monday	7	147	94	67	128	306	1111	2344	2951	2528	2333	1981	1873	1990	2119	2306	2919	3293	3115	1876	1241	752	657	576	417	37124
Dec-15	Tuesday	8	187	96	94	146	338	1097	2660	2983	3258	2585	2078	2138	2011	2152	2514	2934	3238	3116	2041	1274	887	645	502	315	39289
Dec-15	Wednesday	9	173	96	96	124	316	1131	2632	3466	3385	2375	2093	2166	2074	2265	2438	2982	3352	3234	1964	1125	924	723	487	322	39943
Dec-15	Thursday	10	171	100	110	148	323	1131	2683	3378	3400	2549	2150	2075	2217	2376	2606	3005	2652	3320	2224	1393	1091	838	531	412	40883
Dec-15	Friday	11	187	132	94	135	351	1048	2655	3458	3224	2392	2247	2175	2380	2490	2683	3238	3296	2996	2137	1439	1043	933	721	509	41963
Dec-15	Saturday	12	272	143	121	102	182	490	927	1411	1732	1607	1691	1884	1987	2096	2123	1988	1986	1875	1665	1165	808	769	623	433	28080
Dec-15	Sunday	13	201	164	132	92	127	303	401	578	839	1129	1316	1420	1530	1553	1692	1739	1896	1575	1410	919	736	558	401	284	20995
Dec-15	Monday	14	152	93	74	129	339	1082	2717	3597	3241	1499	2066	2040	2001	2113	2432	2911	3218	3189	1933	1204	877	594	463	268	38232
Dec-15	Tuesday	15	169	107	84	146	319	1120	2685	3423	3345	2504	2138	2116	2112	2353	2510	3027	3169	3088	2051	1298	929	710	478	328	40209
Dec-15	Wednesday	16	198	121	102	133	319	1047	2607	3429	3413	2448	2265	2189	2253	2364	2592	3063	3369	3189	2079	1288	983	731	536	396	41114
Dec-15	Thursday	17	197	125	89	173	343	1132	2625	3043	2677	2370	2438	2222	2393	2300	2592	2973	3276	3061	1807	1379	929	801	661	442	40048
Dec-15	Friday	18	237	123	116	141	328	1013	2474	3344	3237	2343	2228	2398	2562	2581	2729	3272	3215	2760	1937	1370	1069	934	837	520	41768
Dec-15	Saturday	19	286	193	134	117	202	468	814	1223	1457	1685	1733	1839	1996	1903	2079	2043	1981	2018	1657	1145	772	788	678	488	27699
Dec-15	Sunday	20	275	177	148	96	142	308	419	584	737	1109	1198	1370	1475	1600	1732	1634	1723	1884	1365	979	738	634	481	341	21149
Dec-15	Monday	21	170	100	77	164	329	1016	2517	3485	2954	2413	2273	2291	2254	2435	2640	2850	3142	2865	1895	1194	861	628	549	350	39452
Dec-15	Tuesday	22	193	107	104	137	318	1015	2467	3216	2802	2245	2137	2135	2219	2353	2440	2792	2977	2742	1828	1130	927	689	782	340	38095
Dec-15	Wednesday	23	276	117	114	133	297	953	2274	3018	2669	2191	2247	2349	2288	2498	2667	2853	2744	2374	1702	1165	882	776	837	431	37855
Dec-15	Thursday	24	315	199	137	119	206	578	1278	1569	1482	1524	1713	1880	2084	1832	1932	1706	1562	1403	1243	876	729	655	517	344	25883
Dec-15	Friday	25	221	118	60	47	67	102	239	255	455	582	738	958	1202	1280	1333	1265	1248	1122	1056	807	678	534	442	277	15086
Dec-15	Saturday	26	173	120	89	93	177	381	541	749	855	1084	1267	1491	1616	1742	1820	1795	1754	1691	1441	1046	841	748	558	353	22425
Dec-15	Sunday	27	250	141	136	98	153	309	414	496	692	970	1177	1285	1496	1500	1595	1517	1637	1569	1448	967	774	609	475	310	20018
Dec-15	Monday	28	235	110	100	146	325	955	2240	2847	2509	2100	2067	2126	2277	2260	2264	2464	2624	2624	1649	1107	746	624	480	308	35187
Dec-15	Tuesday	29	236	138	120	143	331	949	2355	2970	2743	2120	2101	2227	2290	2390	2424	2471	2865	2630	1833	1130	792	655	549	346	36808
Dec-15	Wednesday	30	231	132	98	143	317	918	2249	3082	2802	2257	2261	2278	2437	2542	2576	2629	2791	2735	1797	1204	823	761	565	352	37980
Dec-15	Thursday	31	262	149	98	143	293	769	1839	2369	2325	1829	1961	2000	2288	2241	2327	2405	2022	1546	1352	898	735	642	442	328	31263

30 Highest Hours of the year
100 Highest Hours of the year

AADT 35100

WESTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	238	115	115	104	261	725	1740	2963	2515	2464	2168	2075	2147	2170	2427	2587	2591	3110	2736	1370	928	705	604	363	37221
Jan-15 Friday	9	256	113	72	103	240	671	1962	3419	2904	2105	1990	2293	2279	2464	2547	3238	3295	3491	2432	1421	1020	870	723	475	40383
Jan-15 Saturday	10	351	189	114	108	141	337	565	909	1061	1436	1626	1859	2021	1904	1799	1957	1813	1817	1565	1150	819	730	643	451	25365
Jan-15 Sunday	11	282	168	142	79	79	197	371	540	630	815	1092	1408	1524	1626	1497	1492	1360	1291	1106	830	656	492	354	258	18289
Jan-15 Monday	12	133	81	72	88	260	834	2128	3445	3120	2133	1991	1948	2127	1921	2321	2718	3130	2856	2003	1061	857	612	592	307	36738
Jan-15 Tuesday	13	256	133	89	93	255	747	2183	3402	3133	2108	1952	2130	2143	2257	2421	2704	3145	3030	2637	1190	861	724	607	318	38518
Jan-15 Wednesday	14	239	100	100	109	270	807	2193	3700	3025	2184	1999	2031	2127	2242	2243	2539	3379	3267	2320	1255	886	723	592	315	38645
Jan-15 Thursday	15	280	106	84	118	334	819	2014	3396	2977	2198	2084	2262	2311	2230	2662	3233	3131	3611	2377	1334	917	834	665	363	40340
Jan-15 Friday	16	288	122	81	139	252	783	1793	3214	2706	2157	2275	2318	2565	2449	2814	3166	3068	3390	2959	1559	946	926	764	558	41292
Jan-15 Saturday	17	346	161	121	84	157	263	551	836	1216	1494	1624	1832	1935	1849	1819	1931	1898	1802	1682	1162	869	706	645	496	25479
Jan-15 Sunday	18	326	177	157	81	106	190	352	440	626	827	1115	1343	1569	1760	1658	1536	1429	1291	1230	911	678	530	504	354	19190
Jan-15 Monday	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	20	209	91	91	126	301	854	2370	3722	3256	2138	1996	2158	2323	2240	2571	2933	3198	3406	2477	1309	996	739	622	324	40450
Jan-15 Wednesday	21	211	91	108	99	253	761	2135	3678	3073	2209	1924	2061	2085	2280	2499	3059	3281	3299	2675	1359	934	799	593	370	39836
Jan-15 Thursday	22	242	114	104	120	317	728	2062	3362	3076	2045	1952	2081	2250	2363	2710	3044	3399	3821	2796	1404	1045	722	663	385	40805
Jan-15 Friday	23	232	109	105	118	250	704	2024	3433	2926	2118	2124	2290	2750	2475	2712	2897	3001	2828	1968	1247	799	682	738	469	38999
Jan-15 Saturday	24	345	151	129	92	145	249	531	768	1154	1432	1693	1861	1992	1835	1845	1716	1746	1743	1605	1098	833	691	605	512	24771
Jan-15 Sunday	25	354	182	182	78	99	193	374	532	652	926	1342	1485	1656	1820	1877	1819	1853	1632	1361	996	669	534	382	320	21318
Jan-15 Monday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Wednesday	28	197	112	99	110	232	741	2062	3562	3122	2234	1961	2131	2148	2297	2614	3047	3143	3394	2678	1476	961	807	551	333	40012
Jan-15 Thursday	29	215	148	124	91	263	742	2139	3643	3048	2238	1992	2085	2263	2349	2666	3115	3412	3655	2413	1382	953	889	789	464	41078
Jan-15 Friday	30	242	112	88	119	260	701	1991	3401	2895	2291	2240	2473	2490	2584	2751	3379	3241	3196	2611	1524	1005	1050	807	554	42005
Jan-15 Saturday	31	366	168	106	87	109	282	547	849	1236	1431	1655	1954	2004	1813	1996	1998	1984	1766	1593	1180	947	748	654	475	25948
Feb-15 Sunday	1	310	195	116	77	87	162	337	484	635	902	1168	1390	1510	1785	1563	1627	1419	1476	1038	590	633	568	832	435	19339
Feb-15 Monday	2	153	99	73	101	248	788	2091	3437	3116	2085	1856	2060	2157	2105	2525	2721	3143	3067	2403	1262	860	705	524	307	37886
Feb-15 Tuesday	3	215	142	107	104	304	769	2243	3719	2484	2767	1946	2086	2124	2227	2564	3021	3031	3414	2811	1374	996	795	669	319	40231
Feb-15 Wednesday	4	241	114	115	91	257	775	2144	3672	3069	2160	2054	2051	2333	2143	2403	3167	2772	2769	2638	1749	990	775	618	334	39434
Feb-15 Thursday	5	244	98	95	96	285	712	2131	3575	3081	2245	2030	2166	2175	2313	2585	2814	3142	3290	2396	1399	977	738	628	395	39610
Feb-15 Friday	6	264	129	80	108	268	725	2042	3621	2919	2136	2141	2165	2543	2540	2749	3233	3414	3070	2396	1782	1047	849	784	496	41501
Feb-15 Saturday	7	353	169	118	84	151	286	524	911	1211	1601	1735	1974	2103	1964	1934	2021	2009	1869	1732	1236	887	765	731	517	26885
Feb-15 Sunday	8	285	189	140	75	85	170	369	538	647	901	1254	1407	1608	1878	1786	1723	1663	1527	1390	1010	747	488	395	269	20544
Feb-15 Monday	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	10	207	97	98	104	258	792	2180	3614	3120	2344	2205	2258	2249	2019	2299	2635	3435	3465	2555	1378	953	811	605	344	40025
Feb-15 Wednesday	11	236	98	84	104	279	694	2187	3472	3203	2139	2125	2166	2263	2375	2660	2908	2250	3169	3248	1538	1139	818	653	384	40192
Feb-15 Thursday	12	226	95	84	98	314	755	2151	3726	2898	2217	2177	2133	2158	2445	2622	3031	3349	3377	2993	1549	990	838	667	392	41285
Feb-15 Friday	13	252	124	98	128	270	652	1771	3535	2790	2277	2316	2304	2610	2509	2947	3084	3309	3383	2695	1553	1111	882	932	549	42081
Feb-15 Saturday	14	357	189	133	72	149	232	414	773	1179	1592	1795	1808	1983	2076	1871	1942	1943	1869	1793	1341	894	777	781	585	26548
Feb-15 Sunday	15	362	231	162	72	115	136	272	521	737	983	1368	1656	1875	2220	1870	1729	1648	1439	1300	1035	778	650	468	371	21998
Feb-15 Monday	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Thursday	19	270	132	99	147	295	746	2209	3661	2761	2177	2086	2211	2220	2389	2692	3009	3239	3270	2661	1382	972	736	618	371	40353
Feb-15 Friday	20	237	121	89	105	269	705	1845	3470	2977	2235	2253	2338	2353	2585	2836	2852	2653	3132	2616	1657	1044	830	737	519	40458
Feb-15 Saturday	21	331	157	110	80	132	278	520	970	1329	1740	1875	2118	2255	2023	2170	2046	1973	1949	1907	1327	954	1267	848	516	28875
Feb-15 Sunday	22	306	163	105	89	104	221	347	609	788	1063	1411	1688	1752	1888	1884	1957	1685	1653	1311	973	657	494	414	297	21859
Feb-15 Monday	23	162	105	55	93	320	761	2211	3651	3004	2262	2087	1935	2253	2174	2503	2776	3111	3287	2132	1170	855	637	556	312	38412
Feb-15 Tuesday	24	198	101	69	114	225	579	1456	2343	2199	2282	1699	1636	1855	1811	2035	2249	2462	2440	1670	1025	627	565	475	273	30388
Feb-15 Wednesday	25	242	92	83	123	293	775	2127	3739	3161	2263	2042	2153	2282	2171	2721	2999	2741	2956	2825	1484	912	691	577	316	39768
Feb-15 Thursday	26	252	120	90	98	285	715	2037	3642	3090	2194	2101	2181	2341	2396	2550	2760	3159	3569	2348	1439	981	780	613	363	40104
Feb-15 Friday	27	312	151	112	133	266	669	2023	3190	3358	2322	2164	2442	2612	2480	2877	3155	2927	3661	2454	1778	1003	913	769	521	42292
Feb-15 Saturday	28	341	199	137	92	137	278	494	1002	1326	1681	1894	2108	2123	2106	2103	2312	2137	1819	1605	1271	1166	1281	846	529	28987
Mar-15 Sunday	1	274	181	123	74	113	167	299	563	712	1040	1336	1580	1569	1872	1700	1593	1370	1262	1033	909	701	514	376	268	19629
Mar-15 Monday	2	169	82	74	91	313	789	2141	3667	3062	2274	2007	2056	2218	2282	2616	2946	3241	3360	2561	1484	900	702	555	351	39941

Mar-15 Tuesday	3	244	118	80	150	317	838	2163	3782	3078	2204	1929	2066	2513	2396	2640	2895	3335	3443	2406	1477	924	796	556	362	40712
Mar-15 Wednesday	4	275	133	81	121	284	796	2253	3674	3034	2201	1915	2305	2257	2457	2686	2939	3097	3300	2658	2011	1177	849	669	379	41551
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	319	115	79	129	270	726	1979	3561	2856	2277	2276	2286	2571	2525	2975	3249	3387	3217	2428	1581	1079	891	856	569	42201
Mar-15 Saturday	7	353	180	146	109	162	282	622	1083	1475	1730	2098	2117	2323	2158	2232	2357	2325	2013	1686	1411	992	901	721	582	30058
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	184	89	89	103	335	835	2167	3568	3089	2168	2107	2178	2281	2284	2626	2866	3397	3465	2297	1673	1117	785	640	385	40728
Mar-15 Tuesday	10	238	125	105	122	294	810	2155	3469	3158	2262	2035	2268	2353	2325	2335	3026	3379	3433	2793	1299	1433	895	682	435	41429
Mar-15 Wednesday	11	280	126	106	120	295	753	2140	3582	3272	2349	2081	2325	2212	2385	2767	2985	2670	3160	3292	1835	1312	967	746	418	42178
Mar-15 Thursday	12	299	129	115	149	296	806	2093	3553	3060	2259	2214	2421	2458	2375	2600	3139	2876	2392	3055	1815	1207	852	713	429	41305
Mar-15 Friday	13	303	142	137	135	298	709	1932	3448	3060	2333	2249	2620	2570	2516	2948	3229	3212	3405	2226	1720	1094	879	783	592	42540
Mar-15 Saturday	14	371	236	186	90	180	309	503	880	1269	1570	1779	2000	2117	2052	2066	2085	1930	1769	1509	1362	1043	931	713	619	27569
Mar-15 Sunday	15	354	189	114	85	153	222	339	561	810	1096	1414	1720	1813	1864	1934	2127	1970	1825	1443	1208	1006	693	475	313	23728
Mar-15 Monday	16	174	123	62	95	335	860	2179	3618	3083	2263	2174	2110	2318	2415	2549	2912	3074	3472	2750	1645	1101	802	640	357	41111
Mar-15 Tuesday	17	258	131	91	122	316	819	2124	3598	3266	2374	2118	2230	2353	2294	2591	2968	3119	2827	2957	1821	1169	820	633	400	41399
Mar-15 Wednesday	18	283	136	118	132	297	795	2198	3628	3261	2261	2139	2246	2368	2388	2676	3069	3327	3519	2656	1806	1185	859	644	374	42365
Mar-15 Thursday	19	269	115	83	120	295	753	2138	3450	3097	2599	2229	2381	2383	2489	2622	2533	3095	3339	2255	1467	1042	897	657	364	40672
Mar-15 Friday	20	283	129	96	139	323	735	1978	3468	2969	2451	2241	2425	2706	2639	2864	3154	2816	3305	2571	1763	1366	1050	943	609	43023
Mar-15 Saturday	21	465	217	122	121	209	306	518	1009	1430	1759	1850	1866	2036	2244	2200	2159	2174	2062	1657	1454	1098	1290	903	661	29810
Mar-15 Sunday	22	366	217	170	94	168	219	306	523	688	1064	1435	1735	1926	2016	1835	1745	1605	1542	1294	1055	756	595	415	296	22065
Mar-15 Monday	23	198	81	82	94	354	812	2214	3660	3109	2162	2242	2208	2242	2308	2485	2992	3152	3395	2157	1302	1013	735	637	419	40053
Mar-15 Tuesday	24	248	116	90	137	312	834	2145	3811	3162	2272	2087	2281	2339	2464	2590	3115	3246	3535	2961	1742	1131	816	648	414	42496
Mar-15 Wednesday	25	275	115	107	131	327	813	2172	3733	3228	2404	2246	2241	2367	2387	2683	3193	3277	3563	2752	1842	1141	914	734	370	43015
Mar-15 Thursday	26	273	127	106	128	323	746	2175	3451	3170	2278	2211	2387	2494	2533	2749	3009	3203	3382	2950	1916	1190	868	734	462	42865
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	383	172	122	108	203	433	845	2234	2480	2878	3177	2601	2409	2254	2165	2196	2000	1769	1574	1472	1033	905	692	562	34667
Mar-15 Sunday	29	326	191	157	104	177	201	378	635	881	1336	1706	2005	1967	2028	1878	1715	1720	1510	1253	1194	908	680	465	353	23768
Mar-15 Monday	30	246	120	67	97	340	755	1749	2998	2875	2358	2172	2388	2475	2399	2551	3024	3322	3291	2462	1585	1078	821	652	466	40291
Mar-15 Tuesday	31	248	141	97	134	304	730	1810	3209	2893	2204	2258	2398	2306	2358	2663	3092	3487	3579	2558	1762	1162	928	717	452	41490
Apr-15 Wednesday	1	309	176	129	123	308	740	1849	2875	2852	2393	2240	2366	2433	2217	2620	3254	3138	3450	2328	1776	1268	981	746	448	41019
Apr-15 Thursday	2	310	127	114	152	303	721	1754	3075	2647	2336	2291	2344	2363	2504	2727	3186	3554	3607	2457	1877	1330	914	747	506	41946
Apr-15 Friday	3	317	138	118	102	305	606	1331	2440	2407	2227	2351	2282	2694	2592	2860	3251	3044	2832	2415	1885	1264	1026	955	647	40089
Apr-15 Saturday	4	391	218	132	91	144	262	467	860	1135	1573	1819	1695	1900	1984	1882	1829	1926	1837	1671	1425	1165	1229	817	634	27086
Apr-15 Sunday	5	353	176	153	70	92	170	295	501	666	1056	1341	1481	1514	1798	1760	1888	1893	1757	1524	1380	1039	734	462	298	22401
Apr-15 Monday	6	217	128	105	117	370	844	2079	3839	3003	2426	2042	2153	2397	2328	2569	3081	3310	3664	2663	1783	1151	834	567	402	42072
Apr-15 Tuesday	7	278	124	82	123	360	817	2274	3874	3278	2339	2293	2153	2352	2410	2694	3041	3441	3385	2971	1906	1274	1047	828	584	43928
Apr-15 Wednesday	8	277	134	98	118	301	793	2143	3727	3163	2376	2169	1867	2067	2224	2635	3126	3218	3394	3213	2063	1513	1234	1102	487	43442
Apr-15 Thursday	9	330	130	89	138	336	831	2172	3798	3181	2257	2368	2434	2251	2541	2771	2803	3149	3421	3258	2055	1449	1194	1042	507	44505
Apr-15 Friday	10	348	153	127	138	313	742	2034	3525	2946	2412	2322	2610	2756	2563	3099	2032	2796	3446	2773	2042	1353	1126	947	863	43466
Apr-15 Saturday	11	504	202	152	111	179	325	685	1167	1480	1890	2076	2050	2156	2042	2093	2206	2284	2261	1814	1342	1084	1007	814	642	30566
Apr-15 Sunday	12	360	259	175	105	144	272	437	678	907	1243	1598	1681	1887	2048	2021	2307	2311	1672	1320	1108	860	621	454	323	24791
Apr-15 Monday	13	185	119	59	137	391	843	2166	3500	3320	2377	2159	2137	2137	2350	2614	3077	3304	3305	2403	1607	1039	775	552	411	40967
Apr-15 Tuesday	14	257	102	92	119	356	810	2264	3712	3187	2263	2015	2139	2249	2300	2637	2927	3307	3530	2499	1711	1191	868	693	435	41663
Apr-15 Wednesday	15	314	138	99	132	315	758	2117	3200	3477	2195	2052	2091	2302	2335	2562	3092	3340	3244	2845	1563	955	819	706	403	41054
Apr-15 Thursday	16	244	138	95	120	346	782	2113	3769	3273	2299	2303	2247	2373	2332	2752	3298	3270	3572	2614	1647	1099	826	732	415	42659
Apr-15 Friday	17	298	149	129	146	337	745	2011	3426	3143	2263	2262	2384	2768	2611	2946	3031	3253	3416	2346	1687	1128	996	870	607	42952
Apr-15 Saturday	18	393	195	140	108	170	312	566	978	1265	1654	1690	1951	2002	2188	2110	2248	1902	1900	1591	1276	1213	1294	924	646	28716
Apr-15 Sunday	19	389	209	154	101	164	236	421	632	811	1118	1455	1606	1768	1888	1756	1723	1586	1463	1299	917	715	579	411	299	21700
Apr-15 Monday	20	201	100	80	117	373	821	2125	3738	2532	2762	2180	2197	2024	2243	2467	2817	3512	3587	2285	1565	1001	811	566	367	40471
Apr-15 Tuesday	21	275	127	87	117	338	901	2322	3846	3118	2261	2052	2191	2170	2509	2647	3030	3309	3440	2996	1681	1314	949	642	397	42719
Apr-15 Wednesday	22	272	136	117	132	330	841	2227	3643	3186	2320	2091	2158	2520	2490	2829	3329	3348	3299	2970	1999	1404	960	677	416	43694
Apr-15 Thursday	23	268	141	103	129	339	850	2210	3761	3263	2294	2153	2346	2311	2566	2727	3197	1300	1490	3404	2073	1325	869	737	435	40291
Apr-15 Friday	24	346	133	112	130	309	786	2079	3418	3143	2357	2141	2498	2662	2555	2883	3348	3091	3378	2293	1997	1357	1032	900	681	43629
Apr-15 Saturday	25	444	212	150	92	163	257	574	971	1414	1705	1935	2164	2076	1985	1847	1811	1838	1614	1401	1402	992	908	764	550	27269
Apr-15 Sunday	26	352	189	128	88	175	248	446	746	901	1217	1505	1684	1809	1972	2099	2512	2300	2059	1772	1593	1013	829	506	354	26497
Apr-15 Monday	27	222	120	79	101	346	863	2216	3721	3204	2244	2063	2075	2326	2351	2640	2964	3159	3419	2972	1678	1191	771	611	388	41724
Apr-15 Tuesday	28	248	104	105	119	327	843	2361	3754	3117	2205	2091	2174	2342	2264	2658	3127	3031	2636	3230	1994	1305	876	736	387	42034
Apr-15 Wednesday	29	301	109	103	140	351	779	2073	3537	3083	2203	2033	2161	2251	2352	2540	2763	3039	3254	2377	1432	967	841	649	337	39675
Apr-15 Thursday	30	268	118	94	148	300	760	2197	3368	2969	2528	2183	2197	2725	2409	3277	3176	3290	3320	2647	1875	1393	1050	830	498	43620
May-15 Friday	1	285	175	125	151	347	753	2029	2756	1897	1860	2358	2427	2690	2623	2618	3228	3462	3357	2510	1748	1256	1008	851	691	41205
May-15 Saturday	2	497	254	210	121	169	266	687	1074	1406	1677	1949	1925	2018	2031	2133	2073	2177	1972	1786	1473	1329	1022	849	639	29737
May-15 Sunday	3	288	502	205	113	180	241	424	663	837	1201	1521	1695	1713	1940	1936	1977	1946	1928	1595	1363	1061	797	627	900	25653
May-15 Monday	4	250	145	101	109	334	805	2173	3686	2996	1595	972	2317	2043	2119	2585	2916	3220	3527	2540	1642	1240	850	663	449	39277
May-15 Tuesday	5	254	136	119	130	338	823	2270	3575	3246	2176	1999	2137	2289	2331	2606	3237	3083	3498	3012	1827	1243	974	709	518	42530

May-15	Wednesday	6	325	163	145	122	301	793	2141	3471	3111	2472	2222	2315	2324	2622	2746	2563	2964	3511	2989	1890	1275	968	781	504	42718
May-15	Thursday	7	306	121	99	132	301	763	2184	3730	3143	2282	2602	2844	2523	2541	2454	3057	3241	3213	2173	1350	1111	807	686	430	42093
May-15	Friday	8	273	164	123	134	282	738	2047	3516	2887	2355	2407	2468	2664	2744	2988	3343	3261	3249	2237	1643	1130	936	852	683	43124
May-15	Saturday	9	403	218	156	108	155	311	581	1133	1502	1901	2217	2042	2065	1966	1860	2125	1971	1739	1506	1320	1017	1273	844	576	28989
May-15	Sunday	10	340	194	127	106	130	211	355	568	760	1116	1351	1532	1611	1795	1792	1846	1670	1527	1297	1256	1029	843	582	378	22416
May-15	Monday	11	218	102	76	107	326	874	2230	3572	3052	2313	2188	2324	2383	2524	2767	2870	2976	3473	2547	1521	1136	844	671	394	41488
May-15	Tuesday	12	254	130	112	129	359	789	2260	3618	3194	2249	2149	2262	2275	2467	2791	3120	3237	2813	3218	1918	1350	936	689	432	42751
May-15	Wednesday	13	295	122	116	131	321	793	2248	3566	3234	2362	2311	2189	2457	2396	2737	3067	3216	2916	2378	2447	1349	1034	778	455	42918
May-15	Thursday	14	260	145	115	138	360	747	2194	3591	3095	2259	2212	2201	2360	2488	2686	3170	3021	3495	2836	1847	1214	934	869	493	42730
May-15	Friday	15	316	184	113	132	293	708	2047	3558	2953	2236	2480	2453	2499	2620	2763	3304	3098	3318	2435	1779	1353	1124	952	711	43429
May-15	Saturday	16	439	242	151	131	170	257	617	1079	1578	1833	2060	1936	1919	2067	2173	2233	2262	2265	1844	1612	1339	1120	1156	1343	31826
May-15	Sunday	17	425	238	213	128	179	242	404	740	1008	1307	1677	1671	1866	1976	2018	2067	2018	1833	1567	1322	1109	856	615	388	25867
May-15	Monday	18	246	114	81	121	390	823	2326	3723	3205	2267	2177	2381	2440	2350	2683	3028	3127	3113	2894	1695	1222	861	664	465	42396
May-15	Tuesday	19	333	141	102	123	350	808	2319	3544	3235	2334	2109	2325	2319	2541	2719	2975	3349	3420	2965	1942	1257	975	714	520	43419
May-15	Wednesday	20	312	133	137	134	302	722	2350	3650	3307	2285	2191	2385	2470	2431	3074	2337	2774	3163	2741	1556	1041	974	714	463	41646
May-15	Thursday	21	334	150	96	126	370	761	2138	3737	3123	2305	2367	2399	2514	2484	2669	3217	3396	3332	2781	1886	1291	1031	824	441	43772
May-15	Friday	22	372	169	155	153	285	703	1964	3263	2851	2124	2390	2492	2787	2823	3112	3303	3560	2761	2402	1770	1250	1068	918	740	43415
May-15	Saturday	23	465	193	162	118	155	257	531	961	1381	1760	1931	1887	1869	1920	2022	2057	2138	2083	1798	1694	1426	1591	1087	772	30258
May-15	Sunday	24	468	223	198	147	129	200	361	571	735	1000	1376	1455	1560	1713	1721	1828	1754	1718	1583	1390	1183	975	789	577	23654
May-15	Monday	25	351	201	142	87	153	298	528	759	1093	1396	1934	1923	1857	1993	2082	2136	2049	1940	1772	1520	1178	937	607	372	27308
May-15	Tuesday	26	193	98	80	126	382	849	2332	3878	3330	2440	2410	2343	2743	3464	3143	3217	2744	2381	3276	3390	2027	960	754	444	47004
May-15	Wednesday	27	332	148	108	126	302	837	2272	3794	3256	2384	2365	2345	2340	2594	3013	3179	3323	3438	2885	1863	1255	1130	799	454	44542
May-15	Thursday	28	284	164	111	136	310	772	2126	3689	3280	2335	2321	2340	2408	2537	2843	3171	3227	3534	3063	1901	1295	1030	818	504	44199
May-15	Friday	29	355	164	139	157	308	743	2112	3415	2920	2386	2395	2611	2696	2712	3101	3106	3202	3447	2529	1877	1233	1109	965	676	44358
May-15	Saturday	30	495	214	188	142	184	302	631	1068	1564	1961	2006	2070	2042	2004	2092	2208	2244	1983	1757	1482	1022	1515	1086	694	30954
May-15	Sunday	31	424	208	173	119	141	240	422	633	874	1155	1495	1629	1716	1884	1997	1848	1995	1844	1495	1356	1135	912	669	421	24785
Jun-15	Monday	1	236	142	94	121	336	832	2240	3646	3149	2327	2215	2174	2348	2291	2747	2929	3519	3547	2513	1651	1141	906	649	432	42185
Jun-15	Tuesday	2	287	138	96	139	319	805	2265	3843	3101	2319	2468	2391	2576	2473	2771	3034	3500	3510	2505	1708	1206	897	711	477	43539
Jun-15	Wednesday	3	360	166	104	140	309	726	2150	3515	3066	2273	2403	2306	2422	2385	2600	2761	3215	3232	2173	1601	1263	1015	766	478	41429
Jun-15	Thursday	4	294	155	117	136	294	770	2227	3420	3049	2229	2263	2347	2669	3002	3308	3260	2856	2793	3343	1805	1261	1000	805	510	43913
Jun-15	Friday	5	386	158	120	139	311	712	1900	3251	2875	2358	2180	2544	2931	2862	2362	2384	3123	3319	2508	1834	1306	1099	868	724	42254
Jun-15	Saturday	6	476	130	271	140	196	332	619	1158	1589	1981	2079	1956	2183	2036	2162	2154	2089	1897	1615	1423	1269	1087	1254	1305	31401
Jun-15	Sunday	7	472	310	196	124	153	264	481	639	883	1162	1548	1663	1811	1966	1910	1819	1919	1856	1869	1323	1043	899	621	471	25402
Jun-15	Monday	8	320	163	97	120	341	791	2038	3397	2952	2367	2184	2140	2426	2470	2647	3055	3417	3408	2549	1681	1201	991	684	425	41864
Jun-15	Tuesday	9	307	112	102	159	325	803	2117	3729	3025	2336	2182	2264	2513	2637	2489	2941	2090	2174	2623	2430	965	735	591	389	40038
Jun-15	Wednesday	10	333	144	133	119	341	841	1998	3399	3009	2289	2259	2410	2539	2500	2714	3178	3179	3312	3031	1833	1156	1277	900	543	43437
Jun-15	Thursday	11	358	143	116	138	368	819	1971	3579	3026	2452	2452	2375	2393	2549	2947	3094	2635	3327	3077	1883	1297	1082	798	502	43381
Jun-15	Friday	12	341	152	121	132	332	739	1770	2988	2680	2353	2038	2658	2736	2803	3220	3161	3322	3164	2313	1797	1204	1064	915	696	42699
Jun-15	Saturday	13	423	228	207	142	198	364	736	1242	1576	1937	1306	2595	1993	2152	2110	2096	2064	2028	1806	1517	1181	1185	879	698	30663
Jun-15	Sunday	14	378	259	217	133	201	274	508	721	946	1190	1537	1713	1749	1925	1710	1879	1878	1645	1527	1295	1051	905	612	454	24707
Jun-15	Monday	15	282	126	92	135	362	903	2123	3266	3091	2341	2128	2160	2561	2389	1599	2608	3118	3242	2583	1624	1265	896	692	502	40088
Jun-15	Tuesday	16	328	141	119	140	338	747	2070	3635	3079	2374	2181	2210	2345	2570	2822	2978	3277	3459	2407	1729	1259	1137	863	496	42704
Jun-15	Wednesday	17	363	143	118	113	324	810	2097	3430	3168	2422	2102	2283	2622	2548	2706	2765	3060	3293	2752	1840	1269	1119	1241	523	43111
Jun-15	Thursday	18	366	146	133	131	309	755	1969	3432	3055	2442	2359	2370	2478	2597	2792	3139	3348	2747	2173	2321	1267	1013	819	495	42656
Jun-15	Friday	19	348	152	130	163	336	745	1909	3110	2804	2501	2225	2340	2765	2749	3092	3302	3247	3195	2202	1650	1203	1050	945	707	42870
Jun-15	Saturday	20	515	290	198	138	224	326	676	1143	1579	1834	2106	2013	2112	2137	1899	2076	2011	1919	1612	1451	1163	1175	898	695	30190
Jun-15	Sunday	21	419	234	204	142	166	189	410	644	828	1091	1431	1588	1635	1681	1631	1764	1718	1579	1545	1250	1219	1291	792	507	23958
Jun-15	Monday	22	263	149	112	109	345	826	2042	3463	2864	2289	2076	2211	2543	2483	2686	2843	3440	3204	2773	1501	988	837	669	394	41110
Jun-15	Tuesday	23	294	156	104	137	343	778	2064	3641	3151	2364	2216	2323	2554	2638	2841	3117	3473	3341	2554	1787	1192	1060	741	466	43335
Jun-15	Wednesday	24	340	139	142	114	305	792	1976	3453	3125	2384	2261	2424	2574	2556	2894	3233	3371	3323	2965	1700	1248	976	778	505	43578
Jun-15	Thursday	25	381	152	120	136	297	763	2013	3412	3142	2546	2398	2390	2601	2710	2739	3128	3432	3581	2707	1866	1282	998	839	471	44104
Jun-15	Friday	26	347	176	106	180	348	771	1838	3129	2932	2419	2406	2603	2735	2775	2911	3466	3157	2943	2181	1762	1215	1089	859	669	43017
Jun-15	Saturday	27	448	264	167	146	231	342	666	1104	1509	1828	2208	2143	2154	2208	2319	2128	1976	1747	1452	1294	1114	1422	1591	846	31307
Jun-15	Sunday	28	450	267	180	152	173	257	373	583	858	1153	1506	1542	1701	1854	1682	1811	1897	1556	1520	1078	736	710	559	380	22978
Jun-15	Monday	29	255	124	120	123	371	801	1914	3415	2904	2252	2129	2008	2657	2454	2746	2234	3257	3186	2791	1670	1172	876	678	473	40610
Jun-15	Tuesday	30	343	173	112	117	329	795	1995	3312	3090	2307	2213	2368	2415	2601	2741	2998	3444	2684	3059	2022	1093	919	749	529	42408
Jul-15	Wednesday	1	351	163	105	165	319	778	1852	3351	3058	2404	2288	2435	2553	2538	3014	3336	3388	3680	2625	1858	1335	955	873	477	43901
Jul-15	Thursday	2	329	147	110	128	306	694	1862	2970	2790	2285	2237	2475	2634	2809	3072	3274	3607	3153	2382	1775	1393	1148	1009	579	43168
Jul-15	Friday	3	511	182	123	100	217	369	766	1227	1709	1932	2092	2220	2315	2147	2135	2556	2224	1879	1616	1242	1115	1242	1173	726	31818
Jul-15	Saturday	4	462	231	178	112	122	240	457	651	842	1164	1421	1290	1304	1335	1441	1530	1456	1327	1262	1143	1306	966	1257	948	22445
Jul-15	Sunday	5	417	225	180	109	159	214	390	615	868	1234	1637	1832	1911	1913	1900	1832	1834	1580	1451	1157	922	889	671	439	24379
Jul-15	Monday	6	259	157	98	97	438	777	1874	3133	2986	2357	2139	2292	2335	2592	2458	2881	3173	3373	2413	1504	1170	916	609	440	40471
Jul-15	Tuesday	7	297	137	108	119	361	793	1961	3464	3048	2243	2227	2364	2490	2448	2592	2800	3539	3475	2331	1655	1126	953	859	501	41891
Jul-15	Wednesday	8	313	135	107	111	298	800	1947	3407	2822	2523	2147	2266	2544	2342	2780	2936	3200	3485	2218	1747	1293	991	859	513	41784

Jul-15	Thursday	9	364	149	105	145	308	732	1825	3380	3048	2439	2368	2364	2175	2618	2885	3122	2631	3130	2778	1852	1212	1043	880	499	42052
Jul-15	Friday	10	387	172	105	153	333	672	1784	3103	2892	2237	2336	2531	2880	2723	2998	3220	2555	3459	2242	1712	1254	1113	908	732	42501
Jul-15	Saturday	11	457	247	161	135	194	379	652	1136	1373	1873	2202	2118	1949	2065	2130	2074	2197	1857	1613	1401	1149	1082	927	684	30055
Jul-15	Sunday	12	398	253	174	120	144	210	429	643	804	1066	1342	1632	1733	1805	1773	1845	1818	1584	1386	1156	993	868	659	450	23285
Jul-15	Monday	13	238	153	97	120	364	744	2009	3476	2925	2423	2249	2122	2431	2575	2672	2958	3163	3518	2322	1547	1182	816	698	409	41211
Jul-15	Tuesday	14	314	149	114	124	332	791	1995	3439	3057	2201	2207	2265	2486	2265	2719	3148	3239	3455	2650	1734	1185	873	753	520	42015
Jul-15	Wednesday	15	331	130	117	128	357	743	1969	3679	3121	2331	2238	2406	2399	2621	2778	3195	3148	3006	2890	1758	1286	972	838	494	42935
Jul-15	Thursday	16	359	128	122	112	311	775	1939	3430	3120	2425	2277	2441	2414	2568	2771	3212	3352	3108	2809	1747	1244	962	800	468	42894
Jul-15	Friday	17	358	142	135	145	300	685	1754	3060	2895	2377	2200	2333	2806	2806	3155	2937	3001	3265	2326	1551	1277	1504	1228	740	42980
Jul-15	Saturday	18	453	289	190	125	177	337	624	1014	1602	1907	2148	2027	1952	2027	2055	2098	2168	1992	1666	1447	1253	1396	935	690	30572
Jul-15	Sunday	19	435	280	217	161	157	198	397	614	818	1095	1403	1640	1688	1928	1831	1857	1800	1642	1408	1052	898	787	559	407	23272
Jul-15	Monday	20	284	147	83	103	368	795	2086	3493	2975	2237	2300	2224	2346	2380	2744	2946	2741	3194	2875	1694	1164	905	761	470	41315
Jul-15	Tuesday	21	305	124	91	134	343	777	1974	3501	2970	2235	2318	2150	2345	2468	2707	2901	2640	3555	2504	1675	1218	934	789	441	41099
Jul-15	Wednesday	22	309	138	116	131	326	747	1968	3444	3135	2260	2302	2327	2407	2638	2863	3061	3143	3299	2675	1744	1175	1010	842	459	42519
Jul-15	Thursday	23	345	147	119	163	311	723	1894	2967	3370	2342	2342	2447	2407	2452	2942	3163	3040	2799	2953	1850	1143	923	827	490	42159
Jul-15	Friday	24	335	143	133	150	294	680	1702	2893	2809	2324	2382	2628	2877	2843	3023	3106	3366	2830	2184	1678	1180	957	903	639	42059
Jul-15	Saturday	25	423	218	157	114	191	334	584	1078	1549	1861	2124	2028	1987	2123	2020	2054	2028	2018	1777	1424	1270	1118	833	741	30054
Jul-15	Sunday	26	455	303	214	141	155	231	375	560	809	1155	1377	1649	1694	1806	1814	1869	1854	1702	1429	1199	1051	898	686	406	23832
Jul-15	Monday	27	266	122	89	98	359	763	1989	3310	3106	2301	2151	2163	2472	2442	2816	2807	3114	3135	2802	1571	1181	861	717	425	41060
Jul-15	Tuesday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-15	Wednesday	29	326	141	111	133	325	767	1934	3470	3034	2379	2243	2358	2439	2597	2897	3075	3178	3162	2963	1689	1290	949	750	515	42725
Jul-15	Thursday	30	414	125	128	128	315	727	1958	3408	3047	2523	2410	2441	2596	2627	2952	3131	3051	3533	2454	1902	1311	984	803	487	43455
Jul-15	Friday	31	373	159	113	153	317	694	1795	3027	2847	2411	2487	2633	2781	2746	3141	3343	3273	3118	2337	1751	1129	932	875	730	43165
Aug-15	Saturday	1	456	226	195	147	184	319	706	1040	1419	1859	2083	2039	2284	2022	2025	1994	1911	1811	1585	1358	1193	1313	1282	760	30211
Aug-15	Sunday	2	498	255	205	103	186	209	371	593	757	1139	1399	1657	1720	1866	1866	1796	1531	1462	1304	1095	913	771	553	433	22682
Aug-15	Monday	3	279	112	86	102	339	796	1988	3015	2960	2141	2228	2224	2501	2496	2767	3020	3235	3191	2822	1515	1102	809	661	441	40830
Aug-15	Tuesday	4	292	129	96	132	294	775	1984	3510	3167	2363	2230	2308	2572	2539	2683	3020	3217	2833	3024	1801	1180	920	803	490	42362
Aug-15	Wednesday	5	349	158	117	135	331	740	2007	3558	3135	2371	2242	2404	2496	2636	2866	3184	3177	3174	2871	1873	1300	1016	1075	1301	44516
Aug-15	Thursday	6	426	188	128	133	324	741	1987	3341	3097	2532	2394	2449	2656	2567	2734	2436	2313	3051	2664	1533	1106	848	738	479	40865
Aug-15	Friday	7	321	133	112	134	307	718	1744	3097	2865	2371	2501	2440	2881	2775	3135	3285	3321	2689	2456	1734	1221	1075	1144	1313	43772
Aug-15	Saturday	8	553	289	175	137	186	326	686	1125	1452	1786	2239	2132	2007	2130	2162	2340	2103	2020	1771	1591	1267	1089	1100	1287	31953
Aug-15	Sunday	9	562	338	194	148	145	222	424	605	830	1169	1564	1859	1776	1898	1884	1915	1947	1726	1525	1245	1095	893	722	410	25096
Aug-15	Monday	10	296	132	83	116	377	783	2007	3686	3023	2312	2228	2315	2466	2482	2932	3104	3327	3082	2671	1652	1305	903	681	411	42374
Aug-15	Tuesday	11	283	139	102	140	333	827	2052	3890	3126	2253	2164	2328	2525	2574	2901	2178	1875	3260	3206	1801	1256	923	755	510	41401
Aug-15	Wednesday	12	326	144	100	100	312	823	2067	3663	3026	2379	2250	2302	2394	2546	2795	3209	3443	3292	2658	1839	1236	966	1004	1030	43904
Aug-15	Thursday	13	437	186	137	124	337	769	1935	3655	3070	2319	2382	2253	2534	2581	2944	3136	3485	3463	2530	1776	1247	960	819	518	43597
Aug-15	Friday	14	366	154	120	147	307	682	1766	3318	3022	2426	2349	2600	2860	2764	3271	3274	3398	2956	2445	1819	1277	1009	912	691	43933
Aug-15	Saturday	15	441	246	191	117	207	365	608	1032	1437	1822	2090	2074	2141	2910	2558	2256	2201	1948	1745	1409	1234	1404	1058	798	32292
Aug-15	Sunday	16	413	240	186	123	149	224	377	564	826	1105	1425	1687	1840	1843	1759	1853	1775	1578	1495	1177	1025	765	541	366	23336
Aug-15	Monday	17	228	124	83	125	329	834	2221	3565	3250	2310	2025	2333	2375	2502	2678	3055	3214	3338	2220	1543	1125	718	627	445	41267
Aug-15	Tuesday	18	268	129	87	142	341	861	2260	3786	3282	2229	2136	2252	2373	2492	2805	2775	2813	3200	2488	1424	980	720	623	408	40874
Aug-15	Wednesday	19	341	126	96	129	311	805	2241	3691	3320	2295	2262	2283	2298	2387	2966	3277	3209	2774	2766	1527	1009	800	678	398	41989
Aug-15	Thursday	20	337	120	103	111	282	785	2211	3688	3157	2232	2174	2317	2405	2404	2833	2776	2422	2838	3017	1590	1103	829	758	427	40919
Aug-15	Friday	21	340	128	132	137	272	716	2072	3442	2358	2405	2222	2448	2712	2800	3051	3122	3387	2775	2702	1624	1171	900	774	603	42293
Aug-15	Saturday	22	400	199	162	116	142	283	629	1065	1368	1694	1985	1958	2090	2206	2130	2035	2103	1785	1660	1308	1057	854	838	941	29008
Aug-15	Sunday	23	453	231	159	95	115	241	406	592	755	1109	1405	1619	1748	1772	1725	1652	1632	1637	1419	1087	938	648	538	350	22326
Aug-15	Monday	24	214	94	87	99	340	844	2318	3760	3247	2197	2153	2158	2454	2316	2596	2935	2651	3337	2510	1596	1170	768	651	398	40893
Aug-15	Tuesday	25	272	101	115	130	347	846	2347	3849	3463	2267	2188	2200	2423	2397	2687	3183	3278	3427	2536	1689	1174	790	695	455	42859
Aug-15	Wednesday	26	295	115	110	174	327	784	2191	3590	3502	2214	2187	2238	2374	2311	2850	3100	3335	3264	2710	1833	1139	912	754	440	42749
Aug-15	Thursday	27	292	125	118	120	304	742	2152	3714	3237	2304	2092	2425	2598	2460	2724	3178	3221	3465	2364	1828	1173	805	753	379	42573
Aug-15	Friday	28	286	150	115	118	297	714	2074	3454	3215	2335	2266	2470	2835	2726	2923	3307	3141	3253	2287	1766	1177	894	885	629	43317
Aug-15	Saturday	29	457	203	158	127	165	323	578	924	1283	1748	1970	1977	2154	2112	2109	1993	2055	1747	1613	1316	1166	935	847	624	28584
Aug-15	Sunday	30	366	204	179	95	112	226	390	504	635	988	1425	1636	1848	1798	1652	1566	1429	1298	1082	966	723	573	468	320	20483
Aug-15	Monday	31	175	93	73	114	339	830	2035	2975	2765	1863	1864	2044	2098	2114	2361	2744	2787	3034	2083	1394	1023	787	599	374	36568
Sep-15	Tuesday	1	234	130	92	121	337	768	2316	3766	3256	2199	2060	2263	2466	2452	2751	3219	2844	2821	3266	1759	1157	758	701	404	42140
Sep-15	Wednesday	2	238	125	93	127	259	757	2269	3781	3223	2304	2212	2220	2383	2447	2756	3089	2991	3522	2699	1740	1331	897	731	461	42655
Sep-15	Thursday	3	297	138	143	139	306	797	2162	3819	3315	2279	2331	2447	2548	2510	2775	3229	3233	2905	2711	1969	1176	722	872	438	43261
Sep-15	Friday	4	266	138	93	116	318	719	1912	3436	2903	2307	2328	2479	2788	2912	3072	3042	3301	2842	2298	1695	1162	943	1073	593	42736
Sep-15	Saturday	5	413	229	201	127	150	266	529	896	1294	1633	1914	1766	1923	1929	1942	1919	1883	1776	1520	1285	1048	863	721	602	26829
Sep-15	Sunday	6	405	202	222	106	99	168	287	500	676	940	1218	1381	1568	1681	1708	1618	1491	1436	1266	1035	859	831	605	506	20808
Sep-15	Monday	7	287	169	114	88	153	256	437	693	967	1262	1713	2030	2033	1973	1835	2012	1674	1596	1439	1161	931	743	510	350	24426
Sep-15	Tuesday	8	189	93	64	109	350	863	2291	3973	3299	2369	2307	2299	2340	2404	2567	3112	3438	3389	2639	1759	1098	790	671	366	42779
Sep-15	Wednesday	9	258	99	92	112	335	813	2335	3743	3466	2410	2229	2288	2416	2353	2832	3156	3343	3408	2320	1812	1294	981	724	430	43249
Sep-15	Thursday	10	262	110	95	147	340	811	2092	2938	3531	2354	2279	2326	2646	2428	2880	2030	3265	3606	3316	1910	1323	882	737	417	42725

Sep-15	Friday	11	254	116	112	109	314	774	2096	3545	3145	2389	2335	2566	2671	2795	3097	3313	3210	3081	2873	1764	1238	914	859	661	44231
Sep-15	Saturday	12	361	202	130	105	170	412	700	1115	1422	1733	2080	2162	2170	2030	1870	1870	1737	1631	1530	1271	965	1228	765	613	28272
Sep-15	Sunday	13	361	190	141	94	113	222	412	613	808	1077	1449	1718	1769	1762	1652	1780	1782	1586	1467	1258	1008	720	537	380	22899
Sep-15	Monday	14	302	141	93	124	349	851	2237	3694	3376	2330	2324	2243	2382	2320	2564	3107	2402	3572	2854	1795	1193	835	698	408	42194
Sep-15	Tuesday	15	212	127	102	147	363	826	2261	3805	3300	2221	2168	2290	2267	2432	2779	3167	3200	2129	1874	2296	1589	896	713	443	41607
Sep-15	Wednesday	16	247	143	116	130	297	867	2241	3844	3335	2415	2163	2267	2459	2440	2689	3222	3493	3409	2744	1886	1303	932	777	468	43887
Sep-15	Thursday	17	228	136	118	98	298	808	2179	3402	3219	2342	2349	2454	2513	2555	2820	3011	3450	3436	2418	1716	1192	866	751	460	42819
Sep-15	Friday	18	282	115	104	114	309	717	2024	3508	2877	1584	1440	1844	2786	2619	2986	2636	3454	3173	2426	1952	1303	903	944	705	40805
Sep-15	Saturday	19	444	190	185	116	159	378	599	1054	1412	1761	1990	1915	2119	2157	2117	2136	2108	1907	1758	1556	1155	1271	1078	625	30190
Sep-15	Sunday	20	396	238	163	102	130	253	416	598	862	1185	1496	1633	1803	1908	1816	1909	1854	1844	1502	1269	1070	690	541	379	24057
Sep-15	Monday	21	187	121	103	131	362	781	1918	3653	3055	2168	2235	2170	2364	2429	2697	3203	3476	3619	2348	1833	1070	783	645	406	41757
Sep-15	Tuesday	22	243	115	102	134	359	880	2316	3824	3277	2206	2166	2140	2376	2431	2690	3084	3305	3428	2742	1782	1208	780	699	367	42654
Sep-15	Wednesday	23	260	128	108	126	308	825	2328	3616	3206	2227	2148	2229	2458	2474	2789	3232	3472	3543	2459	1842	1176	815	698	392	42859
Sep-15	Thursday	24	241	105	77	129	300	838	2176	3730	3137	2460	2400	2618	2497	2571	2705	2877	2924	3030	2362	1709	1113	791	654	399	41843
Sep-15	Friday	25	250	102	107	123	297	742	1994	3520	3052	2170	2323	2507	2664	2488	3094	3260	3365	2962	2412	1929	1216	1027	1067	633	43304
Sep-15	Saturday	26	478	230	147	121	164	322	621	1100	1561	1695	2015	2023	1957	2010	1905	1916	1974	1904	1519	1513	974	925	1195	728	28997
Sep-15	Sunday	27	390	206	186	106	135	247	398	645	827	1105	1584	1690	1827	2029	1917	1949	1823	1832	1382	1122	872	696	553	389	23910
Sep-15	Monday	28	245	90	69	96	385	850	2270	3566	3272	2330	2241	2301	2401	2350	2548	3067	3374	3415	2466	1637	994	767	619	357	41710
Sep-15	Tuesday	29	220	120	103	137	328	858	2261	3576	3339	2379	2104	2246	2398	2333	2661	2926	2490	2979	3019	1911	1155	768	693	419	41423
Sep-15	Wednesday	30	303	136	101	111	269	815	2253	3650	3258	2429	2230	2410	2452	2401	2758	3307	2932	2613	2497	1554	1057	803	685	409	41433
Oct-15	Thursday	1	262	132	115	102	291	847	2170	3712	3225	2390	2227	2351	2601	2344	2768	2535	2409	2624	2660	1573	1014	756	663	343	40114
Oct-15	Friday	2	304	91	113	109	266	647	1642	2683	2537	2230	2339	2518	2642	2602	2835	2794	2786	2515	1723	1225	845	686	614	446	37192
Oct-15	Saturday	3	302	152	113	92	119	191	409	654	924	994	1147	1117	1123	1038	1039	954	876	839	742	601	411	348	383	241	14809
Oct-15	Sunday	4	149	77	56	40	78	185	284	454	510	677	939	1027	1003	951	923	848	861	824	672	518	387	336	233	185	12217
Oct-15	Monday	5	132	38	32	60	235	467	1175	1990	1845	1585	1637	1705	1782	1713	1770	1945	2191	2404	1495	1073	727	510	439	301	27251
Oct-15	Tuesday	6	178	91	67	78	275	755	1912	3166	2832	2108	2098	2103	2229	2288	2497	2753	3280	3263	2478	1707	1062	759	667	377	39023
Oct-15	Wednesday	7	202	112	101	139	297	786	2044	3178	3351	2102	1898	2136	2290	2355	2732	3055	3319	2676	2446	2647	1346	865	704	466	41247
Oct-15	Thursday	8	313	126	117	127	322	818	2181	3540	2910	2370	2212	2235	2325	2373	2762	3230	3233	3418	2471	2186	1360	887	776	505	42797
Oct-15	Friday	9	289	148	123	142	320	733	1929	3375	2884	2153	2235	2611	2756	2785	3161	3246	3371	3244	2730	2023	1226	1089	1116	1338	45027
Oct-15	Saturday	10	522	254	248	119	195	319	606	996	1420	1687	1851	2088	2057	2474	1957	1734	1703	1575	1384	1373	1051	867	750	657	27887
Oct-15	Sunday	11	389	171	198	100	131	246	375	571	756	1088	1492	1694	1898	1832	1655	1927	1732	1549	1420	1239	863	625	582	377	22910
Oct-15	Monday	12	226	134	98	125	317	743	2015	3298	2958	2247	2291	2372	2396	2554	2782	3155	3324	3632	2641	1660	1052	853	738	399	42010
Oct-15	Tuesday	13	255	112	111	137	338	895	2273	3645	3406	2292	2370	2365	2450	2468	2779	3137	3171	3399	3042	1734	1143	792	696	421	43431
Oct-15	Wednesday	14	281	130	91	117	323	825	2302	3663	3398	2328	2247	2315	2495	2462	2856	3320	3356	3308	2969	1903	1205	861	691	410	43856
Oct-15	Thursday	15	302	162	113	155	348	847	2222	3608	3391	2360	2250	2340	2498	2583	2903	3078	3187	2868	3313	2105	1220	971	788	431	44043
Oct-15	Friday	16	319	122	102	147	350	792	2102	3344	3041	2375	2338	2496	2762	2792	3163	2933	2635	2883	2993	2149	1162	1082	993	787	43862
Oct-15	Saturday	17	498	203	144	117	163	339	713	1078	1472	1812	2342	2435	2255	2105	2108	2086	2037	1962	1852	1485	1035	958	818	749	30766
Oct-15	Sunday	18	532	208	120	83	126	227	439	609	722	1159	1495	1628	1834	1850	1873	2000	1987	1826	1550	1236	863	709	574	376	24026
Oct-15	Monday	19	203	103	90	110	343	873	2264	3527	3312	2277	2202	2340	2367	2511	2522	3128	3366	3265	2755	1634	1055	846	644	385	42122
Oct-15	Tuesday	20	212	107	86	130	307	848	2234	3666	3449	2313	2214	2186	2367	2516	2793	3053	2718	2895	3379	1864	1100	834	698	387	42356
Oct-15	Wednesday	21	217	121	91	131	322	817	2277	3662	3360	2364	2238	2238	2400	2461	2743	3252	3214	2744	2306	1085	1703	786	723	381	41636
Oct-15	Thursday	22	245	119	92	120	293	826	2215	3616	3322	2343	2267	2397	2491	2615	2862	3286	3193	3079	2991	1853	1293	983	795	428	43724
Oct-15	Friday	23	266	128	140	156	315	771	2062	3414	3023	2377	2329	2532	2778	2911	3169	2674	3374	3281	2604	1915	1083	1026	990	749	44067
Oct-15	Saturday	24	494	235	157	108	163	329	611	951	1510	1696	1649	712	688	1465	1808	2081	2016	1811	1707	1413	1130	978	870	779	25361
Oct-15	Sunday	25	585	304	213	126	146	228	387	607	818	1115	1582	1684	1822	1965	1971	1950	1871	1696	1598	1288	847	712	567	332	24414
Oct-15	Monday	26	205	125	81	90	367	891	2308	3730	3198	2364	2301	2237	2342	2452	2708	3199	3498	3286	2726	1480	916	760	600	367	42231
Oct-15	Tuesday	27	231	94	86	111	319	857	2327	3644	3159	2583	2293	2321	2373	2314	2802	2925	2582	2777	2680	1485	1031	661	628	609	40892
Oct-15	Wednesday	28	429	188	166	106	279	815	2137	3640	2862	2476	2118	2331	2346	2505	2813	2880	3391	3207	2330	1638	1091	824	754	385	41711
Oct-15	Thursday	29	237	114	99	103	320	840	2219	3596	3359	2351	2190	2460	2495	2603	2728	3293	3061	2816	3051	1954	1168	941	843	441	43282
Oct-15	Friday	30	259	132	124	139	311	812	2058	3349	3103	2352	2353	2554	2738	2683	3134	3105	3358	3136	2543	1908	1116	1059	1092	782	44200
Oct-15	Saturday	31	480	196	149	112	153	267	547	904	1342	1565	1834	1830	1931	2034	1896	1894	1894	1586	1354	1072	1113	948	780	663	26544
Nov-15	Sunday	1	403	184	158	111	224	219	411	634	832	1178	1425	1752	1697	1845	1760	1718	1527	1434	1200	853	621	575	377	308	21446
Nov-15	Monday	2	160	123	60	113	378	1002	2506	3819	3337	2393	2245	2231	2353	2489	2620	3092	3192	2106	2497	1761	866	690	571	333	40937
Nov-15	Tuesday	3	231	89	81	119	343	939	2420	3625	3150	2454	2197	2185	2252	2284	2654	2857	3282	3125	2097	1218	909	676	588	357	40132
Nov-15	Wednesday	4	219	115	83	119	306	929	2366	3845	3153	2332	2247	2236	2406	2423	2706	3165	3278	2859	2946	1492	1110	780	648	389	42152
Nov-15	Thursday	5	205	122	148	133	350	876	2345	3596	3208	2253	2266	2306	2564	2490	2934	3209	3217	3373	2789	1630	1036	783	765	375	42973
Nov-15	Friday	6	279	120	109	124	321	845	2229	3535	2998	2312	2299	2579	2729	2952	3098	3189	3124	3332	2507	1513	1038	876	789	581	43478
Nov-15	Saturday	7	344	212	140	118	138	356	714	1083	1491	2067	2126	1992	2101	2067	2067	2018	1896	1822	1572	1252	884	752	648	565	28425
Nov-15	Sunday	8	358	177	113	86	153	235	417	681	976	1257	1581	1654	1818	1762	1629	1499	1427	1368	1166	935	582	567	372	268	21081
Nov-15	Monday	9	172	88	68	96	343	929	2322	3529	3053	2101	2004	1985	2192	2213	2427	2775	2938	2999	2037	1277	855	668	541	302	37914
Nov-15	Tuesday	10	226	89	85	107	314	955	2381	3757	3211	2319	2070	2298	2327	2467	2901	3138	3018	3288	2684	1512	1021	726	661	366	41921
Nov-15	Wednesday	11	254	111	92	111	298	750	2101	3265	2817	2273	2200	2322	2459	2417	2930	3101	3276	3044	2629	1337	1105	831	657	384	40764
Nov-15	Thursday	12	248	112	87	114	330	957	2444	3655	3292	2358	2261	2350	2489	2549	2953	3062	2636	2898	3061	1620	1111	827	668	404	42486
Nov-15	Friday	13	280	121	100	126	305	819	2171	3540	3113	2360	2427	2591	2720	2754	2772	2934	2747	2944	2970	1560	1024	1023	825	554	42780

Nov-15	Saturday	14	342	167	150	118	171	360	741	1271	1706	1853	1959	1968	2061	2091	2081	2037	2003	1883	1593	1187	924	748	700	462	28576
Nov-15	Sunday	15	275	159	121	118	157	230	378	653	729	1068	1462	1616	1723	1864	1771	1667	1647	1566	1349	1002	672	565	408	277	21477
Nov-15	Monday	16	171	87	75	109	415	935	2412	3744	3170	2268	2153	2350	2421	2436	2786	3049	3252	3325	2566	1315	943	748	581	304	41615
Nov-15	Tuesday	17	209	95	94	114	315	933	2434	3791	3316	2150	2205	2292	2420	2421	2785	3343	3008	2149	2185	2045	962	751	662	334	41013
Nov-15	Wednesday	18	204	129	94	94	310	873	2392	3773	3097	2381	2197	2222	2431	2377	2765	3233	2712	2749	2857	1453	1041	884	612	371	41251
Nov-15	Thursday	19	215	112	82	94	274	786	1978	3482	3157	2079	2079	2316	2414	2389	2693	3091	3225	3209	2100	1394	995	816	645	401	40026
Nov-15	Friday	20	235	126	163	121	277	885	2194	3506	3080	2456	2421	2430	2795	2814	3150	3346	3278	1369	1966	2141	1031	924	844	578	42130
Nov-15	Saturday	21	343	176	172	105	197	361	701	1121	1589	1839	2056	1902	1946	2124	2067	1976	1929	1698	1345	1198	853	779	727	478	27682
Nov-15	Sunday	22	294	165	103	85	128	261	367	587	778	1050	1332	1578	1700	1752	1640	1551	1513	1428	1195	950	663	585	514	279	20498
Nov-15	Monday	23	162	97	67	87	334	879	2133	3244	2950	2272	2356	2301	2544	2440	2786	3100	3039	3239	2712	1401	965	766	647	331	40852
Nov-15	Tuesday	24	221	104	92	109	318	823	2159	3297	3004	2491	2369	2476	2576	2611	3007	3280	3362	3297	2477	1426	989	812	720	459	42479
Nov-15	Wednesday	25	291	164	143	116	296	801	1776	2569	2567	2331	2337	2680	2857	2926	3169	3221	2797	2578	1858	1216	904	759	694	474	39524
Nov-15	Thursday	26	274	182	108	123	141	209	405	612	749	930	1073	1059	1253	1112	1023	1127	1165	1229	1306	1188	1104	818	549	447	18186
Nov-15	Friday	27	305	146	113	95	168	345	708	1082	1374	1576	1884	1963	2120	2045	2154	2104	1884	2040	1631	1121	838	772	755	485	27708
Nov-15	Saturday	28	286	147	142	128	192	338	646	917	1319	1611	1807	1809	1698	1626	1728	1694	1790	1535	1319	1126	950	843	718	491	24860
Nov-15	Sunday	29	268	139	112	103	159	302	437	719	1022	1442	1621	1769	1818	1818	1727	1724	1539	1449	1214	967	626	546	390	311	22222
Nov-15	Monday	30	211	106	78	87	372	999	2347	3716	3217	2352	2238	2253	2279	2463	2764	3154	3188	3320	2464	1332	946	738	554	331	41509
Dec-15	Tuesday	1	232	134	76	127	321	932	2374	3680	3358	2386	2158	2189	2341	2357	2806	3174	3161	2779	2904	1367	971	791	661	303	41582
Dec-15	Wednesday	2	237	140	89	137	298	922	2352	3722	2435	2275	2349	2324	2305	2426	2810	2748	2427	2614	2853	1441	1118	776	643	360	39801
Dec-15	Thursday	3	224	122	107	110	267	878	2267	3765	3189	2328	2120	2243	2363	2389	2905	3248	3320	3220	2537	1479	1107	881	677	396	42142
Dec-15	Friday	4	237	122	105	139	314	862	2093	3452	3125	2278	2291	2340	2723	2621	3175	3099	3248	3351	2258	1556	988	887	899	576	42739
Dec-15	Saturday	5	327	179	123	114	162	359	608	933	1455	1684	1918	2101	1981	1972	1987	2020	1987	1836	1568	1281	855	790	712	595	27547
Dec-15	Sunday	6	411	176	139	106	101	217	379	523	765	957	1370	1453	1609	1742	1602	1598	1631	1534	1237	1020	735	578	414	283	20580
Dec-15	Monday	7	145	82	76	106	316	961	2288	3369	3311	2231	2132	2255	2237	2232	2563	2958	2975	2993	2539	1317	911	665	588	359	39609
Dec-15	Tuesday	8	222	118	96	129	280	909	2307	3513	3477	2167	2175	2131	2347	2455	2692	2810	3065	3273	2728	1453	1021	741	641	353	41103
Dec-15	Wednesday	9	211	128	118	122	278	886	2295	3494	3310	2243	2194	2154	2424	2457	2705	3220	3169	3174	2620	1436	1048	833	693	405	41617
Dec-15	Thursday	10	242	113	102	129	334	871	2247	3641	3151	2253	2164	2325	2526	2503	2959	3296	2890	3163	2919	1523	1157	945	736	397	42586
Dec-15	Friday	11	267	136	105	135	314	844	2040	3470	2906	2269	2374	2519	2710	2731	2978	3264	3094	3017	2434	1586	1065	1071	939	629	42897
Dec-15	Saturday	12	379	175	153	116	161	332	568	945	1370	1615	1832	1959	2062	2003	1943	2062	2076	2170	1669	1218	923	1111	951	724	28517
Dec-15	Sunday	13	397	196	134	94	100	201	332	553	794	1032	1365	1529	1636	1856	1684	1658	1576	1609	1282	1156	1069	852	491	345	21941
Dec-15	Monday	14	190	99	74	107	340	992	2229	3568	3263	2282	2149	2409	2521	2529	2525	3101	3259	3245	2163	1333	930	794	575	363	41040
Dec-15	Tuesday	15	220	132	83	109	309	902	2263	3678	3291	2333	2303	2384	2461	2444	2836	3185	2719	1935	3227	1499	1119	765	700	370	41267
Dec-15	Wednesday	16	283	122	118	106	286	902	2190	3568	3184	2286	2303	2360	2602	2471	2823	3230	3277	3214	2660	1412	1208	900	669	420	42594
Dec-15	Thursday	17	272	133	93	143	326	866	2196	3562	3064	2218	2434	2532	2571	2749	3141	2847	2358	2822	2743	1656	1076	877	789	434	41902
Dec-15	Friday	18	261	150	114	110	315	814	1977	3286	3034	2482	2518	2679	2737	2993	3330	2974	3381	3029	2267	1591	1072	966	906	645	43631
Dec-15	Saturday	19	352	211	139	129	230	375	560	918	1348	1721	1903	1968	2188	2193	2064	1989	2045	1864	1651	1235	1028	949	861	599	28520
Dec-15	Sunday	20	467	196	131	101	135	214	341	544	748	1028	1298	1477	1673	1723	1702	1716	1669	1546	1174	1059	835	756	540	401	21474
Dec-15	Monday	21	277	139	95	128	315	739	1728	2829	2794	2356	2391	2517	2669	2667	2926	3167	3390	3375	2363	1456	1009	841	663	483	41317
Dec-15	Tuesday	22	259	118	92	156	281	731	1650	2797	2727	2345	2490	2572	2689	2665	2967	3055	3138	3106	2087	1403	1054	800	702	450	40334
Dec-15	Wednesday	23	271	129	110	132	309	622	1515	2470	2552	2390	2392	2653	2895	2995	3062	3274	2873	2778	1955	1481	1036	849	744	547	40034
Dec-15	Thursday	24	310	164	135	111	192	335	698	1267	1495	1617	1924	2172	2247	2106	2007	1819	1573	1378	1184	917	920	832	556	422	26381
Dec-15	Friday	25	268	130	52	57	83	135	188	286	454	582	765	954	1080	1170	1128	1095	1140	1163	1083	909	851	756	582	348	15259
Dec-15	Saturday	26	227	104	84	85	169	252	406	603	955	1417	1574	1685	1709	1662	1683	1693	1592	1582	1341	1058	788	690	625	450	22434
Dec-15	Sunday	27	262	162	132	105	152	248	409	582	772	1093	1259	1505	1549	1629	1669	1508	1576	1485	1279	960	737	557	505	343	20478
Dec-15	Monday	28	246	105	75	108	256	601	1340	2284	2342	2024	2252	2379	2416	2483	2698	2950	3038	2983	2079	1178	848	717	655	378	36435
Dec-15	Tuesday	29	260	130	107	117	270	637	1393	2317	2567	2171	2350	2331	2438	2597	2820	3017	3237	3283	2212	1205	886	746	741	423	38255
Dec-15	Wednesday	30	271	125	138	101	229	649	1394	2355	2489	2222	2334	2549	2663	2716	3041	3048	3309	3292	2282	1386	1037	759	766	455	39610
Dec-15	Thursday	31	291	141	83	106	197	463	1030	1830	2054	1934	2078	2421	2711	2528	2596	2554	1973	1579	1244	897	733	655	619	393	31110

30 Highest Hours of the year
100 Highest Hours of the year

AADT 36600

2.4.3 Station 31 Volume Data

TWO-WAY VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	691	434	399	318	534	1678	4399	6419	5537	4209	3988	4339	4657	4882	5340	6559	7603	6625	5042	3259	2269	1994	1546	1229	83950
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	756	427	308	294	546	1754	5248	7534	7099	6098	5591	5279	5458	5546	6144	7493	8390	7881	5482	3699	2781	2327	1782	1271	99188
Jan-15 Friday	9	811	490	394	295	539	1893	5542	8279	6910	5296	4890	5461	5880	6143	6880	8242	8698	7757	5979	4385	3286	2925	2548	2051	105574
Jan-15 Saturday	10	1330	867	855	401	430	818	2095	2670	3074	3530	3879	4633	5319	5438	5387	5461	5626	5436	4704	3757	3159	2772	2420	2003	76064
Jan-15 Sunday	11	1330	910	843	402	353	542	1299	1717	1949	2889	3595	3851	4510	4808	4642	4906	4699	4357	4050	3118	2289	1702	1446	1075	61282
Jan-15 Monday	12	574	355	263	297	531	2063	5654	8284	7038	4783	4519	4658	4894	4790	5603	6987	7827	7829	5006	3249	2478	1793	1428	1117	92020
Jan-15 Tuesday	13	748	428	278	279	525	1942	5822	8377	7370	5507	4917	5051	5367	5438	5992	7182	8173	7582	5148	3420	2652	2137	1835	1246	97416
Jan-15 Wednesday	14	703	407	288	282	545	1930	5893	8740	7536	5339	4683	4950	5386	5478	6068	7721	8998	8347	5566	3597	2943	2261	1851	1213	100725
Jan-15 Thursday	15	787	428	301	291	563	1896	5628	8454	7127	5272	4969	5311	5497	5576	6250	7606	8551	8475	5578	3772	2968	2384	1853	1451	100988
Jan-15 Friday	16	860	500	428	323	602	1915	5194	7731	6806	5363	5141	5779	6402	6521	7039	8213	8813	8202	6503	4708	3562	3316	2691	2075	108687
Jan-15 Saturday	17	1416	990	814	498	479	836	2268	2847	3277	3938	4394	4931	5439	5337	5531	5746	5853	5587	5111	4161	3198	3073	2746	2436	80906
Jan-15 Sunday	18	1464	1147	1047	439	375	629	1214	1584	2249	3152	4057	4291	4759	4362	5498	4986	4645	4328	3956	3160	2261	1981	1769	1283	64636
Jan-15 Monday	19	738	482	357	321	514	1382	3875	5063	4894	4652	4726	4968	5244	5703	5924	6648	6828	6784	5004	3579	2410	1980	1593	1143	84812
Jan-15 Tuesday	20	601	375	311	287	592	2046	6138	8658	7801	5861	4959	5067	5490	5592	6017	7497	8444	7672	5627	3743	2883	2345	1687	1044	100737
Jan-15 Wednesday	21	630	401	355	275	544	2033	6051	8216	7775	5310	4881	5190	5442	5656	6247	7777	8459	8487	5860	4149	3089	2364	1847	1258	102296
Jan-15 Thursday	22	722	467	317	285	556	1964	5405	7982	8089	5752	4897	5308	5658	5810	6447	7945	8878	8650	6045	4173	3130	2493	2194	1780	104947
Jan-15 Friday	23	843	554	377	356	614	1971	5718	8500	7153	5642	5317	5810	6445	6297	6822	7861	8681	7964	5442	3972	2959	2718	2351	1919	106286
Jan-15 Saturday	24	1199	822	729	402	390	795	1914	2312	2896	3521	3861	4612	4891	5219	5350	5344	5150	4961	4850	3797	2923	2832	2510	2054	73334
Jan-15 Sunday	25	1365	1026	949	448	368	636	1328	1704	2188	3053	3880	4081	4891	5104	5189	5368	5114	4636	4067	3189	2257	1726	1452	1075	65094
Jan-15 Monday	26	578	328	277	283	566	1982	6049	8759	7277	5163	4741	5023	5455	5463	6037	7401	8196	6932	5035	3432	2656	2051	1560	1108	96352
Jan-15 Tuesday	27	671	445	329	261	568	1973	6069	8316	7147	5299	4769	4889	5239	5362	6076	7430	8112	7748	5798	3716	2999	2263	1604	1178	98261
Jan-15 Wednesday	28	716	452	339	253	546	2103	6065	7600	7692	5577	5117	5382	5745	5677	6539	7535	8666	8717	5735	3889	2985	2281	1643	1210	102464
Jan-15 Thursday	29	686	432	333	288	527	1901	5956	8652	7440	5233	4964	5443	5599	5760	6404	7432	8757	8507	5932	3773	3023	2249	1879	1352	102522
Jan-15 Friday	30	783	497	442	323	590	1977	5651	6886	7826	5505	5447	5919	6421	6626	7419	8543	8897	8099	6473	4718	3386	3203	2924	2235	110790
Jan-15 Saturday	31	1496	1001	866	442	404	765	1968	2648	3260	3658	4122	4627	5012	4973	5226	5535	5417	5181	4746	3748	3035	2768	2379	2088	75365
Feb-15 Sunday	1	1459	1014	917	442	335	588	1307	1685	2227	2985	3707	3857	4447	4731	4977	4797	4505	4373	3418	2124	1780	1550	2436	1405	61066
Feb-15 Monday	2	766	429	367	309	540	1953	5921	8457	7243	5346	4924	4978	5419	5315	5611	3895	7959	7739	5231	3367	2524	1959	1552	1114	92918
Feb-15 Tuesday	3	712	417	344	286	577	2025	6145	8707	7495	5114	4760	5193	5412	5641	6178	7346	8319	8190	5600	3747	2766	2313	1693	1265	100245
Feb-15 Wednesday	4	746	427	326	293	551	1999	6170	8738	7585	5258	4962	5127	5724	5620	6210	7649	7732	7706	5702	3684	2850	2157	1727	1161	100104
Feb-15 Thursday	5	687	481	346	306	588	1956	5776	8208	7516	5434	4965	5285	5776	5802	6520	8244	9153	8725	5913	3941	3135	2566	1877	1416	104616
Feb-15 Friday	6	823	533	472	332	622	1939	5798	8168	7409	5548	5299	5936	6354	6705	7006	8541	8574	6946	6105	4653	3439	3118	3030	2115	109465
Feb-15 Saturday	7	1278	896	753	422	472	899	2085	2846	3550	4120	4630	5080	5550	5371	5358	5843	5473	5223	4858	3996	3101	2914	2613	2175	79506
Feb-15 Sunday	8	1360	1000	1010	461	365	569	1343	1752	2245	3179	4025	4437	5333	5539	5663	5826	5554	5297	4667	3475	2470	1965	1549	1150	70234
Feb-15 Monday	9	614	345	334	282	572	2049	6152	8699	7522	5240	5090	5097	5455	5460	6219	7777	8363	8305	5612	3434	2590	2027	1702	1127	100067
Feb-15 Tuesday	10	714	422	343	273	560	1994	6130	8805	7782	5444	4949	5843	5903	5656	6337	7587	8437	8287	5792	3824	2962	2390	1898	1188	103520
Feb-15 Wednesday	11	700	406	343	273	591	2040	6136	8872	6401	5771	4891	5245	5762	5778	6394	7719	8731	8618	6364	4276	3159	2436	2234	1358	104498
Feb-15 Thursday	12	786	455	356	278	593	1967	6233	8716	7713	5548	5197	5521	5891	6062	6827	8050	8831	8490	6349	4554	3326	2711	2442	1480	108376
Feb-15 Friday	13	930	642	424	346	656	1939	5643	8641	7094	4940	5035	6107	6762	6957	7577	8786	9043	8200	7018	5140	3903	3547	3329	2325	114984
Feb-15 Saturday	14	1512	988	901	461	469	765	1906	2762	3736	4372	5334	5823	6142	6016	6282	6340	6444	6296	6270	4978	3793	3414	3289	2925	91218
Feb-15 Sunday	15	1590	1131	1037	477	375	562	1185	1628	2277	3429	4457	4907	5366	5746	5652	5903	5564	5068	4461	3633	2533	1932	1883	1305	72101
Feb-15 Monday	16	660	407	307	291	564	1629	4518	6397	5663	4982	4965	5330	5610	5515	5845	6728	7234	7143	4627	3140	2363	1946	1548	1106	88518
Feb-15 Tuesday	17	666	413	273	276	575	2058	5384	7894	7934	5304	4817	5004	5110	5522	5867	7386	8356	8462	5723	3649	2991	2459	1830	1231	99184
Feb-15 Wednesday	18	748	433	381	281	618	2050	6163	8812	7568	5586	5101	5411	5728	5807	6484	7774	8691	8721	6082	4194	3204	2652	1888	1264	105641
Feb-15 Thursday	19	786	491	349	329	620	1931	6158	8787	7438	5539	5225	5710	5696	5988	6418	7898	8793	8135	5924	4058	3191	2478	1840	1484	105266
Feb-15 Friday	20	777	490	360	314	663	1864	5485	8223	6945	5718	5236	5890	6272	6481	7708	9721	7852	8029	6146	4788	3543	2930	2595	2016	110046
Feb-15 Saturday	21	1334	1019	855	480	507	869	1938	2750	3460	3873	4258	4948	5352	5120	5175	5110	5131	4883	4671	3791	3288	3238	2813	2226	77089
Feb-15 Sunday	22	1612	1334	1161	544	440	647	1342	1895	2367	3380	4131	4411	5179	5291	5541	5604	5266	5037	4518	3451	2540	2162	1600	1103	70556
Feb-15 Monday	23	658	430	331	306	628	2024	5989	8533	7066	5229	4697	5224	5384	5354	6070	7484	8057	8020	5107	3452	2694	2071	1554	1220	97582
Feb-15 Tuesday	24	721	476	331	284	518	1515	4357	5390	5116	5589	4361	4160	4389	4232	4731	5928	6625	6566	4199	2907	2245	1944	1534	1134	79252
Feb-15 Wednesday	25	693	445	308	294	618	2018	6130	8906	7263	5347	5064	5266	5639	5598	6169	7658	8825	8428	5372	3491	2590	1925	1716	1164	100927
Feb-15 Thursday	26	671	383	297	276	587	1948	6110	8470	7589	5315	5014	5239	5636	5780	6259	7645	8739	8414	6093	4088	3329	2384	2054	1388	103708
Feb-15 Friday	27	898	549	415	400	679	2008	5908	8617	7201	5731	5578	6147	6640	6745	7647	8908	9113	8285	6669	4897	3738	3269	2744	2240	115026
Feb-15 Saturday	28	1921	1121	893	522	553	985	2140	3129	3753	4207	4572	5118	5621	5469	5825	5915	5778	5247	4866	4299	3442	2959	2797	2091	83223
Mar-15 Sunday	1	1446	1079	898	428	450	643	1285	1913	2333	3579	4227	4498	4995	5089	4812	4696	4368	4108	3847	3029	2312	1826	1464	1009	64334
Mar-15 Monday	2	557	372	297	308	634	2114	6053	8575	7249	5110	4840	5107	5442	5377	6166	7561	8334	8363	5711	3903	2816	2238	1761	1203	100091
Mar-15 Tuesday	3	755	512	398	322	643	2092	5845	8266	7605	5410	5090	5159	5205	5548	6059	7533	8483	8438	5646	3821	2943	2317	1824	1287	101201
Mar-15 Wednesday	4	873	549	338	303	618	2062	6159	7755	8091	5743	5151	5765	5618	5934	6583	7804	8688	7807	5113	4358	3452	2520	2001	1425	104710

Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	894	508	428	345	633	1985	5566	7426	7388	5865	5565	6063	6466	6663	6995	8484	8904	7897	6313	4615	3625	3429	2773	2322	111152
Mar-15 Saturday	7	1574	1040	934	474	494	900	2158	3069	3535	4239	4736	5187	5613	5673	5816	6098	5853	5576	5325	4441	3444	3139	2853	2339	84510
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	845	484	366	297	621	1953	5130	7549	7614	5539	4984	5197	5568	5737	6435	7719	9260	8630	5930	4299	3335	2503	1916	1417	103328
Mar-15 Tuesday	10	860	508	380	326	610	1948	5727	8558	7679	5581	5057	5611	6097	6909	6464	7907	8837	8209	6304	4616	3599	3019	2174	1798	108778
Mar-15 Wednesday	11	961	614	499	354	614	1991	5706	8595	8208	6033	5690	5984	6386	6354	6795	8060	7735	7926	6839	4936	3839	3039	2185	1537	110880
Mar-15 Thursday	12	988	625	394	312	611	1984	5797	8719	7740	5947	5354	5892	6053	6173	6582	8195	8797	6995	6474	4735	3787	2993	2319	1994	109460
Mar-15 Friday	13	1061	652	542	380	630	1875	5536	8350	7379	5883	5773	6227	6813	6866	7678	8727	8996	8047	6509	5113	3907	3404	3015	2397	115760
Mar-15 Saturday	14	1635	1043	928	481	500	807	1892	2616	3431	3993	4714	4903	5530	5753	5635	5824	5482	5268	5140	4396	3869	3517	3195	2627	83179
Mar-15 Sunday	15	1768	1264	1229	630	497	739	1357	1802	2413	3705	4574	5082	5731	6014	6072	6051	5715	5464	5170	4382	3332	2539	1924	1289	78743
Mar-15 Monday	16	795	458	422	297	612	2019	5742	8305	7732	6158	5524	5636	6040	5948	6492	7878	8633	7905	6229	4432	3443	2736	1906	1336	106678
Mar-15 Tuesday	17	917	482	402	329	642	1949	5945	8403	8113	6158	5377	5465	5892	5929	6490	7891	8314	6532	6428	4651	3622	2951	2189	1602	106673
Mar-15 Wednesday	18	979	617	519	351	589	1976	5941	8692	7961	5997	5356	5629	6040	6046	6536	8072	8709	8791	6189	4805	3583	2588	2267	1518	109751
Mar-15 Thursday	19	915	511	367	306	636	1970	5427	7648	8210	6222	5254	5658	5808	5913	6673	8065	8799	8493	6063	4208	3452	2948	2235	1508	107289
Mar-15 Friday	20	977	578	459	391	630	1946	5750	8402	7418	5886	5776	6463	6952	7139	7434	7195	9022	8554	6748	5381	4492	4039	3362	2688	117682
Mar-15 Saturday	21	1705	1129	1004	542	589	964	2077	3282	4505	4721	5195	5900	6034	5852	5987	5978	6191	5799	5544	4810	3882	3697	3350	2627	91364
Mar-15 Sunday	22	1673	1251	1211	562	487	748	1334	1802	2431	2700	4403	4411	4677	5161	5071	5235	4698	4233	4050	3480	2528	2054	1651	1245	67096
Mar-15 Monday	23	745	386	321	304	653	1951	5684	8602	7295	5603	4932	5475	5558	5944	6115	7495	7912	7928	5444	3663	2812	2210	1730	1250	100012
Mar-15 Tuesday	24	818	490	331	299	610	2077	5842	8843	7661	5757	5089	5284	5608	5644	6466	7726	8226	8163	6113	4330	3279	2594	1848	1432	104530
Mar-15 Wednesday	25	849	500	440	342	591	1989	5943	8630	7813	5763	5303	5545	5906	5778	6579	7670	8808	8477	6211	4617	3669	2975	2133	1417	107948
Mar-15 Thursday	26	899	552	403	345	633	2022	5944	8524	7655	5842	5475	5808	6226	6407	6974	8378	8436	8467	6553	4896	3920	3025	2561	1630	111575
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	1611	1053	964	640	883	1599	2573	3465	3964	4531	5365	5330	5220	5320	5225	5388	5616	5289	5112	4567	3863	3608	2936	2492	86614
Mar-15 Sunday	29	1674	1273	1143	534	467	596	1328	1806	2514	3688	4826	5045	5698	5753	5813	5765	5591	5356	5055	4105	3374	2405	1903	1344	77056
Mar-15 Monday	30	861	508	430	332	657	1852	5429	7552	6677	5438	5303	5659	5883	5834	6078	7352	8117	7333	5638	4062	3247	2600	1987	1426	100255
Mar-15 Tuesday	31	851	545	370	313	607	1925	5292	7943	7188	5726	5385	5770	5918	6341	6598	7723	8400	8632	6444	4653	3696	3023	2550	1596	107489
Apr-15 Wednesday	1	862	530	442	365	628	1904	5537	7905	7155	5748	5709	5905	6184	6116	6394	7485	8627	8578	6166	4683	3722	2932	2294	1679	107550
Apr-15 Thursday	2	1025	576	453	348	624	1957	5399	7691	7315	6159	5946	6428	6761	6541	7023	8026	8643	8567	6554	4731	3987	3261	2612	1816	112443
Apr-15 Friday	3	1161	715	615	389	608	1688	4664	6430	6158	5668	6241	6643	7214	7436	7826	8425	8278	6493	6452	5409	4697	3761	3242	2595	112808
Apr-15 Saturday	4	1727	1252	1038	549	518	815	1762	2484	3208	4102	4793	5447	5401	5782	5712	5712	5884	5519	5087	4569	3849	3385	3145	2535	84275
Apr-15 Sunday	5	1632	1079	1030	522	450	894	1367	1794	2405	3515	4454	4424	5177	5345	5421	5705	5427	5203	5024	4358	3759	2693	2052	1482	75212
Apr-15 Monday	6	846	455	413	319	688	1951	5956	8588	7245	5820	5699	5928	6141	6245	6649	8080	8878	8320	6135	4527	3678	2558	2056	1498	108673
Apr-15 Tuesday	7	914	487	381	325	631	2067	6209	8997	8088	6195	5923	6034	6076	6161	6665	8063	8814	8791	7036	4797	3791	2985	2282	1638	113350
Apr-15 Wednesday	8	902	525	434	315	630	2072	6115	9169	7904	6300	6902	7038	7548	6274	6856	8325	9047	8580	7042	5082	4251	3129	2556	1562	118558
Apr-15 Thursday	9	985	562	402	344	661	2111	6186	8964	8124	6325	6006	6135	6222	6408	7267	8870	8897	8560	7060	5356	4216	3386	3010	1842	117899
Apr-15 Friday	10	1174	633	538	416	693	2058	5886	8824	7835	6336	6323	6785	7211	7141	7719	8734	9280	8381	7433	5736	4576	4073	3572	2698	124055
Apr-15 Saturday	11	1782	1177	1089	580	599	948	2266	3187	3949	4556	5234	5467	5640	5666	5629	5802	5969	4458	4730	4484	3891	3905	3387	2546	86941
Apr-15 Sunday	12	1778	1281	1297	578	533	838	1607	2225	3020	4078	4988	5315	5663	5924	5825	6188	5731	5232	4540	3912	2934	2068	1803	1372	78730
Apr-15 Monday	13	694	425	328	328	687	2012	5649	8355	7945	5624	5315	5372	5664	5780	6335	7514	8637	8413	5777	4259	3380	2513	1978	1347	104331
Apr-15 Tuesday	14	860	475	380	333	622	2084	6226	8738	7955	5654	5181	5489	5515	5778	6421	7844	8558	8142	6138	4247	3792	2631	2107	1514	106684
Apr-15 Wednesday	15	868	547	439	343	640	2094	6239	8891	6981	6290	4888	5451	5840	5951	6645	7923	8977	8158	5928	3965	3110	2360	1983	1356	105867
Apr-15 Thursday	16	876	547	366	322	689	2053	6133	8962	7914	5632	5324	5693	5916	6193	6639	8039	8761	8615	6268	4346	3594	2746	2250	1549	109427
Apr-15 Friday	17	1001	560	511	374	720	2019	5758	8231	7946	6371	5917	6238	6697	6916	7394	8452	8745	8213	6388	4994	4032	3546	3289	2498	116810
Apr-15 Saturday	18	1641	1141	1029	555	541	941	2216	3296	3745	4297	4683	5365	5487	5364	5275	5638	5584	5660	5073	4419	3936	3639	3258	2716	85499
Apr-15 Sunday	19	1676	1201	1136	558	487	700	1442	1915	2427	3466	4340	4592	4994	5233	5232	5348	4985	4723	3981	3166	2442	1985	1723	1264	69016
Apr-15 Monday	20	752	409	345	352	715	2132	6090	8560	7778	5845	5195	5299	5653	5773	6285	7815	8720	8383	5651	4017	3081	2273	1905	1297	104325
Apr-15 Tuesday	21	845	571	374	303	713	2112	6193	9091	7958	6029	5501	5508	5701	5767	6621	7817	8251	8040	6160	4494	3662	2728	2069	1460	107968
Apr-15 Wednesday	22	794	545	411	333	653	2122	6162	8582	8341	6274	5502	5829	6044	5986	6710	8168	8645	8333	6970	5041	3871	2961	2174	2045	112496
Apr-15 Thursday	23	1052	562	401	327	673	2106	6280	9086	8836	6483	5460	5740	5991	6313	6773	8165	9688	10273	7467	4957	3995	3265	2756	1722	118371
Apr-15 Friday	24	1063	649	577	412	715	2067	5966	8641	7902	6029	5843	6272	6670	7126	7610	8708	8616	8135	6580	5214	4254	3839	3437	2878	119203
Apr-15 Saturday	25	1714	1089	1048	541	599	878	2171	2913	3716	4125	4675	4966	5213	4950	4826	5529	5578	5184	4791	4154	3784	3665	3067	2395	81571
Apr-15 Sunday	26	1578	1066	1043	525	540	746	1487	2005	2721	3847	4692	5121	5647	5826	5720	6071	5811	5560	4961	4429	3586	2712	1990	1394	79078
Apr-15 Monday	27	814	455	428	333	673	2208	6288	8998	7878	5798	5432	5541	5829	5832	6327	7538	8440	8193	5893	4105	3197	2639	1796	1351	105986
Apr-15 Tuesday	28	800	469	355	311	636	2095	6387	8951	7851	5530	5272	5234	5611	5814	6363	7951	8764	6889	6400	4625	3532	2856	1949	1396	106041
Apr-15 Wednesday	29	965	531	383	290	626	1921	5553	7736	7213	5580	5019	5184	5674	5966	6859	6219	5727	5918	5455	3829	3090	2486	1893	1367	95484
Apr-15 Thursday	30	874	471	381	322	687	2032	6340	8578	7766	6474	5494	5684	5774	6149	6883	8282	8685	8902	6138	4596	3971	3065	2371	1830	111749
May-15 Friday	1	1136	724	519	404	692	2008	5823	8398	8412	6596	5833	6281	6534	7013	7962	8972	9031	8447	6806	5097	4195	3937	3609	2616	121045
May-15 Saturday	2	1693	1106	941	576	546	934	2556	3630	4263	4955	5522	5797	5952	5998	6216	6415	6394	5943	5443	4858	4356	3770	3150	2360	93374
May-15 Sunday	3	1357	2008	1190	591	543	763	1621	2174	2681	3908	4682	4768	5433	5734	5734	5863	5814	5325	4795	4078	3328	2494	1989	1369	78242
May-15 Monday	4	784	490	340	344	680	2087	6219	8687	7686	4812	6169	5952	5963	6030	6444	7706	8680	8365	5987	4323	3319	2640	2144	1318	107169
May-15 Tuesday	5	867	535	351	324	689	2071	5220	6322	6173	6765	5984	5725	5870	6018	6604	8105	8902	8656	6485	4652	3757	2933	2150	1953	107111
May-15 Wednesday	6	1094	626	472	346	702	2118	6404	9078	8079	5902	5636	5850	6100	6384	6817	7961	9224	8865	6846	4837	3754	2915	2266	1704	113980
May-15 Thursday	7	1020	573	430	328	696	2100	6303	9121	8204	6238	5693	5900	6011	5883	6410	7773	8376	8154	5729	4005	3347	2754	2342	1717	109107

May-15	Friday	8	1080	585	536	363	660	1964	5321	7561	8193	5944	5916	6247	6635	6904	7419	8824	8434	6930	6164	4863	4079	3811	3199	2562	114194
May-15	Saturday	9	1630	1049	1042	540	530	1063	2576	3390	3735	4342	4802	5238	5842	5982	5936	6185	5772	5557	5081	4344	3705	3500	3015	2586	87442
May-15	Sunday	10	1592	1223	1161	518	514	660	1446	1955	2569	3793	4765	5004	5693	6080	6062	6228	5992	5427	4960	4095	3510	2716	2192	1593	79748
May-15	Monday	11	915	519	436	359	729	2111	6025	8451	7946	5767	5640	5751	5942	5961	6392	7701	7655	8218	5463	4154	3270	2416	2092	1434	105347
May-15	Tuesday	12	884	546	375	307	657	2091	6344	9103	7901	5759	5277	5579	5953	5924	6318	7801	8461	7055	5224	4610	3504	2764	2224	1528	106189
May-15	Wednesday	13	881	552	425	336	701	2152	6465	8950	7784	5687	5207	5687	5948	6049	6633	8023	9037	8496	6425	4713	3787	2953	2290	1703	110884
May-15	Thursday	14	992	581	408	358	705	2033	6271	8754	8192	5912	5621	5903	6150	6252	6638	8312	9101	9063	6725	4868	4413	3438	2739	1863	115292
May-15	Friday	15	1167	657	515	416	767	2062	5993	8852	7438	5798	5755	6143	7072	7270	7857	8915	9470	8505	6771	5373	4431	4258	3957	2733	122175
May-15	Saturday	16	1812	1189	1048	589	625	1050	2369	3302	4240	4909	5367	5641	5958	6028	5622	5280	5672	6136	5582	5215	4398	4609	3631	2859	93131
May-15	Sunday	17	1787	1496	1259	628	567	795	1605	2149	2864	4032	4970	5024	5551	5724	5917	6178	5709	5358	4814	4404	3542	2665	2152	1512	80702
May-15	Monday	18	882	500	453	350	706	2209	6292	8408	7958	5800	5375	5592	5914	5928	6424	7664	8508	8427	5773	4110	3450	2622	1882	1437	106664
May-15	Tuesday	19	855	590	383	325	750	2150	6569	8868	8327	5813	5382	5530	5949	5914	6603	7553	8609	8524	6054	4615	3740	2803	2238	1980	110124
May-15	Wednesday	20	985	586	423	341	688	2041	6468	9005	7492	6077	5689	5645	5962	6073	6607	7704	8034	7440	5909	4090	3328	2758	2255	1488	107088
May-15	Thursday	21	947	609	382	324	746	2149	6353	8873	8202	6407	5944	6045	6381	6306	6866	8435	9232	8724	6268	4989	4042	3358	2644	2044	116270
May-15	Friday	22	1238	733	533	382	694	2000	5888	8506	7248	6054	6195	6424	7048	7139	7688	8929	8831	7828	6656	5468	4534	4074	3600	2970	120660
May-15	Saturday	23	1870	1191	1048	558	539	964	2173	2923	3868	4754	5186	5477	5691	5719	5653	5929	5888	5872	5635	5072	4407	4097	3573	2828	90915
May-15	Sunday	24	1894	1285	1199	573	463	605	1350	1970	2677	3988	4878	4859	5343	5333	5431	5794	5489	5243	5133	4452	3764	3237	2829	2138	79927
May-15	Monday	25	1337	834	673	413	451	935	2075	2523	3176	4260	4615	4990	5181	5243	5409	5610	5235	4984	4457	3737	3134	2957	2675	1473	76377
May-15	Tuesday	26	822	493	407	327	710	2164	6302	8401	7964	5795	5471	7036	5988	5689	5494	5604	5880	5749	5509	4610	3743	2729	2143	1493	100523
May-15	Wednesday	27	933	561	378	311	671	2117	6293	8840	7987	5808	5712	5773	5882	6002	6541	7943	8759	8669	6365	4530	3781	3063	2320	1572	110811
May-15	Thursday	28	1024	623	437	304	695	2131	6492	8660	7235	6220	5726	5923	5986	6183	6732	8009	8537	8084	6356	4707	4102	3195	2529	1863	111753
May-15	Friday	29	1056	665	509	412	715	2021	6231	8543	7697	5994	6044	6336	6788	6889	7428	8698	8782	8077	6441	5051	4005	3961	3335	2626	118304
May-15	Saturday	30	1676	1174	1070	591	576	1076	2554	3250	4085	4915	5382	5529	5855	5806	5741	5942	6052	5481	5201	4733	4283	3877	3383	2861	91093
May-15	Sunday	31	1837	1272	1174	595	570	782	1568	1999	2689	3881	4595	4775	5453	5328	5706	5784	5536	5066	4789	3904	3232	2768	2301	1628	77232
Jun-15	Monday	1	884	471	453	385	715	2207	6252	8747	7190	5668	5579	5648	5821	6041	6653	7657	8492	8589	5958	4228	3199	2778	2078	1500	107193
Jun-15	Tuesday	2	938	523	335	278	688	2113	6345	8882	7767	5877	5633	5545	5939	5842	6351	7485	8637	8107	5600	4070	3403	2817	2191	1593	106959
Jun-15	Wednesday	3	997	524	408	339	675	1966	5125	7171	7689	5703	5519	5801	5616	5974	6324	7411	8672	8754	5951	4434	3673	3032	2369	1680	105807
Jun-15	Thursday	4	1004	621	424	375	718	2169	6302	8233	7580	5938	5971	6243	6330	6849	7631	8381	8230	7787	7062	4949	3729	3366	2753	1831	114476
Jun-15	Friday	5	1222	736	569	426	715	1953	5724	7875	6925	5935	5912	6268	6786	7176	7498	8572	8034	7670	6622	5449	4154	3966	3760	3052	116999
Jun-15	Saturday	6	1758	1196	1103	588	563	957	2445	3251	3874	4487	4967	5317	5550	5667	5941	6173	6203	5994	5399	4774	4116	4079	3403	2910	90715
Jun-15	Sunday	7	1811	1259	1193	558	511	763	1664	2092	2716	3733	4594	5146	5252	5624	5655	5931	5721	5278	4772	4144	3349	2591	2128	1872	78357
Jun-15	Monday	8	878	538	459	346	741	2082	6068	8210	7334	5910	5472	5842	6024	6134	6197	7318	8338	8100	5753	4183	3373	2728	2173	1451	105652
Jun-15	Tuesday	9	864	591	453	356	674	2013	6119	8567	7178	5568	5302	5499	5760	6018	6336	6879	5517	5642	5757	4351	2902	2242	1785	1443	97816
Jun-15	Wednesday	10	957	527	434	385	661	2053	6023	8370	7520	5746	5619	5750	5783	6067	6552	7705	8734	7899	6316	4638	3710	3271	2560	1878	109158
Jun-15	Thursday	11	1061	591	517	360	694	2166	6060	8357	7427	6081	5685	5856	6293	6216	6549	7892	8191	7482	6450	4739	3898	3214	2463	1743	109985
Jun-15	Friday	12	1238	756	602	390	697	2065	5696	7178	7449	6997	6291	6416	6747	7058	7414	8325	8653	8027	6412	5349	4037	3808	3476	2798	117879
Jun-15	Saturday	13	1920	1326	1034	577	583	1015	2504	3330	4237	4977	5382	5817	5725	5697	5975	6163	6125	5655	5453	4770	4128	3999	3625	2805	92822
Jun-15	Sunday	14	1857	1311	1240	542	572	803	1629	2060	2733	3913	4618	4856	5396	5345	5743	5547	5274	5023	4739	4043	3116	2690	2085	1579	76714
Jun-15	Monday	15	946	513	459	388	721	2033	5982	8293	7592	5710	5381	5540	5970	5983	6184	7606	8288	8169	5734	4094	3334	2649	2129	1550	105248
Jun-15	Tuesday	16	951	616	424	372	746	2118	6007	8661	7547	5795	5327	5536	5930	5910	6482	7828	8451	8576	6136	4394	3815	3121	2490	1572	108805
Jun-15	Wednesday	17	1119	667	456	387	721	2141	6201	8512	7771	5873	5477	5678	6273	6199	6672	7739	8981	8607	6351	4711	3714	3115	2634	1949	111948
Jun-15	Thursday	18	1075	647	485	423	781	2248	6077	8400	7853	5974	5475	5892	6171	6271	6791	7821	8686	8621	6399	4870	3934	3514	2979	1987	113374
Jun-15	Friday	19	1191	757	599	426	755	2045	5634	7908	7288	6021	5989	6449	7007	7055	7530	8477	8381	8171	6322	5103	4439	4048	3695	2832	118122
Jun-15	Saturday	20	1881	1197	1005	560	580	1031	2260	3258	4301	4782	5329	5932	5682	5723	5759	6157	5934	5999	5350	4727	4258	4324	3571	2953	92553
Jun-15	Sunday	21	1883	1253	1123	576	605	738	1537	2114	2943	4117	4631	4941	5689	5652	5576	5397	5355	5495	5480	4501	3876	4039	2745	1869	82135
Jun-15	Monday	22	1080	642	452	423	793	2092	5992	8219	7424	6495	5579	5702	5987	5931	6289	7438	8466	7304	5619	4018	3047	2340	1936	1439	104707
Jun-15	Tuesday	23	908	571	413	345	725	2291	6029	8392	7789	5719	5457	5588	5844	5949	6484	7669	9001	8684	6211	4685	3785	3536	2443	1602	110120
Jun-15	Wednesday	24	990	577	454	350	718	2147	6141	8501	7673	6002	5671	5881	6176	6118	6804	7896	8760	8143	6440	4638	3889	3151	2539	1795	111454
Jun-15	Thursday	25	1157	611	457	357	701	2096	5961	8317	7767	6163	5690	5927	6312	6444	6949	8059	8833	8934	6373	5093	3948	3511	2719	1960	114339
Jun-15	Friday	26	1345	799	572	458	913	2424	5861	7756	6749	5244	5099	5391	5475	4780	6012	7115	7177	7252	6031	4964	4033	3771	3362	2810	105393
Jun-15	Saturday	27	1716	1137	961	643	644	990	2473	3277	4153	4939	5357	5551	5484	5703	5934	5845	5724	5244	5136	4401	3899	3630	3366	2762	88969
Jun-15	Sunday	28	1836	1299	1175	539	579	782	1518	1956	2659	3711	4533	4822	5317	5412	5506	5928	5283	4957	4499	3598	2970	2539	2134	1349	74901
Jun-15	Monday	29	921	540	438	377	789	2192	5957	8063	7288	5752	5348	5492	5902	5981	6390	7697	8653	8239	5884	4172	3223	2758	2136	1553	105745
Jun-15	Tuesday	30	863	574	430	373	743	2177	5938	8365	7218	5742	5293	5847	6007	6039	6296	7690	8480	8589	6350	4676	3207	2674	2195	1484	107250
Jul-15	Wednesday	1	991	627	416	337	746	2091	6061	8155	7456	5881	5387	5909	6167	6327	6663	7622	8827	8562	6332	4759	3706	3172	2638	1785	110617
Jul-15	Thursday	2	1148	643	501	421	732	2031	5697	7926	7326	6089	5913	6236	6750	7121	7272	8286	8919	8581	6148	4924	3671	2843	2551	2174	113903
Jul-15	Friday	3	1415	794	649	465	569	1178	2766	3803	4120	4500	5063	5631	6161	6097	5901	5867	6356	5669	5184	4456	3882	3736	3317	2736	90315
Jul-15	Saturday	4	1811	1326	1297	603	489	707	1443	2058	2667	3324	4099	4449	4537	4698	4824	4967	4767	4729	4545	4274	4116	4187	4482	2672	77071
Jul-15	Sunday	5	1675	1144	1102	534	523	704	1330	1842	2442	3567	4558	4987	5254	5790	5639	5587	5444	4907	4692	3693	3067	2817	2111	1596	75005
Jul-15	Monday	6	961	582	430	381	660	2029	5793	7701	7248	5838	5453	5950	6149	6229	6172	7687	8288	8378	5864	4070	3260	2827	2256	1507	105713
Jul-15	Tuesday	7	932	599	383	316	678	2212	5968	8038	7650	6475	5366	5570	5849	5923	6297	7369	8564	8567	5981	4227	3276	2851	2350	1545	106986
Jul-15	Wednesday	8	989	609	445	366	690	2147	5962	8389	7276	5968	5492	5629	6016	6038	6781	7764	8718	8479	6347	4666	3608	3046	2600	1696	109721
Jul-15	Thursday	9	1002	664	429	383	696	2155	6080	8225	7336	5951	5547	5814	6174	6458	6924	7849	7705	8337	6732	4679	3881	3363	2839	1904	111127
Jul-15	Friday	10	1165	798	697	457	700	2031	5536	7798	7198	5938	5678	6258	6718	6928	7507	8428	8792	8014	6644	5006	4197	3950	3487	3077	117002

Jul-15	Saturday	11	1813	1198	1008	618	629	1070	2428	3307	4155	4684	5166	5560	5728	5736	5671	5985	5984	5884	5352	4590	3975	4244	3361	2774	90920
Jul-15	Sunday	12	1803	1244	1200	550	534	773	1568	2128	2646	3682	4515	4873	5369	5559	5416	5784	5576	5089	4704	3995	3442	2819	2293	1555	77117
Jul-15	Monday	13	949	572	450	381	693	2106	6000	8400	7451	5693	5446	5378	5977	6142	6248	7542	8213	8388	5919	4130	3215	2331	1847	1425	104896
Jul-15	Tuesday	14	846	567	409	325	678	2087	5220	6161	7945	6433	5332	5604	5894	6062	6415	7612	8475	8349	6057	4349	3425	2789	2098	1561	104693
Jul-15	Wednesday	15	929	610	472	350	697	2151	5960	8096	7860	5810	5704	6086	6346	6304	6626	7789	8669	8644	6445	4639	3716	3113	2361	1793	111170
Jul-15	Thursday	16	1073	616	464	389	750	2190	5594	8535	7946	6060	5918	6106	6443	6419	6793	8260	8776	7871	6369	4626	3844	3400	2556	1942	112940
Jul-15	Friday	17	1211	741	602	444	770	1993	5492	7771	7297	5994	5936	6452	6639	6066	6445	7360	7235	7896	6404	5007	4069	4019	3453	2669	111965
Jul-15	Saturday	18	1748	1202	1139	624	627	998	2407	3128	3900	4619	5239	5425	5588	5703	5939	6195	6069	5843	5375	4724	4100	4047	3507	3350	91496
Jul-15	Sunday	19	2036	1458	1431	546	570	708	1464	1983	2637	3740	4499	4910	5581	5752	5653	5547	5328	4853	4434	3453	2769	2643	2100	1395	75490
Jul-15	Monday	20	965	533	416	332	733	2189	6023	8213	7372	5791	5702	5727	6118	6000	6439	6975	8096	8101	5827	4149	3186	2579	2049	1547	105062
Jul-15	Tuesday	21	986	613	391	337	741	2149	6118	8351	7599	5990	5404	5499	5945	5855	6405	7824	8543	8159	5803	4211	3361	2806	2255	1617	106962
Jul-15	Wednesday	22	984	616	455	369	704	2222	6129	8182	7610	6102	5734	5873	6113	6153	6538	7724	7101	8000	6222	4519	3612	3057	2480	1692	108191
Jul-15	Thursday	23	1123	613	454	380	736	2180	6047	8162	7626	5852	5476	5911	6607	6170	6883	7850	8406	6861	6555	4292	3597	3017	2409	1837	109044
Jul-15	Friday	24	1154	695	569	423	738	2029	5600	7718	7076	5901	5915	6392	6874	6903	7484	8261	8623	8035	6508	4841	4018	3683	3128	2592	115160
Jul-15	Saturday	25	1672	1142	1004	567	577	982	2236	3127	3950	4783	5317	5664	5738	5732	5953	6077	6080	5854	5582	4608	4158	4268	3450	2922	91443
Jul-15	Sunday	26	1994	1318	1304	581	456	696	1532	2023	2583	3781	4640	5017	5378	5426	5644	5709	5388	4906	4740	3917	3384	2855	2157	1480	76909
Jul-15	Monday	27	923	514	406	351	707	2198	5792	8044	7350	5528	5344	5638	5753	5990	6370	7326	7701	8279	5242	3657	3156	2760	2293	1570	102892
Jul-15	Tuesday	28	990	553	373	337	710	2165	5955	8287	7714	5639	5285	5449	5826	6007	6557	7683	8662	8402	5899	4406	3663	2700	2265	1592	107119
Jul-15	Wednesday	29	975	637	450	380	698	2108	6209	8407	7858	5877	5442	5827	6126	6016	6607	7852	8117	7917	6445	4536	3806	3009	2349	1757	109405
Jul-15	Thursday	30	1068	632	479	356	726	2185	6066	8294	8040	6118	5775	6227	6569	6411	6874	7979	9382	8685	6281	4732	4058	3327	2486	1918	114668
Jul-15	Friday	31	1189	733	577	430	773	2045	5567	7884	7737	6043	5975	6446	6845	7023	7523	8488	8711	8110	6467	5188	4070	3622	3203	2655	117304
Aug-15	Saturday	1	1718	1190	1059	615	613	1031	2232	3344	3942	4577	5217	5841	6065	6131	5889	5808	5885	5604	5417	4460	4023	3806	3577	2700	90744
Aug-15	Sunday	2	1767	1446	1317	612	545	732	1393	2038	2658	3673	4416	4779	5257	5337	5446	5252	4765	4578	4356	3641	2946	2651	2092	1364	73061
Aug-15	Monday	3	828	491	385	328	658	2133	5862	8275	8215	6476	5812	5812	6038	6169	6402	7413	5770	7282	6026	3885	3158	2591	2017	1491	103517
Aug-15	Tuesday	4	893	563	348	332	652	2086	5656	8171	7485	5685	5348	5442	5930	6138	6427	7691	8211	8152	6077	4391	3573	2861	2235	1627	105974
Aug-15	Wednesday	5	986	557	396	360	697	2057	5875	8427	5947	5837	5618	5723	6142	6129	6532	7968	8932	8112	6103	4709	3569	2972	2364	1726	107738
Aug-15	Thursday	6	1068	632	415	416	756	2147	5789	7992	7659	5755	5440	5889	6185	6331	6767	7289	7794	7879	5953	4377	3556	2831	2279	1740	106939
Aug-15	Friday	7	1081	694	539	398	695	2001	5466	7815	7114	5705	5951	6244	7042	7108	7460	8464	9067	8211	6753	5166	4277	3890	3720	2751	117612
Aug-15	Saturday	8	1728	1150	1044	627	577	1002	2501	3389	4113	5009	5697	6290	6068	5991	6189	6483	6367	6043	5643	4914	4286	3972	3386	2785	95254
Aug-15	Sunday	9	1870	1181	1146	593	530	790	1622	2174	2674	3872	4655	5276	5554	5881	5672	6040	5923	5243	4957	4134	3542	2744	2208	1462	79743
Aug-15	Monday	10	928	550	437	358	722	2115	5964	8234	6886	5782	5408	5515	5869	6100	6248	7489	8479	8432	5772	4270	3547	2632	2053	1460	105250
Aug-15	Tuesday	11	878	640	398	326	702	2124	6066	8481	7763	6201	5393	5473	5914	6091	6720	7830	8634	8161	6212	4512	3570	2704	2363	1538	108694
Aug-15	Wednesday	12	887	574	417	356	702	2178	6039	8749	7399	5675	5420	5668	5990	6337	6441	7829	8796	8339	6139	4680	3799	3013	2352	1784	109563
Aug-15	Thursday	13	1087	649	472	372	697	2168	5815	8686	7344	5689	5539	6039	6154	6242	7046	8295	9059	8299	6628	5074	4072	3335	2841	2197	113799
Aug-15	Friday	14	1232	698	603	397	778	2020	5535	8075	7316	5833	5858	6382	6902	7061	7492	8658	9113	8289	6876	5407	4390	4066	3750	2968	119699
Aug-15	Saturday	15	1730	1208	991	590	603	1061	2323	3500	4049	4712	5357	5903	6044	5675	6007	5991	5965	5812	5545	4715	4308	3820	3479	2806	92194
Aug-15	Sunday	16	1859	1342	1297	547	487	728	1480	2016	2589	3718	4635	5328	5674	5877	5935	5952	5658	5160	4762	3992	3264	2493	2035	1396	78224
Aug-15	Monday	17	886	507	367	374	721	2257	6393	8586	7295	5525	5033	5545	5637	5868	6314	7533	8311	8160	5585	3867	3012	2347	1884	1365	103372
Aug-15	Tuesday	18	871	549	336	365	666	2289	6320	8792	7344	5154	5242	5370	5603	5789	6324	7069	7566	6951	5980	3846	2921	2296	1818	1336	100797
Aug-15	Wednesday	19	898	546	368	325	638	2202	6183	8117	7426	5996	5161	5524	5708	5934	6534	7401	7871	7851	6046	4175	3265	2521	2073	1391	104154
Aug-15	Thursday	20	882	525	387	321	702	2232	6240	8948	7509	5529	5307	5731	6153	5994	6529	7716	7537	7524	5796	4093	3253	2680	2283	1502	105373
Aug-15	Friday	21	1135	672	605	411	722	2189	6197	8773	8018	5955	5564	6171	6505	6912	7152	8558	8375	7209	6236	4793	3881	3509	3270	2517	115329
Aug-15	Saturday	22	1591	1150	946	539	559	957	2353	3091	3914	4592	5045	5569	5831	5425	5579	5667	5533	5598	5454	4293	3803	3474	2844	2303	86110
Aug-15	Sunday	23	1493	1119	1028	529	457	724	1577	2019	2594	3741	4424	4829	5365	5742	5581	5918	5386	4913	4661	3648	2883	2101	1710	1300	73742
Aug-15	Monday	24	774	419	361	320	719	2249	6373	9045	7515	5359	5227	5312	5680	5751	5959	7613	8449	8209	5642	4019	3299	2387	1755	1351	103787
Aug-15	Tuesday	25	850	499	333	311	667	2194	6566	9081	7354	5663	5124	5418	5628	5876	6442	7935	8472	8102	5908	4248	3423	2433	1980	1382	105889
Aug-15	Wednesday	26	863	523	409	327	671	2296	6394	9263	7769	5618	5246	5633	5760	5819	6396	7665	8615	8294	6063	4383	3607	2628	2124	1539	107905
Aug-15	Thursday	27	884	528	401	390	694	2343	6437	9288	7953	6139	5720	5888	6132	6071	6843	8794	8387	8746	6006	4462	3569	2881	2202	1602	112360
Aug-15	Friday	28	964	699	569	438	770	2292	6251	9141	7431	5875	5764	6111	6769	6853	8011	8632	8775	7927	6554	4858	3810	3318	3168	2577	117557
Aug-15	Saturday	29	1657	1136	936	591	521	985	2184	3002	3726	4246	4714	5160	5472	5783	5821	5704	5867	5580	5020	4363	4010	3672	3211	2711	86072
Aug-15	Sunday	30	1657	1333	1269	583	477	702	1477	1900	2428	3223	4090	4277	3838	4951	5197	4954	4411	3979	3715	3125	2437	2014	1575	1162	64774
Aug-15	Monday	31	742	418	304	299	670	1800	4853	6595	6607	5983	5221	5199	5366	5377	5782	7274	8062	7318	5291	4031	3239	2425	1776	1369	96001
Sep-15	Tuesday	1	804	538	371	322	658	2304	6294	9095	7942	5700	5251	5610	5796	6040	6650	7979	8833	7382	6404	4714	3587	2769	2117	1403	108563
Sep-15	Wednesday	2	797	578	410	345	702	2276	6447	9221	8080	5927	5318	5469	5849	6022	6707	7763	8830	7939	6629	4597	3840	2901	2313	1511	110471
Sep-15	Thursday	3	912	563	425	352	713	2358	6681	9149	7888	5689	5587	5814	5948	6156	6640	8400	8800	7715	6224	4378	3385	2848	2418	1730	110773
Sep-15	Friday	4	1066	711	600	453	729	2123	6093	8742	7324	5775	5816	6392	7053	7259	7919	8791	9238	7681	6190	5091	4213	3949	3201	2741	119150
Sep-15	Saturday	5	1886	1225	980	526	505	970	2067	3024	3813	4538	5316	5704	5890	5821	5941	5951	6077	5697	5087	4561	3989	3846	3465	2679	89558
Sep-15	Sunday	6	1801	1321	1142	548	388	648	1331	1934	2475	3534	4288	4730	5481	5518	5567	5445	5267	5030	4828	3583	3015	2727	2288	1854	74743
Sep-15	Monday	7	1165	922	692	417	509	829	1853	2550	3112	3429	4195	4738	5064	4954	5616	5535	5372	4642	4213	3643	2843	2216	1865	1317	71691
Sep-15	Tuesday	8	792	391	358	330	714	2427	6061	9019	7870	5555	5362	5552	5827	5942	6726	7984	8722	8104	5971	4364	3320	2484	1909	1474	107258
Sep-15	Wednesday	9	827	503	421	327	757	2241	6371	9004	7687	5915	5189	5669	5902	6086	6808	7871	8806	8235	6119	4513	3672	2765	2077	1488	109253
Sep-15	Thursday	10	887	559	384	339	707	2335	6461	8710	8098	6715	5608	5852	6152	6241	6789	7077	6887	8788	6484	4730	3998	2499	2189	1535	110024
Sep-15	Friday	11	1018	625	502	406	748	2232	5706	8740	7847	6002	5702	6196	6978	6993	7792	8810	8669	7693	6554	4992	4055	3510	3375	2558	117703
Sep-15	Saturday	12	1661	1095	942	509	603	1072	2294	3199	3709	4171	4441	4738	5113	5139	5413	5561	5319	5209	4730	4182	3420	3631	3052	2439	81642

Sep-15	Sunday	13	1683	1262	1076	524	465	743	1487	2044	2600	3601	4460	4932	5690	5617	5816	5903	5586	5235	4913	4170	3208	2352	1880	1254	76501
Sep-15	Monday	14	826	418	353	281	748	2287	6387	8921	7752	5802	5573	4948	5739	5992	6489	8207	9237	8458	5840	4362	3283	2404	1881	1315	107503
Sep-15	Tuesday	15	863	485	349	315	694	2375	6499	8941	7653	5782	5315	5505	5851	5923	6735	8114	8521	8220	6070	4776	3637	2700	2107	1416	108846
Sep-15	Wednesday	16	864	483	378	325	694	2285	6506	9094	8035	5798	5452	5569	6014	6099	6723	7906	8959	8530	6320	4672	3604	2678	2191	1395	110574
Sep-15	Thursday	17	915	516	355	336	776	2436	6283	8317	8193	6302	5434	5745	6012	6165	6910	8194	9335	8883	6537	4567	3503	2897	2353	1726	112690
Sep-15	Friday	18	1056	594	532	434	784	2221	5546	8956	7506	6002	6161	6727	7191	7039	7843	8725	9086	7941	6699	5366	4037	3685	3501	2756	120388
Sep-15	Saturday	19	1658	1173	934	519	572	1077	2377	3494	4323	4907	5309	5672	5928	5867	5880	5928	5833	5616	4957	4658	3873	3656	3229	2666	90106
Sep-15	Sunday	20	1672	1279	1086	545	460	827	1605	2113	2805	3745	4840	4972	5499	5793	5654	5567	5444	5098	4645	4123	3218	2263	1882	1257	76392
Sep-15	Monday	21	854	423	316	366	759	2424	6539	9291	7740	5799	5166	5423	5773	5852	6340	7979	8849	8161	5692	4134	3081	2398	1818	1319	106496
Sep-15	Tuesday	22	859	485	317	296	713	2342	6594	8404	7842	5471	5050	5414	5765	5732	6386	8024	8595	8072	5854	4527	3328	2564	2081	1391	106106
Sep-15	Wednesday	23	827	532	357	357	699	2391	6607	9205	7876	5885	5289	5686	6059	6204	6737	8008	8722	8107	6019	4409	3458	2510	2145	1417	109506
Sep-15	Thursday	24	939	576	386	340	777	2471	6654	9110	7625	6007	5545	5778	5824	5861	6381	7950	7978	7760	5821	4185	3266	2571	2259	1605	107669
Sep-15	Friday	25	972	603	454	387	752	2199	6129	8171	7730	5883	5852	6345	6824	7100	7931	8900	8876	8303	7139	5227	4272	3728	3409	2579	119765
Sep-15	Saturday	26	1681	1109	963	557	544	1016	2303	3288	4173	4688	5106	5700	5521	5612	5816	6241	5992	5547	5049	4329	3591	3890	3304	2487	88507
Sep-15	Sunday	27	1570	1175	1119	484	530	856	1580	2054	2696	3749	4610	4818	5328	5257	5475	5362	5340	4673	4435	3800	2807	2196	1920	1270	73104
Sep-15	Monday	28	787	404	389	353	804	2341	6462	8663	7351	5585	5140	5343	5530	5623	6371	7641	8593	8053	5630	4016	2940	2292	1805	1269	103385
Sep-15	Tuesday	29	789	472	348	318	695	2408	6309	8744	7833	5510	5193	5475	5688	5690	5192	7397	7741	6949	5914	4324	3155	2547	2050	1374	102115
Sep-15	Wednesday	30	831	531	378	326	716	2332	6437	8815	7831	5815	5435	5803	5926	5965	6342	7670	7354	6917	6495	4447	3285	2339	2101	1418	105509
Oct-15	Thursday	1	805	529	393	352	728	2506	6050	8549	8045	6207	5653	5883	6072	5662	6716	7269	6742	6361	4778	3275	2439	2106	1770	1342	100232
Oct-15	Friday	2	859	539	388	343	700	1968	4993	6110	5321	4911	5264	5494	5804	5802	6123	6579	6325	5342	4028	3055	2116	2005	1794	1445	87308
Oct-15	Saturday	3	930	632	515	320	390	703	1436	1777	1735	1818	1778	1884	1797	1861	1752	1866	1768	1759	1500	1419	956	732	741	699	30768
Oct-15	Sunday	4	468	272	216	186	194	397	737	1096	1157	1556	1988	2325	2262	2315	2357	2451	2412	2348	2006	1586	1053	905	726	418	31431
Oct-15	Monday	5	346	150	156	167	398	1308	3227	4149	3758	3500	3470	3596	3806	3975	4224	4909	5308	5068	3780	2699	1942	1542	1342	1047	63867
Oct-15	Tuesday	6	701	385	290	293	640	2015	5712	7289	6613	5475	4922	5256	5386	5460	5826	6946	7829	7760	5937	4275	3037	2294	2014	1302	97657
Oct-15	Wednesday	7	810	494	370	366	718	2388	6235	8180	7428	6261	5206	5300	5663	5896	6629	7717	8611	8012	6677	5042	3423	2709	2045	1525	107705
Oct-15	Thursday	8	976	510	408	359	729	2484	6232	8230	7685	6740	5499	5707	5927	6017	6553	8154	8985	7531	4878	4842	3735	2685	2392	1620	108878
Oct-15	Friday	9	1164	658	498	417	719	2242	6285	8333	7775	6649	5975	6455	6892	6911	7632	8805	8744	8120	6527	5292	3909	3583	3533	2677	119795
Oct-15	Saturday	10	1670	1143	962	559	605	1046	2441	3390	4160	4617	4770	5171	5577	5385	5273	5069	4985	4940	4733	4372	3494	3179	2704	2402	82647
Oct-15	Sunday	11	1458	1057	1038	549	500	834	1629	2194	2848	3808	4536	4766	5312	5399	5542	5599	5272	5191	4557	4259	2868	2366	1785	1319	74686
Oct-15	Monday	12	897	502	387	320	725	2060	5947	8635	7062	5387	5173	5480	5865	5983	6330	7659	8327	8062	5830	4144	3049	2466	1858	1334	103482
Oct-15	Tuesday	13	752	456	325	323	697	2393	6681	8746	8075	5818	5304	5584	5794	6065	6712	8012	8801	7999	6051	4395	3066	2442	1948	1356	107795
Oct-15	Wednesday	14	882	499	373	353	735	2359	6512	8833	8011	5845	5586	5678	6106	6257	6664	8060	8828	8697	6625	4659	3542	2677	2128	1494	111403
Oct-15	Thursday	15	903	531	405	346	719	2348	6213	8648	8026	5745	5549	5663	6093	6289	6915	8339	8707	8299	6698	5095	3645	2901	2316	1708	112101
Oct-15	Friday	16	1090	641	562	409	816	2370	6424	7549	8092	6097	5778	6261	7091	7192	7791	8377	7227	6837	6736	5196	3892	3495	3317	2581	115821
Oct-15	Saturday	17	1597	1112	973	537	578	1171	2487	3395	3781	4387	4814	5227	5401	5603	5731	5764	5713	5518	5172	4568	3504	3377	3004	2479	85893
Oct-15	Sunday	18	1573	1098	937	514	470	990	1787	2175	2828	3895	4567	4999	5593	5571	5730	5925	5468	4976	4791	4080	2886	2291	1952	1246	76342
Oct-15	Monday	19	782	396	311	317	755	2254	6361	8456	7410	5389	5101	5452	5604	5797	6438	7667	8681	7600	5768	4146	2853	2302	1948	1297	103085
Oct-15	Tuesday	20	746	453	335	325	730	2378	6615	8451	7667	6248	5298	5417	6050	6066	6706	8013	7686	7522	6724	4807	3223	2747	2123	1609	107939
Oct-15	Wednesday	21	898	472	370	314	679	2269	6631	9185	7741	6102	5603	5744	6074	6018	6663	8213	8825	7145	6518	5043	3702	2699	2195	1510	110613
Oct-15	Thursday	22	965	562	381	378	754	2422	6153	8634	8277	6476	5812	6019	6333	6405	6988	8521	8760	8921	6779	4665	3641	3080	2783	1807	115516
Oct-15	Friday	23	1021	609	496	424	740	2105	6005	8426	7325	6296	5873	6301	6945	7239	7746	8699	8607	7871	6743	5393	3818	3430	3127	2624	117863
Oct-15	Saturday	24	1669	1095	946	536	504	1004	2240	3171	3667	4210	4816	6118	6490	6539	5880	6057	5830	5333	5432	4445	3363	3387	3009	2534	88275
Oct-15	Sunday	25	1683	1060	1067	528	498	772	1555	1949	2527	3683	4382	4680	5390	5547	5886	5545	5419	5234	4967	4151	2951	2194	2157	1261	75086
Oct-15	Monday	26	885	402	349	304	707	2190	5255	7404	7951	5889	5240	5319	5790	5814	6445	7588	8629	8194	5778	3875	2828	2175	1891	1279	102181
Oct-15	Tuesday	27	842	458	318	314	678	2197	6110	8010	6131	5492	4986	5222	5367	5479	6205	7431	7215	7438	5547	3905	2976	2170	1921	1316	97728
Oct-15	Wednesday	28	977	568	371	307	630	2095	6143	8669	7700	5451	4944	5425	5886	5952	6413	7464	8458	7942	6102	4444	3310	2592	2204	1574	105621
Oct-15	Thursday	29	927	576	418	387	689	2188	6199	8785	8273	6101	5478	5801	6057	6283	6864	8231	8849	8677	6809	4857	3764	3047	2445	1654	113359
Oct-15	Friday	30	1085	698	561	410	726	2104	5343	7897	7695	6158	5741	6090	6734	7112	7443	8627	8236	8108	7062	5226	4031	3567	3651	2800	117105
Oct-15	Saturday	31	1733	1135	1017	491	522	980	2146	2879	3465	3917	4357	4728	5198	5212	5121	5311	5419	5169	4487	3831	3385	3229	3128	2677	79537
Nov-15	Sunday	1	1895	1315	1293	1046	995	718	1586	2245	2907	3908	4609	4669	4983	5376	5387	5284	5070	5076	4394	3450	2594	1978	1516	1068	73362
Nov-15	Monday	2	681	395	300	314	659	2313	6550	9028	7501	5596	5196	5360	5628	5723	6352	7668	8041	6648	6034	3682	2831	2239	1785	1243	101767
Nov-15	Tuesday	3	729	463	357	305	617	2133	6162	7455	7396	5431	4945	5537	5473	5632	6082	5840	8176	7743	5776	3657	2876	2420	2075	1359	98639
Nov-15	Wednesday	4	852	468	338	305	618	2186	6130	8151	8108	6122	5184	5833	6241	5761	6524	7588	8314	7923	6179	4104	3220	2563	2236	1470	106418
Nov-15	Thursday	5	810	516	407	340	734	2204	5653	7149	7321	5640	5318	5838	5949	6169	6915	8092	8549	7770	6567	4349	3479	2941	2320	1754	106784
Nov-15	Friday	6	1130	695	504	361	680	2244	5537	7438	6647	5687	5709	6090	6775	6874	7703	8634	8612	7943	6626	4794	3599	3393	3341	2605	113621
Nov-15	Saturday	7	1681	1081	878	516	543	1016	2379	3306	4073	4604	5356	5458	5813	5707	5799	5826	5429	5714	5579	4136	3337	3121	3004	2479	86835
Nov-15	Sunday	8	1780	1306	1017	489	520	768	1494	2051	2763	3826	4548	4633	5145	5227	5257	5112	4690	4778	4207	3210	2377	1941	1647	1171	69957
Nov-15	Monday	9	706	395	340	322	646	2099	5327	7477	5912	5015	4575	4686	5124	5166	5826	6981	7636	7111	5026	3382	2568	2128	1930	1261	91639
Nov-15	Tuesday	10	762	443	358	291	648	2198	5748	7195	7285	5405	5013	5393	5610	5885	6482	7938	8557	7933	5813	4114	2991	2585	1954	1425	102026
Nov-15	Wednesday	11	860	536	388	332	564	1981	5114	7685	6196	5195	5129	5358	5917	5789	6456	7688	8402	8266	6060	4030	3296	2560	2015	1428	101245
Nov-15	Thursday	12	768	481	377	357	663	2169	5685	7924	7012	5641	5366	5769	5955	6090	6796	7703	7365	7777	5965	4351	3425	2677	2205	1685	104206
Nov-15	Friday	13	1075	612	506	380	732	2057	5467	6408	7366	5964	5861	6486	7156	6818	7261	7343	7195	7270	6933	4794	3836	3608	3095	2380	110603
Nov-15	Saturday	14	1543	1023	941	506	593	998	2377	3431	3920	4171	4706	5069	5245	5311	5508	6080	5681	5890	5138	4123	3261	3030	2973	2402	83920
Nov-15	Sunday	15	1395	1071	1112	524	541	762	1384	2002	2492	3539	4066	4644	5281	5397	5624	5480	5415	5051	4306	3395	2607	2119	1805	1162	71174

Nov-15	Monday	16	655	401	370	336	705	2167	4841	7229	7178	5647	5361	5499	5853	5753	6590	7661	8427	8232	6036	3703	2841	2192	1739	1255	100671
Nov-15	Tuesday	17	753	463	349	321	688	2216	5595	7858	6995	5922	5314	5477	5665	5779	6389	7735	8179	8031	6192	4125	3063	2365	1980	1379	102833
Nov-15	Wednesday	18	817	512	331	325	633	2280	5790	7392	7472	5908	5590	5801	6038	6066	6691	7936	8624	8781	6042	4204	3438	2550	2094	1384	106699
Nov-15	Thursday	19	803	508	419	331	700	2227	5386	7625	6995	5541	5577	5809	6117	6008	6590	7805	8621	8155	5939	4148	3323	2808	2235	1627	105297
Nov-15	Friday	20	1020	655	589	345	766	2255	5575	7471	6948	5847	5879	6388	7060	7040	7732	8838	8378	8004	6741	4986	3467	3118	2929	2298	114329
Nov-15	Saturday	21	1474	1008	870	491	526	932	2188	3336	3925	4325	4755	4938	5214	5700	5531	5746	5612	5343	4821	3964	3119	3063	2738	2184	81803
Nov-15	Sunday	22	1377	995	1083	512	481	789	1447	2030	2556	3368	3984	4301	4917	4957	5008	5028	5007	4751	4109	3372	2510	1974	1716	1279	67551
Nov-15	Monday	23	716	378	287	318	685	2192	5217	7236	6859	5569	5359	5590	5867	5946	6622	7692	8274	8048	5773	3737	2804	2225	1849	1345	100588
Nov-15	Tuesday	24	814	472	378	343	655	2039	5355	6998	6458	5525	5555	5942	6294	6513	6980	7965	8124	7860	6172	4316	3330	2591	2153	1539	104371
Nov-15	Wednesday	25	1004	593	423	397	778	2015	4915	6375	5767	5502	5496	6343	6770	6892	7179	7708	7185	6399	5028	3853	3078	2574	2321	1794	100389
Nov-15	Thursday	26	1130	721	606	383	458	608	1259	1915	2033	2388	3097	3534	3672	3479	3586	3663	3447	3459	3489	3251	3052	2586	2253	1667	55736
Nov-15	Friday	27	1077	716	584	395	541	1067	2257	2949	2995	3480	4036	4447	4826	5180	5448	5752	5694	5181	4832	3857	3101	2812	2722	2132	76081
Nov-15	Saturday	28	1313	916	869	500	514	865	1820	2633	3083	3661	4025	4472	4728	4519	4679	4973	5051	4940	4522	3853	3043	2857	2720	2201	72757
Nov-15	Sunday	29	1447	941	928	486	465	724	1402	1949	2398	3337	4087	4281	4994	4933	5207	5147	5193	5122	4429	3692	3054	2181	1765	1316	69478
Nov-15	Monday	30	841	456	352	323	713	2192	5671	7842	6524	5301	5123	5169	5607	5645	6308	7437	8149	8111	5599	3734	2913	2336	1837	1317	99500
Dec-15	Tuesday	1	856	530	382	297	656	2170	5710	7580	6743	5263	5024	5247	5533	5769	6349	7538	8363	7297	6192	3800	3058	2523	1825	1483	100188
Dec-15	Wednesday	2	784	527	382	327	682	2112	5562	7573	6955	5957	5287	5297	5716	5721	6468	7447	7075	7245	5809	3711	3047	2307	1827	1334	99152
Dec-15	Thursday	3	738	476	404	329	676	2119	5378	7780	7076	5365	5198	5432	5907	5898	6717	7822	8296	8096	5611	4392	2993	2788	2312	1471	103274
Dec-15	Friday	4	970	622	483	393	720	2115	5412	7695	6727	5526	5525	5899	6314	6712	7205	8328	8501	7674	6335	4615	3729	3493	3160	2437	110590
Dec-15	Saturday	5	1455	977	871	482	470	854	2279	3132	3581	4215	4730	5341	5578	5459	5257	5496	5948	5622	5195	4038	3321	3108	2989	2377	82775
Dec-15	Sunday	6	1630	964	1015	498	385	673	1402	1955	2315	3360	3923	4382	5083	5378	5201	5282	5246	4819	4111	3303	2565	2206	1716	1216	68628
Dec-15	Monday	7	641	371	325	272	591	2111	5384	7242	6566	5667	4892	5167	5364	5606	6143	7530	8060	8002	5737	3775	2947	2354	2040	1572	98359
Dec-15	Tuesday	8	852	502	374	308	596	2063	5425	7669	7206	5265	4910	5250	5523	5656	6473	7659	8224	8059	6132	4109	3220	2556	2198	1393	101622
Dec-15	Wednesday	9	871	526	392	352	655	2062	5434	7622	7146	5292	5172	5510	5762	5853	6406	7620	8403	8258	5931	4097	3189	2647	2016	1411	102627
Dec-15	Thursday	10	806	462	365	344	654	2094	5428	7767	7323	5637	5388	6244	5834	6044	6616	7764	8059	7952	6134	4264	3528	3030	2333	1599	105669
Dec-15	Friday	11	1071	703	516	382	672	2016	5127	7513	6644	5445	5596	5897	6343	6637	7470	9230	8509	7888	6486	4690	3688	3640	3539	2569	112271
Dec-15	Saturday	12	1481	1028	931	529	514	905	2147	3090	3577	4004	4686	5022	5187	5297	5630	5870	5878	6126	5481	4601	3833	3818	3319	2721	85675
Dec-15	Sunday	13	1786	1225	1085	525	455	627	1310	1976	2451	3353	4019	4401	4994	5361	5317	5148	5031	5183	4331	3727	2938	2249	1928	1245	70665
Dec-15	Monday	14	714	439	385	305	617	2141	5454	7572	7058	5617	5625	5557	5406	5298	6001	7499	8139	8002	5584	3650	2749	2246	1753	1246	99057
Dec-15	Tuesday	15	771	478	364	342	618	2085	5542	7647	7033	5522	5176	5584	5558	5716	6527	7784	8395	8389	6787	4184	3298	2736	2206	1432	104174
Dec-15	Wednesday	16	757	541	379	325	671	2147	5605	7526	7021	5704	5566	5825	6035	6387	7029	7978	8594	8090	6289	4128	3410	2803	2183	1548	106541
Dec-15	Thursday	17	860	562	393	421	761	2090	5613	7576	6980	5978	5503	5854	5928	6196	6734	7719	7777	7496	6172	4168	3041	2910	2463	1562	104757
Dec-15	Friday	18	955	669	472	376	632	1989	5323	7145	6411	5409	5601	6089	6534	6824	7302	8141	8394	7666	5978	4771	3683	3547	3406	2525	109842
Dec-15	Saturday	19	1448	1048	844	502	578	920	2080	2674	3569	4076	4550	5061	5482	5417	5433	5533	5671	5422	5282	4149	3306	3330	3217	2392	81984
Dec-15	Sunday	20	1544	1019	946	402	400	597	1284	1767	2307	3059	3793	4143	4771	5049	4973	4831	4859	5005	4162	3415	2781	2272	1988	1447	66814
Dec-15	Monday	21	754	468	331	288	649	1910	4829	6137	5819	5158	5253	5795	5792	6121	6519	7392	7773	7664	5807	3991	2807	2601	2257	1628	97743
Dec-15	Tuesday	22	913	571	404	322	651	1965	4664	6134	5675	5173	5054	5610	5618	5760	6379	7173	7690	7250	5501	3797	2937	2551	2290	1478	95560
Dec-15	Wednesday	23	1024	572	435	419	653	1852	4596	5760	5604	5278	5552	6247	6524	6623	6828	7168	7226	6672	5043	4092	3241	2729	2527	1792	98457
Dec-15	Thursday	24	1183	804	577	420	546	1289	2734	3507	3572	3886	4524	5034	5375	5124	5120	5010	4444	4272	3852	3351	2737	2409	2094	1525	73389
Dec-15	Friday	25	1036	637	429	298	234	420	811	1111	1130	1540	2038	2598	3121	3380	3563	3689	3573	3561	3537	3112	2805	2428	2243	1718	49012
Dec-15	Saturday	26	937	744	626	326	442	714	1462	1911	2225	2737	3451	3829	4408	4564	5033	5081	5065	5146	4945	3970	3284	3080	2607	2143	68730
Dec-15	Sunday	27	1431	1134	1189	537	458	591	1223	1606	2118	2819	3629	3929	4372	4640	4811	4767	4821	4815	4534	3511	2862	2370	1954	1387	65508
Dec-15	Monday	28	943	530	409	350	652	1701	4124	5218	5079	4721	5092	5501	5789	5754	6121	6775	7221	7172	5038	3536	2662	2293	1880	1449	90010
Dec-15	Tuesday	29	1001	596	438	353	621	1756	4335	5606	5311	4941	5087	5351	5665	5841	6049	6941	7527	7640	5470	3938	2878	2481	2268	1525	93619
Dec-15	Wednesday	30	994	566	440	363	612	1786	4265	5519	5266	4976	5284	5588	5856	5937	6395	7150	7623	7655	5485	4035	3159	2630	2277	1742	95603
Dec-15	Thursday	31	1183	691	532	431	565	1597	3624	4813	4849	4419	4883	5566	6106	6090	6574	6925	5970	4889	4234	3418	3001	2865	2819	1820	87864

30 Highest Hours of the year
100 Highest Hours of the year

AADT 98000

EASTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	282	154	143	148	284	1025	2648	3253	2688	2095	1904	1964	1967	2139	2220	2233	2644	2546	2020	1251	907	814	650	489	36468
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	313	179	128	155	294	1186	3834	4957	4398	3416	3061	2786	2714	2813	2938	3149	3239	3591	2704	1687	1235	1038	781	536	51132
Jan-15 Friday	9	340	212	141	146	298	1260	3915	5266	4086	3012	2574	2731	2893	2951	3272	3488	3690	3688	3033	2148	1555	1426	1174	919	54218
Jan-15 Saturday	10	503	330	256	170	211	452	1377	1481	1777	2034	2049	2533	2753	2845	2812	2623	2748	2742	2353	1754	1491	1367	1170	859	38690
Jan-15 Sunday	11	486	294	230	154	180	282	843	838	1040	1612	1917	1911	2046	2221	2237	2318	2341	2173	2151	1598	1100	828	766	539	30105
Jan-15 Monday	12	264	154	112	145	275	1334	3896	5080	4325	2627	2349	2269	2413	2380	2577	2850	3071	3358	2303	1461	1082	831	675	479	46310
Jan-15 Tuesday	13	301	177	99	138	304	1291	4035	5190	4289	3126	2574	2620	2718	2592	2765	2916	3245	3367	2427	1469	1135	1008	925	529	49240
Jan-15 Wednesday	14	270	149	116	143	301	1254	4078	5540	4591	2991	2440	2534	2588	2708	2814	3252	3657	3599	2624	1620	1177	1028	914	521	50909
Jan-15 Thursday	15	350	157	121	135	279	1238	3998	5421	4324	2976	2591	2665	2628	2687	2992	3151	3427	3692	2759	1686	1256	1147	843	624	51147
Jan-15 Friday	16	318	190	158	151	319	1255	3731	4905	4182	3035	2677	2892	3055	3183	3276	3508	3732	3752	3156	2411	1834	1715	1365	939	55739
Jan-15 Saturday	17	589	333	263	202	250	505	1629	1652	1817	2087	2463	2824	2947	2732	2777	2693	2954	2694	2564	1931	1431	1590	1325	1236	41488
Jan-15 Sunday	18	531	321	224	171	188	387	837	779	1162	1810	2355	2284	2338	1735	2808	2335	2207	2045	1837	1421	1039	932	842	561	31149
Jan-15 Monday	19	303	199	136	135	246	839	2710	2954	2759	2608	2593	2594	2504	2616	2809	2891	2915	2985	2345	1724	1144	965	809	503	42286
Jan-15 Tuesday	20	269	142	120	137	324	1335	4217	5423	4773	3456	2671	2587	2859	2741	2873	3066	3301	3608	2625	1610	1240	1053	812	523	51765
Jan-15 Wednesday	21	256	130	133	147	309	1364	4201	4934	4738	3093	2613	2643	2686	2787	2888	3303	3478	3748	2715	1871	1297	1049	799	507	51689
Jan-15 Thursday	22	271	163	129	137	303	1286	3622	4725	5005	3411	2641	2714	2751	2877	3079	3502	3640	3655	2690	1891	1363	1219	1166	976	53216
Jan-15 Friday	23	356	211	139	171	340	1294	4008	5362	4187	3092	2732	2869	3114	2912	3142	3333	3973	3923	2731	1950	1435	1350	1124	879	54627
Jan-15 Saturday	24	487	253	246	176	192	485	1300	1282	1538	1939	1984	2445	2469	2627	2688	2743	2614	2418	2417	1884	1406	1518	1189	898	37198
Jan-15 Sunday	25	535	321	243	169	203	370	902	824	1123	1703	2204	2171	2393	2410	2420	2499	2384	2180	2039	1498	1073	870	688	516	31738
Jan-15 Monday	26	253	151	110	143	311	1293	4198	5523	4482	2872	2508	2597	2650	2605	2829	3078	3246	3342	2399	1528	1144	948	711	482	49403
Jan-15 Tuesday	27	268	153	131	121	319	1339	4225	5049	4359	3015	2584	2543	2575	2605	2875	3089	3246	3476	2637	1575	1285	1044	728	495	49736
Jan-15 Wednesday	28	277	155	127	123	318	1377	4254	4380	4660	3149	2719	2793	2783	2794	3219	3074	3586	3795	2684	1630	1224	1046	742	523	51432
Jan-15 Thursday	29	253	173	134	152	286	1256	4155	5394	4486	2962	2674	2845	2727	2821	3037	3229	3561	3653	2845	1693	1341	1044	868	598	52187
Jan-15 Friday	30	298	183	151	164	318	1300	3892	3819	5037	3186	2877	2960	3045	3194	3476	3571	3779	3608	2951	2297	1688	1559	1529	1060	55942
Jan-15 Saturday	31	603	358	273	176	200	432	1358	1444	1750	2064	2168	2445	2498	2495	2606	2587	2503	2490	2413	1736	1430	1299	1077	875	37280
Feb-15 Sunday	1	541	295	242	170	151	324	878	840	1192	1691	1963	1928	2060	2103	2270	2130	2068	2102	1809	1001	870	791	1185	675	29279
Feb-15 Monday	2	337	211	156	168	302	1287	4104	5272	4314	2905	2556	2558	2718	2631	2656	2963	3127	3334	2379	1435	1077	953	717	472	48632
Feb-15 Tuesday	3	301	144	125	167	305	1367	4267	5381	4578	2817	2454	2753	2711	2725	2907	3080	3400	3726	2551	1620	1180	1042	766	546	50913
Feb-15 Wednesday	4	287	157	125	146	304	1328	4224	5405	4710	2977	2678	2635	2883	2704	2956	3161	3452	3692	2569	1611	1185	1081	819	467	51556
Feb-15 Thursday	5	279	188	132	144	331	1313	3962	4955	4509	3033	2648	2693	2961	2865	3129	3609	4168	4512	2736	1788	1342	1144	875	607	53923
Feb-15 Friday	6	353	205	152	168	334	1295	4053	5021	4600	3120	2929	2898	3019	3266	3191	3656	3547	3468	2996	2263	1735	1454	1639	926	56288
Feb-15 Saturday	7	492	312	218	205	254	542	1389	1595	1922	2232	2578	2754	2824	2554	2536	2617	2463	2399	2365	1874	1401	1369	1207	1000	39102
Feb-15 Sunday	8	511	306	253	171	162	315	875	859	1206	1792	2289	2507	2749	2807	2690	2599	2417	2392	2229	1601	1170	918	694	572	34084
Feb-15 Monday	9	249	149	148	147	304	1366	4222	5452	4702	2951	2807	2591	2700	2678	2929	3198	3316	3586	2552	1542	1133	888	752	504	50866
Feb-15 Tuesday	10	304	150	145	136	316	1319	4231	5379	4847	3046	2571	3114	2829	2697	3032	3169	3436	3613	2702	1675	1210	1109	997	513	52540
Feb-15 Wednesday	11	261	141	131	147	304	1354	4270	5569	3523	3551	2566	2686	2845	2935	3040	3251	3585	3754	2834	1833	1367	1109	1099	597	52752
Feb-15 Thursday	12	305	163	150	135	336	1264	4400	5339	4762	3220	2787	2820	2988	3011	3227	3447	3682	3795	2916	2112	1492	1236	1284	663	55534
Feb-15 Friday	13	361	250	163	178	350	1302	4059	5473	4268	2396	2463	3059	3365	3444	3556	3926	3882	3742	3344	2591	2035	1894	1693	1024	58818
Feb-15 Saturday	14	598	344	286	202	256	470	1349	1630	2117	2498	3003	3461	3516	3158	3342	3009	2985	2919	2820	2249	1763	1541	1558	1400	46474
Feb-15 Sunday	15	602	320	294	195	200	351	804	836	1261	1942	2511	2577	2496	2577	2574	2568	2614	2493	2106	1639	1138	928	1039	618	34683
Feb-15 Monday	16	295	175	129	160	258	1024	3186	3942	3285	2685	2582	2724	2714	2591	2688	2853	2987	3162	2236	1412	1082	862	695	456	44183
Feb-15 Tuesday	17	316	170	111	136	321	1401	3601	4660	4510	2986	2582	2569	2507	2607	2732	3120	3378	3692	2638	1622	1208	1231	857	532	49487
Feb-15 Wednesday	18	324	160	149	150	338	1334	4291	5608	4530	3137	2796	2821	2790	2797	3142	3303	3535	3932	2901	1754	1317	1271	903	557	53840
Feb-15 Thursday	19	307	187	163	156	334	1301	4360	5370	4413	3021	2691	2879	2905	2885	3088	3359	3544	3819	2779	1879	1418	1096	813	675	53442
Feb-15 Friday	20	345	190	124	151	363	1229	3909	5250	3915	3200	2879	2967	2988	3140	3793	4828	4006	3695	3124	2349	1774	1526	1207	888	57840
Feb-15 Saturday	21	512	366	254	187	271	506	1333	1567	1942	2187	2394	2950	3135	2992	2976	2824	2801	2668	2584	1941	1574	1728	1392	1079	42163
Feb-15 Sunday	22	529	342	283	224	222	355	906	942	1270	1920	2291	2262	2522	2498	2563	2527	2372	2418	2227	1613	1166	1069	751	514	33786
Feb-15 Monday	23	302	198	150	152	327	1283	4205	5387	4219	2843	2512	2648	2622	2549	2893	3195	3256	3392	2399	1502	1159	978	714	517	49402
Feb-15 Tuesday	24	294	196	115	146	286	1023	3176	3265	2910	3400	2400	2174	2165	1985	2199	2377	2568	2780	2011	1227	958	969	701	492	39817
Feb-15 Wednesday	25	296	173	127	167	331	1334	4279	5613	4266	3029	2705	2655	2781	2741	2899	3208	4111	4217	2495	1494	1099	900	900	548	52368
Feb-15 Thursday	26	273	158	119	150	326	1305	4323	5148	4506	3039	2610	2571	2878	2802	2983	3257	3511	3811	2758	1866	1456	1071	919	613	52453
Feb-15 Friday	27	356	215	164	190	367	1289	4165	5419	4316	3131	2957	3137	3174	3224	3486	3796	3710	3715	3305	2437	1835	1586	1303	950	58227
Feb-15 Saturday	28	861	375	318	213	270	609	1438	1794	2057	2307	2492	2810	2956	2822	2877	2742	2692	2630	2553	2075	1596	1391	1241	891	42010
Mar-15 Sunday	1	591	337	267	172	218	355	847	990	1257	1894	2135	2183	2174	2204	2130	2104	2090	2151	2089	1467	1055	963	739	479	30891
Mar-15 Monday	2	243	182	131	147	332	1397	4201	5351	4318	2812	2539	2560	2702	2643	2925	3190	3381	3666	2593	1669	1199	988	774	513	50456

Mar-15 Tuesday	3	314	211	165	163	355	1393	3976	4971	4690	3123	2721	2622	2765	2779	2839	3195	3444	3690	2573	1649	1298	1068	881	515	51400
Mar-15 Wednesday	4	343	197	141	160	318	1352	4330	4498	5187	3365	2801	2988	2802	2967	3161	3295	3830	4252	2710	1834	1392	1142	921	604	54590
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	357	214	165	175	343	1329	3789	4330	4499	3284	2816	3228	3078	3305	3205	3688	3786	3576	3144	2253	1844	1745	1344	1004	56501
Mar-15 Saturday	7	669	357	268	213	244	513	1407	1690	1994	2293	2660	2906	2962	3004	3138	3017	2856	2663	2649	2017	1595	1464	1373	1087	43039
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	397	201	141	167	322	1267	3452	4646	4729	3239	2640	2681	2835	2972	3128	3362	4028	3952	2731	1770	1404	1124	884	617	52689
Mar-15 Tuesday	10	339	181	145	162	321	1314	4058	5364	4692	3177	2731	2913	3137	3774	3167	3458	3549	3872	2776	1812	1436	1554	1025	845	55802
Mar-15 Wednesday	11	420	229	176	191	330	1339	3952	5304	4965	3351	3043	3235	3347	3235	3267	3490	3631	3726	2939	2041	1569	1358	962	637	56737
Mar-15 Thursday	12	384	268	137	146	320	1285	4041	5426	4757	3439	2884	2960	3038	2979	3114	3613	3753	4321	2891	2022	1594	1356	1104	1046	56878
Mar-15 Friday	13	443	255	202	172	326	1244	3886	5324	4448	3378	3037	3119	3305	3258	3609	3846	4101	3584	3153	2425	1835	1589	1393	1089	59021
Mar-15 Saturday	14	674	359	295	209	244	432	1286	1476	1989	2322	2599	2598	2797	2851	2818	2769	2678	2692	2740	2161	1796	1622	1519	1126	42052
Mar-15 Sunday	15	689	412	305	258	231	408	899	918	1277	2147	2686	2799	2999	2951	2893	2805	2599	2566	2526	1934	1436	1178	965	561	38442
Mar-15 Monday	16	358	229	178	143	311	1321	3959	5141	4489	3584	2952	3007	3160	2998	3124	3367	3505	3773	2873	1836	1411	1167	855	575	54316
Mar-15 Tuesday	17	385	183	161	173	348	1273	4156	5158	5050	3707	2950	2826	3000	2919	3131	3410	3560	3699	2769	1925	1523	1292	942	627	55167
Mar-15 Wednesday	18	370	209	199	163	306	1314	4114	5427	4906	3425	2865	2896	2989	2947	3084	3438	3584	3826	2903	2055	1450	1167	984	639	55260
Mar-15 Thursday	19	342	199	155	153	321	1316	3596	4531	4682	3475	2759	2836	2879	2818	3147	3369	3625	3793	2892	1907	1507	1368	1087	600	53357
Mar-15 Friday	20	448	243	188	187	329	1272	4003	5371	4238	3342	3117	3296	3464	3506	3766	3876	3828	3894	3253	2454	2128	2007	1486	1153	60849
Mar-15 Saturday	21	697	376	281	245	278	557	1470	2050	2685	2719	2906	3306	3272	3051	2886	2742	2888	2738	2674	2105	1688	1768	1519	1093	45994
Mar-15 Sunday	22	653	392	311	226	200	415	870	910	1288	1082	2393	2182	2307	2270	2312	2378	2235	2067	2036	1519	1166	999	869	592	31672
Mar-15 Monday	23	370	163	134	159	318	1251	3959	5385	4227	3177	2592	2804	2807	3135	2843	3271	3236	3488	2531	1576	1205	1006	787	528	50952
Mar-15 Tuesday	24	329	189	129	153	310	1374	4012	5507	4656	3223	2849	2744	2813	2827	3032	3263	3356	3763	2814	1841	1348	1226	849	591	53198
Mar-15 Wednesday	25	353	181	159	159	305	1357	4150	5271	4749	3205	2930	2851	2954	2817	3152	3264	3634	3815	2852	1969	1555	1376	975	576	54609
Mar-15 Thursday	26	350	211	173	166	340	1280	4146	5383	4692	3371	2956	2856	3131	3189	3290	3659	3670	3960	3111	2185	1745	1378	1329	689	57260
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	654	360	329	347	597	1126	1785	1987	2116	2300	2458	2621	2465	2653	2745	2727	2894	2769	2714	2161	1822	1688	1403	1072	43793
Mar-15 Sunday	29	603	356	290	196	200	317	900	846	1291	1948	2569	2561	2713	2735	2828	2687	2683	2490	2516	1864	1585	1136	936	596	36846
Mar-15 Monday	30	379	222	180	176	347	1219	3959	4772	4094	3127	2852	2978	2961	2930	2883	3021	3256	3445	2573	1671	1349	1112	893	601	51000
Mar-15 Tuesday	31	335	225	149	153	350	1310	3817	5104	4364	3325	3098	3033	3140	3284	3095	3128	3377	3869	3088	1922	1514	1232	945	638	54495
Apr-15 Wednesday	1	330	199	167	188	329	1259	4051	5036	4380	3270	3077	3058	3137	3029	3042	3102	3374	3877	2858	2001	1514	1304	1053	678	54313
Apr-15 Thursday	2	411	252	192	174	316	1315	4000	4929	4414	3558	3320	3444	3541	3419	3333	3244	3375	3645	3065	2175	1609	1568	1230	787	57316
Apr-15 Friday	3	469	277	233	184	306	1105	3457	4046	3735	3220	3547	3680	3812	3643	3616	3514	3508	3650	3127	2450	2013	1763	1427	1053	57835
Apr-15 Saturday	4	668	443	310	247	237	466	1223	1342	1787	2314	2716	3089	2873	2972	2907	2779	2813	2715	2532	2041	1716	1519	1369	1073	42151
Apr-15 Sunday	5	639	350	299	214	224	614	962	861	1257	1993	2561	2352	2465	2508	2617	2431	2480	2532	2646	2201	1924	1416	1136	747	37429
Apr-15 Monday	6	407	200	191	164	348	1233	4172	5371	4288	3320	3160	3323	3252	3117	3251	3552	3649	3763	2683	1945	1514	1147	941	597	55588
Apr-15 Tuesday	7	396	178	149	167	339	1344	4313	5612	4909	3469	3274	3208	3162	3140	3121	3416	3652	4418	3168	2007	1544	1357	985	663	57991
Apr-15 Wednesday	8	356	181	177	153	328	1364	4247	5717	4876	3810	4382	4013	4299	3118	3186	3660	3826	4246	3025	2112	1651	1283	1164	623	61797
Apr-15 Thursday	9	382	220	172	184	338	1380	4271	5615	5021	3740	3389	3306	3142	3183	3532	3906	3954	4153	3177	2325	1761	1458	1215	740	60564
Apr-15 Friday	10	448	245	206	191	347	1298	4063	5652	4781	3588	3471	3678	3610	3419	3513	3833	3995	3887	3475	2748	2146	1824	1426	1106	62950
Apr-15 Saturday	11	704	424	378	244	279	523	1516	1776	2103	2547	2893	3036	2867	2840	2831	2822	2936	2781	2588	2101	1783	1789	1687	1077	44525
Apr-15 Sunday	12	610	351	298	220	228	429	1046	1120	1488	2142	2712	2733	2763	2780	2744	2824	2642	2421	2064	1669	1305	1046	876	683	37194
Apr-15 Monday	13	338	185	148	160	365	1260	3824	5206	5017	3183	2817	2741	2817	2784	2996	3235	3664	3891	2714	1764	1394	992	875	524	52894
Apr-15 Tuesday	14	364	164	150	160	310	1347	4346	5405	4912	3269	2851	2893	2729	2770	3022	3364	3546	3848	2833	1759	1568	1208	921	600	54339
Apr-15 Wednesday	15	323	185	185	174	326	1394	4308	5562	4021	3874	2513	2895	2951	2862	3167	3309	3768	3912	2617	1711	1324	1013	919	548	53861
Apr-15 Thursday	16	371	210	153	156	352	1354	4309	5532	4719	3259	2889	2930	2970	3042	3224	3526	3656	3810	2912	1940	1630	1281	1015	684	55924
Apr-15 Friday	17	424	190	219	173	368	1339	4019	5089	4825	3589	3113	3270	3246	3349	3466	3807	3690	3894	3156	2392	1943	1799	1635	1059	60054
Apr-15 Saturday	18	612	384	326	221	267	556	1520	1965	2253	2517	2680	3015	2876	2781	2627	2688	2724	2812	2572	2053	1763	1748	1393	1033	43386
Apr-15 Sunday	19	610	396	314	219	199	391	967	920	1310	1898	2489	2270	2306	2369	2395	2586	2385	2289	1884	1526	1192	957	885	534	33291
Apr-15 Monday	20	384	163	151	184	365	1388	4214	5417	4779	3256	2788	2700	2778	2811	2929	3324	3437	3644	2599	1709	1347	1033	878	509	52787
Apr-15 Tuesday	21	326	252	133	154	355	1427	4260	5708	4790	3644	3079	2868	2852	2836	3062	3418	3478	3745	2845	1864	1471	1196	935	610	55308
Apr-15 Wednesday	22	304	220	157	164	352	1392	4307	5249	5108	3669	3063	3182	3100	2977	3118	3651	4152	3780	2808	2076	1617	1227	1007	1081	57761
Apr-15 Thursday	23	448	228	181	147	356	1404	4304	5580	5100	3397	2911	2908	2983	3157	3289	3634	4433	5066	3440	2124	1698	1467	1121	726	60102
Apr-15 Friday	24	398	233	197	180	342	1346	4163	5453	4925	3386	3151	3116	3342	3421	3563	3945	3961	4003	3506	2524	1920	1682	1341	1072	61170
Apr-15 Saturday	25	681	345	287	234	286	506	1481	1696	2153	2319	2492	2563	2510	2555	2469	2713	2947	2862	2666	2067	1644	1460	1277	953	41166
Apr-15 Sunday	26	599	342	287	185	243	399	1006	986	1480	2234	2837	3102	2990	2905	2653	2793	2816	2562	2242	1838	1388	1252	947	643	38729
Apr-15 Monday	27	374	207	212	180	355	1456	4308	5718	4648	3185	2869	2822	3015	2922	2982	3151	3403	3414	2549	1735	1396	1323	830	587	53641
Apr-15 Tuesday	28	320	166	148	151	341	1371	4420	5599	4814	3181	2893	2657	2845	2862	2959	3447	4138	3946	2643	1958	1466	1328	911	555	55119
Apr-15 Wednesday	29	380	217	146	136	334	1234	3773	4835	4161	3337	2667	2634	2932	3082	3569	3219	3248	3459	2584	1626	1331	1207	938	546	51595
Apr-15 Thursday	30	364	170	166	169	356	1297	4528	5345	4802	3943	2958	2957	3045	3016	3287	3553	4077	4145	2804	1969	1715	1408	1095	745	57914
May-15 Friday	1	492	279	209	170	351	1329	4031	5311	4791	3332	3029	3246	3257	3426	3643	3943	3989	4003	3462	2557	2018	1882	1554	1067	61371
May-15 Saturday	2	678	410	311	233	274	535	1796	2239	2394	2897	3199	3250	3272	3125	3064	2997	2992	2926	2810	2156	1762	1537	1281	877	47015
May-15 Sunday	3	535	888	424	247	231	409	1055	1159	1483	2173	2682	2562	2698	2681	2703	2694	2750	2508	2181	1782	1357	1115	970	671	37958
May-15 Monday	4	366	220	153	188	342	1352	4341	5456	4612	2498	3494	2847	2989	2885	3054	3287	3554	3778	2815	1862	1418	1104	951	526	54092
May-15 Tuesday	5	351	202	139	154	382	1340	3291	3099	3232	4496	3632	3070	2976	2884	3112	3484	3875	4065	2847	1870	1543	1342	1021	955	53362

May-15	Wednesday	6	430	209	174	173	380	1381	4501	5790	4875	3405	3068	3044	3006	3116	3190	3418	3781	4114	2939	2073	1506	1302	1092	772	57739
May-15	Thursday	7	436	197	175	161	351	1382	4394	5804	4787	3420	2911	2913	2865	2721	3012	3231	3448	3672	2823	1829	1472	1258	1043	740	55045
May-15	Friday	8	460	231	206	175	334	1264	3523	4488	5201	3353	3099	3186	3239	3299	3559	3982	3906	3478	3127	2343	1964	1726	1584	1094	58821
May-15	Saturday	9	656	399	349	209	290	601	1672	1946	2144	2416	2651	2792	2943	3107	3161	3095	2884	2582	2590	1977	1678	1568	1323	1114	44147
May-15	Sunday	10	594	372	344	186	229	350	922	997	1404	2125	2838	2809	2937	3022	2811	2871	2816	2587	2449	1840	1601	1279	1013	738	39134
May-15	Monday	11	439	241	181	177	361	1363	4169	5336	4745	3192	2996	2984	3036	3014	3052	3302	3350	3719	2534	1746	1403	1079	1042	593	54054
May-15	Tuesday	12	364	198	164	141	348	1356	4411	5806	4772	3438	2975	2982	3039	2889	2922	3312	3437	3694	2578	1802	1389	1194	1046	594	54851
May-15	Wednesday	13	355	203	174	173	380	1439	4502	5687	4763	3259	2828	2911	3072	2908	3117	3498	3793	3891	2972	2054	1469	1257	998	706	56409
May-15	Thursday	14	404	212	164	176	353	1331	4389	5444	5091	3403	3056	3042	3195	3025	3123	3624	3692	4178	3277	2155	2021	1378	1199	751	58683
May-15	Friday	15	489	248	183	198	409	1338	4227	5596	4639	3271	3054	3209	3447	3574	3801	3905	4198	4133	3527	2680	2128	1899	1509	1125	62787
May-15	Saturday	16	668	399	340	245	306	651	1565	1912	2305	2810	3117	3402	3341	3219	2853	2209	2621	3082	2654	2263	1867	1782	1585	1181	46377
May-15	Sunday	17	624	389	306	227	252	403	1035	1026	1571	2328	2821	2673	2681	2684	2721	2992	2916	2480	2234	1851	1427	1195	1016	635	38487
May-15	Monday	18	417	197	150	183	378	1419	4352	5252	4840	3335	2932	2857	2924	2872	3028	3224	3408	3663	2552	1809	1467	1127	902	579	53867
May-15	Tuesday	19	338	219	150	166	401	1434	4578	5456	4955	3357	2925	2873	3001	2828	3120	3282	3418	3901	2795	1855	1425	1181	1017	1031	55706
May-15	Wednesday	20	424	233	165	173	379	1310	4454	5608	4391	3732	3088	2951	2909	2905	3302	3610	3992	3536	2708	1871	1415	1254	1031	616	56057
May-15	Thursday	21	397	252	155	171	390	1417	4449	5498	5054	3761	3194	3124	3259	3135	3348	3659	3842	4107	2854	2236	1808	1471	1172	796	59549
May-15	Friday	22	498	274	217	178	366	1326	4185	5474	4252	3473	3337	3419	3559	3508	3623	3853	3745	3718	3432	2858	2275	1991	1743	1216	62520
May-15	Saturday	23	766	415	306	230	258	613	1493	1702	2259	2991	3166	3356	3350	3163	2985	2857	2846	2817	2684	2364	1884	1669	1545	1104	46823
May-15	Sunday	24	713	384	316	185	198	360	921	1070	1596	2572	3214	2970	2971	2842	2711	2817	2609	2390	2364	1768	1454	1237	1093	757	39512
May-15	Monday	25	493	270	196	182	224	585	1437	1356	1649	2205	2352	2655	2541	2491	2426	2387	2231	2290	2153	1677	1365	1176	1001	619	35961
May-15	Tuesday	26	349	217	170	154	357	1419	4233	4937	4995	3330	3020	2958	3377	3543	3359	3290	3122	3267	2747	2165	1649	1126	946	595	55325
May-15	Wednesday	27	383	223	158	140	357	1377	4390	5534	4962	3440	3118	2969	2921	2910	3066	3362	3634	4038	2977	1927	1553	1304	978	589	56310
May-15	Thursday	28	424	229	173	145	392	1391	4579	5350	4256	3848	3121	3073	2995	2973	3175	3420	3640	3815	2968	2095	1797	1411	1134	722	57126
May-15	Friday	29	398	259	178	186	385	1350	4408	5423	4852	3386	3272	3179	3359	3334	3442	3842	3873	3784	3180	2589	1854	1750	1383	1055	60721
May-15	Saturday	30	657	372	294	239	288	669	1787	1877	2232	2655	3070	3142	3253	3170	2822	2813	3069	2661	2535	2212	1910	1617	1439	1130	45913
May-15	Sunday	31	695	366	286	198	255	462	1089	1036	1466	2249	2623	2577	2672	2534	2700	2645	2597	2405	2290	1628	1409	1167	988	723	37060
Jun-15	Monday	1	378	212	179	203	371	1406	4388	5501	4284	3288	3055	2901	2942	2980	3184	3260	3427	3746	2745	1828	1360	1194	916	544	54292
Jun-15	Tuesday	2	390	184	181	177	391	1395	4484	5487	4709	3357	2978	2834	2962	2880	2970	3084	3643	3605	2654	1727	1438	1178	981	654	54343
Jun-15	Wednesday	3	396	207	150	177	365	1318	3474	4019	4684	3247	2805	2731	2718	2875	3095	3218	3776	4117	2868	2117	1618	1340	1017	620	52952
Jun-15	Thursday	4	408	250	162	175	378	1451	4493	5041	4491	3324	3074	3204	3299	3488	3803	3703	3527	3774	3555	2374	1614	1487	1208	683	58966
Jun-15	Friday	5	479	289	202	193	373	1282	4188	5039	4128	3360	3258	3288	3367	3564	3480	3661	3709	3966	3439	2753	2017	1804	1583	1096	60518
Jun-15	Saturday	6	666	372	309	263	281	592	1636	1853	2273	2602	2855	3059	2984	2965	3119	2961	3122	3087	2689	2205	1818	1583	1450	1212	45956
Jun-15	Sunday	7	684	382	281	191	210	422	1101	1079	1474	2175	2638	2823	2590	2686	2686	2784	2813	2473	2210	1743	1360	1164	993	958	37920
Jun-15	Monday	8	415	246	185	165	377	1391	4333	5253	4305	3252	2941	3046	3076	3075	2888	3000	3239	3678	2579	1827	1526	1204	949	583	53533
Jun-15	Tuesday	9	303	245	178	168	334	1296	4437	5403	4333	3187	2910	2837	2906	2960	2910	2517	2791	2844	2357	1887	1360	1013	882	710	50768
Jun-15	Wednesday	10	365	239	176	193	353	1344	4366	5244	4542	3342	3018	2955	2841	2987	3046	3160	3571	3656	2882	2137	1623	1499	1195	717	55451
Jun-15	Thursday	11	392	215	201	173	347	1425	4355	5253	4419	3596	3098	3089	3144	3016	3256	3316	3634	3849	2906	2135	1690	1311	1092	687	56599
Jun-15	Friday	12	521	316	217	183	368	1370	4113	4387	4577	4443	3572	3399	3299	3560	3454	3518	3789	3634	3291	2636	1928	1711	1520	1138	60944
Jun-15	Saturday	13	759	445	312	242	284	637	1733	1870	2419	2826	2922	3150	3162	2945	3068	3043	3071	2734	2837	2207	1898	1637	1452	1125	46778
Jun-15	Sunday	14	664	398	315	188	245	433	1107	1011	1526	2335	2653	2573	2681	2581	2711	2554	2487	2361	2275	1785	1384	1173	935	694	37069
Jun-15	Monday	15	422	204	214	201	349	1321	4280	5261	4577	3319	2873	2885	3000	2956	2800	2989	3337	3628	2653	1822	1488	1188	951	580	53298
Jun-15	Tuesday	16	384	222	179	180	383	1424	4273	5505	4498	3308	2949	2881	2944	2848	3036	3214	3429	3877	2927	1912	1622	1313	1028	630	54966
Jun-15	Wednesday	17	439	239	172	195	400	1420	4478	5311	4699	3386	3041	2914	3054	2982	3029	3123	3968	4001	3122	2167	1599	1328	1147	640	56854
Jun-15	Thursday	18	438	242	182	218	399	1469	4435	5191	4770	3454	2964	3069	3035	3068	3103	3185	3575	4034	3233	2141	1774	1495	1171	765	57410
Jun-15	Friday	19	428	315	234	201	401	1340	4059	5058	4377	3345	3205	3243	3512	3297	3409	3545	3759	4050	3399	2599	2120	1743	1440	1046	60125
Jun-15	Saturday	20	738	430	295	223	280	600	1522	1852	2357	2691	2877	3132	2976	3004	2911	3188	2934	3261	2869	2264	1888	1675	1421	1152	46540
Jun-15	Sunday	21	690	392	282	229	242	434	1028	1129	1722	2532	2500	2522	2564	2566	2613	2537	2678	2896	3129	2408	1730	1327	1075	764	39989
Jun-15	Monday	22	484	257	209	200	398	1335	4308	5268	4538	4011	3086	2913	2987	2930	3002	3069	3469	3469	2575	1740	1335	1019	870	551	54023
Jun-15	Tuesday	23	387	229	154	159	404	1482	4280	5326	4811	3246	3042	2889	2967	2862	3038	3102	3780	3975	2967	2078	1537	1226	1038	602	55581
Jun-15	Wednesday	24	383	200	174	183	389	1400	4473	5348	4625	3448	3077	3087	3037	2984	3202	3197	3586	3845	3035	2118	1678	1265	1041	650	56425
Jun-15	Thursday	25	434	222	224	176	364	1428	4306	5295	4625	3412	3056	3078	3048	3193	3217	3266	3730	4119	3045	2330	1686	1526	1203	757	57740
Jun-15	Friday	26	589	382	224	252	519	1648	4208	4835	3963	2949	2579	2571	2669	2118	2679	2872	3224	3612	3129	2511	2003	1757	1429	1026	53748
Jun-15	Saturday	27	632	418	270	281	299	583	1617	1876	2315	2626	2876	3050	2970	2940	2918	2825	2908	2678	2700	2039	1851	1614	1472	1079	44837
Jun-15	Sunday	28	665	389	279	191	271	414	1029	969	1455	2144	2599	2573	2559	2504	2617	2666	2554	2389	2214	1725	1326	1120	1009	587	36248
Jun-15	Monday	29	431	247	192	180	388	1446	4319	5141	4522	3434	2917	2892	2957	2938	2836	3140	3651	3558	2537	1840	1395	1218	917	615	53711
Jun-15	Tuesday	30	366	207	162	175	399	1470	4312	5411	4388	3367	2868	3055	3094	2927	2862	3088	3445	3714	2745	1803	1403	1096	982	624	53963
Jul-15	Wednesday	1	395	243	167	166	406	1371	4384	5156	4557	3356	2952	3114	3099	3103	3141	3140	3633	3755	2836	2107	1588	1373	1252	688	55982
Jul-15	Thursday	2	508	257	208	209	380	1367	4199	5128	4341	3501	3224	3254	3381	3367	3400	3465	3719	4095	2910	2292	1713	1402	1329	1123	58772
Jul-15	Friday	3	681	320	242	218	285	731	1963	2315	2353	2593	2934	3227	3371	3130	2862	2901	3215	2952	2710	2279	1915	1758	1504	1173	47632
Jul-15	Saturday	4	672	414	340	222	216	393	949	1131	1594	1965	2446	2662	2596	2580	2513	2515	2480	2685	2690	2328	1738	1293	1304	997	38723
Jul-15	Sunday	5	618	362	289	196	246	395	860	859	1234	1956	2386	2416	2307	2559	2580	2518	2625	2398	2369	1690	1330	1109	980	685	34967
Jul-15	Monday	6	466	239	176	191	338	1336	4088	4912	4221	3139	2855	3106	3171	3118	2751	3308	3326	3716	2853	1748	1389	1117	920	606	53090
Jul-15	Tuesday	7	385	250	143	155	374	1443	4269	5167	4796	4089	3008	2929	2968	2930	2947	2998	3332	3718	2768	1900	1382	1206	980	620	54757
Jul-15	Wednesday	8	394	222	171	193	366	1422	4328	5309	4446	3423	2976	2832	3023	3004	3025	3263	3529	3767	2970	2100	1541	1325	1100	619	55348

Jul-15 Thursday	9	375	251	171	184	366	1429	4425	5294	4470	3462	3058	2946	3047	3116	3170	3288	3467	3990	3224	2139	1685	1337	1136	753	56783
Jul-15 Friday	10	442	306	272	193	350	1312	4038	4967	4342	3378	3044	3194	3271	3384	3516	3544	3754	3574	3461	2579	2080	1825	1510	1120	59456
Jul-15 Saturday	11	731	397	302	242	306	633	1664	1838	2281	2604	2815	3129	3060	2960	2855	2945	3018	3208	2812	2177	1804	1597	1412	1100	45890
Jul-15 Sunday	12	644	436	335	189	243	432	1057	1138	1459	2171	2607	2568	2540	2673	2502	2703	2728	2547	2402	1823	1505	1210	1041	680	37633
Jul-15 Monday	13	419	236	180	194	372	1365	4265	5421	4490	3287	2968	2758	2925	2992	2960	3105	3281	3578	2656	1859	1410	988	857	562	53128
Jul-15 Tuesday	14	356	230	167	156	364	1365	3583	3125	5117	3801	2925	2919	2929	2961	2951	3067	3294	3614	2809	1883	1447	1207	922	601	51793
Jul-15 Wednesday	15	380	235	198	165	377	1437	4291	5045	4915	3403	3074	3127	3136	2985	3009	3247	3477	3842	2946	2099	1578	1310	1028	631	55935
Jul-15 Thursday	16	409	264	198	196	402	1448	3964	5448	4722	3450	3140	3162	3265	3145	3318	3315	3593	3670	2925	2146	1704	1423	1172	828	57307
Jul-15 Friday	17	469	287	218	187	408	1322	3988	4977	4403	3484	3226	3404	3112	3233	3203	3229	3489	3823	3187	2473	2009	1941	1605	1106	58783
Jul-15 Saturday	18	720	377	330	259	319	602	1640	1685	2127	2588	2977	2991	2965	2887	3168	3113	2982	3041	2862	2303	1866	1648	1429	1508	46387
Jul-15 Sunday	19	811	544	403	207	261	408	1001	969	1453	2188	2554	2553	2625	2666	2630	2482	2354	2264	2247	1615	1376	1233	978	649	36471
Jul-15 Monday	20	455	231	170	165	382	1440	4333	5202	4324	3246	3098	2996	3120	3091	3009	3025	3334	3516	2670	1802	1380	1089	887	626	53591
Jul-15 Tuesday	21	413	223	155	144	405	1406	4404	5259	4450	3269	3019	2871	2884	2863	2951	3048	3396	3620	2667	1861	1403	1206	987	609	53513
Jul-15 Wednesday	22	398	237	188	184	401	1448	4464	5178	4672	3754	3192	3074	3046	3022	3077	3218	3449	3721	2865	2027	1500	1268	1031	634	56048
Jul-15 Thursday	23	457	271	177	184	396	1443	4414	5201	4584	3444	2950	3025	3151	2982	3166	3298	3471	3345	3214	1978	1628	1359	1001	791	55930
Jul-15 Friday	24	461	260	212	219	398	1386	4088	4930	4271	3371	3166	3236	3394	3312	3353	3606	3624	3883	3500	2389	1904	1664	1390	1055	59072
Jul-15 Saturday	25	628	380	283	212	273	567	1550	1721	2173	2679	2876	3270	3137	3044	3002	2949	3121	3033	3051	2266	1907	1670	1393	1144	46329
Jul-15 Sunday	26	684	368	304	193	177	419	1056	1042	1425	2225	2699	2650	2411	2478	2651	2659	2682	2505	2355	1755	1453	1138	994	633	36956
Jul-15 Monday	27	416	229	166	174	380	1471	4144	5206	4485	3085	2919	2965	2848	2953	2989	3065	3341	3633	2710	1725	1402	1182	969	614	53071
Jul-15 Tuesday	28	405	200	148	154	401	1468	4304	5303	4848	3288	2914	2839	2933	2867	3056	3128	3373	3541	2657	1981	1574	1166	994	627	54169
Jul-15 Wednesday	29	384	222	194	182	378	1375	4544	5376	4937	3378	2995	3039	3000	2843	3094	3229	3486	3667	3033	2009	1595	1287	991	708	55946
Jul-15 Thursday	30	404	251	195	168	393	1509	4384	5244	4916	3457	3112	3194	3385	3224	3267	3394	4187	4408	3067	2107	1783	1414	1083	731	59277
Jul-15 Friday	31	479	287	206	197	404	1347	4055	5103	4948	3425	3113	3264	3325	3398	3420	3587	3780	3702	3131	2538	1992	1636	1502	1085	59924
Aug-15 Saturday	1	623	404	336	255	276	601	1539	1922	2386	2638	2779	3080	3083	2832	2860	2860	3016	2830	2832	2134	1867	1684	1650	1161	45648
Aug-15 Sunday	2	647	401	318	217	258	418	938	1052	1469	2196	2439	2485	2423	2298	2318	2396	2450	2345	2307	1688	1314	1146	895	594	35012
Aug-15 Monday	3	424	244	155	169	356	1408	4207	5265	5108	3874	3096	2979	3010	3143	3041	3166	3423	3524	2628	1647	1417	1196	906	644	55030
Aug-15 Tuesday	4	376	231	146	162	343	1361	4025	5198	4711	3278	2835	2762	2961	3078	2992	3103	3411	3667	2883	1908	1516	1233	981	669	53830
Aug-15 Wednesday	5	367	215	168	175	389	1332	4220	5312	3208	3390	3143	3015	3082	3067	3006	3291	3963	3914	2831	2015	1462	1284	1092	727	54668
Aug-15 Thursday	6	437	270	157	206	387	1402	4121	4938	4745	3323	2981	3000	3079	3146	2955	3184	3793	3586	2872	2003	1589	1265	1095	691	55225
Aug-15 Friday	7	472	277	182	196	354	1338	4003	5030	4254	3173	3176	3167	3429	3474	3396	3615	3973	4170	3543	2593	2065	1755	1585	1208	60428
Aug-15 Saturday	8	661	390	303	264	254	635	1626	1829	2193	2742	3088	3724	3414	3130	3147	3261	3139	3067	2856	2147	1854	1724	1474	1150	48072
Aug-15 Sunday	9	713	365	289	233	215	480	1101	1128	1448	2244	2573	2722	2610	2762	2591	2788	2889	2548	2464	1751	1383	1228	1056	661	38242
Aug-15 Monday	10	407	253	169	169	373	1418	4283	5136	4120	3426	2933	2838	2973	3006	2922	3091	3450	3679	2638	1879	1548	1197	917	612	53437
Aug-15 Tuesday	11	367	249	157	160	362	1445	4377	5283	4977	3830	2925	2805	3014	3043	3050	3248	3725	3626	2913	1910	1477	1156	980	611	55690
Aug-15 Wednesday	12	365	235	146	169	371	1444	4387	5509	4517	3226	2949	2930	3021	3114	2961	3160	3581	3849	2978	2073	1596	1317	975	723	55596
Aug-15 Thursday	13	460	247	169	181	365	1457	4228	5485	4516	3292	2942	3173	3116	3117	3265	3463	3836	4108	3350	2334	1728	1366	1122	794	58114
Aug-15 Friday	14	484	261	191	197	430	1305	4031	5117	4525	3360	3136	3249	3398	3476	3358	3614	4127	3992	3641	2617	1997	1745	1497	1295	61043
Aug-15 Saturday	15	670	416	315	250	287	653	1591	1980	2218	2684	2971	3234	3213	2996	3089	2891	2879	2998	2986	2314	1981	1715	1471	1141	46943
Aug-15 Sunday	16	663	408	321	201	208	418	973	1002	1420	2141	2518	2812	2756	2907	2785	2687	2669	2349	2353	1825	1434	1114	962	614	37540
Aug-15 Monday	17	410	220	165	200	364	1441	4488	5383	4338	3266	2648	2773	2767	2744	2852	3109	3345	3727	2657	1682	1225	1035	851	560	52250
Aug-15 Tuesday	18	355	205	132	180	360	1482	4443	5544	4465	2895	2949	2697	2736	2755	2963	3062	3381	3583	2478	1579	1220	1073	845	597	51979
Aug-15 Wednesday	19	374	203	143	174	361	1447	4303	4917	4546	3678	2757	2854	2755	2865	2978	3178	3367	3810	3273	1801	1387	1054	937	545	53707
Aug-15 Thursday	20	341	202	174	147	380	1486	4391	5658	4690	3171	2821	2934	3103	2933	3068	3349	3457	3478	2623	1876	1473	1259	1034	613	54661
Aug-15 Friday	21	495	271	240	189	383	1405	4420	5553	4823	3443	2886	3197	3198	3369	3288	3691	3852	3462	3349	2461	1938	1670	1433	994	60010
Aug-15 Saturday	22	600	409	290	244	277	603	1639	1706	2187	2598	2868	3174	3217	2747	2640	2675	2652	2791	2729	1901	1891	1511	1265	992	43606
Aug-15 Sunday	23	529	375	273	195	202	393	1059	1039	1460	2186	2518	2534	2434	2728	2590	2543	2686	2268	2223	1628	1236	1013	824	585	35521
Aug-15 Monday	24	362	178	132	172	374	1428	4438	5641	4645	3036	2817	2697	2783	2795	2863	3325	3472	3772	2576	1760	1387	1100	824	563	53140
Aug-15 Tuesday	25	363	181	145	154	363	1430	4553	5780	4397	3371	2776	2792	2809	2808	2982	3323	3481	3637	2637	1787	1394	1057	876	566	53662
Aug-15 Wednesday	26	334	189	154	164	394	1511	4471	5841	4883	3205	2865	2885	2803	2753	3005	3164	3496	3881	2909	1812	1378	1135	880	623	54735
Aug-15 Thursday	27	390	188	149	189	384	1590	4546	5838	4818	3406	2959	2963	2983	2982	3358	4279	3868	4358	2704	2015	1555	1285	981	647	58435
Aug-15 Friday	28	362	281	204	211	420	1550	4430	5778	4500	3254	3091	3106	3186	3321	3806	3855	3889	3817	3300	2369	1871	1634	1464	1110	60809
Aug-15 Saturday	29	656	368	269	238	256	567	1502	1707	2196	2426	2662	2773	2768	2943	2853	2741	2924	3005	2724	2092	1731	1466	1365	1125	43357
Aug-15 Sunday	30	603	425	328	204	212	414	937	968	1337	1808	2130	1977	2111	2250	2311	2285	2189	2068	2011	1491	1182	952	760	486	31439
Aug-15 Monday	31	373	182	131	162	341	1053	3059	3469	3754	3723	3081	2749	2822	2745	2830	3094	3494	3493	2531	1757	1311	1061	788	552	48555
Sep-15 Tuesday	1	327	195	136	159	366	1538	4455	5613	5040	3412	2810	2801	2823	2865	3090	3326	3616	3720	2847	1875	1320	1119	876	551	54880
Sep-15 Wednesday	2	318	203	165	169	396	1492	4550	5745	5134	3538	2881	2762	2876	2961	3136	3274	3614	3865	2927	1848	1547	1248	955	601	56205
Sep-15 Thursday	3	361	210	161	182	386	1530	4709	5617	4867	3192	2924	2862	2844	3111	2959	3651	3692	3676	2668	1930	1478	1269	1188	788	56255
Sep-15 Friday	4	463	290	252	225	374	1364	4435	5520	4469	3275	3017	3281	3463	3520	3679	4078	4599	3704	3233	2570	2061	2088	1648	1281	62889
Sep-15 Saturday	5	744	443	296	214	234	574	1447	1697	2119	2561	3109	3344	3473	3220	3071	2953	3022	2675	2567	2144	1797	1655	1337	1113	45809
Sep-15 Sunday	6	619	365	310	186	189	382	930	1019	1436	2148	2589	2722	2746	2614	2666	2555	2571	2355	2440	1642	1378	1247	1064	767	36940
Sep-15 Monday	7	413	270	233	211	245	508	1317	1425	1697	1691	1964	2292	2392	2300	2533	2322	2384	2034	2147	1666	1306	1061	931	533	33875
Sep-15 Tuesday	8	385	157	151	158	354	1604	4119	5643	4748	3219	2920	2789	2884	2951	3220	3532	3563	3634	2814	1814	1339	1068	844	603	54513
Sep-15 Wednesday	9	321	153	177	159	426	1467	4501	5538	4800	3574	2882	2963	3023	2973	3198	3291	3577	3824	2791	1933	1531	1224	926	614	55866
Sep-15 Thursday	10	356	189	160	167	388	1546	4526	5266	4818	4144	3032	3097	3088	3069	3188	3403	3520	3947	2841	1960	1740	1047	980	584	57056

Sep-15	Friday	11	403	263	193	198	395	1469	3921	5479	4956	3454	2980	3087	3189	3279	3516	3796	3856	3551	3138	2345	1872	1692	1538	1012	59582
Sep-15	Saturday	12	638	350	288	224	242	588	1530	1756	2056	2249	2318	2428	2590	2586	2777	2802	2823	2696	2541	1984	1663	1564	1335	1020	41048
Sep-15	Sunday	13	645	483	330	193	210	379	950	1084	1444	2052	2517	2783	2869	2899	2915	2786	2710	2541	2543	1898	1322	1135	920	542	38150
Sep-15	Monday	14	374	199	134	140	403	1529	4490	5543	4777	3219	2887	2833	2896	3023	3076	3631	3871	3866	2736	1843	1363	1016	874	521	55244
Sep-15	Tuesday	15	333	166	132	154	390	1575	4593	5525	4712	3566	2886	2872	2883	2882	3184	3334	3605	3734	2568	1845	1474	1139	903	568	55023
Sep-15	Wednesday	16	324	161	141	157	399	1498	4542	5603	5064	3384	2965	2863	2978	2963	3187	3250	3697	3889	2911	1960	1460	1173	952	508	56029
Sep-15	Thursday	17	373	172	133	169	420	1633	4331	5018	4880	3751	2860	2868	3022	2974	3425	3684	4076	4395	3189	2046	1471	1236	1094	719	57939
Sep-15	Friday	18	425	222	210	206	408	1485	3762	5554	4598	3323	3059	3106	3214	3372	3576	3730	3881	3902	3431	2662	1871	1738	1629	1088	60452
Sep-15	Saturday	19	605	357	272	233	263	649	1645	2001	2438	2849	2980	3208	3129	2909	3015	2826	2753	2875	2552	2105	1653	1660	1325	1120	45422
Sep-15	Sunday	20	602	364	269	209	212	440	1065	1116	1519	2103	2693	2592	2614	2738	2631	2651	2661	2471	2406	1853	1452	1079	931	539	37210
Sep-15	Monday	21	349	187	129	182	413	1607	4560	5841	4823	3198	2772	2655	2808	2857	2958	3366	3610	3625	2630	1731	1290	1068	832	532	54023
Sep-15	Tuesday	22	332	163	136	139	399	1524	4613	4882	4863	3183	2732	2747	2859	2755	2940	3346	3669	3723	2675	1811	1360	1156	974	507	53488
Sep-15	Wednesday	23	306	187	146	181	402	1557	4678	5756	4886	3485	2846	2902	2929	2898	3061	3357	3517	3683	2810	1901	1462	1124	955	582	55611
Sep-15	Thursday	24	398	213	158	168	409	1636	4705	5608	4468	3417	2847	2773	2770	2807	3057	3355	3438	3791	3048	1932	1413	1147	990	631	55179
Sep-15	Friday	25	410	235	166	164	402	1450	4275	4835	4783	3347	3108	3185	3290	3324	3706	3816	3717	3996	3220	2546	2127	1773	1495	999	60369
Sep-15	Saturday	26	651	362	281	202	259	606	1598	1806	2268	2599	2847	3214	2896	2867	2880	3100	3211	2897	2566	1925	1628	1585	1324	982	44554
Sep-15	Sunday	27	567	367	306	168	246	452	1057	1045	1407	2043	2464	2418	2415	2406	2535	2578	2585	2350	2272	1718	1344	1097	1013	514	35367
Sep-15	Monday	28	345	192	159	165	412	1544	4523	5348	4414	3244	2704	2711	2719	2741	3053	3195	3428	3490	2546	1674	1324	1087	851	506	52375
Sep-15	Tuesday	29	326	170	151	157	390	1572	4413	5380	4792	3168	2807	2813	2760	2818	1815	3124	3419	3432	2769	1795	1314	1122	887	544	51938
Sep-15	Wednesday	30	330	187	149	167	408	1538	4557	5450	4925	3326	2894	2893	2892	2840	3071	3172	3298	3674	2836	1726	1365	1101	937	559	54295
Oct-15	Thursday	1	348	199	163	162	406	1641	4143	5052	4831	3537	2903	3010	2895	2748	2951	3086	3059	2989	2294	1474	1066	1080	905	555	51497
Oct-15	Friday	2	381	234	150	155	375	1316	3606	3550	2792	2541	2517	2487	2656	2671	2672	2744	2770	2535	1923	1374	1012	956	848	577	42842
Oct-15	Saturday	3	375	279	189	146	211	430	949	982	751	829	774	858	834	890	867	915	862	875	788	654	457	325	372	248	14860
Oct-15	Sunday	4	167	104	77	87	87	217	459	474	531	730	925	1174	1131	1210	1268	1293	1351	1319	1115	779	493	431	390	183	15995
Oct-15	Monday	5	178	78	67	74	196	862	2225	2418	2058	1917	1799	1828	1816	2047	2162	2296	2406	2489	2011	1287	906	751	658	442	32971
Oct-15	Tuesday	6	326	173	119	128	341	1339	4104	4600	4077	3152	2573	2698	2740	2709	2693	2803	3136	3325	2590	1721	1295	1095	984	528	49249
Oct-15	Wednesday	7	310	187	147	157	420	1583	4369	5125	4193	3970	2961	2741	2830	2959	3131	3215	3570	3448	2875	2032	1363	1160	936	588	54270
Oct-15	Thursday	8	349	192	171	178	385	1659	4280	4936	4617	4329	3097	2967	2951	2955	3134	3497	3847	3111	3123	2082	1493	1162	1050	638	56203
Oct-15	Friday	9	513	258	201	184	399	1495	4569	5081	4775	4149	3179	3392	3338	3299	3395	3655	3655	3634	3125	2439	1856	1845	1675	1158	61269
Oct-15	Saturday	10	678	363	303	243	290	622	1702	2079	2546	2655	2568	2738	2584	2452	2702	2473	2577	2443	2254	1996	1571	1452	1172	1034	41497
Oct-15	Sunday	11	554	361	307	202	194	501	1107	1114	1541	2111	2581	2578	2617	2676	2607	2546	2546	2510	2363	1930	1312	1157	830	583	36828
Oct-15	Monday	12	411	224	165	144	386	1342	4187	5383	4261	3045	2750	2767	2841	2976	2974	3288	3430	3432	2595	1735	1379	1108	854	541	52218
Oct-15	Tuesday	13	335	157	129	154	376	1610	4670	5430	4961	3435	2829	2848	2898	2943	3060	3333	3566	3527	2679	1787	1235	1028	890	504	54384
Oct-15	Wednesday	14	344	190	159	155	407	1542	4623	5428	5067	3434	2965	2968	3040	3027	3092	3381	3792	4170	3178	1973	1510	1139	975	559	57118
Oct-15	Thursday	15	360	209	165	165	390	1537	4287	5271	4943	3328	3049	2865	3009	3084	3283	3592	3855	4010	3096	2215	1617	1241	1005	651	57227
Oct-15	Friday	16	451	236	261	190	412	1533	4550	4284	5110	3424	3049	3151	3343	3319	3461	3868	3756	3433	3211	2394	1907	1600	1487	1089	59519
Oct-15	Saturday	17	653	345	260	212	278	678	1565	1908	2026	2398	2500	2834	2749	2886	2847	2805	2826	2720	2553	2098	1657	1651	1384	999	42832
Oct-15	Sunday	18	565	338	258	217	218	565	1189	1152	1417	2112	2357	2589	2805	2750	2867	2828	2642	2438	2508	1898	1384	1145	957	499	37698
Oct-15	Monday	19	320	173	135	143	401	1470	4461	5184	4519	3072	2609	2774	2824	2832	3004	3218	3637	3883	2670	1864	1238	1094	826	525	52876
Oct-15	Tuesday	20	311	169	149	163	395	1557	4688	5105	4779	3790	2856	2792	2886	2983	3186	3461	3728	3886	3056	2121	1457	1222	1050	700	56490
Oct-15	Wednesday	21	377	160	152	150	381	1507	4679	5625	4715	3526	3073	2943	2947	2823	3132	3488	3835	3832	3210	2181	1453	1156	977	598	56920
Oct-15	Thursday	22	381	209	162	183	418	1589	4210	5113	4947	3735	3027	3137	3260	3107	3333	3655	3861	4704	3344	2065	1550	1225	1123	773	59111
Oct-15	Friday	23	418	236	176	214	381	1396	4221	5313	4318	3752	3156	3253	3254	3374	3553	3640	3804	3698	3283	2653	1881	1684	1425	991	60074
Oct-15	Saturday	24	619	358	286	203	254	597	1562	1825	2020	2413	2582	3007	2868	3020	3004	2852	2785	2538	2670	1960	1591	1569	1348	1008	42939
Oct-15	Sunday	25	592	337	253	201	189	398	1040	998	1344	2085	2404	2409	2532	2587	2744	2667	2667	2517	2469	1856	1426	1179	1209	570	36673
Oct-15	Monday	26	401	194	139	167	366	1424	3363	4298	4984	3467	2776	2696	2893	2853	3025	3147	3604	3616	2583	1706	1263	1018	933	508	51424
Oct-15	Tuesday	27	328	166	121	160	329	1455	4257	4778	4068	3202	2567	2564	2721	2614	2942	3032	3205	3386	2598	1723	1289	994	904	607	50010
Oct-15	Wednesday	28	464	251	185	145	359	1354	4354	5459	4378	3045	2641	2837	2897	2831	3020	3173	3487	3622	2953	1931	1366	1232	1034	658	53676
Oct-15	Thursday	29	390	239	197	198	368	1395	4384	5402	4974	3597	2967	2955	2949	2979	3181	3524	3692	4263	3203	2144	1651	1407	1157	677	57893
Oct-15	Friday	30	440	263	211	194	375	1391	3605	4783	4617	3656	3139	3057	3276	3297	3346	3641	3612	3911	3619	2585	2022	1825	1720	1151	59736
Oct-15	Saturday	31	657	401	312	191	246	589	1485	1629	1956	2177	2315	2573	2731	2722	2483	2501	2604	2243	2285	1940	1752	1769	1635	1319	40515
Nov-15	Sunday	1	784	452	326	241	397	414	1098	1199	1505	2081	2454	2426	2217	2317	2452	2468	2432	2437	2198	1716	1282	1061	762	512	35231
Nov-15	Monday	2	315	189	128	163	351	1497	4580	5606	4555	3284	2759	2705	2764	2672	2898	3191	3362	3482	2564	1611	1219	1050	871	480	52296
Nov-15	Tuesday	3	247	170	167	147	334	1375	4190	4993	4330	2990	2618	2616	2562	2684	2768	3062	3291	3445	2672	1647	1275	1244	1046	565	50438
Nov-15	Wednesday	4	314	168	125	162	333	1429	4175	4733	4977	3537	2737	2832	2926	2728	2906	3067	3289	3581	2749	1755	1343	1290	1147	603	52906
Nov-15	Thursday	5	343	214	193	175	373	1426	3732	3860	4047	3154	2843	2841	2816	2824	3095	3361	3347	3389	2824	1980	1518	1382	1136	800	51673
Nov-15	Friday	6	424	258	179	169	357	1472	3740	4188	3668	3073	2880	2972	3057	3056	3387	3586	3638	3552	3038	2209	1690	1654	1613	1137	54997
Nov-15	Saturday	7	761	368	269	215	262	597	1558	1917	2344	2557	3032	2907	2985	2907	2792	2780	2555	2488	2465	1928	1555	1497	1432	1144	43315
Nov-15	Sunday	8	823	500	270	175	210	450	983	983	1295	1959	2316	2208	2260	2333	2372	2314	2238	2411	2284	1582	1237	1096	882	584	33765
Nov-15	Monday	9	347	189	144	169	341	1415	3605	4277	3647	2668	2346	2262	2443	2456	2716	2915	3104	3132	2209	1481	1167	954	977	497	45461
Nov-15	Tuesday	10	291	172	159	152	333	1441	3822	3729	4200	2983	2640	2749	2685	2749	2992	3323	3540	3520	2769	1781	1263	1157	823	555	49828
Nov-15	Wednesday	11	336	201	136	154	297	1274	3344	4378	3356	2885	2747	2706	2847	2827	3009	3493	3582	3676	2836	1730	1361	1086	880	582	49723
Nov-15	Thursday	12	317	197	144	163	362	1402	3581	4454	3961	3189	2805	2840	2933	2926	3117	3252	3404	3577	2770	1980	1375	1174	1003	683	51609
Nov-15	Friday	13	448	224	201	180	371	1366	3631	3203	4192	3160	2901	3195	3435	3121	3321	3442	3464	3326	3104	2272	1790	1629	1447	980	54403

Nov-15 Saturday	14	603	364	259	223	265	553	1547	1888	2134	2248	2479	2682	2708	2682	2734	2782	2704	2796	2565	1986	1505	1385	1416	1003	41511
Nov-15 Sunday	15	489	374	296	208	234	408	941	1041	1341	1889	2211	2351	2484	2443	2645	2572	2569	2395	2107	1673	1229	1100	849	519	34368
Nov-15 Monday	16	326	184	180	163	364	1375	2941	3944	4130	3203	2806	2730	2848	2701	2938	3115	3284	3474	2618	1665	1232	1007	812	520	48560
Nov-15 Tuesday	17	290	172	160	171	360	1451	3667	4407	3851	3512	2885	2789	2772	2693	2866	3162	3363	3435	2682	1693	1276	1040	844	557	50098
Nov-15 Wednesday	18	323	170	121	150	363	1463	3845	3940	4134	3302	2893	2871	2921	2851	2895	3205	3354	4083	2977	1770	1436	1126	870	548	51611
Nov-15 Thursday	19	300	184	161	154	352	1415	3425	4274	3801	2997	2824	2949	2933	2800	2984	3218	3476	3520	2880	1844	1417	1364	994	618	50884
Nov-15 Friday	20	390	245	260	174	418	1471	3764	4268	3757	3148	2985	2996	3109	3096	3384	3539	3437	3493	2942	2290	1721	1488	1255	913	54543
Nov-15 Saturday	21	592	368	276	176	236	526	1462	1828	2080	2419	2572	2653	2709	2956	2747	2611	2582	2422	2512	1924	1542	1453	1229	950	40825
Nov-15 Sunday	22	550	341	261	197	204	460	995	1114	1429	1835	2163	2127	2236	2276	2452	2513	2319	2254	2115	1629	1209	980	811	563	33033
Nov-15 Monday	23	304	165	130	148	344	1438	3503	4296	3971	2978	2753	2761	2893	2820	2971	3251	3101	3229	2512	1675	1216	1045	853	538	48895
Nov-15 Tuesday	24	302	157	159	171	335	1306	3650	4120	3607	3033	2782	2916	2930	3016	3013	3090	3253	3295	2805	1967	1446	1111	974	689	50127
Nov-15 Wednesday	25	437	255	166	185	379	1296	3440	3868	3120	2925	2678	2920	3011	2973	3078	3239	2997	2740	2332	1770	1416	1201	1067	818	48311
Nov-15 Thursday	26	470	276	284	175	193	336	816	1057	998	1028	1279	1733	1919	1816	1849	1823	1711	1686	1819	1595	1511	1272	1160	823	27629
Nov-15 Friday	27	548	367	315	222	288	661	1641	1753	1679	2011	2197	2488	2678	2752	2745	2660	2617	2362	2376	1891	1448	1292	1245	880	39116
Nov-15 Saturday	28	462	294	251	207	228	494	1165	1324	1511	1882	2066	2409	2572	2277	2352	2419	2399	2391	2437	1934	1497	1401	1320	936	36228
Nov-15 Sunday	29	521	321	266	202	179	401	911	989	1184	1688	2084	2143	2500	2411	2678	2580	2719	2629	2500	2008	1653	1176	891	654	35288
Nov-15 Monday	30	431	216	152	174	380	1397	3853	4601	3562	2933	2657	2573	2718	2693	2947	3095	3127	3339	2531	1669	1232	955	816	560	48611
Dec-15 Tuesday	1	314	195	166	155	365	1415	3801	4287	3688	2934	2743	2561	2660	2766	2941	3042	3224	3404	2655	1631	1299	1044	824	619	48733
Dec-15 Wednesday	2	276	166	150	171	374	1394	3694	4304	3787	3214	2748	2632	2740	2694	2811	3111	3215	3283	2564	1611	1194	983	834	564	48514
Dec-15 Thursday	3	256	167	161	176	368	1383	3515	4356	3838	2928	2730	2629	2854	2785	2966	3195	3261	3472	2397	2170	1445	1233	990	597	49872
Dec-15 Friday	4	382	215	166	184	383	1367	3643	4443	3692	3065	2882	2995	2984	3019	3138	3392	3471	3458	3164	2366	1789	1561	1338	950	54047
Dec-15 Saturday	5	532	339	250	217	238	498	1494	1854	2039	2212	2425	2720	2684	2678	2484	2713	3021	2909	2882	2038	1516	1261	1163	841	41008
Dec-15 Sunday	6	579	299	298	183	171	361	907	1047	1283	1925	2138	2222	2442	2609	2476	2345	2355	2411	2082	1495	1127	961	759	586	33061
Dec-15 Monday	7	269	142	129	138	307	1352	3630	4125	3540	3315	2553	2499	2590	2666	2838	3052	3167	3291	2535	1718	1133	969	1037	739	47734
Dec-15 Tuesday	8	318	193	161	151	335	1316	3584	4365	4048	3003	2616	2576	2699	2671	3010	3143	3158	3459	2787	1852	1392	1038	940	585	49400
Dec-15 Wednesday	9	321	197	158	160	380	1348	3579	4328	3995	2871	2684	2783	2784	2706	2856	3168	3310	3686	2728	1889	1299	1042	835	562	49669
Dec-15 Thursday	10	303	170	126	165	375	1363	3592	4353	3967	3035	2780	2930	2851	2865	2976	3261	3625	3690	2784	1997	1571	1294	969	656	51698
Dec-15 Friday	11	338	225	164	184	369	1306	3438	4421	3678	2896	2896	2851	3004	3000	3443	4249	3786	3756	3434	2415	1807	1601	1364	964	55589
Dec-15 Saturday	12	513	341	279	207	264	542	1453	1818	2049	2182	2401	2603	2644	2637	2809	2794	2936	3245	2995	2097	1642	1586	1315	1037	42389
Dec-15 Sunday	13	565	379	276	207	212	308	862	1011	1297	1800	2161	2241	2412	2504	2562	2379	2379	2413	2256	1682	1224	945	766	549	33390
Dec-15 Monday	14	291	189	156	159	343	1401	3616	4399	3853	3041	3067	2814	2762	2758	2785	3070	3179	3671	2624	1582	1128	930	809	505	49132
Dec-15 Tuesday	15	303	181	176	169	336	1343	3707	4434	3946	3139	2747	2790	2542	2385	2795	3147	3337	3577	2973	1888	1405	1103	895	568	49886
Dec-15 Wednesday	16	295	199	147	165	378	1371	3763	4262	3850	3208	2865	2790	2858	2964	3030	3212	3389	3513	2832	1812	1413	1123	929	631	50999
Dec-15 Thursday	17	314	202	161	198	414	1309	3788	4263	3866	3447	2872	2888	2775	2812	2984	3089	3400	3457	2816	1892	1227	1213	1048	667	51102
Dec-15 Friday	18	367	244	161	185	335	1302	3653	4210	3504	2864	2807	3050	3045	3097	3204	3442	3418	3500	2992	2299	1764	1628	1431	1057	53559
Dec-15 Saturday	19	527	378	268	192	257	559	1376	1463	1781	2124	2344	2664	2808	2834	2769	2573	2715	2786	2891	2144	1536	1446	1288	904	40627
Dec-15 Sunday	20	557	357	255	161	161	310	874	892	1248	1782	2066	2112	2294	2390	2403	2220	2380	2417	2211	1655	1224	1002	828	593	32392
Dec-15 Monday	21	303	209	145	140	348	1249	3383	3678	3339	2909	2689	2819	2760	2918	2892	2904	3011	3121	2681	1805	1253	1057	930	626	47169
Dec-15 Tuesday	22	327	211	161	154	333	1296	3253	3699	3270	2807	2589	2649	2613	2627	2854	2904	3049	2926	2539	1723	1359	1128	1046	628	46145
Dec-15 Wednesday	23	428	204	172	203	342	1187	3285	3465	3118	2779	2703	2932	2996	2929	2908	2859	2859	2857	2413	1915	1431	1269	1196	782	47232
Dec-15 Thursday	24	514	322	240	232	266	872	1861	2029	1937	1983	2078	2237	2370	2331	2405	2181	2111	2152	2134	1616	1211	1074	922	636	35714
Dec-15 Friday	25	448	264	185	154	105	213	507	474	471	708	1072	1340	1733	1851	1928	1916	1883	1854	1975	1597	1349	1187	1088	767	25069
Dec-15 Saturday	26	441	284	236	166	241	455	989	987	1181	1462	1778	2045	2477	2530	2841	2611	2595	2712	2588	1970	1589	1552	1322	964	36016
Dec-15 Sunday	27	602	398	270	204	207	312	813	803	1142	1624	2081	2105	2206	2292	2375	2405	2493	2504	2481	1758	1404	1132	986	613	33210
Dec-15 Monday	28	467	250	178	183	351	1162	2950	3143	2781	2641	2674	2800	3060	2829	2910	2852	2920	2983	2408	1690	1258	1074	862	534	44960
Dec-15 Tuesday	29	437	232	173	170	339	1242	3128	3373	3101	2808	2681	2740	2888	2863	2722	2803	2946	3046	2557	1858	1263	1131	1021	611	46133
Dec-15 Wednesday	30	402	190	149	180	333	1233	3056	3262	3048	2758	2752	2836	2916	2852	2969	3051	3021	3093	2596	1863	1480	1226	1003	680	46949
Dec-15 Thursday	31	450	261	204	220	307	1106	2588	2928	2835	2415	2496	2711	2933	2859	3109	3156	2703	2320	2334	1797	1644	1644	1584	886	45490

30 Highest Hours of the year

100 Highest Hours of the year

AADT 49400

WESTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Friday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Saturday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Sunday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Monday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Tuesday	6	409	280	256	170	250	653	1751	3166	2849	2114	2084	2375	2690	2743	3120	4326	4959	4079	3022	2008	1362	1180	896	740	47482
Jan-15 Wednesday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-15 Thursday	8	443	248	180	139	252	568	1414	2577	2701	2682	2530	2493	2744	2733	3206	4344	5151	4290	2778	2012	1546	1289	1001	735	48056
Jan-15 Friday	9	471	278	253	149	241	633	1627	3013	2824	2284	2316	2730	2987	3192	3608	4754	5008	4069	2946	2237	1731	1499	1374	1132	51356
Jan-15 Saturday	10	827	537	599	231	219	366	718	1189	1297	1496	1830	2100	2566	2593	2575	2838	2878	2694	2351	2003	1668	1405	1250	1144	37374
Jan-15 Sunday	11	844	616	613	248	173	260	456	879	909	1277	1678	1940	2464	2587	2405	2588	2358	2184	1899	1520	1189	874	680	536	31177
Jan-15 Monday	12	310	201	151	152	256	729	1758	3204	2713	2156	2170	2389	2481	2410	3026	4137	4756	4471	2703	1788	1396	962	753	638	45710
Jan-15 Tuesday	13	447	251	179	141	221	651	1787	3187	3081	2381	2343	2431	2649	2846	3227	4266	4928	4215	2721	1951	1517	1129	910	717	48176
Jan-15 Wednesday	14	433	258	172	139	244	676	1815	3200	2945	2348	2243	2416	2798	2770	3254	4469	5341	4748	2942	1977	1766	1233	937	692	49816
Jan-15 Thursday	15	437	271	180	156	284	658	1630	3033	2803	2296	2378	2646	2869	2889	3258	4455	5124	4783	2819	2086	1712	1237	1010	827	49841
Jan-15 Friday	16	542	310	270	172	283	660	1463	2826	2624	2328	2464	2887	3347	3338	3763	4705	5081	4450	3347	2297	1728	1601	1326	1136	52948
Jan-15 Saturday	17	827	657	551	296	229	331	639	1195	1460	1851	1931	2107	2492	2605	2754	3053	2899	2893	2547	2230	1767	1483	1421	1200	39418
Jan-15 Sunday	18	933	826	823	268	187	242	377	805	1087	1342	1702	2007	2421	2627	2690	2651	2438	2283	2119	1739	1222	1049	927	722	33487
Jan-15 Monday	19	435	283	221	186	268	543	1165	2109	2135	2044	2133	2374	2740	3087	3115	3757	3913	3799	2659	1855	1266	1015	784	640	42526
Jan-15 Tuesday	20	332	233	191	150	268	711	1921	3235	3028	2405	2288	2480	2631	2851	3144	4431	5143	4064	3002	2133	1643	1292	875	521	48972
Jan-15 Wednesday	21	374	271	222	128	235	669	1850	3282	3037	2217	2268	2547	2756	2869	3359	4474	4981	4739	3145	2278	1792	1315	1048	751	50607
Jan-15 Thursday	22	451	304	188	148	253	678	1783	3257	3084	2341	2256	2594	2907	2933	3368	4443	5238	4995	3355	2282	1767	1274	1028	804	51731
Jan-15 Friday	23	487	343	238	185	274	677	1710	3138	2966	2550	2585	2941	3331	3385	3680	4528	4708	4041	2711	2022	1524	1368	1227	1040	51659
Jan-15 Saturday	24	712	569	483	226	198	310	614	1030	1358	1582	1877	2167	2422	2592	2662	2601	2536	2543	2433	1913	1517	1314	1321	1156	36136
Jan-15 Sunday	25	830	705	706	279	165	266	426	880	1065	1350	1676	1910	2498	2694	2769	2869	2730	2456	2028	1691	1184	856	764	559	33356
Jan-15 Monday	26	325	177	167	140	255	689	1851	3236	2795	2291	2233	2426	2805	2858	3208	4323	4950	3590	2636	1904	1512	1103	849	626	46949
Jan-15 Tuesday	27	403	292	198	140	249	634	1844	3267	2788	2284	2185	2346	2664	2757	3201	4341	4866	4272	3161	2141	1714	1219	876	683	48525
Jan-15 Wednesday	28	439	297	212	130	228	726	1811	3220	3032	2428	2398	2589	2962	2883	3320	4461	5080	4922	3051	2259	1761	1235	901	687	51032
Jan-15 Thursday	29	433	259	199	136	241	645	1801	3258	2954	2271	2290	2598	2872	2939	3367	4203	5196	4854	3087	2080	1682	1205	1011	754	50335
Jan-15 Friday	30	485	314	291	159	272	677	1759	3067	2789	2319	2570	2959	3376	3432	3943	4972	5118	4491	3522	2421	1698	1644	1395	1175	54848
Jan-15 Saturday	31	893	643	593	266	204	333	610	1204	1510	1594	1954	2182	2514	2478	2620	2948	2914	2691	2333	2012	1605	1469	1302	1213	38085
Feb-15 Sunday	1	918	719	675	272	184	264	429	845	1035	1294	1744	1929	2387	2628	2707	2667	2437	2271	1609	1123	910	759	1251	730	31787
Feb-15 Monday	2	429	218	211	141	238	666	1817	3185	2929	2441	2368	2420	2701	2684	2955	932	4832	4405	2852	1932	1447	1006	835	642	44286
Feb-15 Tuesday	3	411	273	219	119	272	658	1878	3326	2917	2297	2306	2440	2701	2916	3271	4266	4919	4464	3049	2127	1586	1271	927	719	49332
Feb-15 Wednesday	4	459	270	201	147	247	671	1946	3333	2875	2281	2284	2492	2841	2916	3254	4488	4280	4014	3133	2073	1665	1076	908	694	48548
Feb-15 Thursday	5	408	293	214	162	257	643	1814	3253	3007	2401	2317	2592	2815	2937	3391	4635	4985	4213	3177	2153	1793	1422	1002	809	50693
Feb-15 Friday	6	470	328	320	164	288	644	1745	3147	2809	2428	2370	3038	3335	3439	3815	4885	5027	3478	3109	2390	1704	1664	1391	1189	53177
Feb-15 Saturday	7	786	584	535	217	218	357	696	1251	1628	1888	2052	2326	2726	2817	2822	3226	3010	2824	2493	2122	1700	1545	1406	1175	40404
Feb-15 Sunday	8	849	694	757	290	203	254	468	893	1039	1387	1736	1930	2584	2732	2973	3227	3137	2905	2438	1874	1300	1047	855	578	36150
Feb-15 Monday	9	365	196	186	135	268	683	1930	3247	2820	2289	2283	2506	2755	2782	3290	4579	5047	4719	3060	1892	1457	1139	950	623	49201
Feb-15 Tuesday	10	410	272	198	137	244	675	1899	3426	2935	2398	2378	2729	3074	2959	3305	4418	5001	4674	3090	2149	1752	1281	901	675	50980
Feb-15 Wednesday	11	439	265	212	126	287	686	1866	3303	2878	2220	2325	2559	2917	2843	3354	4468	5146	4864	3530	2443	1792	1327	1135	761	51746
Feb-15 Thursday	12	481	292	206	143	257	703	1833	3377	2951	2328	2410	2701	2903	3051	3600	4603	5149	4695	3433	2442	1834	1475	1158	817	52842
Feb-15 Friday	13	569	392	261	168	306	637	1584	3168	2826	2544	2572	3048	3397	3513	4021	4860	5161	4458	3674	2549	1868	1653	1636	1301	56166
Feb-15 Saturday	14	914	644	615	259	213	295	557	1132	1619	1874	2331	2362	2626	2858	2940	3331	3459	3377	3450	2729	2030	1873	1731	1525	44744
Feb-15 Sunday	15	988	811	743	282	175	211	381	792	1016	1487	1946	2330	2870	3169	3078	3335	2950	2575	2355	1994	1395	1004	844	687	37418
Feb-15 Monday	16	365	232	178	131	306	605	1332	2455	2378	2297	2383	2606	2896	2924	3157	3875	4247	3981	2391	1728	1281	1084	853	650	44335
Feb-15 Tuesday	17	350	243	162	140	254	657	1783	3234	3424	2318	2235	2435	2603	2915	3135	4266	4978	4770	3085	2027	1783	1228	973	699	49697
Feb-15 Wednesday	18	424	273	232	131	280	716	1872	3204	3038	2449	2305	2590	2938	3010	3342	4471	5156	4789	3181	2440	1887	1381	985	707	51801
Feb-15 Thursday	19	479	304	186	173	286	630	1798	3417	3025	2518	2534	2831	2791	3103	3330	4539	5249	4316	3145	2179	1773	1382	1027	809	51824
Feb-15 Friday	20	432	300	236	163	300	635	1576	2973	3030	2518	2357	2923	3284	3341	3915	4893	3846	4334	3022	2439	1769	1404	1388	1128	52206
Feb-15 Saturday	21	822	653	601	293	236	363	605	1183	1518	1686	1864	1998	2217	2128	2199	2286	2330	2215	2087	1850	1714	1510	1421	1147	34926
Feb-15 Sunday	22	1083	992	878	320	218	292	436	953	1097	1460	1840	2149	2657	2793	2978	3077	2894	2619	2291	1838	1374	1093	849	589	36770
Feb-15 Monday	23	356	232	181	154	301	741	1784	3146	2847	2386	2185	2576	2762	2805	3177	4289	4801	4628	2708	1950	1535	1093	840	703	48180
Feb-15 Tuesday	24	427	280	216	138	232	492	1181	2125	2206	2189	1961	1986	2224	2247	2532	3551	4057	3786	2188	1680	1287	975	833	642	39435
Feb-15 Wednesday	25	397	272	181	127	287	684	1851	3293	2997	2318	2359	2611	2858	2857	3270	4450	4714	4211	2877	1997	1491	1025	816	616	48559
Feb-15 Thursday	26	398	225	178	126	261	643	1787	3322	3083	2276	2404	2668	2758	2978	3276	4388	5228	4603	3335	2222	1873	1313	1135	775	51255
Feb-15 Friday	27	542	334	251	210	312	719	1743	3198	2885	2600	2621	3010	3466	3521	4161	5112	5403	4570	3364	2460	1903	1683	1441	1290	56799
Feb-15 Saturday	28	1060	746	575	309	283	376	702	1335	1696	1900	2080	2308	2665	2647	2948	3173	3086	2617	2313	2224	1846	1568	1556	1200	41213
Mar-15 Sunday	1	855	742	631	256	232	288	438	923	1076	1685	2092	2315	2821	2885	2682	2592	2278	1957	1758	1562	1257	863	725	530	33443
Mar-15 Monday	2	314	190	166	161	302	717	1852	3224	2931	2298	2301	2547	2740	2734	3241	4371	4953	4697	3118	2234	1617	1250	987	690	49635

Mar-15 Tuesday	3	441	301	233	159	288	699	1869	3295	2915	2287	2369	2537	2440	2769	3220	4338	5039	4748	3073	2172	1645	1249	943	772	49801
Mar-15 Wednesday	4	530	352	197	143	300	710	1829	3257	2904	2378	2350	2777	2816	2967	3422	4509	4858	3555	2403	2524	2060	1378	1080	821	50120
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	537	294	263	170	290	656	1777	3096	2889	2581	2749	2835	3388	3358	3790	4796	5118	4321	3169	2362	1781	1684	1429	1318	54651
Mar-15 Saturday	7	905	683	666	261	250	387	751	1379	1541	1946	2076	2281	2651	2669	2678	3081	2997	2913	2676	2424	1849	1675	1480	1252	41471
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	448	283	225	130	299	686	1678	2903	2885	2300	2344	2516	2733	2765	3307	4357	5232	4678	3199	2529	1931	1379	1032	800	50639
Mar-15 Tuesday	10	521	327	235	164	289	634	1669	3194	2987	2404	2326	2698	2960	3135	3297	4449	5288	4337	3528	2804	2163	1465	1149	953	52976
Mar-15 Wednesday	11	541	385	323	163	284	652	1754	3291	3243	2682	2647	2749	3039	3119	3528	4570	4104	4200	3900	2895	2270	1681	1223	900	54143
Mar-15 Thursday	12	604	357	257	166	291	699	1756	3293	2983	2508	2470	2932	3015	3194	3468	4582	5044	2674	3583	2713	2193	1637	1215	948	52582
Mar-15 Friday	13	618	397	340	208	304	631	1650	3026	2931	2505	2736	3108	3508	3608	4069	4881	4895	4463	3356	2688	2072	1815	1622	1308	56739
Mar-15 Saturday	14	961	684	633	272	256	375	606	1140	1442	1671	2115	2305	2733	2902	2817	3055	2804	2576	2400	2235	2073	1895	1676	1501	41127
Mar-15 Sunday	15	1079	852	924	372	266	331	458	884	1136	1558	1888	2283	2732	3063	3179	3246	3116	2898	2644	2448	1896	1361	959	728	40301
Mar-15 Monday	16	437	229	244	154	301	698	1783	3164	3243	2574	2572	2629	2880	2950	3368	4511	5128	4132	3356	2596	2032	1569	1051	761	52362
Mar-15 Tuesday	17	532	299	241	156	294	676	1789	3245	3063	2451	2427	2639	2892	3010	3359	4481	4754	2833	3659	2726	2099	1659	1247	975	51506
Mar-15 Wednesday	18	609	408	320	188	283	662	1827	3265	3055	2572	2491	2733	3051	3099	3452	4634	5125	4965	3286	2750	2133	1421	1283	879	54491
Mar-15 Thursday	19	573	312	212	153	315	654	1831	3117	3528	2747	2495	2822	2929	3095	3526	4696	5174	4700	3171	2301	1945	1580	1148	908	53932
Mar-15 Friday	20	529	335	271	204	301	674	1747	3031	3180	2544	2659	3167	3488	3633	3668	3319	5194	4660	3495	2927	2364	2032	1876	1535	56833
Mar-15 Saturday	21	1008	753	723	297	311	407	607	1232	1820	2002	2289	2594	2762	2801	3101	3236	3303	3061	2870	2705	2194	1929	1831	1534	45370
Mar-15 Sunday	22	1020	859	900	336	287	333	464	892	1143	1618	2010	2229	2370	2891	2759	2857	2463	2166	2014	1961	1362	1055	782	653	35424
Mar-15 Monday	23	375	223	187	145	335	700	1725	3217	3068	2426	2340	2671	2751	2809	3272	4224	4676	4440	2913	2087	1607	1204	943	722	49060
Mar-15 Tuesday	24	489	301	202	146	300	703	1830	3336	3005	2534	2240	2540	2795	2817	3434	4463	4870	4400	3299	2489	1931	1368	999	841	51332
Mar-15 Wednesday	25	496	319	281	183	286	632	1793	3359	3064	2558	2373	2694	2952	2961	3427	4406	5174	4662	3359	2648	2114	1599	1158	841	53339
Mar-15 Thursday	26	549	341	230	179	293	742	1798	3141	2963	2471	2519	2952	3095	3218	3684	4719	4766	4507	3442	2711	2175	1647	1232	941	54315
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	957	693	635	293	286	473	788	1478	1848	2231	2907	2709	2755	2667	2480	2661	2722	2520	2398	2406	2041	1920	1533	1420	42821
Mar-15 Sunday	29	1071	917	853	338	267	279	428	960	1223	1740	2257	2484	2985	3018	2985	3078	2908	2866	2539	2241	1789	1269	967	748	40210
Mar-15 Monday	30	482	286	250	156	310	633	1470	2780	2583	2311	2451	2681	2922	2904	3195	4331	4861	3888	3065	2391	1898	1488	1094	825	49255
Mar-15 Tuesday	31	516	320	221	160	257	615	1475	2839	2824	2401	2287	2737	2778	3057	3503	4595	5023	4763	3356	2731	2182	1791	1605	958	52994
Apr-15 Wednesday	1	532	331	275	177	299	645	1486	2869	2775	2478	2632	2847	3047	3087	3352	4383	5253	4701	3308	2682	2208	1628	1241	1001	53237
Apr-15 Thursday	2	614	324	261	174	308	642	1399	2762	2901	2601	2626	2984	3220	3122	3690	4782	5268	4922	3489	2556	2378	1693	1382	1029	55127
Apr-15 Friday	3	692	438	382	205	302	583	1207	2384	2423	2448	2694	2963	3402	3793	4210	4911	4770	2843	3325	2959	2684	1998	1815	1542	54973
Apr-15 Saturday	4	1059	809	728	302	281	349	539	1142	1421	1788	2077	2358	2528	2810	2805	2933	3071	2804	2555	2528	2133	1866	1776	1462	42124
Apr-15 Sunday	5	993	729	731	308	226	280	405	933	1148	1522	1893	2072	2712	2837	2804	3274	2947	2671	2378	2157	1835	1277	916	735	37783
Apr-15 Monday	6	439	255	222	155	340	718	1784	3217	2957	2500	2539	2605	2889	3128	3398	4528	5229	4557	3452	2582	2164	1411	1115	901	53085
Apr-15 Tuesday	7	518	309	232	158	292	723	1896	3385	3179	2726	2649	2826	2914	3021	3544	4647	5162	4373	3868	2790	2247	1628	1297	975	55359
Apr-15 Wednesday	8	546	344	257	162	302	708	1868	3452	3028	2490	2520	3025	3249	3156	3670	4665	5221	4334	4017	2970	2600	1846	1392	939	56761
Apr-15 Thursday	9	603	342	230	160	323	731	1915	3349	3103	2585	2617	2829	3080	3225	3735	4964	4943	4407	3883	3031	2455	1928	1795	1102	57335
Apr-15 Friday	10	726	388	332	225	346	760	1823	3172	3054	2748	2852	3107	3601	3722	4206	4901	5285	4494	3958	2988	2430	2249	2146	1592	61105
Apr-15 Saturday	11	1078	753	711	336	320	425	750	1411	1846	2009	2341	2431	2773	2826	2798	2980	3033	1677	2142	2383	2108	2116	1700	1469	42416
Apr-15 Sunday	12	1168	930	999	358	305	409	561	1105	1532	1936	2276	2582	2900	3144	3081	3364	3089	2811	2476	2243	1629	1022	927	689	41536
Apr-15 Monday	13	356	240	180	168	322	752	1825	3149	2928	2441	2498	2631	2847	2996	3339	4279	4973	4522	3063	2495	1986	1521	1103	823	51437
Apr-15 Tuesday	14	496	311	230	173	312	737	1880	3333	3043	2385	2330	2596	2786	3008	3399	4480	5012	4294	3305	2488	2224	1423	1186	914	52345
Apr-15 Wednesday	15	545	362	254	169	314	700	1931	3329	2960	2416	2375	2556	2889	3089	3478	4614	5209	4246	3311	2254	1786	1347	1064	808	52006
Apr-15 Thursday	16	505	337	213	166	337	699	1824	3430	3195	2373	2435	2763	2946	3151	3415	4513	5105	4805	3356	2406	1964	1465	1235	865	53503
Apr-15 Friday	17	577	370	292	201	352	680	1739	3142	3121	2782	2804	2968	3451	3567	3928	4645	5055	4319	3232	2602	2089	1747	1654	1439	56756
Apr-15 Saturday	18	1029	757	703	334	274	385	696	1331	1492	1780	2003	2350	2611	2583	2648	2950	2860	2848	2501	2366	2173	1891	1865	1683	42113
Apr-15 Sunday	19	1066	805	822	339	288	309	475	995	1117	1568	1851	2322	2688	2864	2837	2762	2600	2434	2097	1640	1250	1028	838	730	35725
Apr-15 Monday	20	368	246	194	168	350	744	1876	3143	2999	2589	2407	2599	2875	2962	3356	4491	5283	4739	3052	2308	1734	1240	1027	788	51538
Apr-15 Tuesday	21	519	319	241	149	358	685	1933	3383	3168	2385	2422	2640	2849	2931	3559	4399	4773	4295	3315	2630	2191	1532	1134	850	52660
Apr-15 Wednesday	22	490	325	254	169	301	730	1855	3333	3233	2605	2439	2647	2944	3009	3592	4517	4493	4553	4162	2965	2254	1734	1167	964	54735
Apr-15 Thursday	23	604	334	220	180	317	702	1976	3506	3736	3086	2549	2832	3008	3156	3484	4531	5255	5207	4027	2833	2297	1798	1635	996	58269
Apr-15 Friday	24	665	416	380	232	373	721	1803	3188	2977	2643	2692	3156	3328	3705	4047	4763	4655	4132	3074	2690	2334	2157	2096	1806	58033
Apr-15 Saturday	25	1033	744	761	307	313	372	690	1217	1563	1806	2183	2403	2703	2395	2357	2816	2631	2322	2125	2087	2140	2205	1790	1442	40405
Apr-15 Sunday	26	979	724	756	340	297	347	481	1019	1241	1613	1855	2019	2657	2921	3067	3278	2995	2998	2719	2591	2198	1460	1043	751	40349
Apr-15 Monday	27	440	248	216	153	318	752	1980	3280	3230	2613	2563	2719	2814	2910	3345	4387	5037	4779	3344	2370	1801	1316	966	764	52345
Apr-15 Tuesday	28	480	303	207	160	295	724	1967	3352	3037	2349	2379	2577	2766	2952	3404	4504	4626	2943	3757	2667	2066	1528	1038	841	50922
Apr-15 Wednesday	29	585	314	237	154	292	687	1780	2901	3052	2243	2352	2550	2742	2884	3290	3000	2479	2459	2871	2203	1759	1279	955	821	43889
Apr-15 Thursday	30	510	301	215	153	331	735	1812	3233	2964	2531	2536	2727	2729	3133	3596	4729	4608	4757	3334	2627	2256	1657	1276	1085	53835
May-15 Friday	1	644	445	310	234	341	679	1792	3087	3621	3264	2804	3035	3277	3587	4319	5029	5042	4444	3344	2540	2177	2055	2055	1549	59674
May-15 Saturday	2	1015	696	630	343	272	399	760	1391	1869	2058	2323	2547	2680	2873	3152	3418	3402	3017	2633	2702	2594	2233	1869	1483	46359
May-15 Sunday	3	822	1120	766	344	312	354	566	1015	1198	1735	2000	2206	2735	3053	3031	3169	3064	2817	2614	2296	1971	1379	1019	698	40284
May-15 Monday	4	418	270	187	156	338	735	1878	3231	3074	2314	2675	3105	2974	3145	3390	4419	5126	4587	3172	2461	1901	1536	1193	792	53077
May-15 Tuesday	5	516	333	212	170	307	731	1929	3223	2941	2269	2352	2655	2894	3134	3492	4621	5027	4591	3638	2782	2214	1591	1129	998	53749

May-15	Wednesday	6	664	417	298	173	322	737	1903	3288	3204	2497	2568	2806	3094	3268	3627	4543	5443	4751	3907	2764	2248	1613	1174	932	56241
May-15	Thursday	7	584	376	255	167	345	718	1909	3317	3417	2818	2782	2987	3146	3162	3398	4542	4928	4482	2906	2176	1875	1496	1299	977	54062
May-15	Friday	8	620	354	330	188	326	700	1798	3073	2992	2591	2817	3061	3396	3605	3860	4842	4528	3452	3037	2520	2115	2085	1615	1468	55373
May-15	Saturday	9	974	650	693	331	240	462	904	1444	1591	1926	2151	2446	2899	2875	2775	3090	2888	2975	2491	2367	2027	1932	1692	1472	43295
May-15	Sunday	10	998	851	817	332	285	310	524	958	1165	1668	1927	2195	2756	3058	3251	3357	3176	2840	2511	2255	1909	1437	1179	855	40614
May-15	Monday	11	476	278	255	182	368	748	1856	3115	3201	2575	2644	2767	2906	2947	3340	4399	4305	4499	2929	2408	1867	1337	1050	841	51293
May-15	Tuesday	12	520	348	211	166	309	735	1933	3297	3129	2321	2302	2597	2914	3035	3396	4489	5024	3361	2646	2808	2115	1570	1178	934	51338
May-15	Wednesday	13	526	349	251	163	321	713	1963	3263	3021	2428	2379	2776	2876	3141	3516	4525	5244	4605	3453	2659	2318	1696	1292	997	54475
May-15	Thursday	14	588	369	244	182	352	702	1882	3310	3101	2509	2565	2861	2955	3227	3515	4688	5409	4885	3448	2713	2392	2060	1540	1112	56609
May-15	Friday	15	678	409	332	218	358	724	1766	3256	2799	2527	2701	2934	3625	3696	4056	5010	5272	4372	3244	2693	2303	2359	2448	1608	59388
May-15	Saturday	16	1144	790	708	344	319	399	804	1390	1935	2099	2250	2239	2617	2809	2769	3071	3051	3054	2928	2952	2531	2827	2046	1678	46754
May-15	Sunday	17	1163	1107	953	401	315	392	570	1123	1293	1704	2149	2351	2870	3040	3196	3186	2793	2878	2580	2553	2115	1470	1136	877	42215
May-15	Monday	18	465	303	303	167	328	790	1940	3156	3118	2465	2443	2735	2990	3056	3396	4440	5100	4764	3221	2301	1983	1495	980	858	52797
May-15	Tuesday	19	517	371	233	159	349	716	1991	3412	3372	2456	2457	2657	2948	3086	3483	4271	5191	4623	3259	2760	2315	1622	1221	949	54418
May-15	Wednesday	20	561	353	258	168	309	731	2014	3397	3101	2345	2601	2694	3053	3168	3305	4094	4042	3904	3201	2219	1913	1504	1224	872	51031
May-15	Thursday	21	550	357	227	153	356	732	1904	3375	3148	2646	2750	2921	3122	3171	3518	4776	5390	4617	3414	2753	2234	1887	1472	1248	56721
May-15	Friday	22	740	459	316	204	328	674	1703	3032	2996	2581	2858	3005	3489	3631	4065	5076	5086	4110	3224	2610	2259	2083	1857	1754	58140
May-15	Saturday	23	1104	776	742	328	281	351	680	1221	1609	1763	2020	2121	2341	2556	2668	3072	3042	3055	2951	2708	2523	2428	2028	1724	44092
May-15	Sunday	24	1181	901	883	388	265	245	429	900	1081	1416	1664	1889	2372	2491	2720	2977	2880	2853	2769	2684	2310	2000	1736	1381	40415
May-15	Monday	25	844	564	477	231	227	350	638	1167	1527	2055	2263	2335	2640	2752	2983	3223	3004	2694	2304	2060	1769	1781	1674	854	40416
May-15	Tuesday	26	473	276	237	173	353	745	2069	3464	2969	2465	2451	4078	2611	2146	2135	2314	2758	2482	2762	2445	2094	1603	1197	898	45198
May-15	Wednesday	27	550	338	220	171	314	740	1903	3306	3025	2368	2594	2804	2961	3092	3475	4581	5125	4631	3388	2603	2228	1759	1342	983	54501
May-15	Thursday	28	600	394	264	159	303	740	1913	3310	2979	2372	2605	2850	2991	3210	3557	4589	4897	4269	3388	2612	2305	1784	1395	1141	54627
May-15	Friday	29	658	406	331	226	330	671	1823	3120	2845	2608	2772	3157	3429	3555	3986	4856	4909	4293	3261	2462	2151	2211	1952	1571	57583
May-15	Saturday	30	1019	802	776	352	288	407	767	1373	1853	2260	2312	2387	2602	2636	2919	3129	2983	2820	2666	2521	2373	2260	1944	1731	45180
May-15	Sunday	31	1142	906	888	397	315	320	479	963	1223	1632	1972	2198	2781	2794	3006	3139	2939	2661	2499	2276	1823	1601	1313	905	40172
Jun-15	Monday	1	506	259	274	182	344	801	1864	3246	2906	2380	2524	2747	2879	3061	3469	4397	5065	4843	3213	2400	1839	1584	1162	956	52901
Jun-15	Tuesday	2	548	339	154	101	297	718	1861	3395	3058	2520	2655	2711	2977	2962	3381	4401	4994	4502	2946	2343	1965	1639	1210	939	52616
Jun-15	Wednesday	3	601	317	258	162	310	648	1651	3152	3005	2456	2714	3070	2898	3099	3229	4193	4896	4637	3083	2317	2055	1692	1352	1060	52855
Jun-15	Thursday	4	596	371	262	200	340	718	1809	3192	3089	2614	2897	3039	3031	3361	3828	4678	4703	4013	3507	2575	2115	1879	1545	1148	55510
Jun-15	Friday	5	743	447	367	233	342	671	1536	2836	2797	2575	2654	2980	3419	3612	4018	4911	4325	3704	3183	2696	2137	2162	2177	1956	56481
Jun-15	Saturday	6	1092	824	794	325	282	365	809	1398	1601	1885	2112	2258	2566	2702	2822	3212	3081	2907	2710	2569	2298	2496	1953	1698	44759
Jun-15	Sunday	7	1127	877	912	367	301	341	563	1013	1242	1558	1956	2323	2662	2938	2969	3147	2908	2805	2562	2401	1989	1427	1135	914	40437
Jun-15	Monday	8	463	292	274	181	364	691	1735	2957	3029	2658	2531	2796	2948	3059	3309	4318	5099	4422	3174	2356	1847	1524	1224	868	52119
Jun-15	Tuesday	9	561	346	275	188	340	717	1682	3164	2845	2381	2392	2662	2854	3058	3426	4362	2726	2798	3400	2464	1542	1229	903	733	47048
Jun-15	Wednesday	10	592	288	258	192	308	709	1657	3126	2978	2404	2601	2795	2942	3080	3506	4545	5163	4243	3434	2501	2087	1772	1365	1161	53707
Jun-15	Thursday	11	669	376	316	187	347	741	1705	3104	3008	2485	2587	2767	3149	3200	3293	4576	4557	3633	3544	2604	2208	1903	1371	1056	53386
Jun-15	Friday	12	717	440	385	207	329	695	1583	2791	2872	2554	2719	3017	3448	3498	3960	4807	4864	4393	3121	2713	2109	2097	1956	1660	56935
Jun-15	Saturday	13	1161	881	722	335	299	378	771	1460	1818	2151	2460	2667	2563	2752	2907	3120	3054	2921	2616	2563	2230	2362	2173	1680	46044
Jun-15	Sunday	14	1193	913	925	354	327	370	522	1049	1207	1578	1965	2283	2715	2764	3032	2993	2787	2662	2464	2258	1732	1517	1150	885	39645
Jun-15	Monday	15	524	309	245	187	372	712	1702	3032	3015	2391	2508	2655	2970	3027	3384	4617	4951	4541	3081	2272	1846	1461	1178	970	51950
Jun-15	Tuesday	16	567	394	245	192	363	694	1734	3156	3049	2487	2378	2655	2986	3062	3446	4614	5022	4699	3209	2482	2193	1808	1462	942	53839
Jun-15	Wednesday	17	680	428	284	192	321	721	1723	3201	3072	2487	2436	2764	3219	3217	3643	4616	5013	4606	3229	2544	2115	1787	1487	1309	55094
Jun-15	Thursday	18	637	405	303	205	382	779	1642	3209	3083	2520	2511	2823	3136	3203	3688	4636	5111	4587	3166	2729	2160	2019	1808	1222	55964
Jun-15	Friday	19	763	442	365	225	354	705	1575	2850	2911	2676	2784	3206	3495	3758	4121	4932	4622	4121	2923	2504	2319	2305	2255	1786	57997
Jun-15	Saturday	20	1143	767	710	337	300	431	738	1406	1944	2091	2452	2800	2706	2719	2848	2969	3000	2738	2481	2463	2370	2649	2150	1801	46013
Jun-15	Sunday	21	1193	861	841	347	363	304	509	985	1221	1585	2131	2419	3125	3086	2963	2860	2677	2599	2351	2093	2146	2712	1670	1105	42146
Jun-15	Monday	22	596	385	243	223	395	757	1684	2951	2886	2484	2493	2789	3000	3001	3287	4369	4997	3835	3044	2278	1712	1321	1066	888	50684
Jun-15	Tuesday	23	521	342	259	186	321	809	1749	3066	2978	2473	2415	2699	2877	3087	3446	4567	5221	4709	3244	2607	2248	2310	1405	1000	54539
Jun-15	Wednesday	24	607	377	280	167	329	747	1668	3153	3048	2554	2594	2794	3139	3134	3602	4699	5174	4298	3405	2520	2211	1886	1498	1145	55029
Jun-15	Thursday	25	723	389	233	181	337	668	1655	3022	3142	2751	2634	2849	3264	3251	3732	4793	5103	4815	3328	2763	2262	1985	1516	1203	56599
Jun-15	Friday	26	756	417	348	206	394	776	1653	2921	2786	2295	2520	2820	2806	2662	3333	4243	3953	3640	2902	2453	2030	2014	1933	1784	51645
Jun-15	Saturday	27	1084	719	691	362	345	407	856	1401	1838	2313	2481	2501	2514	2763	3016	3020	2816	2566	2436	2362	2048	2016	1894	1683	44132
Jun-15	Sunday	28	1171	910	896	348	308	368	489	987	1204	1567	1934	2249	2758	2908	2889	3262	2729	2568	2285	1873	1644	1419	1125	762	38653
Jun-15	Monday	29	490	293	246	197	401	746	1638	2922	2766	2318	2431	2600	2945	3043	3554	4557	5002	4681	3347	2332	1828	1540	1219	938	52034
Jun-15	Tuesday	30	497	367	268	198	344	707	1626	2954	2830	2375	2425	2792	2913	3112	3434	4602	5035	4875	3605	2873	1804	1578	1213	860	53287
Jul-15	Wednesday	1	596	384	249	171	340	720	1677	2999	2899	2525	2435	2795	3068	3224	3522	4482	5194	4807	3496	2652	2118	1799	1386	1097	54635
Jul-15	Thursday	2	640	386	293	212	352	664	1498	2798	2985	2588	2689	2982	3369	3754	3872	4821	5200	4486	3238	2632	1958	1441	1222	1051	55131
Jul-15	Friday	3	734	474	407	247	284	447	803	1488	1767	1907	2129	2404	2790	2967	3039	2966	3141	2717	2474	2177	1967	1978	1813	1563	42683
Jul-15	Saturday	4	1139	912	957	381	273	314	494	927	1073	1359	1653	1787	1941	2118	2311	2452	2287	2044	1855	1946	2378	2894	3178	1675	38348
Jul-15	Sunday	5	1057	782	813	338	277	309	470	983	1208	1611	2172	2571	2947	3231	3059	3069	2819	2509	2323	2003	1737	1708	1131	911	40038
Jul-15	Monday	6	495	343	254	190	322	693	1705	2789	3027	2699	2598	2844	2978	3111	3421	4379	4962	4662	3011	2322	1871	1710	1336	901	52623
Jul-15	Tuesday	7	547	349	240	161	304	769	1699	2871	2854	2386	2358	2641	2881	2993	3350	4371	5232	4849	3213	2327	1894	1645	1370	925	52229
Jul-15	Wednesday	8	595	387	274	173	324	725	1634	3080	2830	2545	2516	2797	2993	3034	3756	4501	5189	4712	3377	2566	2067	1721	1500	1077	54373

Jul-15	Thursday	9	627	413	258	199	330	726	1655	2931	2866	2489	2489	2868	3127	3342	3754	4561	4238	4347	3508	2540	2196	2026	1703	1151	54344
Jul-15	Friday	10	723	492	425	264	350	719	1498	2831	2856	2560	2634	3064	3447	3544	3991	4884	5038	4440	3183	2427	2117	2125	1977	1957	57546
Jul-15	Saturday	11	1082	801	706	376	323	437	764	1469	1874	2080	2351	2431	2668	2776	2816	3040	2966	2676	2540	2413	2171	2647	1949	1674	45030
Jul-15	Sunday	12	1159	808	865	361	291	341	511	990	1187	1511	1908	2305	2829	2886	2914	3081	2848	2542	2302	2172	1937	1609	1252	875	39484
Jul-15	Monday	13	530	336	270	187	321	741	1735	2979	2961	2406	2478	2620	3052	3150	3288	4437	4932	4810	3263	2271	1805	1343	990	863	51768
Jul-15	Tuesday	14	490	337	242	169	314	722	1637	3036	2828	2632	2407	2685	2965	3101	3464	4545	5181	4735	3248	2466	1978	1582	1176	960	52900
Jul-15	Wednesday	15	549	375	274	185	320	714	1669	3051	2945	2407	2630	2959	3210	3319	3617	4542	5192	4802	3499	2540	2138	1803	1333	1162	55235
Jul-15	Thursday	16	664	352	266	193	348	742	1630	3087	3224	2610	2778	2944	3178	3274	3475	4945	5183	4201	3444	2480	2140	1977	1384	1114	55633
Jul-15	Friday	17	742	454	384	257	362	671	1504	2794	2894	2510	2710	3048	3527	2833	3242	4131	3746	4073	3217	2534	2060	2078	1848	1563	53182
Jul-15	Saturday	18	1028	825	809	365	308	396	767	1443	1773	2031	2262	2434	2623	2816	2771	3082	3087	2802	2513	2421	2234	2399	2078	1842	45109
Jul-15	Sunday	19	1225	914	1028	339	309	300	463	1014	1184	1552	1945	2357	2956	3086	3023	3065	2974	2589	2187	1838	1393	1410	1122	746	39019
Jul-15	Monday	20	510	302	246	167	351	749	1690	3011	3048	2545	2604	2731	2998	2909	3430	3950	4762	4585	3157	2347	1806	1490	1162	921	51471
Jul-15	Tuesday	21	573	390	236	193	336	743	1714	3092	3149	2721	2385	2628	3061	2992	3454	4776	5147	4539	3136	2350	1958	1600	1268	1008	53449
Jul-15	Wednesday	22	586	379	267	185	303	774	1665	3004	2938	2348	2542	2799	3067	3131	3461	4506	3652	4279	3357	2492	2112	1789	1449	1058	52143
Jul-15	Thursday	23	666	342	277	196	340	737	1633	2961	3042	2408	2526	2886	3456	3188	3717	4552	4935	3516	3341	2314	1969	1658	1408	1046	53114
Jul-15	Friday	24	693	435	357	204	340	643	1512	2788	2805	2530	2749	3156	3480	3591	4131	4655	4999	4152	3008	2452	2114	2019	1738	1537	56088
Jul-15	Saturday	25	1044	762	721	355	304	415	686	1406	1777	2104	2441	2394	2601	2688	2951	3128	2959	2821	2531	2342	2251	2598	2057	1778	45114
Jul-15	Sunday	26	1310	950	1000	388	279	277	476	981	1158	1556	1941	2367	2967	2948	2993	3050	2706	2401	2385	2162	1931	1717	1163	847	39953
Jul-15	Monday	27	507	285	240	177	327	727	1648	2838	2865	2443	2425	2673	2905	3037	3381	4261	4360	4646	2532	1932	1754	1578	1324	956	49821
Jul-15	Tuesday	28	585	353	225	183	309	697	1651	2984	2866	2351	2371	2610	2893	3140	3501	4555	5289	4861	3242	2425	2089	1534	1271	965	52950
Jul-15	Wednesday	29	591	415	256	198	320	733	1665	3031	2921	2499	2447	2788	3126	3173	3513	4623	4631	4250	3412	2527	2211	1722	1358	1049	53459
Jul-15	Thursday	30	664	381	284	188	333	676	1682	3050	3124	2661	2663	3033	3184	3187	3607	4585	5195	4277	3214	2625	2275	1913	1403	1187	55391
Jul-15	Friday	31	710	446	371	233	369	698	1512	2781	2789	2618	2862	3182	3520	3625	4103	4901	4931	4408	3336	2650	2078	1986	1701	1570	57380
Aug-15	Saturday	1	1095	786	723	360	337	430	693	1422	1556	1939	2438	2761	2982	3299	3029	2948	2869	2774	2585	2326	2156	2122	1927	1539	45096
Aug-15	Sunday	2	1120	1045	999	395	287	314	455	986	1189	1477	1977	2294	2834	3039	3128	2856	2315	2233	2049	1953	1632	1505	1197	770	38049
Aug-15	Monday	3	404	247	230	159	302	725	1655	3010	3107	2602	2716	2833	3028	3026	3361	4247	2347	3758	3398	2238	1741	1395	1111	847	48487
Aug-15	Tuesday	4	517	332	202	170	309	725	1631	2973	2774	2407	2513	2680	2969	3060	3435	4588	4800	4485	3194	2483	2057	1628	1254	958	52144
Aug-15	Wednesday	5	619	342	228	185	308	725	1655	3115	2739	2447	2475	2708	3060	3062	3526	4677	4969	4198	3272	2694	2107	1688	1272	999	53070
Aug-15	Thursday	6	631	362	258	210	369	745	1668	3054	2914	2432	2459	2889	3106	3185	3812	4105	4001	4293	3081	2374	1967	1566	1184	1049	51714
Aug-15	Friday	7	609	417	357	202	341	663	1463	2785	2860	2532	2775	3077	3613	3634	4064	4849	5094	4041	3210	2573	2212	2135	2135	1543	57184
Aug-15	Saturday	8	1067	760	741	363	323	367	875	1560	1920	2267	2609	2566	2654	2861	3042	3222	3228	2976	2787	2767	2432	2248	1912	1635	47182
Aug-15	Sunday	9	1157	816	857	360	315	310	521	1046	1226	1628	2082	2554	2944	3119	3081	3252	3034	2695	2493	2383	2159	1516	1152	801	41501
Aug-15	Monday	10	521	297	268	189	349	697	1681	3098	2766	2356	2475	2677	2896	3094	3326	4398	5029	4753	3134	2391	1999	1435	1136	848	51813
Aug-15	Tuesday	11	511	391	241	166	340	679	1689	3198	2786	2371	2468	2668	2900	3048	3670	4582	4909	4535	3299	2602	2093	1548	1383	927	53004
Aug-15	Wednesday	12	522	339	271	187	331	734	1652	3240	2882	2449	2471	2738	2969	3223	3480	4669	5215	4490	3161	2607	2203	1696	1377	1061	53967
Aug-15	Thursday	13	627	402	303	191	332	711	1587	3201	2828	2397	2597	2866	3038	3125	3781	4832	5223	4191	3278	2740	2344	1969	1719	1403	55685
Aug-15	Friday	14	748	437	412	200	348	715	1504	2958	2791	2473	2722	3133	3504	3585	4134	5044	4986	4297	3235	2790	2393	2321	2253	1673	58656
Aug-15	Saturday	15	1060	792	676	340	316	408	732	1520	1831	2028	2386	2669	2831	2679	2918	3100	3086	2814	2559	2401	2327	2105	2008	1665	45251
Aug-15	Sunday	16	1196	934	976	346	279	310	507	1014	1169	1577	2117	2516	2918	2970	3150	3265	2989	2811	2409	2167	1830	1379	1073	782	40684
Aug-15	Monday	17	476	287	202	174	357	816	1905	3203	2957	2259	2385	2772	2870	3124	3462	4424	4966	4433	2928	2185	1787	1312	1033	805	51122
Aug-15	Tuesday	18	516	344	204	185	306	807	1877	3248	2879	2259	2293	2673	2867	3034	3361	4007	4185	3368	3502	2267	1701	1223	973	739	48818
Aug-15	Wednesday	19	524	343	225	151	277	755	1880	3200	2880	2318	2404	2670	2953	3069	3556	4223	4504	4041	2773	2374	1878	1467	1136	846	50447
Aug-15	Thursday	20	541	323	213	174	322	746	1849	3290	2819	2358	2486	2797	3050	3061	3461	4367	4080	4046	3173	2217	1780	1421	1249	889	50712
Aug-15	Friday	21	640	401	365	222	339	784	1777	3220	3195	2512	2678	2974	3307	3543	3864	4867	4523	3747	2887	2332	1943	1839	1837	1523	55319
Aug-15	Saturday	22	991	741	656	295	282	354	714	1385	1727	1994	2177	2395	2614	2678	2939	2992	2881	2807	2725	2392	1912	1963	1579	1311	42504
Aug-15	Sunday	23	964	744	755	334	255	331	518	980	1134	1555	1906	2295	2931	3014	2991	3375	2700	2645	2438	2020	1647	1088	886	715	38221
Aug-15	Monday	24	412	241	229	148	345	821	1935	3404	2870	2323	2410	2615	2897	2956	3096	4288	4977	4437	3066	2259	1912	1287	931	788	50647
Aug-15	Tuesday	25	487	318	188	157	304	764	2013	3301	2957	2292	2348	2626	2819	3068	3460	4612	4991	4465	3271	2461	2029	1376	1104	816	52227
Aug-15	Wednesday	26	529	334	255	163	277	785	1923	3422	2886	2413	2381	2748	2957	3066	3391	4501	5119	4413	3154	2571	2229	1493	1244	916	53170
Aug-15	Thursday	27	494	340	252	201	310	753	1891	3450	3135	2733	2761	2925	3149	3089	3485	4515	4519	4388	3302	2447	2014	1596	1221	955	53925
Aug-15	Friday	28	602	418	365	227	350	742	1821	3363	2931	2621	2673	3005	3583	3532	4205	4777	4886	4110	3254	2489	1939	1684	1704	1467	56748
Aug-15	Saturday	29	1001	768	667	353	265	418	682	1295	1530	1820	2052	2387	2704	2840	2968	2963	2943	2575	2296	2271	2279	2206	1846	1586	42715
Aug-15	Sunday	30	1054	908	941	379	265	288	540	932	1091	1415	1960	2300	1727	2701	2886	2669	2222	1911	1704	1634	1255	1062	815	676	33335
Aug-15	Monday	31	369	236	173	137	329	747	1794	3126	2853	2260	2140	2450	2544	2632	2952	4180	4568	3825	2760	2274	1928	1364	988	817	47446
Sep-15	Tuesday	1	477	343	235	163	292	766	1839	3482	2902	2288	2441	2809	2973	3175	3560	4653	5217	3662	3557	2839	2267	1650	1241	852	53683
Sep-15	Wednesday	2	479	375	245	176	306	784	1897	3476	2946	2389	2437	2707	2973	3061	3571	4489	5216	4074	3702	2749	2293	1653	1358	910	54266
Sep-15	Thursday	3	551	353	264	170	327	828	1972	3532	3021	2497	2663	2952	3104	3045	3681	4749	5108	4039	3556	2448	1907	1579	1230	942	54518
Sep-15	Friday	4	603	421	348	228	355	759	1658	3222	2855	2500	2799	3111	3590	3739	4240	4713	4639	3977	2957	2521	2152	1861	1553	1460	56261
Sep-15	Saturday	5	1142	782	684	312	271	396	620	1327	1694	1977	2207	2360	2417	2601	2870	2998	3055	3022	2520	2417	2192	2191	2128	1566	43749
Sep-15	Sunday	6	1182	956	832	362	199	266	401	915	1039	1386	1699	2008	2735	2904	2901	2890	2696	2675	2388	1941	1637	1480	1224	1087	37803
Sep-15	Monday	7	752	652	459	206	264	321	536	1125	1415	1738	2231	2446	2672	2654	3083	3213	2988	2608	2066	1977	1537	1155	934	784	37816
Sep-15	Tuesday	8	407	234	207	172	360	823	1942	3376	3122	2336	2442	2763	2943	2991	3506	4452	5159	4470	3157	2550	1981	1416	1065	871	52745
Sep-15	Wednesday	9	506	350	244	168	331	774	1870	3466	2887	2341	2307	2706	2879	3113	3610	4580	5229	4411	3328	2580	2141	1541	1151	874	53387
Sep-15	Thursday	10	531	370	224	172	319	789	1935	3444	3280	2571	2576	2755	3064	3172	3601	3674	3367	4841	3643	2770	2258	1452	1209	951	52968

Sep-15	Friday	11	615	362	309	208	353	763	1785	3261	2891	2548	2722	3109	3789	3714	4276	5014	4813	4142	3416	2647	2183	1818	1837	1546	58121
Sep-15	Saturday	12	1023	745	654	285	361	484	764	1443	1653	1922	2123	2310	2523	2553	2636	2759	2496	2513	2189	2198	1757	2067	1717	1419	40594
Sep-15	Sunday	13	1038	779	746	331	255	364	537	960	1156	1549	1943	2149	2821	2718	2901	3117	2876	2694	2370	2272	1886	1217	960	712	38351
Sep-15	Monday	14	452	219	219	141	345	758	1897	3378	2975	2583	2686	2115	2843	2969	3413	4576	5366	4592	3104	2519	1920	1388	1007	794	52259
Sep-15	Tuesday	15	530	319	217	161	304	800	1906	3416	2941	2216	2429	2633	2968	3041	3551	4780	4916	4486	3502	2931	2163	1561	1204	848	53823
Sep-15	Wednesday	16	540	322	237	168	295	787	1964	3491	2971	2414	2487	2706	3036	3136	3536	4656	5262	4641	3409	2712	2144	1505	1239	887	54545
Sep-15	Thursday	17	542	344	222	167	356	803	1952	3299	3313	2551	2574	2877	2990	3191	3485	4510	5259	4488	3348	2521	2032	1661	1259	1007	54751
Sep-15	Friday	18	631	372	322	228	376	736	1784	3402	2908	2679	3102	3621	3977	3667	4267	4995	5205	4039	3268	2704	2166	1947	1872	1668	59936
Sep-15	Saturday	19	1053	816	662	286	309	428	732	1493	1885	2058	2329	2464	2799	2958	2865	3102	3080	2741	2405	2553	2220	1996	1904	1546	44684
Sep-15	Sunday	20	1070	915	817	336	248	387	540	997	1286	1642	2147	2380	2885	3055	3023	2916	2783	2627	2239	2270	1766	1184	951	718	39182
Sep-15	Monday	21	505	236	187	184	346	817	1979	3450	2917	2601	2394	2768	2965	2995	3382	4613	5239	4536	3062	2403	1791	1330	986	787	52473
Sep-15	Tuesday	22	527	322	181	157	314	818	1981	3522	2979	2288	2318	2667	2906	2977	3446	4678	4926	4349	3179	2716	1968	1408	1107	884	52618
Sep-15	Wednesday	23	521	345	211	176	297	834	1929	3449	2990	2400	2443	2784	3130	3306	3676	4651	5205	4424	3209	2508	1996	1386	1190	835	53895
Sep-15	Thursday	24	541	363	228	172	368	835	1949	3502	3157	2590	2698	3005	3054	3054	3324	4595	4540	3969	2773	2253	1853	1424	1269	974	52490
Sep-15	Friday	25	562	368	288	223	350	749	1854	3336	2947	2536	2744	3160	3534	3776	4225	5084	5159	4307	3919	2681	2145	1955	1914	1580	59396
Sep-15	Saturday	26	1030	747	682	355	285	410	705	1482	1905	2089	2259	2486	2625	2745	2936	3141	2781	2650	2483	2404	1963	2305	1980	1505	43953
Sep-15	Sunday	27	1003	808	813	316	284	404	523	1009	1289	1706	2146	2400	2913	2851	2940	2784	2755	2323	2163	2082	1463	1099	907	756	37737
Sep-15	Monday	28	442	212	230	188	392	797	1939	3315	2937	2341	2436	2632	2811	2882	3318	4446	5165	4563	3084	2342	1616	1205	954	763	51010
Sep-15	Tuesday	29	463	302	197	161	305	836	1896	3364	3041	2342	2386	2662	2928	2872	3377	4273	4322	3517	3145	2529	1841	1425	1163	830	50177
Sep-15	Wednesday	30	501	344	229	159	308	794	1880	3365	2906	2489	2541	2910	3034	3125	3271	4498	4056	3243	3659	2721	1920	1238	1164	859	51214
Oct-15	Thursday	1	457	330	230	190	322	865	1907	3497	3214	2670	2750	2873	3177	2914	3765	4183	3683	3372	2484	1801	1373	1026	865	787	48735
Oct-15	Friday	2	478	305	238	188	325	652	1387	2560	2529	2370	2747	3007	3148	3131	3451	3835	3555	2807	2105	1681	1104	1049	946	868	44466
Oct-15	Saturday	3	555	353	326	174	179	273	487	795	984	989	1004	1026	963	971	885	951	906	884	712	765	499	407	369	451	15908
Oct-15	Sunday	4	301	168	139	99	107	180	278	622	626	826	1063	1151	1131	1105	1089	1158	1061	1029	891	807	560	474	336	235	15436
Oct-15	Monday	5	168	72	89	93	202	446	1002	1731	1700	1583	1671	1768	1990	1928	2062	2613	2902	2579	1769	1412	1036	791	684	605	30896
Oct-15	Tuesday	6	375	212	171	165	299	676	1608	2689	2536	2323	2349	2558	2646	2751	3133	4143	4693	4435	3347	2554	1742	1199	1030	774	48408
Oct-15	Wednesday	7	500	307	223	209	298	805	1866	3055	3235	2291	2245	2559	2833	2937	3498	4502	5041	4564	3802	3010	2060	1549	1109	937	53435
Oct-15	Thursday	8	627	318	237	181	344	825	1952	3294	3068	2411	2402	2740	2976	3062	3419	4657	5138	4420	1755	2760	2242	1523	1342	982	52675
Oct-15	Friday	9	651	400	297	233	320	747	1716	3252	3000	2500	2796	3063	3554	3612	4237	5150	5089	4486	3402	2853	2053	1738	1858	1519	58526
Oct-15	Saturday	10	992	780	659	316	315	424	739	1311	1614	1962	2202	2433	2993	2933	2571	2596	2408	2497	2479	2376	1923	1727	1532	1368	41150
Oct-15	Sunday	11	904	696	731	347	306	333	522	1080	1307	1697	1955	2188	2695	2723	2935	3053	2726	2681	2194	2329	1556	1209	955	736	37858
Oct-15	Monday	12	486	278	222	176	339	718	1760	3252	2801	2342	2423	2713	3024	3007	3356	4371	4897	4630	3235	2409	1670	1358	1004	793	51264
Oct-15	Tuesday	13	417	299	196	169	321	783	2011	3316	3114	2383	2475	2736	2896	3122	3652	4679	5235	4472	3372	2608	1831	1414	1058	852	53411
Oct-15	Wednesday	14	538	309	214	198	328	817	1889	3405	2944	2411	2621	2710	3066	3230	3572	4679	5036	4527	3447	2686	2032	1538	1153	935	54285
Oct-15	Thursday	15	543	322	240	181	329	811	1926	3377	3083	2417	2500	2798	3084	3205	3632	4747	4852	4289	3602	2880	2028	1660	1311	1057	54874
Oct-15	Friday	16	639	405	301	219	404	837	1874	3265	2982	2673	2729	3110	3748	3873	4330	4509	3471	3404	3525	2802	1985	1895	1830	1492	56302
Oct-15	Saturday	17	944	767	713	325	300	493	922	1487	1755	1989	2314	2393	2652	2717	2884	2959	2887	2798	2619	2470	1847	1726	1620	1480	43061
Oct-15	Sunday	18	1008	760	679	297	252	425	598	1023	1411	1783	2210	2410	2788	2821	2863	3097	2826	2538	2283	2182	1502	1146	995	747	38644
Oct-15	Monday	19	462	223	176	174	354	784	1900	3272	2891	2317	2492	2678	2780	2965	3434	4449	5044	3717	3098	2282	1615	1208	1122	772	50209
Oct-15	Tuesday	20	435	284	186	162	335	821	1927	3346	2888	2458	2442	2625	3164	3083	3520	4552	3958	3636	3668	2686	1766	1525	1073	909	51449
Oct-15	Wednesday	21	521	312	218	164	298	762	1952	3560	3026	2576	2530	2801	3127	3195	3531	4725	4990	3313	3308	2862	2249	1543	1218	912	53693
Oct-15	Thursday	22	584	353	219	195	336	833	1943	3521	3330	2741	2785	2882	3073	3298	3655	4866	4899	4217	3435	2600	2091	1855	1660	1034	56405
Oct-15	Friday	23	603	373	320	210	359	709	1784	3113	3007	2544	2717	3048	3691	3865	4193	5059	4803	4173	3460	2740	1937	1746	1702	1633	57789
Oct-15	Saturday	24	1050	737	660	333	250	407	678	1346	1647	1797	2234	3111	3622	3519	2876	3205	3045	2795	2762	2485	1772	1818	1661	1526	45336
Oct-15	Sunday	25	1091	723	814	327	309	374	515	951	1183	1598	1978	2271	2858	2960	3142	2878	2752	2717	2498	2295	1525	1015	948	691	38413
Oct-15	Monday	26	484	208	210	137	341	766	1892	3106	2967	2422	2464	2623	2897	2961	3420	4441	5025	4578	3195	2169	1565	1157	958	771	50757
Oct-15	Tuesday	27	514	292	197	154	349	742	1853	3232	2063	2290	2419	2658	2646	2865	3263	4399	4010	4052	2949	2182	1687	1176	1017	709	47718
Oct-15	Wednesday	28	513	317	186	162	271	741	1789	3210	3322	2406	2303	2588	2989	3121	3393	4291	4971	4320	3149	2513	1944	1360	1170	916	51945
Oct-15	Thursday	29	537	337	221	189	321	793	1815	3383	3299	2504	2511	2846	3108	3304	3683	4707	5157	4414	3606	2713	2113	1640	1288	977	55466
Oct-15	Friday	30	645	435	350	216	351	713	1738	3114	3078	2502	2602	3033	3458	3815	4097	4986	4624	4197	3443	2641	2009	1742	1931	1649	57369
Oct-15	Saturday	31	1076	734	705	300	276	391	661	1250	1509	1740	2042	2155	2467	2490	2638	2810	2815	2926	2202	1891	1633	1460	1493	1358	39022
Nov-15	Sunday	1	1111	863	967	805	598	304	488	1046	1402	1827	2155	2243	2766	3059	2935	2816	2638	2639	2196	1734	1312	917	754	556	38131
Nov-15	Monday	2	366	206	172	151	308	816	1970	3422	2946	2312	2437	2655	2864	3051	3454	4477	4679	3166	3470	2071	1612	1189	914	763	49471
Nov-15	Tuesday	3	482	293	190	158	283	758	1972	2462	3066	2441	2327	2921	2911	2948	3314	2778	4885	4298	3104	2010	1601	1176	1029	794	48201
Nov-15	Wednesday	4	538	300	213	143	285	757	1955	3418	3131	2585	2447	3001	3315	3033	3618	4521	5025	4342	3430	2349	1877	1273	1089	867	53512
Nov-15	Thursday	5	467	302	214	165	361	778	1921	3289	3274	2486	2475	2997	3133	3345	3820	4731	5202	4381	3743	2369	1961	1559	1184	954	55111
Nov-15	Friday	6	706	437	325	192	323	772	1797	3250	2979	2614	2829	3118	3718	3818	4316	5048	4974	4391	3588	2585	1909	1739	1728	1468	58624
Nov-15	Saturday	7	920	713	609	301	281	419	821	1389	1729	2047	2324	2551	2828	2800	3007	3046	2874	3226	3114	2208	1782	1624	1572	1335	43520
Nov-15	Sunday	8	957	806	747	314	310	318	511	1068	1468	1867	2232	2425	2885	2894	2885	2798	2452	2367	1923	1628	1140	845	765	587	36192
Nov-15	Monday	9	359	206	196	153	305	684	1722	3200	2265	2347	2229	2424	2681	2710	3110	4066	4532	3979	2817	1901	1401	1174	953	764	46178
Nov-15	Tuesday	10	471	271	199	139	315	757	1926	3466	3085	2422	2373	2644	2925	3136	3490	4615	5017	4413	3044	2333	1728	1428	1131	870	52198
Nov-15	Wednesday	11	524	335	252	178	267	707	1770	3307	2840	2310	2382	2652	3070	2962	3447	4195	4820	4590	3224	2300	1935	1474	1135	846	51522
Nov-15	Thursday	12	451	284	233	194	301	767	2104	3470	3051	2452	2561	2929	3022	3164	3679	4451	3961	4200	3195	2371	2050	1503	1202	1002	52597
Nov-15	Friday	13	627	388	305	200	361	691	1836	3205	3174	2804	2960	3291	3721	3697	3940	3901	3731	3944	3829	2522	2046	1979	1648	1400	56200

Nov-15 Saturday	14	940	659	682	283	328	445	830	1543	1786	1923	2227	2387	2537	2629	2774	3298	2977	3094	2573	2137	1756	1645	1557	1399	42409
Nov-15 Sunday	15	906	697	816	316	307	354	443	961	1151	1650	1855	2293	2797	2954	2979	2908	2846	2656	2199	1722	1378	1019	956	643	36806
Nov-15 Monday	16	329	217	190	173	341	792	1900	3285	3048	2444	2555	2769	3005	3052	3652	4546	5143	4758	3418	2038	1609	1185	927	735	52111
Nov-15 Tuesday	17	463	291	189	150	328	765	1928	3451	3144	2410	2429	2688	2893	3086	3523	4573	4816	4596	3510	2432	1787	1325	1136	822	52735
Nov-15 Wednesday	18	494	342	210	175	270	817	1945	3452	3338	2606	2697	2930	3117	3215	3796	4731	5270	4698	3065	2434	2002	1424	1224	836	55088
Nov-15 Thursday	19	503	324	258	177	348	812	1961	3351	3194	2544	2753	2860	3184	3208	3606	4587	5145	4635	3059	2304	1906	1444	1241	1009	54413
Nov-15 Friday	20	630	410	329	171	348	784	1811	3203	3191	2699	2894	3392	3951	3944	4348	5299	4941	4511	3799	2696	1746	1630	1674	1385	59786
Nov-15 Saturday	21	882	640	594	315	290	406	726	1508	1845	1906	2183	2285	2505	2744	2784	3135	3030	2921	2309	2040	1577	1610	1509	1234	40978
Nov-15 Sunday	22	827	654	822	315	277	329	452	916	1127	1533	1821	2174	2681	2681	2556	2515	2688	2497	1994	1743	1301	994	905	716	34518
Nov-15 Monday	23	412	213	157	170	341	754	1714	2940	2888	2591	2606	2829	2974	3126	3651	4441	5173	4819	3261	2062	1588	1180	996	807	51693
Nov-15 Tuesday	24	512	315	219	172	320	733	1705	2878	2851	2492	2773	3026	3364	3497	3967	4875	4871	4565	3367	2349	1884	1480	1179	850	54244
Nov-15 Wednesday	25	567	338	257	212	399	719	1475	2507	2647	2577	2818	3423	3759	3919	4101	4469	4188	3659	2696	2083	1662	1373	1254	976	52078
Nov-15 Thursday	26	660	445	322	208	265	272	443	858	1035	1360	1818	1801	1753	1663	1737	1840	1736	1773	1670	1656	1541	1314	1093	844	28107
Nov-15 Friday	27	529	349	269	173	253	406	616	1196	1316	1469	1839	1959	2148	2428	2703	3092	3077	2819	2456	1966	1653	1520	1477	1252	36965
Nov-15 Saturday	28	851	622	618	293	286	371	655	1309	1572	1779	1959	2063	2156	2242	2327	2554	2652	2549	2085	1919	1546	1456	1400	1265	36529
Nov-15 Sunday	29	926	620	662	284	286	323	491	960	1214	1649	2003	2138	2494	2522	2529	2567	2474	2493	1929	1684	1401	1005	874	662	34190
Nov-15 Monday	30	410	240	200	149	333	795	1818	3241	2962	2368	2466	2596	2889	2952	3361	4342	5022	4772	3068	2065	1681	1381	1021	757	50889
Dec-15 Tuesday	1	542	335	216	142	291	755	1909	3293	3055	2329	2281	2686	2873	3003	3408	4496	5139	3893	3537	2169	1759	1479	1001	864	51455
Dec-15 Wednesday	2	508	361	232	156	308	718	1868	3269	3168	2743	2539	2665	2976	3027	3657	4336	3860	3962	3245	2100	1853	1324	993	770	50638
Dec-15 Thursday	3	482	309	243	153	308	736	1863	3424	3238	2437	2468	2803	3053	3113	3751	4627	5035	4624	3214	2222	1548	1555	1322	874	53402
Dec-15 Friday	4	588	407	317	209	337	748	1769	3252	3035	2461	2643	2904	3330	3693	4067	4936	5030	4216	3171	2249	1940	1932	1822	1487	56543
Dec-15 Saturday	5	923	638	621	265	232	356	785	1278	1542	2003	2305	2621	2894	2781	2773	2783	2927	2713	2313	2000	1805	1847	1826	1536	41767
Dec-15 Sunday	6	1051	665	717	315	214	312	495	908	1032	1435	1785	2160	2641	2769	2725	2937	2891	2408	2029	1808	1438	1245	957	630	35567
Dec-15 Monday	7	372	229	196	134	284	759	1754	3117	3026	2352	2339	2668	2774	2940	3305	4478	4893	4711	3202	2057	1814	1385	1003	833	50625
Dec-15 Tuesday	8	534	309	213	157	261	747	1841	3304	3158	2262	2294	2674	2824	2985	3463	4516	5066	4600	3345	2257	1828	1518	1258	808	52222
Dec-15 Wednesday	9	550	329	234	192	275	714	1855	3294	3151	2421	2488	2727	2978	3147	3550	4452	5093	4572	3203	2208	1890	1605	1181	849	52958
Dec-15 Thursday	10	503	292	239	179	279	731	1836	3414	3356	2602	2608	3314	2983	3179	3640	4503	4434	4262	3350	2267	1957	1736	1364	943	53971
Dec-15 Friday	11	733	478	352	198	303	710	1689	3092	2966	2549	2700	3046	3339	3637	4027	4981	4723	4132	3052	2275	1881	2039	2175	1605	56682
Dec-15 Saturday	12	968	687	652	322	250	363	694	1272	1528	1822	2285	2419	2543	2660	2821	3076	2942	2881	2486	2504	2191	2232	2004	1684	43286
Dec-15 Sunday	13	1221	846	809	318	243	319	448	965	1154	1553	1858	2160	2582	2857	2755	2769	2652	2770	2075	2045	1714	1304	1162	696	37275
Dec-15 Monday	14	423	250	229	146	274	740	1838	3173	3205	2576	2558	2743	2644	2540	3216	4429	4960	4331	2960	2068	1621	1316	944	741	49925
Dec-15 Tuesday	15	468	297	188	173	282	742	1835	3213	3087	2383	2429	2794	3016	3331	3732	4637	5058	4812	3814	2296	1893	1633	1311	864	54288
Dec-15 Wednesday	16	462	342	232	160	293	776	1842	3264	3171	2496	2701	3035	3177	3423	3999	4766	5205	4577	3457	2316	1997	1680	1254	917	55542
Dec-15 Thursday	17	546	360	232	223	347	781	1825	3313	3114	2531	2631	2966	3153	3384	3750	4630	4377	4039	3356	2276	1814	1697	1415	895	53655
Dec-15 Friday	18	588	425	311	191	297	687	1670	2935	2907	2545	2794	3039	3489	3727	4098	4699	4976	4166	2986	2472	1919	1919	1975	1468	56283
Dec-15 Saturday	19	921	670	576	310	321	361	704	1211	1788	1952	2206	2397	2674	2583	2664	2960	2956	2636	2391	2005	1770	1884	1929	1488	41357
Dec-15 Sunday	20	987	662	691	241	239	287	410	875	1059	1277	1727	2031	2477	2659	2570	2611	2479	2588	1951	1760	1557	1270	1160	854	34422
Dec-15 Monday	21	451	259	186	148	301	661	1446	2459	2480	2249	2564	2976	3032	3203	3627	4488	4762	4543	3126	2186	1554	1544	1327	1002	50574
Dec-15 Tuesday	22	586	360	243	168	318	669	1411	2435	2405	2366	2465	2961	3005	3133	3525	4269	4641	4324	2962	2074	1578	1423	1244	850	49415
Dec-15 Wednesday	23	596	368	263	216	311	665	1311	2295	2486	2499	2849	3315	3528	3694	3920	4309	4367	3815	2630	2177	1810	1460	1331	1010	51225
Dec-15 Thursday	24	669	482	337	188	280	417	873	1478	1635	1903	2446	2797	3005	2793	2715	2829	2333	2120	1718	1735	1526	1335	1172	889	37675
Dec-15 Friday	25	588	373	244	144	129	207	304	637	659	832	966	1258	1388	1529	1635	1773	1690	1707	1562	1515	1456	1241	1155	951	23943
Dec-15 Saturday	26	496	460	390	160	201	259	473	924	1044	1275	1673	1784	1931	2034	2192	2470	2470	2434	2357	2000	1695	1528	1285	1179	32714
Dec-15 Sunday	27	829	736	919	333	251	279	410	803	976	1195	1548	1824	2166	2348	2436	2362	2328	2311	2053	1753	1458	1238	968	774	32298
Dec-15 Monday	28	476	280	231	167	301	539	1174	2075	2298	2080	2418	2701	2729	2925	3211	3923	4301	4189	2630	1846	1404	1219	1018	915	45050
Dec-15 Tuesday	29	564	364	265	183	282	514	1207	2233	2210	2133	2406	2611	2777	2978	3327	4138	4581	4594	2913	2080	1615	1350	1247	914	47486
Dec-15 Wednesday	30	592	376	291	183	279	553	1209	2257	2218	2218	2532	2752	2940	3085	3426	4099	4602	4562	2889	2172	1679	1404	1274	1062	48654
Dec-15 Thursday	31	733	430	328	211	258	491	1036	1885	2014	2004	2387	2855	3173	3231	3465	3769	3267	2569	1900	1621	1357	1221	1235	934	42374

30 Highest Hours of the year

100 Highest Hours of the year

AADT 48600

2.4.4 Station 71 Volume Data

TWO-WAY VOLUMES		Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15	Thursday	1																									
Jan-15	Friday	2																									
Jan-15	Saturday	3																									
Jan-15	Sunday	4																									
Jan-15	Monday	5																									
Jan-15	Tuesday	6																									
Jan-15	Wednesday	7																									
Jan-15	Thursday	8																									
Jan-15	Friday	9																									
Jan-15	Saturday	10																									
Jan-15	Sunday	11																									
Jan-15	Monday	12																									
Jan-15	Tuesday	13																									
Jan-15	Wednesday	14																									
Jan-15	Thursday	15																									
Jan-15	Friday	16																									
Jan-15	Saturday	17																									
Jan-15	Sunday	18																									
Jan-15	Monday	19																									
Jan-15	Tuesday	20																									
Jan-15	Wednesday	21																									
Jan-15	Thursday	22																									
Jan-15	Friday	23																									
Jan-15	Saturday	24																									
Jan-15	Sunday	25																									
Jan-15	Monday	26																									
Jan-15	Tuesday	27																									
Jan-15	Wednesday	28																									
Jan-15	Thursday	29																									
Jan-15	Friday	30																									
Jan-15	Saturday	31																									
Feb-15	Sunday	1	1111	701	617	381	459	713	1334	1638	2430	3324	4324	4556	5162	5538	5402	5101	5008	4885	3982	2368	2067	1780	2432	1355	66668
Feb-15	Monday	2	720	417	389	490	965	3116	7195	7799	6430	5686	5397	5520	5573	5597	6235	6662	8291	7603	6176	3461	2651	2148	1543	1102	101166
Feb-15	Tuesday	3	790	500	423	529	1071	3185	7222	8032	6284	5483	5063	5579	5320	5697	6594	7963	8065	8962	6304	3846	2890	2571	1780	1165	105318
Feb-15	Wednesday	4	806	495	440	531	1036	2952	6863	7614	7018	5417	5055	5091	5377	5803	6439	7821	7929	8184	6222	4065	2993	2351	1708	1084	103294
Feb-15	Thursday	5	802	485	424	544	1129	3154	6763	6914	6740	5544	5382	5349	5718	6376	6823	8146	8647	8851	6720	3954	3491	2703	2067	1292	108018
Feb-15	Friday	6	885	600	459	548	1103	2919	6470	7708	6536	5806	5674	6100	6507	6934	7704	8894	8583	7854	7635	5537	3680	3226	2944	1763	116069
Feb-15	Saturday	7	1197	703	661	494	628	1178	2450	3109	3979	4813	5187	5742	6196	6259	6174	6415	5999	5815	5432	4200	3045	2816	2353	1731	86576
Feb-15	Sunday	8	1076	746	582	449	451	760	1460	1713	2482	3430	4619	4870	5860	6154	5929	6069	6177	5772	5233	3765	2729	2136	1532	1067	75061
Feb-15	Monday	9	601	392	350	514	1094	3243	6692	7422	6586	5539	5641	4927	5125	5808	6653	7974	8702	8656	5912	3553	2610	2246	1583	1137	102960
Feb-15	Tuesday	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Wednesday	11	805	510	426	513	1115	3110	7141	8071	5307	5808	5102	5322	5575	6055	6699	8042	8411	8669	6960	4279	3323	2601	2042	1210	107096
Feb-15	Thursday	12	846	526	431	569	1125	3096	7399	8011	6557	5558	5100	5229	5579	6390	6878	8022	9046	8786	6946	4545	3529	2845	2212	1385	110610
Feb-15	Friday	13	993	573	495	603	1075	2891	6653	7706	6286	6028	6017	6507	7168	7381	8308	9131	9737	8999	7609	5720	4110	3621	2825	1961	122397
Feb-15	Saturday	14	1353	849	628	439	594	1023	2049	2853	3742	4763	5735	6238	6779	6502	6469	5826	6712	6279	5661	4557	3346	2977	2540	2389	90303
Feb-15	Sunday	15	1237	753	658	417	487	688	1224	1649	2444	3675	5006	5564	6080	6296	6380	6395	5829	5618	4802	3677	2793	2151	1705	1157	76685
Feb-15	Monday	16	662	408	363	484	1028	2654	5871	6749	5979	5805	5817	5973	6225	6187	6994	7580	7826	8160	5314	3826	2559	2202	1621	1075	101362
Feb-15	Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Wednesday	18	777	500	417	467	1087	3063	6972	8201	6669	5545	5315	4942	5232	5884	6755	7986	8700	8850	6678	4147	3192	2658	1954	1303	107294
Feb-15	Thursday	19	822	523	450	585	1116	3000	7080	8012	6505	5684	5556	5626	5857	6363	6768	8271	8249	8918	6495	3364	3453	2562	1924	1201	108384
Feb-15	Friday	20	820	567	428	517	1002	2875	6315	7318	6374	6024	5839	5959	6581	6937	7801	8890	8711	9293	7157	5195	3625	3169	2536	1745	115678
Feb-15	Saturday	21	1222	723	657	477	653	1171	2376	3094	4166	4615	5167	5885	6429	6479	6624	6232	6364	6068	5504	4157	3260	3147	2523	1770	88763
Feb-15	Sunday	22	1135	802	710	449	443	822	1369	1837	2622	3788	4798	5069	5900	6280	6329	6453	5787	5581	4796	3559	2621	2134	1628	1062	75974
Feb-15	Monday	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Tuesday	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Wednesday	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Thursday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15	Saturday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15	Sunday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15	Monday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Mar-15 Tuesday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Wednesday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	810	464	422	535	1140	3107	7078	7897	6690	5875	5536	5396	5591	6278	6670	8177	8599	8713	6318	4151	3377	2551	1872	1334	108581
Mar-15 Tuesday	10	915	558	445	569	1131	3129	7097	7929	6450	5716	5341	5382	5399	5794	7005	8206	8625	8892	6845	4411	3495	3138	2160	1550	110182
Mar-15 Wednesday	11	994	620	513	580	1131	3218	6951	7676	7012	6302	6111	6103	5937	6680	7368	8079	8152	8856	7286	4689	3763	3004	2192	1374	114591
Mar-15 Thursday	12	1060	618	471	635	1063	3132	7158	8004	6539	6023	5648	5918	6213	6297	6842	8184	9093	9008	7185	4677	3680	3085	2217	1576	114326
Mar-15 Friday	13	1046	659	548	645	1078	2839	6809	7654	6358	5767	6040	6422	6853	7181	8280	9026	9445	9071	7329	5525	4186	3435	2811	1996	121003
Mar-15 Saturday	14	1381	871	630	487	684	1094	2158	2932	3726	4540	4996	5411	6271	6096	5877	6080	5748	5344	5101	4356	3644	3128	2888	2076	85519
Mar-15 Sunday	15	1246	839	700	491	487	872	1375	1828	2569	3907	4886	5442	6066	6385	6677	6802	6455	5952	5719	4591	3545	2696	1917	1306	82753
Mar-15 Monday	16	847	474	467	554	1132	3201	7153	8147	6752	5963	5490	5616	5594	5997	6886	7982	8618	8490	6971	4311	3406	2709	1974	1257	109991
Mar-15 Tuesday	17	939	537	457	564	1139	3139	7268	7234	7237	5936	5610	5451	5465	5747	6988	8020	6656	8273	7419	4557	3614	2807	2049	1403	108509
Mar-15 Wednesday	18	971	606	518	571	1118	3211	7000	7488	6818	5941	5782	5923	6088	6331	7010	8287	8914	8766	6759	4622	3598	2830	2047	1344	112543
Mar-15 Thursday	19	922	539	466	577	1097	3173	6096	5940	7103	5951	5603	5957	5896	6433	7112	7966	8600	8930	6443	4434	3389	2962	2343	1421	109353
Mar-15 Friday	20	1058	620	500	612	1117	3037	6930	7663	6453	5989	6238	6840	7113	7639	8459	9156	9539	9488	7402	5587	4646	4057	3115	2246	125504
Mar-15 Saturday	21	1510	914	695	555	759	1256	2422	3576	4855	5195	6048	6351	6430	6251	6441	6379	6455	6007	5646	4531	3763	3373	2992	1987	94391
Mar-15 Sunday	22	1294	844	683	467	535	807	1294	1687	2587	3673	5041	5525	5992	6372	6196	6008	5492	4806	4645	3683	2868	2210	1711	1203	75623
Mar-15 Monday	23	692	441	356	469	1149	3202	7134	7867	6726	5821	5564	5585	5723	5972	6645	7782	7960	8351	5714	3610	2933	2429	1797	1253	105175
Mar-15 Tuesday	24	818	536	463	565	1111	3015	6222	7508	6935	5736	5429	5391	5362	5746	6609	8191	8247	8823	6737	4343	3402	2982	1950	1359	107480
Mar-15 Wednesday	25	895	556	448	619	1143	3276	7274	7810	6988	5840	5572	5664	6094	6293	7016	8223	8835	8604	6763	4408	3620	3059	2137	1301	112438
Mar-15 Thursday	26	959	600	480	596	1161	3195	7177	7851	6902	6071	5851	6111	6228	6580	7466	8656	8832	9307	7205	4931	4054	3327	2483	1492	117515
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	1420	868	666	565	988	1853	2723	3284	4181	4836	5593	6386	6682	6583	6642	6425	6553	6043	5486	4493	3777	3243	2579	1954	93823
Mar-15 Sunday	29	1218	842	696	472	522	829	1357	1923	2959	4426	5886	6437	6981	7153	6825	6687	6367	6027	5261	4504	3495	2579	1931	1253	86630
Mar-15 Monday	30	895	478	444	584	1142	2922	6949	7678	6593	5845	5554	5911	5924	6432	6801	7742	8079	7630	6400	4064	3225	2726	2135	1372	107525
Mar-15 Tuesday	31	954	555	480	596	1118	2975	6635	7693	6763	6098	5482	5784	5984	6249	7269	8380	8699	8816	6741	4502	3559	3008	2317	1475	112132
Apr-15 Wednesday	1	946	592	495	632	1134	2800	6851	7619	6730	6024	6131	5957	6500	6354	7132	8324	8941	8354	6995	4876	3831	3112	2305	1551	114186
Apr-15 Thursday	2	1053	645	491	594	1150	2834	6895	7582	6803	6352	6339	6649	6713	6899	7750	8847	9289	9198	7080	5089	4159	3445	2669	1793	120318
Apr-15 Friday	3	1167	684	558	575	1026	2371	5513	6432	6013	5870	6435	7176	7625	7829	8741	9098	8368	8467	7372	5834	4692	3688	2930	2158	120622
Apr-15 Saturday	4	1537	959	722	519	647	1040	1891	2958	3764	4783	5733	6025	6253	6383	6485	6390	6137	5792	5074	4384	3707	3121	2587	1937	88828
Apr-15 Sunday	5	1204	779	668	378	399	894	1350	1750	2642	3762	4870	5069	5747	6062	5998	6287	6476	6117	5699	4858	4220	2893	2105	1405	81632
Apr-15 Monday	6	874	499	451	495	1171	3053	6414	7211	6610	5853	5821	5878	6609	6200	7089	8126	8712	8846	6653	4910	3539	2847	1989	1342	111192
Apr-15 Tuesday	7	854	578	458	546	1150	2962	6405	7092	6655	5511	5486	5528	5807	5849	6955	8396	8969	9056	7066	4764	3680	2999	2149	1502	110417
Apr-15 Wednesday	8	969	558	523	529	1113	2982	6134	7254	6252	5401	5754	6067	5860	5915	7164	8425	9073	9082	7414	5074	4072	3269	2309	1430	112623
Apr-15 Thursday	9	951	616	521	587	1201	3225	7362	8463	7254	6258	6171	6434	6422	6797	7894	8763	8930	9066	7552	5489	4212	4142	2631	1634	122575
Apr-15 Friday	10	1165	667	570	630	1194	3068	7202	8154	7001	6600	6709	7183	7263	7537	8498	9179	9461	9210	7713	5795	4590	3910	3037	2256	128592
Apr-15 Saturday	11	1463	848	720	563	812	1331	2703	3724	4694	5583	6203	6442	6434	6377	6374	6356	6375	5750	5667	4399	3790	3571	3120	2100	95399
Apr-15 Sunday	12	1287	868	720	467	563	909	1745	2210	3260	4603	5870	6057	6595	6612	6640	6698	6739	5754	4933	3540	2902	2360	1832	1197	84361
Apr-15 Monday	13	717	515	390	541	1171	3224	6851	7115	7595	5928	5627	5588	5687	6030	6634	7923	8518	8733	6283	4184	3216	2640	1847	1167	108124
Apr-15 Tuesday	14	844	531	414	605	1089	3348	7344	7733	7235	5847	5676	5543	5343	6092	6748	8072	8656	8838	6508	4210	3497	2760	1901	1433	110267
Apr-15 Wednesday	15	860	596	473	617	1137	3200	7406	8057	5758	6345	5596	5603	5785	6078	6628	8078	8948	8203	6351	3990	3157	2621	1934	1254	108675
Apr-15 Thursday	16	881	602	435	547	1174	3228	7443	7902	6310	5285	5132	5363	5966	6524	7280	8647	9003	9060	6611	4542	3612	2980	2169	1469	112165
Apr-15 Friday	17	1052	610	541	659	1145	2987	6812	7460	6828	6376	6280	6667	6906	6756	7355	8276	9461	9355	7137	5088	3944	3623	2896	2148	120362
Apr-15 Saturday	18	1472	795	693	528	745	1230	2297	3325	4138	4782	5422	5692	5804	5446	5901	5912	5520	5561	4882	4169	3717	3482	2731	2051	86295
Apr-15 Sunday	19	1316	889	706	446	511	801	1354	1836	2610	3673	5005	5260	5670	5927	5934	5628	5347	4972	4417	3761	2768	2262	1732	1127	73952
Apr-15 Monday	20	696	444	407	557	1140	3259	7466	8148	6796	6207	5627	5729	5852	6130	6617	8087	8634	8674	6168	4059	3016	2378	1789	1257	109137
Apr-15 Tuesday	21	881	581	420	595	1188	3286	7437	8404	6858	5836	5498	5631	5749	6123	6856	8057	8355	8809	6882	4430	3620	2945	1975	1289	111705
Apr-15 Wednesday	22	905	551	496	643	1199	3246	7443	6746	6276	6392	5680	6002	5919	5992	6621	8176	9109	8437	7330	5065	3817	2959	2095	2049	113148
Apr-15 Thursday	23	1060	672	471	542	1142	3294	7354	8047	7006	6147	5571	5313	5752	6402	6738	7893	8579	8688	7285	5068	3999	3199	2455	1510	114187
Apr-15 Friday	24	1116	621	583	606	1157	2876	7062	7638	6891	6249	5864	6753	7001	7560	8230	8984	8660	9378	7030	5508	4471	3726	2998	2100	123062
Apr-15 Saturday	25	1380	812	695	531	810	1198	2468	3361	4190	4842	5340	5503	6044	5682	5537	5534	5382	5128	4516	3860	3365	3141	2626	1874	83819
Apr-15 Sunday	26	1204	761	638	450	538	844	1606	2191	3071	4302	5632	5974	6323	6560	6364	6380	6348	6277	5615	4650	3918	3104	1940	1236	85926
Apr-15 Monday	27	777	505	367	577	1139	3185	7340	8463	7253	6243	5802	5741	5411	5557	6173	7793	8657	8630	6359	4150	3231	2568	1694	1289	108904
Apr-15 Tuesday	28	819	535	440	584	1168	3261	7764	8221	6895	5965	5538	5635	5556	5949	6871	8069	5752	8041	7371	4535	3690	3013	1975	1286	108933
Apr-15 Wednesday	29	915	566	461	578	1117	3070	6620	6790	5844	5720	5309	5643	5644	5997	6521	7266	7666	7859	6270	4216	3169	2616	1935	1221	103013
Apr-15 Thursday	30	907	560	457	579	1191	3120	7487	7421	6355	6092	5314	5367	5950	5871	7380	8863	9161	8903	6778	4823	3997	3103	2430	1648	113757
May-15 Friday	1	1079	723	554	687	1175	3047	7229	6607	6883	5939	5953	6647	6924	7422	8389	9252	9888	9398	7398	5546	4747	4147	3431	2337	125402
May-15 Saturday	2	1447	972	696	601	728	1257	2844	3814	4469	5439	6091	6001	6193	6046	6075	6257	6231	5830	5211	4424	3993	3479	2687	1819	92604
May-15 Sunday	3	1103	1945	901	562	520	851	1654	2197	3034	4126	5303	5551	5843	6236	6301	6357	6452	6036	5013	4237	3398	2674	1887	1404	83585
May-15 Monday	4	772	511	416	597	1147	2967	7510	7852	6937	4436	4984	5451	5259	5485	6307	7849	8702	8463	6369	4270	3312	2755	1972	1319	105642
May-15 Tuesday	5	840	563	452	603	1230	3273	7046	4777	4211	5157	5808	5765	6058	6366	7163	8092	8925	8808	6959	4449	3600	2993	2019	1517	106674

May-15	Wednesday	6	959	631	527	645	1105	3244	7547	8070	6909	5797	5657	5918	5726	6249	7309	8382	8952	9001	7010	4560	3684	3062	2148	1554	114646
May-15	Thursday	7	960	605	510	643	1207	3269	7369	8338	7086	6302	6237	6351	6201	6600	6960	8099	8720	8843	5982	4123	3380	2832	2184	1464	114265
May-15	Friday	8	1053	674	522	653	1084	2841	6723	5415	7205	5770	6294	6778	7018	7581	7570	8639	7913	8928	7484	5236	4158	3675	3134	2262	118610
May-15	Saturday	9	1438	959	741	539	688	1330	2760	3808	4651	5546	5763	6213	6697	6907	6635	6177	5985	5567	5119	4381	3868	3444	2651	1963	93830
May-15	Sunday	10	1248	840	714	423	448	744	1445	1919	2746	4206	5442	5554	5866	6395	6140	6403	6149	5888	5359	4375	3685	2867	2168	1501	82525
May-15	Monday	11	824	493	478	587	1157	2935	6045	7284	6808	6107	5988	6287	6215	6305	7093	7940	8257	8628	6008	4150	3298	2544	1914	1294	108639
May-15	Tuesday	12	896	575	460	601	1162	3236	7459	8488	6755	5770	5707	5798	5834	6200	6912	8155	8181	7316	7001	4427	3523	2751	2057	1371	110635
May-15	Wednesday	13	897	571	448	627	1171	3144	6687	7458	6953	5759	5573	5784	5970	6461	6992	8420	8735	8565	6781	4851	3834	3029	2132	1470	112312
May-15	Thursday	14	969	615	496	579	1262	3201	7370	7945	6861	5888	5901	5928	6201	6200	6907	8251	8905	9065	6934	4748	3813	3267	2444	1672	115422
May-15	Friday	15	1095	728	607	721	1183	3109	6888	7942	6528	5896	6275	6534	7071	7707	8350	9348	9140	9182	6549	5906	4608	4022	3303	2274	124966
May-15	Saturday	16	1537	935	766	589	818	1335	2611	3848	4944	5618	6257	6651	6289	6529	5292	6594	5953	5801	5386	4684	4033	3883	3041	2272	95666
May-15	Sunday	17	1435	948	760	536	574	875	1589	2196	3139	4396	5804	5802	6179	6571	6162	6314	6026	5524	5355	4425	3640	2847	2042	1275	84414
May-15	Monday	18	795	492	436	598	1141	3289	7722	7952	7120	5428	5219	5355	5768	6074	6748	7757	8605	8279	6505	4092	3414	2748	1889	1326	108752
May-15	Tuesday	19	889	556	476	617	1178	3400	8034	7769	6989	5676	5141	5577	5616	5890	6838	8134	8714	8965	6528	4409	3398	2940	2079	1518	111331
May-15	Wednesday	20	974	550	460	645	1095	3235	7523	7897	5592	5817	5711	5815	6193	6057	7107	6950	8148	7329	6587	4149	3206	2890	2223	1363	107516
May-15	Thursday	21	914	623	508	643	1171	3286	7506	7760	7257	5686	6083	6378	6262	6545	7285	8853	9137	8902	6978	5109	4159	3460	2589	1815	118909
May-15	Friday	22	1175	734	611	660	1148	2981	7086	7407	6538	6257	6364	6964	7276	7935	8373	9421	9077	8523	7575	6196	4964	4449	3544	2418	127676
May-15	Saturday	23	1635	933	794	555	627	1238	2395	3323	4419	5632	6332	6584	6813	6545	6025	6217	5984	5803	5272	4601	4066	3727	3184	2065	94769
May-15	Sunday	24	1366	887	738	486	470	765	1429	1953	2928	4112	5361	5569	5889	5894	5617	5571	5488	5454	5111	4287	3548	2927	2335	1669	79854
May-15	Monday	25	1110	705	502	443	547	1266	2143	2543	3557	4634	5569	5715	5911	5912	5895	5998	5707	5529	4655	3881	3270	2966	2238	1302	81998
May-15	Tuesday	26	788	513	422	571	1142	3100	6813	5673	6946	5625	5516	5648	5532	5681	5814	6328	6590	6324	5245	4230	3880	2873	2060	1356	98670
May-15	Wednesday	27	936	597	449	601	1175	3243	7499	7972	7075	6008	5804	5797	6098	6245	6977	8475	8830	8961	6722	4424	3633	3077	2126	1391	114115
May-15	Thursday	28	1009	594	518	660	1195	3261	7589	7868	4912	6385	5977	5982	5965	6487	7031	7838	8523	8721	6991	4685	3961	3114	2410	1661	113337
May-15	Friday	29	1049	691	568	707	1239	2893	7257	7618	6433	5707	6372	6624	6906	7333	8187	9284	9026	8919	7182	5549	4128	3787	2946	2130	122535
May-15	Saturday	30	1391	965	740	566	766	1359	2613	3609	4813	5708	6126	6573	7148	6721	6498	6685	6938	5762	5234	4648	3779	3617	2942	2145	97346
May-15	Sunday	31	1298	880	707	544	554	830	1621	2010	2970	4060	5265	5599	5919	6053	6141	6172	5814	5518	4919	4157	3480	2824	2104	1425	80864
Jun-15	Monday	1	827	525	433	607	1087	3010	6634	8406	6508	5463	5386	5343	5512	5683	6597	7775	8220	8410	6332	4257	3257	2770	1981	1378	106401
Jun-15	Tuesday	2	908	570	471	538	1117	3045	6280	7073	6626	5948	5331	5811	5701	6025	6650	7572	8639	7722	6443	4104	3282	2878	1994	1434	106162
Jun-15	Wednesday	3	994	633	439	599	1133	3188	6435	6652	6285	5489	5504	5648	5825	6228	6856	7938	8306	8210	6196	4244	3494	3109	2205	1426	107036
Jun-15	Thursday	4	965	676	540	614	1098	3051	6499	6397	6116	5443	5585	5721	5931	6767	7153	8150	8334	7523	7545	4940	3914	3307	2473	1644	110386
Jun-15	Friday	5	1196	701	549	685	1163	2792	6120	6680	6162	6313	6441	6471	6981	7447	7479	8193	8668	8785	6913	5796	4499	3860	3258	2443	119595
Jun-15	Saturday	6	1491	904	828	602	768	1335	2761	3635	4519	5522	5722	5897	6336	6163	6424	6598	7052	6285	5198	4795	4358	3641	2860	2217	95911
Jun-15	Sunday	7	1468	896	829	458	581	874	1698	2161	2913	3925	5210	5510	5886	6377	6349	6563	6524	6080	5191	4313	3581	2796	2051	1854	84088
Jun-15	Monday	8	880	569	461	549	1140	3274	7676	8282	7113	5873	5664	5723	5955	6286	6712	8005	8457	8703	6591	4205	3376	2827	2009	1406	111736
Jun-15	Tuesday	9	904	635	494	578	1180	3239	7653	8203	6719	6049	5430	5318	5421	5941	6205	6867	6084	7655	6710	4509	3073	2413	1912	1580	104772
Jun-15	Wednesday	10	983	588	489	593	1153	3230	7157	8362	6929	5641	5295	5534	5176	6528	6996	7619	8839	8423	7094	4624	3555	3317	2595	1669	112389
Jun-15	Thursday	11	1061	596	531	602	1171	2960	6206	7129	6996	6012	5923	6261	6196	6617	6912	7727	8535	8878	7236	4771	3882	3405	2499	1643	113749
Jun-15	Friday	12	1169	747	594	641	1180	3035	7100	6713	7028	6451	6493	6909	7255	7873	8204	9132	9252	9010	6918	5628	4275	3755	2988	2364	124714
Jun-15	Saturday	13	1519	988	757	572	750	1415	2859	3852	5021	5788	6055	6690	6299	6053	6367	6635	6685	6223	5687	4518	3888	3575	2913	2103	97212
Jun-15	Sunday	14	1407	914	718	482	553	857	1666	2091	3074	4266	5586	5860	6229	6123	6418	6416	6111	5798	5330	4253	3470	2872	2083	1455	84032
Jun-15	Monday	15	910	519	424	604	1177	3067	6433	7132	6221	5536	5277	5321	5648	5740	6442	7933	8493	8693	6334	4051	3351	2834	2003	1483	105626
Jun-15	Tuesday	16	970	598	473	582	1203	3062	7397	8184	6835	5543	5194	5404	5450	5957	6934	8264	8871	8829	6434	4318	3601	3027	2319	1458	110907
Jun-15	Wednesday	17	1034	680	486	607	1240	3068	6255	7432	6935	5828	5460	5510	6262	6528	7356	8267	9000	8754	6746	4688	3694	3148	2435	1674	113087
Jun-15	Thursday	18	1038	635	539	681	1232	3305	7409	8217	6863	6127	6012	6245	6300	6835	7549	8118	8279	8428	6786	4783	3882	3406	2819	1733	117221
Jun-15	Friday	19	1162	682	600	674	1251	3138	6930	7459	7013	6415	6443	6925	7368	7623	8480	9412	9056	8371	7296	5363	4375	3962	3188	2311	125497
Jun-15	Saturday	20	1555	926	782	607	791	1402	2717	3883	5047	6008	6532	6783	6841	6575	6660	6801	6493	6167	5366	4450	3964	3897	2985	2308	99540
Jun-15	Sunday	21	1420	864	753	504	543	844	1538	2164	3096	4391	5406	5743	6284	6226	6146	6099	5950	6026	5601	4480	3913	3635	2635	1616	85877
Jun-15	Monday	22	998	611	487	618	1180	3310	7455	8090	7090	5758	5877	6048	5871	5876	6516	7620	8214	6681	6635	4157	3020	2605	1875	1436	108028
Jun-15	Tuesday	23	942	589	483	656	1236	3391	7374	7896	6935	6015	5940	5760	5925	6093	6478	7958	8908	8881	6466	4502	3565	3196	2316	1493	112998
Jun-15	Wednesday	24	1045	635	555	606	1176	3392	7057	8293	6849	6062	6060	6129	6121	5903	6842	8025	8328	8420	7009	4586	3713	3172	2345	1666	113989
Jun-15	Thursday	25	988	682	526	617	1151	3267	7300	8190	7062	6292	6057	6273	6396	6972	7784	8732	9226	9020	7042	5001	3836	3423	2678	1731	120246
Jun-15	Friday	26	1201	866	639	674	1292	3370	6869	7853	6682	5881	6258	6416	6696	6671	7366	8464	7769	7299	6298	4904	4075	3698	2914	2189	116344
Jun-15	Saturday	27	1471	928	723	599	831	1453	2861	3920	5006	5918	6859	6772	6631	6591	6534	6523	6168	5715	5313	4262	3725	3359	2902	2067	97131
Jun-15	Sunday	28	1281	876	743	516	564	903	1578	2075	3018	4167	5315	5741	6208	6572	6503	6624	6143	5724	5076	3996	3222	2764	2069	1331	83009
Jun-15	Monday	29	881	519	433	609	1288	3375	6587	7287	6236	5915	5834	5859	6066	6108	6183	7363	8433	8542	6557	4389	3263	2907	2036	1443	108113
Jun-15	Tuesday	30	934	602	528	599	1205	3301	7251	8183	6809	5993	5467	6072	5649	5886	7151	8261	8915	8794	6926	4856	3187	2887	2127	1444	113027
Jul-15	Wednesday	1	1002	635	478	631	1232	3324	7341	7866	7158	6132	6117	6013	6253	6305	7035	8463	9159	8638	7430	4868	3840	3172	2524	1662	117278
Jul-15	Thursday	2	1105	680	561	690	1170	2984	6765	7653	6659	6475	6333	6776	7188	7393	7841	8471	8948	8309	6542	5227	4585	3496	2991	2443	121285
Jul-15	Friday	3	1432	781	577	624	901	1585	3178	3997	4397	5161	5870	6622	6533	6652	6115	6858	6661	5747	5441	4490	3741	3439	2837	2041	95680
Jul-15	Saturday	4	1350	894	763	535	556	874	1582	2292	3170	4037	4926	4996	5204	5342	5128	4959	4706	4459	4260	3694	3399	3044	3516	2295	75981
Jul-15	Sunday	5	1262	768	664	387	467	818	1427	2084	2829	4262	5737	6121	6656	6630	6841	6334	6375	5613	5232	4030	3164	2926	2090	1497	84214
Jul-15	Monday	6	921	577	446	566	1095	2922	6125	7027	6534	6543	6316	6499	6011	6060	6609	7903	8109	8364	5961	4131	3285	2886	2060	1422	108372
Jul-15	Tuesday	7	878	565	489	582	1173	3282	7073	8129	6756	5759	5355	6055	6043	6233	6163	8274	8725	8824	6367	4151	3092	3045	2151	1469	110633
Jul-15	Wednesday	8	933	622	510	599	1170	3016	7301	8247	6922	6096	5973	6167	6198	6352	7488	8504	9066	8860	6724	4582	3623	3087	2421	1855	116316

Jul-15	Thursday	9	1015	705	504	661	1179	3263	7055	8139	6988	6105	6088	6261	6279	6953	7602	7953	8604	9121	7268	4861	3860	3470	2685	1654	118273
Jul-15	Friday	10	1084	704	614	699	1166	3066	6489	7849	6849	6142	6332	6785	7126	7711	8505	9158	9378	8856	7094	5476	4476	3934	3130	2475	125098
Jul-15	Saturday	11	1550	1005	747	635	813	1492	2889	3692	4723	5694	6766	6770	6478	6401	6680	6413	6521	6168	5665	4534	3844	3752	2964	2027	98223
Jul-15	Sunday	12	1379	900	755	496	564	932	1677	2237	2791	3880	5106	5523	5952	6205	6266	6448	6248	5731	5200	4025	3657	2979	2233	1388	82572
Jul-15	Monday	13	882	598	447	633	1248	3183	7325	8319	7012	6061	5803	5681	6265	6693	7078	8246	8407	8790	6634	4289	3258	2543	1873	1410	112678
Jul-15	Tuesday	14	913	608	471	605	1218	3284	6379	4408	6480	6074	5672	5432	5715	5982	6751	7796	8275	8270	6425	4432	3500	2787	1945	1497	104919
Jul-15	Wednesday	15	923	624	512	597	1152	3075	6861	7465	7310	5934	5917	6382	6441	6576	7045	8077	8931	8910	7000	4519	3656	3083	2257	1579	114826
Jul-15	Thursday	16	1003	663	585	622	1196	2902	5189	7947	7143	6167	6389	6578	6474	6756	7396	8651	8836	8944	7178	4723	3800	3368	2517	1651	116678
Jul-15	Friday	17	1117	725	624	700	1173	3084	6760	7546	6703	6435	6507	6891	6899	7376	7770	8155	8689	8957	7612	5521	4461	3940	3051	2266	122962
Jul-15	Saturday	18	1473	945	782	620	806	1428	2770	3700	4901	6007	6506	6552	6543	6515	6786	6819	6544	6355	5712	4480	3829	3845	2837	2132	98887
Jul-15	Sunday	19	1505	934	819	520	574	850	1572	2076	2875	4061	5350	5642	6172	6489	6323	6331	6065	5907	5200	3925	3290	2858	2201	1430	82969
Jul-15	Monday	20	901	567	462	577	1215	3293	7340	8210	7081	6270	6263	6159	6300	6472	6961	8131	8219	8586	6672	4254	3292	2767	2042	1439	113473
Jul-15	Tuesday	21	954	587	526	580	1235	3253	7449	8211	6955	5985	5991	5970	6136	6335	7140	8286	8795	8220	6681	4326	3476	3028	2172	1455	113746
Jul-15	Wednesday	22	945	606	488	616	1171	3211	7483	8064	7141	6240	5925	6009	6035	6576	7415	8450	8542	9088	6846	4597	3695	3145	2349	1564	116201
Jul-15	Thursday	23	1030	589	524	629	1261	3214	7407	8057	7150	5996	5668	5751	5948	6471	7552	8660	8656	7606	7187	5021	3676	3235	2405	1612	115305
Jul-15	Friday	24	1095	732	593	681	1229	3110	6935	7654	6781	6219	6441	6849	7324	7565	8340	9015	9242	8940	6761	5127	4037	3570	2887	2122	123249
Jul-15	Saturday	25	1408	950	708	565	758	1369	2592	3612	4765	5689	6747	6909	6808	6545	6850	6890	6525	6063	5634	4507	3835	3674	2825	2186	98414
Jul-15	Sunday	26	1457	922	813	573	542	835	1529	2072	2839	4144	5341	5631	5892	6396	6229	6196	5924	5483	4983	4094	3557	2967	2147	1415	81981
Jul-15	Monday	27	901	588	476	578	1175	3082	6376	7020	6119	5450	5718	5553	5858	5934	7063	8217	8109	9019	6142	4137	3306	2816	2134	1406	107177
Jul-15	Tuesday	28	934	609	504	613	1224	3303	7223	8102	6979	6018	5746	5862	6188	6364	7150	8344	8608	8766	6443	4519	3619	2848	2168	1471	113605
Jul-15	Wednesday	29	960	608	490	594	1172	3003	6208	7269	6968	5922	5801	5618	6109	5989	6868	8018	8353	8818	7519	4742	3903	3013	2302	1545	111792
Jul-15	Thursday	30	1073	665	549	601	1225	3323	7023	8447	7209	6374	6404	6448	6684	6836	7518	8716	8686	7924	7229	4965	3952	3350	2415	1610	119226
Jul-15	Friday	31	1059	743	606	643	1210	3065	6775	7693	6882	6371	6489	6973	7377	7644	8012	9038	9487	8755	7181	5518	4122	3581	2723	2245	124192
Aug-15	Saturday	1	1499	972	761	608	813	1361	2625	3642	4589	5587	6507	6685	6956	6567	6694	6695	6626	6174	5324	4475	3832	3585	2925	2117	97619
Aug-15	Sunday	2	1405	1034	818	521	547	846	1496	2024	2880	4041	5254	5692	6096	6288	6459	6074	5643	5286	4829	3941	3243	2715	2084	1310	80526
Aug-15	Monday	3	848	553	449	562	1194	3244	7216	8082	6739	6182	6154	6325	6279	5899	6591	7947	7647	8047	6558	4062	3224	2704	2030	1399	109935
Aug-15	Tuesday	4	944	613	502	581	1206	3269	6895	8146	6796	5955	5821	5832	6102	6285	6947	7920	8526	8503	6959	4446	3549	2970	2193	1479	112439
Aug-15	Wednesday	5	971	675	487	636	1235	3292	7415	8148	6463	5534	5601	5890	6090	6640	7256	8581	8449	8469	7089	4691	3630	3139	2300	1736	114417
Aug-15	Thursday	6	1008	638	525	641	1228	3245	7375	7070	6936	5844	5827	6146	6428	6854	7205	8072	8218	8644	6993	4542	3742	3058	2328	1566	114133
Aug-15	Friday	7	1056	660	554	688	1204	3113	6687	7724	6691	6252	6409	6957	6924	7096	8331	9165	9748	9498	7488	5601	4361	3982	3292	2422	125903
Aug-15	Saturday	8	1555	982	711	639	828	1458	2845	3850	4840	5761	6939	7137	6956	7110	7006	7213	7064	6428	5589	4843	4073	3720	2989	2247	102783
Aug-15	Sunday	9	1380	905	740	543	598	946	1701	2142	3007	4277	5824	6427	6542	6858	6697	6917	6906	6199	5534	4444	3652	3052	2105	1419	88815
Aug-15	Monday	10	858	583	470	632	1184	3374	7126	8041	6029	5822	5849	6072	6110	6561	7034	8274	8787	8134	6664	4449	3531	2752	2070	1353	111759
Aug-15	Tuesday	11	864	612	510	576	1176	3039	7032	8068	6957	5482	5316	5308	5608	6160	7144	8253	8460	8495	6891	4569	3500	2838	2214	1506	110578
Aug-15	Wednesday	12	902	602	516	593	1210	3345	7382	8492	6930	5983	5998	6145	6423	6659	7041	8579	8915	8776	7023	4791	3703	2963	2272	1660	116903
Aug-15	Thursday	13	993	630	597	610	1177	3316	7334	8520	6715	6015	6030	6240	6279	6971	7753	8822	9170	8694	7160	4824	3940	3285	2629	1868	119572
Aug-15	Friday	14	1127	697	590	636	1248	3004	6951	7997	6847	6241	6503	7000	7434	7870	8225	9386	9358	9113	7258	5706	4397	4011	3137	2483	127219
Aug-15	Saturday	15	1454	945	770	508	838	1449	2654	3876	4882	5772	6371	7085	6985	6579	6678	6830	6607	6369	5665	4755	3981	3690	2912	2131	99786
Aug-15	Sunday	16	1303	976	805	531	575	932	1518	2109	2804	4125	5433	5940	6405	6661	6382	6596	6227	5971	5335	4250	3342	2769	1887	1230	84106
Aug-15	Monday	17	804	539	410	577	1177	3166	6919	7406	6885	5745	4985	5354	5444	5852	6504	7645	8115	8198	5667	4023	3019	2547	1797	1249	104027
Aug-15	Tuesday	18	828	588	501	595	1195	3092	6422	7471	6947	5628	5508	5571	5770	6195	6904	7398	8201	8063	6340	4039	3045	2437	1840	1294	105872
Aug-15	Wednesday	19	884	513	480	548	1210	3419	7428	6153	6557	5741	5205	5291	5388	6147	7006	8150	8541	7956	6590	4247	3304	2418	2017	1366	106559
Aug-15	Thursday	20	872	560	508	589	1155	3167	7492	7985	6929	5865	5807	5867	5936	6579	7243	7559	8370	8457	6855	4313	3476	2958	2252	1498	112292
Aug-15	Friday	21	992	668	594	625	1259	3225	7270	7840	6768	6140	6121	6667	7015	7414	7968	9167	9079	7931	7748	5365	4167	3542	2993	2285	122843
Aug-15	Saturday	22	1342	878	683	572	772	1345	2640	3657	4562	5415	6449	6487	6662	6642	6174	6265	6020	5824	5225	4113	3423	3119	2510	1927	92706
Aug-15	Sunday	23	1184	874	687	448	552	883	1518	2013	2744	4035	5198	5643	6223	6439	6325	6402	5949	5571	5106	3915	2969	2359	1836	1177	80050
Aug-15	Monday	24	760	452	404	559	1182	3523	7593	8237	7048	5811	5648	5728	5871	4885	5475	8317	8230	8364	6437	4169	3185	2501	1839	1254	107472
Aug-15	Tuesday	25	780	537	465	565	1225	3525	7526	8139	7169	5826	5647	5636	5750	6119	6898	8202	8453	8424	6683	4162	3380	2703	1905	1294	111013
Aug-15	Wednesday	26	801	541	490	619	1214	3479	7368	7847	7260	5900	5601	5681	5904	6281	7075	8330	8430	8711	6414	4272	3739	2724	1999	1336	112016
Aug-15	Thursday	27	857	563	473	593	1209	3556	7401	8189	7335	6339	6156	6208	6165	6594	7135	8519	8823	8246	6990	4767	3640	2950	2133	1449	116290
Aug-15	Friday	28	908	644	559	647	1211	3308	7347	8091	6855	6030	6109	6528	7040	7436	8233	9158	9166	8832	6963	5253	3932	3325	2969	2166	122710
Aug-15	Saturday	29	1428	897	680	539	739	1405	2498	3454	4236	5205	5760	6111	6251	6759	6498	6213	6083	5635	5043	4364	3678	3358	2632	2007	91473
Aug-15	Sunday	30	1244	900	789	469	531	857	1384	1811	2491	3600	4834	5066	5662	6023	6163	5771	5135	4746	4403	3493	2802	2264	1681	1111	73230
Aug-15	Monday	31	665	445	368	570	1174	3168	5540	5754	6992	6440	5766	5667	5765	5859	6653	7613	8046	7724	6341	4006	3372	2492	1828	1238	103486
Sep-15	Tuesday	1	764	564	473	563	1207	3531	7295	7639	7211	5815	5597	5692	5715	6352	6791	8107	8079	8183	7029	4440	3545	2742	1911	1273	110518
Sep-15	Wednesday	2	820	505	459	581	1153	3391	6256	6759	6865	5863	5877	5729	5930	6156	7110	8213	8703	8776	6626	4394	3730	2866	2089	1347	110198
Sep-15	Thursday	3	817	561	547	590	1237	3584	7368	7507	7470	6049	5911	6087	6268	6692	7255	8642	8978	8471	6994	4825	3742	2877	2428	1593	116493
Sep-15	Friday	4	1032	645	587	649	1201	3222	6845	7773	6490	6015	6409	6854	7673	7952	8823	9120	9266	8766	7928	5966	4734	4184	3414	2373	127921
Sep-15	Saturday	5	1604	1004	769	565	681	1267	2210	3240	4256	5212	6138	6731	6784	6601	6464	6236	6095	5740	5036	4283	3761	3237	2835	1965	92714
Sep-15	Sunday	6	1250	866	670	450	436	802	1351	1872	2524	3821	4780	5227	5908	5972	6019	5823	5373	5176	4643	3665	3171	2587	2126	1515	76027
Sep-15	Monday	7	965	659	571	446	605	985	1859	2348	3124	4101	5312	6160	6207	6187	6457	6404	5842	5159	4694	3881	3331	2535	1780	1202	80814
Sep-15	Tuesday	8	662	420	407	543	1191	3628	6990	7973	7480	6116	6037	5971	6074	6554	7090	8441	8591	8430	6534	4435	3428	2636	1835	1295	112761
Sep-15	Wednesday	9	806	528	510	607	1236	3425	7204	7928	7130	6172	5864	5801	6038	6346	7103	8336	8705	8468	7527	4779	3635	2834	1951	1302	114235
Sep-15	Thursday	10	814	579	513	581	1241	3662	6980	6773	6154	6487	6124	6064	6368	6801	7218	8065	8507	8921	7172	4796	3740	2879	2106	1410	113955

Sep-15	Friday	11	976	620	571	665	1216	3398	5309	6769	7118	6219	6147	6472	7067	7527	8281	9033	9211	8838	7415	5459	4252	3470	2903	2208	121144
Sep-15	Saturday	12	1372	834	689	537	872	1481	2761	3604	4249	4873	5510	5817	6146	6080	6074	6041	5885	5387	4959	3966	3327	3250	2576	1972	88262
Sep-15	Sunday	13	1416	1106	805	496	516	914	1559	1979	2812	3910	5239	5663	6393	6431	6537	6566	6348	5932	5339	4413	3473	2609	1706	1178	83340
Sep-15	Monday	14	766	500	385	579	1204	3518	7390	7751	7004	5932	5979	5774	5789	5886	6881	7980	8617	8286	6501	4283	3299	2490	1841	1262	109897
Sep-15	Tuesday	15	798	551	468	615	1234	3561	7343	7833	6313	5938	5634	5646	5516	6379	7053	8252	8791	8539	5906	4625	3862	2789	1881	1369	110896
Sep-15	Wednesday	16	886	537	477	617	1197	3623	7374	7860	7211	6135	5763	5878	6098	6454	7170	8376	8947	8600	6827	4424	3806	2761	1995	1276	114292
Sep-15	Thursday	17	879	542	495	604	1221	3590	6916	6806	6287	6235	5748	6095	6201	6489	7329	8578	9017	8998	6967	4681	3739	3007	2262	1600	114286
Sep-15	Friday	18	1049	609	563	633	1204	3491	4784	6786	6825	6032	6153	6675	7051	7830	8342	9423	9075	9419	7435	5618	4133	3631	3144	2340	122245
Sep-15	Saturday	19	1468	856	705	533	814	1524	2623	3640	4717	5591	6089	6244	6500	6258	6231	6282	6108	5743	5124	4404	3769	3269	2627	1998	93117
Sep-15	Sunday	20	1244	855	699	522	523	899	1496	2045	2995	4217	5568	5728	6197	6431	6051	5967	5727	5735	5082	4292	3418	2523	1686	1216	81116
Sep-15	Monday	21	751	472	378	616	1173	3668	7509	8004	6473	5993	5769	5779	5828	6305	6811	8528	8743	8752	6011	4295	3140	2426	1763	1206	110393
Sep-15	Tuesday	22	800	485	439	599	1215	3722	7236	7511	6805	5827	5545	5707	5773	6170	6879	8178	8509	8628	6572	4463	3459	2633	1859	1249	110263
Sep-15	Wednesday	23	814	557	471	600	1227	3707	7310	7941	6524	5875	5670	5735	5954	6275	7165	8598	8611	8790	6482	4447	3472	2684	1985	1328	112222
Sep-15	Thursday	24	813	525	493	585	1237	3723	7265	7811	6445	5959	5878	5940	6000	6481	7034	7988	7895	8878	6186	4323	3424	2784	2139	1404	111210
Sep-15	Friday	25	912	622	517	634	1211	3327	6713	5834	6928	6025	6138	6571	6994	7479	8178	9002	9419	9274	7190	5567	4300	3625	2990	2183	121633
Sep-15	Saturday	26	1404	909	759	543	726	1397	2529	3567	4761	5271	5736	6167	6105	6289	6435	6283	6229	5748	5167	4308	3445	3363	2849	1890	91880
Sep-15	Sunday	27	1209	805	672	432	528	845	1488	2071	2864	4164	5590	5669	6219	6387	6368	5953	5936	5511	4846	4227	3137	2428	1843	1112	80304
Sep-15	Monday	28	752	456	401	583	1253	3610	7524	7791	6988	5917	5741	5634	5836	6038	6920	8044	8632	8589	5765	4163	3086	2412	1725	1202	109062
Sep-15	Tuesday	29	785	471	462	600	1252	3620	6584	7273	6946	5903	5469	5455	5395	5662	4934	6712	7302	7673	6720	4546	3258	2564	1873	1279	102738
Sep-15	Wednesday	30	825	496	452	594	1206	3550	7069	7488	7063	5864	5684	5830	5880	5847	6897	7451	6449	7206	6738	4292	3398	2561	1932	1292	106064
Oct-15	Thursday	1	867	565	472	622	1263	3352	5572	5422	6548	6084	6034	6221	5868	6603	7537	7721	7628	7385	6056	3674	3129	2492	1856	1351	104322
Oct-15	Friday	2	870	560	477	607	1115	2985	6281	5889	5445	5361	5718	6219	6578	6735	7283	7746	7407	6268	4810	3472	2562	2165	1820	1349	99722
Oct-15	Saturday	3	921	588	436	414	570	925	1634	1935	2255	2335	2576	2739	2919	2792	2794	2631	2481	2344	2000	1592	1192	957	814	651	40495
Oct-15	Sunday	4	434	289	223	213	306	577	970	1300	1593	2171	2989	3354	3407	3476	3521	3288	3253	3063	2800	1995	1398	1135	824	523	43102
Oct-15	Monday	5	356	233	185	313	699	2161	4601	4929	4272	4187	4182	4298	4564	4747	5204	5803	5917	5955	4251	3063	2274	1774	1455	1073	76496
Oct-15	Tuesday	6	645	447	376	545	1147	3182	6598	6832	6062	5697	5361	5437	5491	5803	6376	7551	8115	8156	6306	4344	3209	2461	1923	1227	103291
Oct-15	Wednesday	7	818	546	466	618	1265	3605	6608	6078	5399	5861	5305	5430	5860	6473	7116	8226	8642	8247	6935	5034	3658	2823	2016	1409	108438
Oct-15	Thursday	8	926	586	495	655	1310	3769	7715	7882	7276	6788	5973	5894	5955	6606	7401	8708	8913	7908	5268	6013	3819	2923	2435	1563	116781
Oct-15	Friday	9	1158	692	581	713	1283	3417	6877	7149	6265	5978	6322	6800	7089	7867	8551	8947	9019	8921	7176	5658	4226	3880	3383	2221	124173
Oct-15	Saturday	10	1416	865	775	557	852	1446	2561	3488	4371	4810	5316	5839	6032	5898	5679	5510	5129	5109	4544	4058	3203	2839	2367	1767	84431
Oct-15	Sunday	11	1172	769	656	476	556	878	1548	1980	2790	3804	5173	5350	6183	6281	5882	5958	5695	5531	5029	4382	3179	2528	1751	1312	78863
Oct-15	Monday	12	811	520	428	572	1137	3298	7257	7511	6187	5777	5750	6000	6165	6407	7044	8010	8389	8487	6095	4222	3107	2552	1891	1251	108868
Oct-15	Tuesday	13	779	505	439	584	1262	3684	7371	7227	6911	5777	5747	5904	5881	6478	7198	8363	8852	8603	6550	4497	3150	2627	1912	1309	111610
Oct-15	Wednesday	14	789	545	451	586	1259	3670	7332	7320	7063	6071	5972	5990	5995	6423	7373	8530	8759	8662	7215	4641	3697	2840	2092	1393	114668
Oct-15	Thursday	15	946	559	485	607	1297	3575	6422	7072	6596	5588	5536	5600	5638	6678	7380	8743	8818	8755	7369	5190	3681	2956	2261	1671	113423
Oct-15	Friday	16	1028	711	594	655	1214	3470	7285	5687	6442	6041	6251	6507	7076	6820	7501	8927	8492	8834	8277	5957	4506	3989	3099	2294	121657
Oct-15	Saturday	17	1535	868	739	547	818	1455	2851	3878	4448	5178	5857	6313	6290	6504	6228	6386	6002	5878	5435	4395	3601	3423	2915	2130	93674
Oct-15	Sunday	18	1269	817	659	434	551	913	1635	2105	2893	4193	5583	5926	6640	6757	6644	6663	6523	5981	5477	4482	3389	2514	1840	1178	85066
Oct-15	Monday	19	793	427	402	601	1215	3584	7450	7245	6470	5784	5642	5774	5997	6263	7046	8159	7974	6931	6280	4206	3140	2409	1873	1273	106938
Oct-15	Tuesday	20	737	538	489	601	1219	3722	7078	6245	6850	5873	5620	5638	5665	6574	7200	7913	8533	8908	7228	4903	3490	2747	2113	1424	111308
Oct-15	Wednesday	21	894	541	463	615	1216	3686	7362	7297	6904	6071	5894	5733	5595	6287	7143	8558	8599	7743	6791	5539	3952	2808	2100	1367	113158
Oct-15	Thursday	22	863	599	490	626	1253	3633	6828	6574	6811	6241	6287	6034	6490	6965	7654	8872	8919	8964	7217	4985	3812	3059	2494	1587	117257
Oct-15	Friday	23	967	633	563	667	1249	3456	7166	7154	6430	6183	6223	6899	7213	7513	8762	9047	9138	9002	7347	5639	3947	3478	2922	2298	123896
Oct-15	Saturday	24	1478	858	695	547	775	1383	2724	3546	4496	5214	5509	6037	6162	6109	6013	6222	6469	5739	5467	4523	3450	3450	3082	2112	92060
Oct-15	Sunday	25	1345	800	697	466	532	860	1523	1932	2819	3950	5173	5441	6175	6698	6707	6549	6173	6000	5541	4526	3195	2506	1846	1187	82641
Oct-15	Monday	26	744	453	388	606	1185	3682	6475	5295	6768	5863	5749	5835	6130	6253	7113	8307	8808	8255	6229	3955	2916	2375	1796	1207	106387
Oct-15	Tuesday	27	779	496	411	569	1188	3732	6933	6749	6033	5819	5801	5693	5832	5968	6908	7860	7581	8003	6285	4029	3183	2423	1779	1195	105249
Oct-15	Wednesday	28	828	540	411	609	1199	3632	7003	7447	5975	5815	5728	5305	5557	5823	6995	7551	8421	8346	6528	4316	3371	2611	2114	1341	107466
Oct-15	Thursday	29	864	551	535	606	1233	3747	7141	7197	6883	6062	5931	6073	6219	6589	7485	8854	9072	8543	6886	4975	3976	3226	2366	1520	116534
Oct-15	Friday	30	959	614	588	638	1250	3473	6022	5646	6559	6143	6228	6521	6935	7695	8183	8828	8781	8663	7214	5447	4053	3559	3438	2487	119924
Oct-15	Saturday	31	1622	840	717	494	791	1311	2447	3190	4003	4591	5157	5614	5726	5463	5751	5726	5638	5361	4645	3884	3323	3210	2722	2432	84658
Nov-15	Sunday	1	1648	838	792	662	1001	914	1489	2256	3089	3998	5047	5589	5886	6024	6099	6096	5846	5691	5099	4222	3158	2420	1529	1082	80475
Nov-15	Monday	2	633	479	374	583	1152	3213	6398	6948	6102	5871	5703	5680	6016	6015	6829	7835	7695	7582	6428	4085	2994	2518	1826	1235	104194
Nov-15	Tuesday	3	772	537	471	568	1161	3476	6572	7020	6187	5645	5492	5479	5650	6047	7063	7473	8144	8445	6151	3821	2926	2654	1952	1361	105067
Nov-15	Wednesday	4	825	524	462	584	1273	3489	6948	7023	6983	5875	5774	5819	5991	6473	7334	8516	8715	8418	6721	4237	3038	3169	2278	1415	111884
Nov-15	Thursday	5	771	541	456	619	1257	3499	7243	6928	6203	5867	6004	6155	6191	6631	7872	8664	9216	8795	7445	4688	3588	3349	2722	1756	116460
Nov-15	Friday	6	1003	654	558	612	1190	3399	7022	6137	6453	6115	6267	6607	7110	7745	8669	9369	9363	8988	7530	5337	4084	3709	3511	2592	124024
Nov-15	Saturday	7	1792	877	640	502	652	1323	2708	3853	4560	5573	6135	6320	6580	6422	6660	6733	6380	6106	5438	4068	3472	3153	3155	2650	95752
Nov-15	Sunday	8	2155	939	641	441	538	873	1504	2205	3182	4253	5495	5635	6008	6213	6106	5687	5346	5646	4978	3788	2915	2407	1664	1045	79664
Nov-15	Monday	9	625	441	353	558	1107	3340	6389	6448	5831	5395	5135	5325	5612	5799	6713	7308	7795	7845	4857	4041	2716	2265	1742	1212	98852
Nov-15	Tuesday	10	748	508	392	550	1195	3570	7364	6123	6783	5851	5871	5695	5816	6014	6480	8010	8065	8220	6287	4121	3096	2545	1873	1266	106443
Nov-15	Wednesday	11	846	507	435	551	1105	2850	6241	6350	5736	5863	5748	6004	6237	6345	7176	7935	8309	8412	6295	4227	3318	2673	2070	1277	106510
Nov-15	Thursday	12	800	491	433	608	1153	3401	7445	7010	6795	6012	5769	5799	6209	6591	6853	7457	8659	8838	6778	4512	3496	2837	2121	1486	111553
Nov-15	Friday	13	946	617	520	611	1222	3365	6902	6581	6700	6401	6484	6803	7310	7696	6004	8710	8570	8741	8049	5061	4001	3566	2790	2117	119767

Nov-15	Saturday	14	1375	754	690	491	778	1394	2842	3924	4779	5172	5530	5504	5984	5687	6032	6408	6249	6349	5673	3949	3191	2880	2660	1801	90096
Nov-15	Sunday	15	1058	794	652	468	533	844	1509	2032	2789	3922	5054	5606	6131	6109	6018	5718	5846	5590	4789	3666	2748	2233	1658	1076	76843
Nov-15	Monday	16	636	498	456	599	1169	3140	5988	5270	7040	5919	5502	5191	5652	5653	6877	8042	8477	8244	6462	3889	2941	2328	1793	1140	102906
Nov-15	Tuesday	17	759	508	459	596	1204	3612	7256	7093	6478	5654	5628	5108	5322	6066	7111	8009	8422	8566	6309	4233	3075	2455	1798	1258	106979
Nov-15	Wednesday	18	789	531	458	590	1209	3608	7021	6204	6547	6172	5488	5454	5849	6502	7137	8221	8663	8435	6477	4393	3241	2549	2001	1260	108799
Nov-15	Thursday	19	814	596	485	550	1138	3429	6549	6560	6295	5858	5717	5961	5842	6496	7147	8490	8765	8493	6278	4129	3351	3045	2113	1415	109516
Nov-15	Friday	20	949	724	551	594	1206	3406	7261	6786	6339	6226	6252	6758	7279	7596	8528	9293	9290	8661	6909	5565	3845	3330	2815	2045	122208
Nov-15	Saturday	21	1318	758	636	520	816	1385	2752	3791	4848	5241	5595	5651	5795	6136	6221	6206	5907	6045	5267	4020	3204	2801	2427	1706	89046
Nov-15	Sunday	22	1154	797	678	429	554	920	1457	1935	2744	3697	4797	5246	5943	5887	5848	5780	5641	5338	4755	3803	2790	2201	1676	1177	75247
Nov-15	Monday	23	684	460	383	560	1207	3525	7357	7315	6295	6289	6134	6167	6304	6412	7297	8011	8533	8694	6630	4098	3007	2403	1741	1295	110801
Nov-15	Tuesday	24	826	502	439	600	1176	3286	7027	7176	6144	6027	6038	6401	6599	7222	7832	8310	9171	9134	7071	4906	3507	2916	2278	1680	116268
Nov-15	Wednesday	25	1137	700	617	672	1302	3182	6759	6540	5981	6088	6521	7114	7727	8126	8753	8417	8839	7355	5758	4064	3679	2950	2372	1814	116467
Nov-15	Thursday	26	1046	680	550	400	510	733	1328	1811	2222	3195	3893	4587	4433	3967	3872	3909	4154	4240	4184	3993	3691	3015	2417	1863	64693
Nov-15	Friday	27	1360	833	639	528	831	1559	2827	3363	3592	4272	5116	5646	6157	6385	6440	6629	6357	6077	5516	4213	3280	2914	2393	1654	88581
Nov-15	Saturday	28	1052	686	614	511	690	1137	2170	3061	4018	4755	5028	5898	5819	5606	5651	5677	6084	5771	5002	4153	3185	2749	2320	1711	83348
Nov-15	Sunday	29	1098	823	622	480	649	1014	1635	2125	3037	4330	5589	5583	5894	5909	6026	5889	6161	6312	5338	4059	3314	2536	1751	1145	81319
Nov-15	Monday	30	800	530	403	565	1204	3573	6781	7564	6646	6115	5766	5523	6153	6241	6643	8092	8446	8516	6040	3735	2834	2398	1796	1227	107591
Dec-15	Tuesday	1	779	543	449	579	1224	3569	7380	7496	6383	5904	5723	5705	5844	6287	7250	8207	8128	8101	6779	4038	3125	2568	1852	1230	109143
Dec-15	Wednesday	2	815	563	435	602	1215	3500	7281	7433	6382	5701	5953	5440	5939	6219	7206	7386	7474	7664	6476	3992	2991	2456	1748	1247	106118
Dec-15	Thursday	3	777	514	471	605	1170	3363	6833	7316	5334	5584	5700	5820	5966	6365	7506	8519	8662	8492	6664	4234	2945	2947	2168	1393	109348
Dec-15	Friday	4	894	628	559	635	1216	3412	7011	7384	6334	5897	6093	6284	6743	7342	7952	9134	9044	8504	6938	4942	3771	3421	2982	2108	119228
Dec-15	Saturday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Sunday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Monday	7	878	528	493	574	1164	2981	6289	6237	5957	5769	6160	5196	6004	6004	6657	7807	8310	8314	6124	3841	2997	2412	1935	1682	104313
Dec-15	Tuesday	8	859	567	458	575	1191	3476	7236	7195	6214	5804	5627	5499	5928	6084	6797	8152	8362	8112	6682	4111	3192	2496	2094	1257	107968
Dec-15	Wednesday	9	885	573	488	573	1235	3472	7318	6957	6650	5844	5440	5664	5917	6141	6776	8169	8721	8513	6595	4314	3266	2776	1994	1398	109679
Dec-15	Thursday	10	832	522	486	620	1166	3337	6403	7164	6890	6217	5875	6029	6270	6746	7679	8215	8325	8486	6600	4721	3549	3095	2166	1455	112848
Dec-15	Friday	11	961	629	537	616	1191	3340	6940	7082	6149	5898	6037	6472	6814	7348	8022	8935	8762	8815	7017	4983	3752	3477	3019	2136	118932
Dec-15	Saturday	12	1218	776	664	501	788	1345	2584	3345	4034	4556	5462	5896	5988	6247	6357	6495	6503	6778	5675	4346	3680	3444	2964	2177	91823
Dec-15	Sunday	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Monday	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Tuesday	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Wednesday	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15	Thursday	17	927	589	511	569	1022	2785	5400	6019	5334	6081	6004	6068	6045	6244	7521	7873	8190	7847	6968	4720	3253	2925	2483	1537	106915
Dec-15	Friday	18	989	691	523	618	1189	3177	6776	6771	6115	6108	6327	6675	6996	7659	6916	9313	9134	8302	6798	4988	3791	3507	3176	2136	118675
Dec-15	Saturday	19	1334	849	657	511	826	1381	2435	3202	4265	4917	6001	6390	6664	6489	6472	6498	6471	6202	5569	4246	3351	3170	3028	2105	93033
Dec-15	Sunday	20	1336	870	621	414	538	819	1419	1747	2498	3592	4893	5082	5776	6114	5873	5657	5594	5621	4810	3769	3068	2476	1894	1306	75787
Dec-15	Monday	21	790	488	428	578	1211	3184	6935	6634	6237	5823	6329	6333	6135	6721	6892	8023	8281	7912	6346	4160	3157	2757	2200	1593	109147
Dec-15	Tuesday	22	921	572	503	603	1142	3222	6560	6481	5967	5866	6215	6366	6451	6621	7195	8222	8540	7933	6213	4009	3306	2793	2402	1487	109590
Dec-15	Wednesday	23	949	604	525	644	1164	2724	5317	5547	5532	5880	6031	6638	6602	7068	7413	8093	8095	7521	5742	4479	3584	2918	2721	1684	107475
Dec-15	Thursday	24	1174	733	580	485	732	1657	2966	3580	3780	4456	5274	6020	6413	6358	6135	5722	5112	4645	4263	3355	2909	2472	2051	1470	82342
Dec-15	Friday	25	876	587	397	321	295	514	861	996	1294	1900	2560	3330	3798	4030	3969	4054	4145	3957	4010	3358	2972	2567	2019	1486	54296
Dec-15	Saturday	26	845	545	500	362	558	1006	1635	2067	2949	3739	4878	5181	5940	6148	6086	5853	5929	5885	5180	4108	3346	3021	2408	1779	79948
Dec-15	Sunday	27	1170	759	717	443	556	869	1356	1699	2475	3513	4483	4966	5583	5878	5886	5732	6025	5731	5736	3969	3248	2642	2052	1402	76890
Dec-15	Monday	28	967	568	559	570	1118	2778	5644	5841	5678	5716	5991	6406	6317	6647	6841	7874	8139	8059	5579	3939	2995	2465	1915	1343	103949
Dec-15	Tuesday	29	871	574	464	539	1075	2758	5720	6121	5766	5582	5917	6209	6331	6587	6997	7954	8316	8337	6437	4180	3049	2702	2089	1343	105918
Dec-15	Wednesday	30	941	579	487	591	1066	2711	5620	6264	5730	5690	6024	6293	6488	7144	7486	8501	8718	8415	6238	4324	3354	2838	2223	1501	109226
Dec-15	Thursday	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

30 Highest Hours of the year
100 Highest Hours of the year

AADT 104000

EASTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1																									
Jan-15 Friday	2																									
Jan-15 Saturday	3																									
Jan-15 Sunday	4																									
Jan-15 Monday	5																									
Jan-15 Tuesday	6																									
Jan-15 Wednesday	7																									
Jan-15 Thursday	8																									
Jan-15 Friday	9																									
Jan-15 Saturday	10																									
Jan-15 Sunday	11																									
Jan-15 Monday	12																									
Jan-15 Tuesday	13																									
Jan-15 Wednesday	14																									
Jan-15 Thursday	15																									
Jan-15 Friday	16																									
Jan-15 Saturday	17																									
Jan-15 Sunday	18																									
Jan-15 Monday	19																									
Jan-15 Tuesday	20																									
Jan-15 Wednesday	21																									
Jan-15 Thursday	22																									
Jan-15 Friday	23																									
Jan-15 Saturday	24																									
Jan-15 Sunday	25																									
Jan-15 Monday	26																									
Jan-15 Tuesday	27																									
Jan-15 Wednesday	28																									
Jan-15 Thursday	29																									
Jan-15 Friday	30																									
Jan-15 Saturday	31																									
Feb-15 Sunday	1	446	261	196	170	291	439	790	903	1301	1794	2159	2195	2437	2565	2340	2289	2279	2261	1912	1191	1040	979	1232	660	32130
Feb-15 Monday	2	338	216	185	282	672	2395	5316	5138	3743	3217	2918	2906	2832	2701	2844	2825	2781	2967	2062	1284	942	854	632	434	50484
Feb-15 Tuesday	3	249	186	167	293	784	2502	5343	5284	3787	3182	2818	3205	2687	2686	2878	2909	2967	3218	2319	1492	1017	999	719	447	52138
Feb-15 Wednesday	4	230	171	173	297	758	2256	5012	4891	4355	3235	2719	2626	2671	2824	2872	3029	2947	3052	2323	1414	1016	955	684	413	50923
Feb-15 Thursday	5	253	191	171	289	814	2487	4972	4318	4216	3188	2929	2843	2858	3125	2950	3039	3309	3291	2640	1798	1294	1092	892	531	53490
Feb-15 Friday	6	296	229	189	312	773	2283	4756	5034	4135	3411	3091	3188	3085	3198	3420	3622	3408	3334	3410	2464	1714	1470	1167	742	58731
Feb-15 Saturday	7	425	274	267	263	407	725	1533	1813	2318	2689	2851	3212	3488	3275	3094	3111	2676	2698	2534	1801	1273	1138	1039	762	43666
Feb-15 Sunday	8	432	288	186	206	291	540	888	908	1284	1753	2350	2554	2964	3108	2856	2669	2512	2527	2273	1719	1316	1173	802	506	36105
Feb-15 Monday	9	278	203	156	300	772	2503	4850	4690	3950	3258	3299	2387	2434	2862	2965	2926	3028	3141	2101	1412	918	896	664	402	50395
Feb-15 Tuesday	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	11	242	220	162	288	799	2392	5273	5295	2694	3621	2688	2812	2809	3024	2993	2955	3069	3249	2613	1646	1163	1060	800	440	52307
Feb-15 Thursday	12	280	207	174	319	801	2398	5509	5249	3957	3199	2563	2649	2723	3112	2975	2929	3378	3304	2791	1858	1396	1194	959	577	54501
Feb-15 Friday	13	338	238	229	346	770	2238	5040	4969	3731	3527	3244	3386	3630	3487	3800	4067	3930	3742	3531	2893	2095	1578	1213	847	62869
Feb-15 Saturday	14	486	311	246	220	413	660	1291	1683	2094	2654	3188	3649	4026	3687	3415	3320	3086	3117	2681	1962	1407	1133	932	692	46353
Feb-15 Sunday	15	452	239	189	198	277	436	715	834	1218	1785	2357	2708	2856	2917	3025	2896	2626	2393	2151	1657	1266	1106	873	581	35755
Feb-15 Monday	16	300	199	167	268	689	1945	4245	4311	3416	3258	3030	3048	3053	3000	3152	3147	3092	3116	2216	1518	1071	875	692	415	50223
Feb-15 Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	18	223	190	166	279	801	2403	5183	5549	4161	3212	3007	2650	2433	2817	3084	3051	3085	3311	2607	1620	1158	997	736	506	53229
Feb-15 Thursday	19	268	202	198	324	774	2354	5230	5256	3918	3321	2980	2866	2993	3139	2925	3150	3241	3279	2489	1738	1192	991	826	486	54140
Feb-15 Friday	20	266	204	181	292	719	2203	4770	4806	3723	3509	3287	3133	3204	3276	3428	3552	3483	3625	3172	2505	1782	1475	1185	751	58531
Feb-15 Saturday	21	439	276	238	219	427	761	1429	1777	2396	2670	2879	3287	3544	3458	3392	3061	3217	3026	2690	1797	1376	1134	988	725	45206
Feb-15 Sunday	22	388	265	229	182	275	559	784	956	1314	1890	2328	2351	2865	3039	3008	2864	2582	2525	2214	1636	1248	1127	836	496	35961
Feb-15 Monday	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Thursday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Saturday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Sunday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Mar-15 Tuesday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Wednesday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	378	227	200	315	795	2353	5224	5195	3939	3359	2879	2766	2781	3238	3005	3205	3089	3015	2505	1577	1266	1040	798	572	53721
Mar-15 Tuesday	10	286	217	203	315	802	2449	5263	5203	3889	3370	2967	2765	2597	2612	3273	3225	3192	3393	2717	1733	1286	1167	894	550	54368
Mar-15 Wednesday	11	350	224	201	325	810	2495	5138	4989	4235	3664	3227	3308	2947	3349	3403	3161	3338	3221	2578	1794	1312	1133	851	579	56632
Mar-15 Thursday	12	388	249	188	354	756	2422	5289	5308	3917	3609	3107	3110	3095	2937	3213	3348	3470	3657	2756	1865	1388	1291	975	625	57317
Mar-15 Friday	13	341	268	238	344	747	2180	5071	5078	3739	3326	3205	3319	3281	3394	3715	3797	3731	3336	3363	2637	1988	1624	1241	855	60818
Mar-15 Saturday	14	532	331	232	238	436	655	1302	1696	2212	2694	2697	2916	3491	3141	2807	2942	2722	2486	2387	1868	1464	1278	1091	882	42500
Mar-15 Sunday	15	488	344	234	193	284	525	761	899	1309	1909	2343	2614	2881	2959	3278	3155	2971	2650	2548	2083	1694	1416	1025	645	39208
Mar-15 Monday	16	393	252	226	323	798	2441	5231	5324	3880	3405	2701	3018	2730	2942	3210	3077	3183	3206	2597	1703	1253	1063	862	506	54324
Mar-15 Tuesday	17	346	221	211	313	806	2433	5320	4364	4632	3506	3132	2841	2566	2593	3122	3127	3168	3111	2458	1600	1399	1136	845	525	53775
Mar-15 Wednesday	18	302	227	193	315	785	2464	5110	4684	4149	3385	3142	3053	3078	3089	3103	3126	3254	3131	2637	1801	1263	1100	851	563	54805
Mar-15 Thursday	19	294	239	192	333	782	2474	4254	3397	4664	3389	2963	3053	2917	3067	3290	2992	3250	3503	2522	1834	1398	1242	1011	607	53667
Mar-15 Friday	20	379	239	207	334	796	2295	5176	5106	3797	3430	3377	3616	3504	3662	3906	3848	3799	3840	3464	2557	2194	1758	1332	932	63548
Mar-15 Saturday	21	539	346	271	268	462	767	1426	2037	2713	2940	3306	3589	3534	3235	3102	3084	2994	2837	2658	2049	1541	1335	1035	761	46829
Mar-15 Sunday	22	504	310	239	200	349	517	697	864	1225	1709	2164	2307	2594	2797	2648	2664	2552	2322	2257	1731	1452	1218	941	571	34832
Mar-15 Monday	23	340	203	163	279	795	2422	5258	5183	3956	3358	3003	2901	2854	2845	2966	2996	2873	2739	2042	1369	1065	984	755	510	51859
Mar-15 Tuesday	24	260	205	195	318	784	2294	4349	4740	4251	3375	3109	2939	2564	2715	2878	3022	3095	3182	2521	1643	1240	1130	851	547	52207
Mar-15 Wednesday	25	282	208	189	353	798	2560	5369	5059	4275	3466	3097	2988	3105	3047	3153	3134	3223	3172	2576	1770	1378	1132	848	550	55732
Mar-15 Thursday	26	321	223	213	329	839	2486	5295	5076	4216	3611	3270	3233	3214	3218	3432	3373	3439	3587	2911	2060	1602	1464	1088	664	59164
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	548	388	240	334	723	1305	1654	1608	2100	2327	2626	2971	3122	3338	3433	3302	3543	3278	2872	2167	1681	1431	1171	860	47022
Mar-15 Sunday	29	511	356	225	242	309	520	732	883	1249	1835	2421	2690	3193	3302	3254	3270	3253	3026	2484	2265	1756	1407	1067	666	40916
Mar-15 Monday	30	403	227	212	343	794	2198	5184	5079	3981	3316	2933	3158	2994	3218	3127	2816	2674	2821	2274	1616	1238	1129	994	566	53295
Mar-15 Tuesday	31	327	223	226	341	796	2238	4859	5123	4086	3505	2919	3193	3117	3014	3339	3145	3182	3347	2614	1745	1316	1147	861	560	55223
Apr-15 Wednesday	1	337	225	221	338	793	2087	5092	5036	4007	3602	3312	3166	3296	3121	3223	3274	3289	3300	2680	1968	1512	1252	983	645	56759
Apr-15 Thursday	2	409	269	227	343	772	2075	5131	4867	4042	3611	3452	3609	3574	3443	3498	3425	3519	3477	3074	2230	1771	1593	1289	880	60580
Apr-15 Friday	3	474	276	233	315	713	1718	4067	4109	3570	3316	3500	3926	4054	3740	4094	3814	3679	3735	3259	2570	1997	1592	1299	904	60954
Apr-15 Saturday	4	603	345	296	276	383	586	1051	1582	1963	2518	2999	3237	3456	3492	3457	3357	3141	2876	2416	1932	1546	1225	1038	905	44680
Apr-15 Sunday	5	485	318	240	181	208	572	766	860	1256	1756	2227	2193	2655	2642	2695	2743	2928	3087	3006	2673	2377	1666	1319	847	39700
Apr-15 Monday	6	497	270	202	306	765	2169	4408	4240	3666	3053	2981	2982	3463	2872	3137	3023	3136	3179	2529	2111	1460	1203	860	510	53022
Apr-15 Tuesday	7	301	213	207	295	817	2207	4315	4194	3717	2855	2698	2712	2871	2638	3073	3187	3322	3368	2601	1852	1390	1151	912	567	51463
Apr-15 Wednesday	8	303	209	217	298	760	2170	4144	4335	3511	3019	3098	3231	2861	2601	3097	3392	3379	3560	2643	1911	1432	1237	916	562	52886
Apr-15 Thursday	9	322	229	234	323	826	2454	5345	5541	4467	3726	3290	3452	3320	3298	3676	3632	3329	3489	2832	2115	1557	1477	1148	697	60779
Apr-15 Friday	10	430	258	236	352	831	2247	5216	5348	4280	3667	3492	3833	3658	3544	3758	3871	3692	3670	3260	2517	2022	1755	1320	863	64120
Apr-15 Saturday	11	555	344	247	269	473	721	1597	1929	2406	2865	3069	3429	3477	3266	3167	3082	3072	2992	2602	1996	1567	1374	1174	857	46530
Apr-15 Sunday	12	502	317	207	218	319	522	978	1068	1482	2104	2698	2784	3022	3046	2949	2930	2753	2617	2165	1814	1505	1283	1020	641	38944
Apr-15 Monday	13	365	256	194	348	799	2419	4845	4333	4810	3385	2909	2978	2831	2908	2968	3071	3301	3196	2287	1589	1166	1062	733	412	53165
Apr-15 Tuesday	14	283	194	173	335	774	2581	5323	4889	4557	3444	3110	2933	2729	2812	3019	3090	3210	3221	2374	1615	1237	1094	818	568	54383
Apr-15 Wednesday	15	268	243	202	339	821	2451	5404	5241	3094	3975	3065	2864	2923	2796	2833	3062	3199	3106	2177	1495	1152	1094	782	538	53124
Apr-15 Thursday	16	294	232	179	313	830	2490	5476	4962	3558	2965	2608	2632	3093	3129	3358	3308	3233	3416	2655	1945	1457	1271	981	613	54998
Apr-15 Friday	17	385	235	238	383	791	2261	4957	4762	4027	3687	3299	3595	3282	2926	3029	3352	3743	3655	3318	2399	1924	1603	1182	805	59838
Apr-15 Saturday	18	567	301	272	236	490	726	1371	1908	2378	2667	3069	2953	3000	2885	2728	2693	2597	2750	2336	1835	1460	1239	1034	816	42311
Apr-15 Sunday	19	499	370	249	191	282	511	755	882	1267	1691	2182	2309	2425	2622	2558	2515	2513	2308	2027	1986	1459	1270	957	570	34398
Apr-15 Monday	20	312	201	201	324	804	2461	5502	5397	4202	3533	3053	2932	3000	2960	3009	3020	2962	3111	2321	1558	1153	980	718	477	54191
Apr-15 Tuesday	21	304	198	179	362	855	2509	5398	5571	4259	3514	3091	3066	2981	2934	3031	3018	3139	3196	2481	1660	1322	1202	827	518	55615
Apr-15 Wednesday	22	323	199	222	374	862	2511	5395	3952	3426	3809	3006	3250	3006	2668	2751	3104	3447	3398	2770	2126	1368	1148	853	555	54523
Apr-15 Thursday	23	375	233	207	315	804	2513	5278	5304	4458	3553	2945	2535	2632	3088	2689	2785	2837	3139	2775	1945	1585	1246	1004	613	54858
Apr-15 Friday	24	407	221	255	335	776	2099	5110	4895	4145	3652	2934	3348	3370	3516	3664	3802	3654	3717	3274	2516	1989	1550	1263	793	61285
Apr-15 Saturday	25	499	319	241	269	507	714	1462	1857	2349	2652	2901	2892	3258	2994	2773	2653	2638	2549	2270	1754	1342	1186	1024	741	41844
Apr-15 Sunday	26	474	266	223	193	324	501	869	1006	1425	2236	2793	3142	3047	3139	2790	2752	2923	2960	2544	1982	1751	1672	1007	658	40677
Apr-15 Monday	27	395	256	167	358	809	2416	5217	5621	4233	3529	3005	2969	2504	2442	2502	2858	3038	2990	2325	1526	1250	1092	698	514	52714
Apr-15 Tuesday	28	269	217	188	318	846	2452	5727	5378	4177	3501	3057	2987	2721	2884	2964	3026	3073	3014	2498	1644	1391	1184	805	465	54786
Apr-15 Wednesday	29	283	217	178	337	773	2393	4740	4294	3273	3421	2849	2859	2862	2909	2927	2889	2948	2840	2337	1483	1226	1019	845	471	50373
Apr-15 Thursday	30	312	222	183	342	826	2397	5532	4704	3744	3611	2724	2573	2917	2596	3161	3462	3502	3420	2599	1935	1590	1330	1110	700	55492
May-15 Friday	1	407	296	238	353	786	2291	5342	4044	4257	3391	3099	3584	3395	3590	3835	3920	3982	4068	3691	2736	2042	1642	1436	946	63371
May-15 Saturday	2	570	408	260	287	439	762	1735	2163	2444	3098	3397	3227	3472	3091	2921	2896	2747	2609	2338	1841	1506	1294	1111	706	45322
May-15 Sunday	3	520	998	373	263	313	532	976	1153	1455	2025	2488	2626	2762	2834	2797	2724	2684	2519	2099	1894	1543	1376	973	643	38570
May-15 Monday	4	374	251	208	351	791	2147	5510	5125	4189	2320	2714	2404	2354	2444	2594	2878	3145	3047	2453	1617	1296	1136	791	539	50678
May-15 Tuesday	5	292	212	205	346	835	2500	5043	2083	1803	3038	3383	3066	3088	3051	3221	3051	3330	3194	2609	1758	1355	1144	820	545	49972

May-15	Wednesday	6	326	220	220	381	732	2450	5533	5311	4188	3193	3038	3113	2628	2797	3317	3125	3345	3443	2759	1791	1364	1179	894	573	55920
May-15	Thursday	7	317	214	214	374	836	2509	5253	5497	4098	3434	3242	3124	2949	2958	3061	3137	3093	3245	2535	1700	1264	1170	959	610	55793
May-15	Friday	8	395	257	209	372	685	2135	4808	2761	4480	3140	3257	3337	3301	3552	3149	3172	3247	3516	3286	2504	1903	1594	1405	952	57417
May-15	Saturday	9	583	412	300	260	462	796	1605	2067	2649	3207	3040	3322	3526	3483	3419	2992	2864	2604	2338	1949	1635	1335	1097	780	46725
May-15	Sunday	10	519	348	290	189	251	451	802	935	1330	1991	2603	2688	2765	3045	2754	2928	2794	2841	2583	2067	1832	1503	1144	745	39398
May-15	Monday	11	403	240	259	365	806	2178	4036	4600	3987	3372	3164	3351	3235	3252	3181	3172	3037	3028	2346	1707	1314	1084	796	529	53442
May-15	Tuesday	12	293	222	202	343	795	2492	5352	5692	4061	3426	3191	3175	2941	2989	3089	3008	3055	3179	2321	1611	1260	1112	813	520	55142
May-15	Wednesday	13	311	233	179	361	810	2433	4580	4664	4289	3329	3037	3049	3119	3140	3112	3354	3250	3263	2725	1907	1390	1176	917	572	55200
May-15	Thursday	14	368	240	195	333	863	2471	5394	5126	4224	3389	3234	3182	3120	2875	3024	2900	3017	3499	2791	1946	1516	1436	1096	708	56947
May-15	Friday	15	399	268	260	394	818	2345	4977	5292	3902	3390	3223	3384	3481	3720	3893	3784	3577	4096	3377	2692	2123	1736	1379	938	63448
May-15	Saturday	16	582	391	295	293	507	860	1486	2184	2720	3059	3400	3709	3437	3566	2042	3233	2647	2619	2483	1954	1605	1417	1204	830	46523
May-15	Sunday	17	553	403	241	213	339	539	862	1059	1472	2092	2630	2655	2734	2960	2626	2877	2727	2471	2439	1994	1623	1480	1063	646	38698
May-15	Monday	18	381	218	189	368	789	2511	5650	5123	4297	2869	2623	2495	2790	2879	2933	2645	3111	3145	2296	1591	1297	1103	851	525	52679
May-15	Tuesday	19	314	207	203	353	833	2585	5903	4970	4260	3204	2594	3011	2758	2675	2882	3013	3189	3308	2466	1675	1261	1182	842	571	54259
May-15	Wednesday	20	344	207	175	373	768	2479	5418	5103	2915	3478	3069	3001	3074	2907	3064	2823	2953	2617	2162	1620	1198	1190	873	563	52374
May-15	Thursday	21	316	255	216	392	832	2516	5472	4976	4337	3021	3201	3335	3145	3171	3308	3452	3525	3383	2743	2206	1831	1506	1268	807	59214
May-15	Friday	22	488	315	286	366	795	2224	5187	4776	3810	3627	3401	3665	3672	3881	4005	3762	3561	3997	4010	3411	2671	2162	1697	1118	66887
May-15	Saturday	23	717	431	296	261	384	785	1414	1854	2544	3200	3683	4061	4154	3849	3068	3145	2963	2700	2325	1960	1609	1351	1122	841	48717
May-15	Sunday	24	516	338	238	189	244	477	795	1030	1631	2350	3063	3175	3306	3123	2740	2624	2535	2409	2105	1704	1410	1213	1019	706	38940
May-15	Monday	25	461	328	212	237	334	826	1341	1253	1596	2066	2294	2394	2533	2418	2384	2402	2205	2326	1946	1639	1428	1371	963	584	35541
May-15	Tuesday	26	378	234	188	327	737	2261	4593	2747	4086	2877	2745	2818	2789	2992	2807	2635	2594	2538	1996	1499	1249	1081	843	504	47518
May-15	Wednesday	27	323	219	198	342	844	2480	5410	5174	4287	3541	3207	3107	3016	2965	3046	3279	3387	3471	2560	1687	1331	1177	856	520	56427
May-15	Thursday	28	340	233	212	382	820	2468	5543	5085	2226	3899	3359	3136	3001	3041	2965	2633	3014	3462	2629	1911	1516	1299	1057	696	54927
May-15	Friday	29	373	287	247	372	832	2155	5244	4995	3772	3008	3325	3436	3500	3547	3680	3973	3675	3402	3184	2642	1878	1681	1324	903	61435
May-15	Saturday	30	512	388	268	287	490	834	1535	1949	2629	3002	3054	3501	3719	3670	3271	3126	2954	2624	2350	2016	1423	1384	1169	881	47036
May-15	Sunday	31	536	310	219	243	326	500	891	943	1423	1989	2468	2619	2657	2741	2890	2812	2650	2404	2220	1769	1606	1374	1084	731	37405
Jun-15	Monday	1	365	255	207	349	759	2212	4608	5608	3838	2896	2670	2560	2524	2642	2682	2616	2677	2787	2212	1684	1271	1154	824	514	49914
Jun-15	Tuesday	2	296	236	220	307	773	2310	4337	4326	3894	3481	2843	3023	2837	2892	2951	2558	3039	2868	2369	1628	1184	1141	829	515	50857
Jun-15	Wednesday	3	309	291	189	333	797	2458	4625	4021	3741	3190	3050	2839	2877	3080	3107	2915	2802	2933	2332	1747	1325	1155	887	523	51526
Jun-15	Thursday	4	321	264	205	355	742	2297	4479	3609	3321	2827	2705	2754	2822	3277	3312	2918	3350	3059	2813	2044	1506	1266	1013	667	51926
Jun-15	Friday	5	444	287	239	375	774	2019	4325	4036	3520	3722	3504	3182	3316	3510	2992	3164	3242	3196	2948	2749	2026	1691	1352	982	57595
Jun-15	Saturday	6	586	342	306	287	460	824	1663	2006	2525	2954	2786	3008	3431	3188	3311	3395	3799	3389	2554	2051	1581	1395	1158	841	47840
Jun-15	Sunday	7	566	320	262	189	345	556	976	1084	1338	1947	2417	2553	2670	2876	2949	3115	3057	2967	2480	1944	1702	1426	969	683	39391
Jun-15	Monday	8	393	274	216	337	768	2538	5718	5444	4237	3001	2765	2777	2897	2962	2837	2905	3090	3327	2425	1737	1316	1132	833	507	54436
Jun-15	Tuesday	9	317	243	245	324	813	2510	5685	5387	4047	3514	2894	2533	2525	2753	2955	3010	2767	2864	2181	1464	1054	961	781	495	52322
Jun-15	Wednesday	10	307	223	196	331	834	2476	5295	5497	4210	3153	2574	2594	2510	3153	2980	2534	3237	3241	2811	1923	1398	1256	962	616	54311
Jun-15	Thursday	11	372	239	226	333	800	2228	4272	4352	4242	3498	3175	3226	3097	3234	2763	2719	3361	3364	2811	2013	1551	1332	1122	684	55014
Jun-15	Friday	12	461	299	232	355	771	2313	5302	4115	4402	3734	3581	3604	3591	3943	3593	3778	3794	3472	3203	2707	2053	1735	1321	934	63293
Jun-15	Saturday	13	590	394	254	279	443	850	1605	2000	2714	2986	3116	3298	3267	3079	3030	3391	3430	3112	2951	1974	1687	1419	1156	868	47893
Jun-15	Sunday	14	577	341	220	217	319	526	899	998	1467	2108	2724	2859	2948	2752	2855	2980	2863	2881	2506	1999	1592	1490	1042	718	39881
Jun-15	Monday	15	451	248	194	364	769	2259	4462	4341	3486	3014	2591	2505	2562	2554	2895	3234	3101	3141	2421	1724	1327	1158	847	529	50177
Jun-15	Tuesday	16	352	249	210	326	823	2308	5527	5409	4063	3089	2620	2621	2514	2608	2975	3003	3148	3434	2626	1722	1323	1239	851	554	53594
Jun-15	Wednesday	17	362	260	201	359	858	2288	4338	4611	4184	3327	2725	2561	3219	3154	3212	3205	3219	3286	2801	1948	1400	1225	915	560	54218
Jun-15	Thursday	18	398	249	233	372	850	2498	5477	5397	4020	3380	3122	3262	3080	3406	3310	2907	2795	3324	2850	1991	1573	1377	1157	699	57727
Jun-15	Friday	19	407	288	264	357	844	2341	5096	4859	4094	3612	3335	3570	3671	3494	3645	3796	3772	3585	3325	2545	2070	1744	1328	907	62949
Jun-15	Saturday	20	603	373	298	312	463	792	1495	1989	2639	3134	3205	3478	3668	3388	3485	3604	3279	3244	2697	1996	1606	1464	1212	929	49353
Jun-15	Sunday	21	567	334	230	206	293	506	816	1060	1576	2128	2445	2590	2883	2797	2713	2857	2937	3190	2910	2319	1961	1612	1197	776	40903
Jun-15	Monday	22	488	315	241	352	795	2508	5515	5445	4316	3210	3172	3183	2911	2672	2987	2859	3111	2860	2301	1691	1240	1089	757	588	54606
Jun-15	Tuesday	23	332	262	194	372	858	2587	5468	5213	4278	3554	3321	3114	3012	2851	2687	2809	3254	3375	2532	1792	1340	1202	896	564	55867
Jun-15	Wednesday	24	350	262	241	360	833	2607	5188	5502	4163	3470	3338	3208	3030	2589	2685	2814	2762	3356	2766	1900	1440	1265	943	604	55676
Jun-15	Thursday	25	332	292	224	342	821	2527	5415	5403	4249	3689	3317	3320	3347	3422	3431	3291	3512	3517	2788	2052	1566	1417	1146	742	60162
Jun-15	Friday	26	472	412	268	387	890	2531	5021	5113	3861	3188	3222	3105	3194	3103	3135	3275	2907	2922	2788	2223	1874	1615	1247	848	57601
Jun-15	Saturday	27	548	381	267	279	475	824	1565	2051	2580	2917	3339	3407	3528	3420	3279	3244	3106	2978	2801	2064	1775	1341	1080	774	48023
Jun-15	Sunday	28	460	309	238	225	329	531	845	1025	1470	1997	2409	2790	3039	3186	3166	3046	2899	2822	2398	2020	1678	1439	1060	669	40050
Jun-15	Monday	29	432	274	216	349	896	2587	4689	4554	3518	3374	3153	3134	3087	2902	2825	2812	3034	2942	2430	1764	1249	1233	873	543	52870
Jun-15	Tuesday	30	321	240	218	334	847	2538	5356	5421	4177	3517	2797	3176	2636	2583	3135	2985	3230	3267	2579	1746	1257	1183	964	558	55065
Jul-15	Wednesday	1	345	247	204	348	852	2533	5361	5110	4431	3616	3382	3189	3157	2839	2936	3109	3367	3388	3020	2083	1528	1343	1020	716	58124
Jul-15	Thursday	2	428	293	256	378	783	2191	4928	5022	3950	3658	3298	3535	3705	3523	3284	3072	3218	3247	2646	2317	2226	1561	1646	1489	60654
Jul-15	Friday	3	682	380	264	369	582	1088	2132	2325	2517	2994	3309	3876	3432	3483	3029	3338	3327	2713	2685	2179	1776	1517	1221	832	50050
Jul-15	Saturday	4	563	367	245	253	312	495	805	1126	1702	2078	2524	2589	2926	3053	2855	2670	2418	2385	2037	1807	1437	1149	1078	905	37779
Jul-15	Sunday	5	537	337	231	174	214	469	735	870	1133	1747	2185	2312	2644	2641	3052	2918	2819	2654	2396	1878	1479	1442	1064	749	36680
Jul-15	Monday	6	451	287	199	338	698	2118	4198	4256	3598	3461	3143	3298	2807	2652	2727	2731	2680	2778	2246	1645	1223	1146	814	580	50074
Jul-15	Tuesday	7	322	209	204	314	801	2485	5169	5349	4132	3304	2809	3263	3046	3170	3032	2983	3116	3162	2395	1632	1187	1208	834	548	54674
Jul-15	Wednesday	8	306	247	235	327	820	2269	5394	5480	4280	3597	3295	3249	3159	3021	3309	3232	3352	3190	2727	1910	1417	1251	971	628	57666

Jul-15 Thursday	9	367	267	231	372	822	2524	5188	5379	4334	3502	3309	3134	3130	3363	3378	3421	3344	3418	2843	2010	1634	1437	1076	629	59112
Jul-15 Friday	10	415	275	261	374	787	2305	4774	5132	4096	3505	3328	3481	3333	3700	3867	3751	3811	3455	3335	2757	2105	1815	1371	980	63013
Jul-15 Saturday	11	547	392	280	312	486	857	1618	1887	2297	2768	3313	3473	3383	3272	3611	3255	3277	3220	2994	2060	1631	1473	1198	816	48420
Jul-15 Sunday	12	521	352	308	218	348	575	957	1107	1329	1904	2392	2564	2814	2885	2910	3134	2897	2846	2589	1861	1786	1486	1098	696	39577
Jul-15 Monday	13	423	299	212	393	827	2405	5399	5646	4272	3536	3076	2901	3278	3318	3286	3154	3059	3185	2547	1695	1224	1110	806	520	56571
Jul-15 Tuesday	14	320	243	209	350	833	2521	4473	1816	4068	3659	3003	2626	2739	2661	2637	2591	2702	2797	2330	1715	1317	1088	789	550	48037
Jul-15 Wednesday	15	320	244	213	330	809	2292	4992	4717	4610	3384	3140	3313	3242	3090	2947	2791	3255	3276	2772	1793	1386	1253	941	595	55705
Jul-15 Thursday	16	311	281	281	359	824	2148	3334	5203	4151	3391	3432	3482	3261	3277	3231	3381	3343	3459	2772	2035	1535	1376	1075	715	56657
Jul-15 Friday	17	426	290	270	361	803	2306	4966	4990	4029	3604	3505	3618	3428	3694	3636	3352	3653	3562	3372	2673	2158	1818	1275	942	62731
Jul-15 Saturday	18	573	352	261	295	477	803	1578	1826	2457	3065	3105	3346	3454	3541	3659	3665	3308	3309	2983	2093	1633	1496	1082	822	49183
Jul-15 Sunday	19	562	336	285	235	305	509	880	966	1341	1962	2405	2599	2757	2848	2862	2897	3013	2792	2481	1911	1806	1526	1223	768	39269
Jul-15 Monday	20	437	287	215	347	845	2497	5444	5459	4203	3567	3363	3232	3293	3297	3126	3093	3165	3121	2373	1756	1284	1107	858	561	56930
Jul-15 Tuesday	21	313	230	234	315	859	2498	5532	5423	4310	3470	3412	3144	3054	3175	3238	3086	3217	3155	2529	1749	1283	1252	898	539	56915
Jul-15 Wednesday	22	288	235	210	360	842	2438	5603	5243	4457	3716	3293	3172	3106	3217	3330	3222	3263	3432	2694	1905	1375	1220	929	602	58152
Jul-15 Thursday	23	349	248	231	342	904	2478	5497	5406	4238	3357	2810	2689	2702	2904	3289	3416	3318	3201	2858	2008	1534	1300	1096	687	56862
Jul-15 Friday	24	387	296	241	346	831	2314	5065	4981	4163	3509	3380	3456	3582	3593	3652	3906	3424	3663	3237	2418	1900	1640	1302	878	62164
Jul-15 Saturday	25	518	363	263	273	439	779	1424	1811	2434	2774	3314	3632	3799	3578	3672	3704	3423	3258	2907	2105	1630	1406	1125	892	49523
Jul-15 Sunday	26	575	343	237	256	318	496	839	990	1394	2039	2418	2570	2517	2830	2924	2794	2690	2604	2277	1901	1658	1468	1035	708	37881
Jul-15 Monday	27	437	294	239	360	810	2274	4456	4246	3437	2878	2982	2774	2786	2751	3191	3084	3119	3246	2447	1653	1295	1186	909	552	51406
Jul-15 Tuesday	28	331	226	228	342	851	2574	5321	5383	4294	3574	3231	3125	3150	3156	3105	3074	3025	3171	2462	1755	1463	1188	907	580	56516
Jul-15 Wednesday	29	332	232	224	321	824	2216	4384	4535	4238	3492	3077	2903	2939	2623	2733	2809	3178	3441	2759	1924	1447	1236	1022	605	53494
Jul-15 Thursday	30	407	253	233	330	879	2546	5084	5674	4219	3584	3469	3375	3451	3380	3377	3367	3281	3395	2809	2094	1596	1345	1051	674	59873
Jul-15 Friday	31	380	291	259	349	831	2259	4993	5126	4136	3594	3331	3522	3520	3685	3489	3612	3651	3512	3276	2637	1869	1585	1150	944	62001
Aug-15 Saturday	1	578	382	293	299	479	772	1403	1981	2470	2875	3208	3341	3655	3518	3410	3624	3539	3260	2777	2140	1638	1424	1174	873	49113
Aug-15 Sunday	2	564	391	267	232	304	509	826	1002	1395	2002	2506	2696	2894	2962	2765	2882	2893	2707	2392	1931	1589	1394	1062	616	38781
Aug-15 Monday	3	439	279	213	346	847	2486	5323	5395	4053	3567	3309	3368	3068	2828	2744	2865	2752	2785	2207	1622	1275	1146	901	548	54366
Aug-15 Tuesday	4	330	230	218	318	849	2518	5052	5389	4146	3514	3232	3047	3237	3052	3142	3208	3164	3220	2538	1771	1404	1171	857	551	56158
Aug-15 Wednesday	5	339	285	209	343	861	2489	5515	5439	3883	3138	2866	3015	3099	3243	3142	3229	3230	3307	2675	1847	1427	1304	974	593	56452
Aug-15 Thursday	6	324	240	223	363	862	2475	5434	4328	4269	3309	3055	3110	3115	3256	3305	3244	3257	3126	2704	1918	1637	1338	1043	678	56613
Aug-15 Friday	7	377	254	207	407	826	2370	4975	5101	3985	3529	3504	3652	3240	3150	3701	3976	4130	4075	3540	2695	1884	1791	1422	967	63758
Aug-15 Saturday	8	625	381	269	318	473	879	1607	1976	2457	2972	3507	3941	3918	3942	3739	3796	3659	3167	2656	2066	1696	1404	1139	852	51439
Aug-15 Sunday	9	566	342	232	238	361	618	982	1049	1434	2118	2752	2965	3118	3191	3062	3259	3229	2889	2553	2014	1626	1488	997	727	41810
Aug-15 Monday	10	419	293	217	379	826	2572	5226	5242	3383	3387	3018	3185	3133	3335	3127	3162	3109	3193	2436	1827	1422	1186	939	516	55532
Aug-15 Tuesday	11	341	231	218	337	822	2254	5109	5274	4259	3063	2637	2544	2575	2888	3128	3223	3105	3225	2607	1829	1331	1141	916	619	53676
Aug-15 Wednesday	12	309	238	206	327	843	2539	5373	5446	4159	3443	3216	3276	3266	3200	3112	3227	3311	3311	2788	1915	1422	1166	942	595	57630
Aug-15 Thursday	13	356	239	239	344	811	2559	5397	5455	3920	3583	3335	3356	3211	3399	3512	3456	3389	3424	2957	2138	1537	1326	1084	702	59729
Aug-15 Friday	14	415	298	247	349	860	2274	5117	5184	4092	3537	3478	3609	3568	3813	3611	3753	3860	3635	3454	2818	2018	1810	1404	867	64071
Aug-15 Saturday	15	575	380	269	244	455	844	1465	2064	2494	2950	3110	3809	3879	3385	3235	3403	3202	3121	2775	2197	1689	1490	1213	876	49124
Aug-15 Sunday	16	523	372	274	238	347	564	845	1036	1331	1999	2661	2939	3035	3117	2834	3046	2948	2731	2354	1895	1515	1397	978	607	39586
Aug-15 Monday	17	372	278	202	344	830	2347	4745	4787	4280	3241	2386	2494	2419	2507	2550	2512	2564	2750	2171	1599	1097	1088	738	460	48761
Aug-15 Tuesday	18	290	227	228	333	857	2310	4371	4782	4357	3315	3014	2803	2898	2923	2975	2949	2929	2952	2173	1607	1180	1024	777	477	51751
Aug-15 Wednesday	19	319	184	206	319	854	2630	5434	3472	3966	3269	2600	2486	2549	2792	3009	2951	2990	3046	2497	1770	1285	1117	821	515	51081
Aug-15 Thursday	20	296	191	230	325	811	2385	5439	5242	4241	3461	3152	3087	2888	3175	3118	3131	2995	3073	2551	1793	1456	1307	1008	612	55967
Aug-15 Friday	21	367	260	249	309	876	2437	5304	5230	4020	3471	3236	3452	3421	3459	3535	3767	3597	3474	3387	2595	1945	1608	1347	929	62275
Aug-15 Saturday	22	493	362	291	283	468	824	1509	1990	2447	2968	3478	3610	3772	3514	3185	3068	2918	2825	2442	1687	1406	1273	1056	750	46619
Aug-15 Sunday	23	457	332	246	217	331	550	874	1039	1399	2088	2560	2773	2937	3052	2897	3011	2807	2569	2293	1784	1408	1308	965	549	38446
Aug-15 Monday	24	362	240	186	327	824	2692	5573	5480	4256	3425	3057	2990	2932	2981	2909	3024	3055	3149	2257	1630	1149	1031	804	458	54791
Aug-15 Tuesday	25	254	220	214	335	850	2711	5457	5349	4419	3448	3094	2874	2860	2948	3067	2992	3054	3097	2363	1527	1283	1105	808	450	54779
Aug-15 Wednesday	26	265	217	199	348	874	2671	5372	5073	4537	3565	3064	2969	2920	2954	3102	3091	3031	3285	2395	1599	1407	1078	808	520	55344
Aug-15 Thursday	27	292	224	184	327	870	2768	5407	5347	4553	3657	3291	3177	3094	3200	3122	3177	3247	3339	2465	1844	1422	1215	911	558	57691
Aug-15 Friday	28	337	231	222	349	829	2578	5484	5425	4072	3497	3298	3328	3351	3486	3537	3568	3457	3383	3127	2464	1775	1515	1380	895	61588
Aug-15 Saturday	29	543	356	269	235	476	857	1490	1965	2405	2902	3134	3250	3320	3647	3275	3054	2901	2774	2472	1881	1499	1299	1071	820	45895
Aug-15 Sunday	30	496	327	259	193	327	576	773	959	1309	1876	2268	2326	2696	2721	2808	2628	2462	2342	2196	1668	1430	1237	858	497	35232
Aug-15 Monday	31	306	233	177	347	843	2483	3809	3549	4321	4171	3218	2924	2903	2812	2952	2926	2940	2908	2132	1497	1202	985	784	447	50869
Sep-15 Tuesday	1	262	200	186	304	865	2740	5249	4937	4695	3572	3152	2991	2909	3043	2957	2958	3008	3069	2368	1639	1246	1021	739	470	54580
Sep-15 Wednesday	2	302	169	179	329	855	2620	4194	4009	4328	3515	3237	2971	3089	2876	3118	3017	3143	3176	2579	1632	1358	1135	848	485	53164
Sep-15 Thursday	3	290	213	221	346	877	2823	5338	4732	4742	3504	3195	3046	2958	3184	3115	3342	3417	3335	2557	1759	1523	1244	1175	737	57673
Sep-15 Friday	4	438	284	268	372	830	2467	4977	5072	3944	3529	3448	3584	3816	3808	3915	3849	3716	3847	3777	3070	2441	2394	1831	1194	66871
Sep-15 Saturday	5	741	415	288	277	420	778	1267	1798	2249	2796	3472	4019	4181	3865	3599	3282	3157	2741	2387	1910	1622	1401	1132	802	48599
Sep-15 Sunday	6	462	306	210	188	266	512	787	978	1295	2021	2539	2841	2971	3003	2898	2756	2566	2427	1949	1643	1512	1194	999	653	36976
Sep-15 Monday	7	416	313	289	285	387	616	1074	1170	1426	1713	2184	2563	2701	2676	2782	2709	2635	2379	2306	1769	1598	1292	883	596	36762
Sep-15 Tuesday	8	315	196	211	325	833	2788	4871	5044	4656	3507	3240	3049	3028	3189	3193	3244	3288	3085	2398	1737	1235	1046	731	459	55668
Sep-15 Wednesday	9	283	194	214	342	888	2671	5164	5085	4478	3773	3221	3130	3004	3010	3193	3072	3095	3148	2452	1773	1302	1136	807	501	55936
Sep-15 Thursday	10	301	224	210	314	891	2866	4880	4125	3311	3960	3408	3299	3170	3308	3211	3223	3259	3325	2548	1822	1483	1162	888	555	55743

Sep-15	Friday	11	373	243	252	355	861	2612	3338	4093	4431	3612	3217	3252	3347	3355	3519	3659	3573	3330	3099	2491	1947	1575	1317	851	58702
Sep-15	Saturday	12	542	312	292	280	527	864	1686	2016	2322	2548	2777	2966	3156	3027	3114	3006	2921	2752	2521	1840	1405	1253	1075	824	44026
Sep-15	Sunday	13	694	608	354	228	312	596	943	1031	1376	1949	2545	2938	3249	3352	3357	3233	3092	2941	2568	2081	1631	1389	872	568	41907
Sep-15	Monday	14	355	228	177	355	847	2697	5396	5037	4284	3371	3335	3078	2751	2597	3166	3032	3098	3001	2339	1525	1219	1008	757	481	54134
Sep-15	Tuesday	15	258	217	202	352	883	2771	5320	5058	3691	3647	3068	2957	2645	3034	3067	3126	3143	3078	2417	1695	1365	1139	762	538	54433
Sep-15	Wednesday	16	312	193	193	341	861	2817	5326	5076	4467	3596	3064	3130	3097	3092	3141	3045	3249	3318	2565	1692	1401	1123	823	473	56395
Sep-15	Thursday	17	273	193	194	360	859	2812	4829	4109	3569	3739	3109	3101	3067	3147	3308	3235	3345	3426	2752	1824	1478	1290	1034	685	55738
Sep-15	Friday	18	437	231	254	356	864	2685	2836	4149	4168	3543	3308	3358	3229	3648	3614	3809	3621	3610	3532	2765	1904	1705	1343	904	59873
Sep-15	Saturday	19	560	309	246	265	503	937	1532	2075	2593	3130	3339	3502	3549	3266	3142	3174	2894	2764	2461	1938	1499	1282	1009	817	46786
Sep-15	Sunday	20	472	325	240	248	305	587	850	1045	1445	2139	2666	2745	2903	2918	2722	2713	2643	2684	2385	2004	1648	1374	855	634	38550
Sep-15	Monday	21	348	241	184	378	840	2839	5524	5210	3867	3398	3106	3034	2896	3049	2978	3136	3181	3077	2291	1669	1142	962	736	483	54569
Sep-15	Tuesday	22	251	195	185	331	867	2881	5147	4663	4183	3476	3036	3019	2862	2923	3078	2973	3113	3068	2418	1709	1285	1104	743	437	53947
Sep-15	Wednesday	23	258	197	194	363	854	2886	5245	5092	3902	3549	3155	3009	3006	2955	3193	3053	3154	3108	2605	1747	1304	1119	823	513	55284
Sep-15	Thursday	24	277	197	211	342	867	2900	5159	5024	3766	3363	3121	2923	2807	3058	3116	3070	2807	3680	2459	1759	1374	1215	954	564	55013
Sep-15	Friday	25	334	259	204	356	887	2586	4856	3188	4295	3480	3282	3339	3415	3449	3383	3513	3642	3584	3296	2576	2118	1649	1315	851	59857
Sep-15	Saturday	26	514	358	284	246	446	903	1520	1962	2452	2800	2994	3320	3249	3203	3253	3146	3114	2935	2561	1917	1523	1359	1131	729	45919
Sep-15	Sunday	27	469	297	231	200	294	543	839	1058	1361	2019	2522	2655	2879	2872	2979	2832	2872	2669	2343	1995	1623	1383	950	515	38400
Sep-15	Monday	28	351	231	203	371	885	2800	5457	5053	4249	3471	3071	2901	2897	2937	3170	3067	3074	2934	2272	1580	1162	1017	681	463	54297
Sep-15	Tuesday	29	278	174	215	344	888	2828	4569	4528	4402	3473	2982	2750	2500	2423	1951	2271	2703	2803	2260	1610	1188	1052	749	467	49408
Sep-15	Wednesday	30	254	187	191	343	888	2782	5036	4717	4401	3497	3057	3010	2798	2582	2841	2613	2635	2663	2138	1571	1213	1052	809	494	51772
Oct-15	Thursday	1	292	207	194	378	911	2524	3581	2560	3893	3468	3213	3228	2607	3422	3101	3070	2877	2652	2025	1538	1190	1105	877	543	49456
Oct-15	Friday	2	282	215	200	356	809	2340	4794	3491	2914	2867	2804	2790	2984	2920	2920	2797	2723	2350	1902	1491	1076	950	794	550	47319
Oct-15	Saturday	3	344	241	168	231	403	636	1007	1096	1093	1170	1138	1216	1381	1309	1304	1220	1243	1111	914	703	548	443	365	302	19586
Oct-15	Sunday	4	193	138	102	117	208	382	561	689	693	965	1216	1438	1662	1879	1985	1886	1857	1774	1523	1058	717	612	420	212	22287
Oct-15	Monday	5	158	109	89	218	551	1777	3511	3220	2563	2467	2338	2375	2428	2515	2584	2657	2490	2420	1925	1332	1006	885	666	412	40696
Oct-15	Tuesday	6	255	187	173	334	846	2547	4952	4423	3794	3402	2981	2970	2944	2929	2906	2895	3003	2955	2353	1636	1227	1092	811	455	52070
Oct-15	Wednesday	7	282	212	191	360	925	2857	4805	3666	2902	3740	3080	2926	3099	3286	3283	3072	3072	2881	2743	1864	1298	1116	824	562	53046
Oct-15	Thursday	8	293	219	206	406	955	2976	5708	5162	4682	4257	3379	3193	3074	3261	3366	3362	3365	3230	2637	1899	1354	1182	1151	703	60020
Oct-15	Friday	9	502	286	246	408	922	2702	5130	4480	3609	3568	3406	3580	3452	3630	3687	3423	3346	3319	3237	2621	2008	1977	1802	841	62182
Oct-15	Saturday	10	500	335	272	271	526	963	1534	2059	2488	2660	2853	3167	3173	2915	2833	2774	2541	2503	2035	1792	1356	1209	1022	736	42517
Oct-15	Sunday	11	451	297	231	232	329	561	912	1004	1374	1849	2531	2686	3071	2989	2655	2717	2659	2677	2518	2051	1640	1496	893	690	38513
Oct-15	Monday	12	382	237	224	376	808	2495	5314	4709	3458	3326	3172	3067	3168	3102	3118	3228	3111	3129	2454	1667	1214	1056	799	460	54074
Oct-15	Tuesday	13	278	224	203	340	910	2915	5288	4478	4269	3384	3171	3055	2917	3083	3000	3061	3104	3026	2330	1756	1160	1070	783	494	54299
Oct-15	Wednesday	14	224	232	215	353	890	2898	5222	4468	4359	3543	3281	3189	3023	3116	3301	3341	3265	3194	2726	1809	1366	1189	845	557	56606
Oct-15	Thursday	15	353	217	213	359	903	2808	4402	4239	3794	3121	3014	2865	2550	3156	3250	3574	3538	3318	2722	2062	1453	1207	987	705	54810
Oct-15	Friday	16	382	279	248	374	842	2695	5364	3025	3754	3297	3272	3249	3244	3700	3637	3659	3583	3433	3238	2587	1934	1572	1395	1025	59788
Oct-15	Saturday	17	565	374	284	279	510	922	1676	2141	2336	2761	2983	3216	3120	3279	3102	3146	2769	2946	2797	1936	1653	1439	1313	875	46422
Oct-15	Sunday	18	471	331	241	194	336	620	1010	1103	1326	2047	2619	2921	3399	3433	3332	3181	3003	2891	2757	2208	1822	1463	1002	568	42278
Oct-15	Monday	19	352	218	211	365	849	2744	5408	4539	3767	3393	3031	2995	3104	3127	3226	3179	3126	3025	2337	1800	1291	988	747	500	54322
Oct-15	Tuesday	20	258	221	196	347	884	2904	5099	3433	4237	3519	3097	2981	2840	3213	3142	3412	3353	3377	2753	1977	1412	1143	901	568	55267
Oct-15	Wednesday	21	325	228	209	341	875	2845	5361	4524	4028	3650	3257	2889	2461	2939	2978	3280	3397	3333	2600	1906	1426	1159	857	567	55435
Oct-15	Thursday	22	310	232	226	364	892	2836	4809	3834	4123	3558	3376	3045	3319	3371	3270	3478	3538	3525	2899	2025	1503	1217	969	658	57377
Oct-15	Friday	23	376	257	235	398	843	2684	5252	4522	3683	3474	3185	3406	3312	3230	3852	3608	3647	3533	3160	2599	1897	1594	1228	879	60854
Oct-15	Saturday	24	515	356	257	264	466	880	1604	1993	2416	2912	2960	3365	3287	3007	2897	2997	3125	2821	2623	2021	1551	1445	1146	765	45673
Oct-15	Sunday	25	469	312	253	223	342	559	872	966	1313	1902	2291	2590	2870	3187	3270	3091	2948	3004	2840	2256	1679	1470	959	590	40256
Oct-15	Monday	26	361	235	198	407	834	2829	4370	2590	4193	3398	3095	3030	3120	3001	3249	3119	3260	3154	2287	1587	1120	991	720	467	51615
Oct-15	Tuesday	27	260	178	175	360	858	2971	4899	4160	3696	3218	3021	2819	2924	2867	2933	2915	3052	2974	2266	1563	1116	944	644	470	51283
Oct-15	Wednesday	28	294	202	175	370	861	2872	5042	4757	3401	3397	3175	2645	2639	2467	3131	3181	3099	3207	2537	1713	1286	1126	839	478	52894
Oct-15	Thursday	29	291	247	207	375	864	2957	5172	4372	4118	3620	3277	3129	2996	3025	3201	3402	3510	3351	2627	2014	1640	1501	1105	617	57618
Oct-15	Friday	30	346	257	238	375	872	2702	4166	3029	3894	3610	3336	3286	3265	3375	3506	3368	3272	3501	3330	2538	1907	1727	1616	1064	58580
Oct-15	Saturday	31	701	342	269	239	483	842	1449	1742	2176	2474	2679	2984	2894	2693	2677	2657	2477	2165	2049	1813	1657	1666	1521	1342	41991
Nov-15	Sunday	1	846	332	271	241	530	591	838	1156	1500	1908	2315	2439	2488	2682	2766	2949	2791	2742	2549	2417	1878	1477	852	591	39149
Nov-15	Monday	2	314	247	191	389	799	2441	4357	4146	3405	3454	3129	2916	2966	2783	2990	2913	2923	2919	2209	1575	1242	1189	869	467	50833
Nov-15	Tuesday	3	269	212	214	348	842	2786	4569	4582	3634	3201	3025	2900	2770	2964	2925	2881	2898	3027	2435	1592	1183	1199	727	506	51689
Nov-15	Wednesday	4	306	213	189	342	911	2719	4953	4308	4145	3447	3073	3113	2977	3070	3219	3201	3188	3187	2470	1736	1417	1395	1098	607	55284
Nov-15	Thursday	5	264	207	203	362	918	2742	5151	4270	3478	3401	3310	3243	3010	3036	3385	3252	3392	3307	2830	2030	1547	1728	1421	921	57408
Nov-15	Friday	6	341	275	237	357	840	2648	5109	3456	3824	3500	3392	3285	3363	3413	3544	3638	3625	3579	3180	2475	1992	1799	1859	1398	61129
Nov-15	Saturday	7	962	366	247	228	383	829	1599	2196	2630	3193	3334	3302	3422	3116	3131	3203	2986	2672	2300	1776	1666	1585	1675	1566	48367
Nov-15	Sunday	8	1439	441	234	195	317	565	813	1045	1330	1917	2391	2549	2770	2861	2904	2670	2516	2886	2693	2069	1652	1488	928	522	39195
Nov-15	Monday	9	299	206	168	361	798	2639	4530	4081	3748	3035	2717	2741	2801	2884	2927	2775	2932	2779	1879	1472	1068	936	694	436	48906
Nov-15	Tuesday	10	245	221	161	346	861	2789	5344	3345	4178	3425	3303	3041	2904	2892	2482	2718	2666	2959	2140	1568	1092	1018	687	479	50864
Nov-15	Wednesday	11	303	203	182	326	772	2105	4201	3702	3217	3488	3251	3339	3211	3057	3169	3050	3151	3312	2523	1679	1235	1024	865	469	51834
Nov-15	Thursday	12	286	194	188	356	844	2661	5383	4202	4095	3481	3190	3037	3064	3097	3309	3413	3379	3315	2665	1836	1309	1196	892	602	55994
Nov-15	Friday	13	351	241	220	350	853	2650	5021	3846	3970	3615	3456	3534	3647	3606	3638	3378	3458	3468	3290	2321	1803	1528	1078	856	60178

Nov-15	Saturday	14	536	293	250	245	495	813	1636	2000	2417	2810	3020	2830	3096	2807	3028	3146	2980	3081	2915	1698	1368	1195	948	688	44295
Nov-15	Sunday	15	394	287	217	207	311	528	848	1065	1350	1932	2460	2772	3061	2866	2704	2614	2635	2591	2323	1808	1368	1159	792	520	36812
Nov-15	Monday	16	324	260	242	386	818	2344	3976	2718	4415	3503	2948	2525	2712	2483	2963	3000	3035	3044	2293	1499	1088	967	773	375	48691
Nov-15	Tuesday	17	273	210	196	367	853	2823	5220	4323	3839	3394	3217	2486	2398	2831	3051	2928	3136	3189	2400	1460	1083	1019	698	443	51837
Nov-15	Wednesday	18	284	202	178	354	880	2805	5040	3460	3701	3735	2729	2709	2832	3031	3030	2937	3131	3215	2497	1567	1137	955	792	494	51695
Nov-15	Thursday	19	293	242	201	327	820	2693	4702	3946	3676	3409	3092	3124	2844	3064	3055	3258	3240	3203	2527	1720	1266	1095	827	507	53131
Nov-15	Friday	20	368	292	227	348	873	2651	5376	4212	3635	3584	3343	3428	3276	3286	3411	3621	3431	3331	3152	2438	1753	1388	1096	800	59320
Nov-15	Saturday	21	487	280	253	234	479	825	1546	1948	2424	2816	3099	3100	3098	3146	3056	2941	2851	2987	2783	1915	1377	1161	1039	708	44553
Nov-15	Sunday	22	496	342	219	191	331	564	862	987	1371	1858	2447	2661	3117	2985	2959	2961	2887	2560	2264	1835	1528	1258	826	535	38044
Nov-15	Monday	23	343	238	188	352	857	2704	5384	4604	3573	3611	3317	3279	3261	3079	3186	3136	3116	3213	2462	1639	1151	991	769	480	54933
Nov-15	Tuesday	24	302	200	196	348	851	2542	5086	4492	3541	3409	3208	3277	3256	3345	3179	3407	3461	3560	2722	2190	1458	1283	1093	823	57229
Nov-15	Wednesday	25	513	344	319	398	881	2383	5011	3998	3404	3285	3298	3374	3436	3545	3741	3858	3376	3147	2760	2101	1783	1392	1111	843	58301
Nov-15	Thursday	26	436	329	303	204	271	409	643	791	810	1189	1590	2277	2272	2129	2040	2029	2266	2436	2439	2271	2024	1675	1259	893	32985
Nov-15	Friday	27	575	352	247	282	568	1103	1991	2087	2162	2406	2713	3088	3348	3338	3249	3066	2956	2731	2470	1866	1389	1169	950	619	44725
Nov-15	Saturday	28	425	273	234	234	402	638	1064	1342	1717	2098	2182	3027	3065	2901	2917	2935	3121	2915	2678	2105	1539	1232	1030	737	40811
Nov-15	Sunday	29	443	337	264	206	346	525	754	913	1230	1747	2388	2495	2704	2733	2898	2871	3402	3468	3029	2212	1972	1548	994	604	40083
Nov-15	Monday	30	411	293	222	364	848	2725	4728	4775	3750	3594	3115	2778	3088	3045	2721	3063	3031	3109	2330	1490	1098	924	712	478	52692
Dec-15	Tuesday	1																									
Dec-15	Wednesday	2																									
Dec-15	Thursday	3																									
Dec-15	Friday	4																									
Dec-15	Saturday	5																									
Dec-15	Sunday	6																									
Dec-15	Monday	7																									
Dec-15	Tuesday	8																									
Dec-15	Wednesday	9																									
Dec-15	Thursday	10																									
Dec-15	Friday	11																									
Dec-15	Saturday	12																									
Dec-15	Sunday	13																									
Dec-15	Monday	14																									
Dec-15	Tuesday	15																									
Dec-15	Wednesday	16																									
Dec-15	Thursday	17																									
Dec-15	Friday	18																									
Dec-15	Saturday	19																									
Dec-15	Sunday	20																									
Dec-15	Monday	21																									
Dec-15	Tuesday	22																									
Dec-15	Wednesday	23																									
Dec-15	Thursday	24																									
Dec-15	Friday	25																									
Dec-15	Saturday	26																									
Dec-15	Sunday	27																									
Dec-15	Monday	28																									
Dec-15	Tuesday	29																									
Dec-15	Wednesday	30																									
Dec-15	Thursday	31																									

30 Highest Hours of the year

100 Highest Hours of the year

AADT 51300

WESTBOUND VOLUMES	Day	12a 1	1a 2	2a 3	3a 4	4a 5	5a 6	6a 7	7a 8	8a 9	9a 10	10a 11	11a 12	12p 13	1p 14	2p 15	3p 16	4p 17	5p 18	6p 19	7p 20	8p 21	9p 22	10p 23	11p 24	Total
Jan-15 Thursday	1																									
Jan-15 Friday	2																									
Jan-15 Saturday	3																									
Jan-15 Sunday	4																									
Jan-15 Monday	5																									
Jan-15 Tuesday	6																									
Jan-15 Wednesday	7																									
Jan-15 Thursday	8																									
Jan-15 Friday	9																									
Jan-15 Saturday	10																									
Jan-15 Sunday	11																									
Jan-15 Monday	12																									
Jan-15 Tuesday	13																									
Jan-15 Wednesday	14																									
Jan-15 Thursday	15																									
Jan-15 Friday	16																									
Jan-15 Saturday	17																									
Jan-15 Sunday	18																									
Jan-15 Monday	19																									
Jan-15 Tuesday	20																									
Jan-15 Wednesday	21																									
Jan-15 Thursday	22																									
Jan-15 Friday	23																									
Jan-15 Saturday	24																									
Jan-15 Sunday	25																									
Jan-15 Monday	26																									
Jan-15 Tuesday	27																									
Jan-15 Wednesday	28																									
Jan-15 Thursday	29																									
Jan-15 Friday	30																									
Jan-15 Saturday	31																									
Feb-15 Sunday	1	665	440	421	211	168	274	544	735	1129	1530	2165	2361	2725	2973	3062	2812	2729	2624	2070	1177	1027	801	1200	695	34538
Feb-15 Monday	2	382	201	204	208	293	721	1879	2661	2687	2469	2479	2614	2741	2896	3391	3837	5510	4636	4114	2177	1709	1294	911	668	50682
Feb-15 Tuesday	3	541	314	256	236	287	683	1879	2748	2497	2301	2245	2374	2633	3011	3716	5054	5098	5744	3985	2354	1873	1572	1061	718	53180
Feb-15 Wednesday	4	576	324	267	234	278	696	1851	2723	2663	2182	2336	2465	2706	2979	3567	4792	4982	5132	3899	2651	1977	1396	1024	671	52371
Feb-15 Thursday	5	549	294	253	255	315	667	1791	2596	2524	2356	2453	2506	2860	3251	3873	5107	5338	5560	4080	2156	2197	1611	1175	761	54528
Feb-15 Friday	6	589	371	270	236	330	636	1714	2674	2401	2395	2583	2912	3422	3736	4284	5272	5175	4520	4225	3073	1966	1756	1777	1021	57338
Feb-15 Saturday	7	772	429	394	231	221	453	917	1296	1661	2124	2336	2530	2708	2984	3080	3304	3323	3117	2898	2399	1772	1678	1314	969	42910
Feb-15 Sunday	8	644	458	396	243	160	220	572	805	1198	1677	2269	2316	2896	3046	3073	3400	3665	3245	2960	2046	1413	963	730	561	38956
Feb-15 Monday	9	323	189	194	214	322	740	1842	2732	2636	2281	2342	2540	2691	2946	3688	5048	5674	5515	3811	2141	1692	1350	919	735	52565
Feb-15 Tuesday	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	11	563	290	264	225	316	718	1868	2776	2613	2187	2414	2510	2766	3031	3706	5087	5342	5420	4347	2633	2160	1541	1242	770	54789
Feb-15 Thursday	12	566	319	257	250	324	698	1890	2762	2600	2359	2537	2580	2856	3278	3903	5093	5668	5482	4155	2687	2133	1651	1253	808	56109
Feb-15 Friday	13	655	335	266	257	305	653	1613	2737	2555	2501	2773	3121	3538	3894	4508	5064	5807	5257	4078	2827	2015	2043	1612	1114	59528
Feb-15 Saturday	14	867	538	382	219	181	363	758	1170	1648	2109	2547	2589	2753	2815	3054	2506	3626	3162	2980	2595	1939	1844	1608	1697	43950
Feb-15 Sunday	15	785	514	469	219	210	252	509	815	1226	1890	2649	2856	3224	3379	3355	3499	3203	3225	2651	2020	1527	1045	832	576	40930
Feb-15 Monday	16	362	209	196	216	339	709	1626	2438	2563	2547	2787	2925	3172	3187	3842	4433	4734	5044	3098	2308	1488	1327	929	660	51139
Feb-15 Tuesday	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	18	554	310	251	188	286	660	1789	2652	2508	2333	2308	2292	2799	3067	3671	4935	5615	5539	4071	2527	2034	1661	1218	797	54065
Feb-15 Thursday	19	554	321	252	261	342	646	1850	2756	2587	2363	2576	2760	2864	3224	3843	5121	5008	5639	4006	1626	2261	1571	1098	715	54244
Feb-15 Friday	20	554	363	247	225	283	672	1545	2512	2651	2515	2552	2826	3377	3661	4373	5338	5228	5668	3985	2690	1843	1694	1351	994	57147
Feb-15 Saturday	21	783	447	419	258	226	410	947	1317	1770	1945	2288	2598	2885	3021	3232	3171	3147	3042	2814	2360	1884	2013	1535	1045	43557
Feb-15 Sunday	22	747	537	481	267	168	263	585	881	1308	1898	2470	2718	3035	3241	3321	3589	3205	3056	2582	1923	1373	1007	792	566	40013
Feb-15 Monday	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Tuesday	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Wednesday	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Thursday	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-15 Saturday	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Sunday	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Mar-15 Tuesday	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Wednesday	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Thursday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Friday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Sunday	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Monday	9	432	237	222	220	345	754	1854	2702	2751	2516	2657	2630	2810	3040	3665	4972	5510	5698	3813	2574	2111	1511	1074	762	54860
Mar-15 Tuesday	10	629	341	242	254	329	680	1834	2726	2561	2346	2374	2617	2802	3182	3732	4981	5433	5499	4128	2678	2209	1971	1266	1000	55814
Mar-15 Wednesday	11	644	396	312	255	321	723	1813	2687	2777	2638	2884	2795	2990	3331	3965	4918	4814	5635	4708	2895	2451	1871	1341	795	57959
Mar-15 Thursday	12	672	369	283	281	307	710	1869	2696	2622	2414	2541	2808	3118	3360	3629	4836	5623	5351	4429	2812	2292	1794	1242	951	57009
Mar-15 Friday	13	705	391	310	301	331	659	1738	2576	2619	2441	2835	3103	3572	3787	4565	5229	5714	5735	3966	2888	2198	1811	1570	1141	60185
Mar-15 Saturday	14	849	540	398	249	248	439	856	1236	1514	1846	2299	2495	2780	2955	3070	3138	3026	2858	2714	2488	2180	1850	1797	1194	43019
Mar-15 Sunday	15	758	495	466	298	203	347	614	929	1260	1998	2543	2828	3185	3426	3399	3647	3484	3302	3171	2508	1851	1280	892	661	43545
Mar-15 Monday	16	454	222	241	231	334	760	1922	2823	2872	2558	2789	2598	2864	3055	3676	4905	5435	5284	4374	2608	2153	1646	1112	751	55667
Mar-15 Tuesday	17	593	316	246	251	333	706	1948	2870	2605	2430	2478	2610	2899	3154	3866	4893	3488	5162	4961	2957	2215	1671	1204	878	54734
Mar-15 Wednesday	18	669	379	325	256	333	747	1890	2804	2669	2556	2640	2870	3010	3242	3907	5161	5660	5635	4122	2821	2335	1730	1196	781	57738
Mar-15 Thursday	19	628	300	274	244	315	699	1842	2543	2439	2562	2640	2904	2979	3366	3822	4974	5350	5427	3921	2600	1991	1720	1332	814	55686
Mar-15 Friday	20	679	381	293	278	321	742	1754	2557	2656	2559	2861	3224	3609	3977	4553	5308	5740	5648	3938	3030	2452	2299	1783	1314	61956
Mar-15 Saturday	21	971	568	424	287	297	489	996	1539	2142	2255	2742	2762	2896	3016	3339	3295	3461	3170	2988	2482	2222	2038	1957	1226	47562
Mar-15 Sunday	22	790	534	444	267	186	290	597	823	1362	1964	2877	3218	3398	3575	3548	3344	2940	2484	2388	1952	1416	992	770	632	40791
Mar-15 Monday	23	352	238	193	190	354	780	1876	2684	2770	2463	2561	2684	2869	3127	3679	4786	5087	5612	3672	2241	1868	1445	1042	743	53316
Mar-15 Tuesday	24	558	331	268	247	327	721	1873	2768	2684	2361	2320	2452	2798	3031	3731	5169	5152	5641	4216	2700	2162	1852	1099	812	55273
Mar-15 Wednesday	25	613	348	259	266	345	716	1905	2751	2713	2374	2475	2676	2989	3246	3863	5089	5612	5432	4187	2638	2242	1927	1289	751	56706
Mar-15 Thursday	26	638	377	267	267	322	709	1882	2775	2686	2460	2581	2878	3014	3362	4034	5283	5393	5720	4294	2871	2452	1863	1395	828	58351
Mar-15 Friday	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-15 Saturday	28	872	480	426	231	265	548	1069	1676	2081	2509	2967	3415	3560	3245	3209	3123	3010	2765	2614	2326	2096	1812	1408	1094	46801
Mar-15 Sunday	29	707	486	471	230	213	309	625	1040	1710	2591	3465	3747	3788	3851	3571	3417	3114	3001	2777	2239	1739	1172	864	587	45714
Mar-15 Monday	30	492	251	232	241	348	724	1765	2599	2612	2529	2621	2753	2930	3214	3674	4926	5405	4809	4126	2448	1987	1597	1141	806	54230
Mar-15 Tuesday	31	627	332	254	255	322	737	1776	2570	2677	2593	2563	2591	2867	3235	3930	5235	5517	5469	4127	2757	2243	1861	1456	915	56909
Apr-15 Wednesday	1	609	367	274	294	341	713	1759	2583	2723	2422	2819	2791	3204	3233	3909	5050	5652	5054	4315	2908	2319	1860	1322	906	57427
Apr-15 Thursday	2	644	376	264	251	378	759	1764	2715	2761	2741	2887	3040	3139	3456	4252	5422	5770	5721	4006	2859	2388	1852	1380	913	59738
Apr-15 Friday	3	693	408	325	260	313	653	1446	2323	2443	2554	2935	3250	3571	4089	4647	5284	4689	4732	4113	3264	2695	2096	1631	1254	59668
Apr-15 Saturday	4	934	614	426	243	264	454	840	1376	1801	2265	2734	2788	2797	2891	3028	3033	2996	2916	2658	2452	2161	1896	1549	1032	44148
Apr-15 Sunday	5	719	461	428	197	191	322	584	890	1386	2006	2643	2876	3092	3420	3303	3544	3548	3030	2693	2185	1843	1227	786	558	41932
Apr-15 Monday	6	377	229	249	189	406	884	2006	2971	2944	2800	2840	2896	3146	3328	3952	5103	5576	5667	4124	2799	2079	1644	1129	832	58170
Apr-15 Tuesday	7	553	365	251	251	333	755	2090	2898	2938	2656	2788	2816	2936	3211	3882	5209	5647	5688	4465	2912	2290	1848	1237	935	58954
Apr-15 Wednesday	8	666	349	306	231	353	812	1990	2919	2741	2382	2656	2836	2999	3314	4067	5033	5694	5522	4771	3163	2640	2032	1393	868	59737
Apr-15 Thursday	9	629	387	287	264	375	771	2017	2922	2787	2532	2881	2982	3102	3499	4218	5131	5601	5577	4720	3374	2655	2665	1483	937	61796
Apr-15 Friday	10	735	409	334	278	363	821	1986	2806	2721	2933	3217	3350	3605	3993	4740	5308	5769	5540	4453	3278	2568	2155	1717	1393	64472
Apr-15 Saturday	11	908	504	473	294	339	610	1106	1795	2288	2718	3134	3013	2957	3111	3207	3274	3303	2758	3065	2403	2223	2197	1946	1243	48869
Apr-15 Sunday	12	785	551	513	249	244	387	767	1142	1778	2499	3172	3273	3573	3566	3691	3768	3986	3137	2768	1726	1397	1077	812	556	45417
Apr-15 Monday	13	352	259	196	193	372	805	2006	2782	2785	2543	2718	2610	2856	3122	3666	4852	5217	5537	3996	2595	2050	1578	1114	755	54959
Apr-15 Tuesday	14	561	337	241	270	315	767	2021	2844	2678	2403	2566	2610	2614	3280	3729	4982	5446	5617	4134	2595	2260	1666	1083	865	55884
Apr-15 Wednesday	15	592	353	271	278	316	749	2002	2816	2664	2370	2531	2739	2862	3282	3795	5016	5749	5097	4174	2495	2005	1527	1152	716	55551
Apr-15 Thursday	16	587	370	256	234	344	738	1967	2940	2752	2320	2524	2731	2873	3395	3922	5339	5770	5644	3956	2597	2155	1709	1188	856	57167
Apr-15 Friday	17	667	375	303	276	354	726	1855	2698	2801	2689	2981	3072	3624	3830	4326	4924	5718	5700	3819	2689	2020	2020	1714	1343	60524
Apr-15 Saturday	18	905	494	421	292	255	504	926	1417	1760	2115	2353	2739	2804	2561	3173	3219	2923	2811	2546	2334	2257	2243	1697	1235	43984
Apr-15 Sunday	19	817	519	457	255	229	290	599	954	1343	1982	2823	2951	3245	3305	3376	3113	2834	2664	2390	1775	1309	992	775	557	39554
Apr-15 Monday	20	384	243	206	233	336	798	1964	2751	2594	2674	2574	2797	2852	3170	3608	5067	5672	5563	3847	2501	1863	1398	1071	780	54946
Apr-15 Tuesday	21	577	383	241	233	333	777	2039	2833	2599	2322	2407	2565	2768	3189	3825	5039	5216	5613	4401	2770	2298	1743	1148	771	56090
Apr-15 Wednesday	22	582	352	274	269	337	735	2048	2794	2850	2583	2674	2752	2913	3324	3870	5072	5662	5039	4560	2939	2449	1811	1242	1494	58625
Apr-15 Thursday	23	685	439	264	227	338	781	2076	2743	2548	2594	2626	2778	3120	3314	4049	5108	5742	5549	4510	3123	2414	1953	1451	897	59329
Apr-15 Friday	24	709	400	328	271	381	777	1952	2743	2746	2597	2930	3405	3631	4044	4566	5182	5006	5661	3756	2992	2482	2176	1735	1307	61777
Apr-15 Saturday	25	881	493	454	262	303	484	1006	1504	1841	2190	2439	2611	2786	2688	2764	2881	2744	2579	2246	2106	2023	1955	1602	1133	41975
Apr-15 Sunday	26	730	495	415	257	214	343	737	1185	1646	2066	2839	2832	3276	3421	3574	3628	3425	3317	3071	2668	2167	1432	933	578	45249
Apr-15 Monday	27	382	249	200	219	330	769	2123	2842	3020	2714	2797	2772	2907	3115	3671	4935	5619	5640	4034	2624	1981	1476	996	775	56190
Apr-15 Tuesday	28	550	318	252	266	322	809	2037	2843	2718	2464	2481	2648	2835	3065	3907	5043	2679	5027	4873	2891	2299	1829	1170	821	54147
Apr-15 Wednesday	29	632	349	283	241	344	677	1880	2496	2571	2299	2460	2784	2782	3088	3594	4377	4718	5019	3933	2733	1943	1597	1090	750	52640
Apr-15 Thursday	30	595	338	274	237	365	723	1955	2717	2611	2481	2590	2794	3033	3275	4219	5401	5659	5483	4179	2888	2407	1773	1320	948	58265
May-15 Friday	1	672	427	316	334	389	756	1887	2563	2626	2548	2854	3063	3529	3832	4554	5332	5906	5330	3707	2810	2705	2505	1995	1391	62031
May-15 Saturday	2	877	564	436	314	289	495	1109	1651	2025	2341	2694	2774	2721	2955	3154	3361	3484	3221	2873	2583	2487	2185	1576	1113	47282
May-15 Sunday	3	583	947	528	299	207	319	678	1044	1579	2101	2815	2925	3081	3402	3504	3633	3768	3517	2914	2343	1855	1298	914	761	45015
May-15 Monday	4	398	260	208	246	356	820	2000	2727	2748	2116	2270	3047	2905	3041	3713	4971	5557	5416	3916	2653	2016	1619	1181	780	54964
May-15 Tuesday	5	548	351	247	257	395	773	2003	2694	2408	2119	2425	2699	2970	3315	3942	5041	5595	5614	4350	2691	2245	1849	1199	972	56702

May-15	Wednesday	6	633	411	307	264	373	794	2014	2759	2721	2604	2619	2805	3098	3452	3992	5257	5607	5558	4251	2769	2320	1883	1254	981	58726
May-15	Thursday	7	643	391	296	269	371	760	2116	2841	2988	2868	2995	3227	3252	3642	3899	4962	5627	5598	3447	2423	2116	1662	1225	854	58472
May-15	Friday	8	658	417	313	281	399	706	1915	2654	2725	2630	3037	3441	3717	4029	4421	5467	4666	5412	4198	2732	2255	2081	1729	1310	61193
May-15	Saturday	9	855	547	441	279	226	534	1155	1741	2002	2339	2723	2891	3171	3424	3216	3185	3121	2963	2781	2432	2233	2109	1554	1183	47105
May-15	Sunday	10	729	492	424	234	197	293	643	984	1416	2215	2839	2866	3101	3350	3386	3475	3355	3047	2776	2308	1853	1364	1024	756	43127
May-15	Monday	11	421	253	219	222	351	757	2009	2684	2821	2735	2824	2936	2980	3053	3912	4768	5220	5600	3662	2443	1984	1460	1118	765	55197
May-15	Tuesday	12	603	353	258	258	367	744	2107	2796	2694	2344	2516	2623	2893	3211	3823	5147	5126	4137	4680	2816	2263	1639	1244	851	55493
May-15	Wednesday	13	586	338	269	266	361	711	2107	2794	2664	2430	2536	2735	2851	3321	3880	5066	5485	5302	4056	2944	2444	1853	1215	898	57112
May-15	Thursday	14	601	375	301	246	399	730	1976	2819	2637	2499	2667	2746	3081	3325	3883	5351	5888	5566	4143	2802	2297	1831	1348	964	58475
May-15	Friday	15	696	460	347	327	365	764	1911	2650	2626	2506	3052	3150	3590	3987	4457	5564	5563	5086	3172	3214	2485	2286	1924	1336	61518
May-15	Saturday	16	955	544	471	296	311	475	1125	1664	2224	2559	2857	2942	2852	2963	3250	3361	3306	3182	2903	2730	2428	2466	1837	1442	49143
May-15	Sunday	17	882	545	519	323	235	336	727	1137	1667	2304	3174	3147	3445	3611	3536	3437	3299	3053	2916	2431	2017	1367	979	629	45716
May-15	Monday	18	414	274	247	230	352	778	2072	2829	2823	2559	2596	2860	2978	3195	3815	5112	5494	5134	4209	2501	2117	1645	1038	801	56073
May-15	Tuesday	19	575	349	273	264	345	815	2131	2799	2729	2472	2547	2566	2858	3215	3956	5121	5525	5657	4062	2734	2137	1758	1237	947	57072
May-15	Wednesday	20	630	343	285	272	327	756	2105	2794	2677	2339	2642	2814	3119	3150	4043	4127	5195	4712	4425	2529	2008	1700	1350	800	55142
May-15	Thursday	21	598	368	292	251	339	770	2034	2784	2920	2665	2882	3043	3117	3374	3977	5401	5612	5519	4235	2903	2328	1954	1321	1008	59695
May-15	Friday	22	687	419	325	294	353	757	1899	2631	2728	2630	2963	3299	3604	4054	4368	5659	5516	4526	3565	2785	2293	2287	1847	1300	60789
May-15	Saturday	23	918	502	498	294	243	453	981	1469	1875	2432	2649	2523	2659	2696	2957	3072	3021	3103	2947	2641	2457	2376	2062	1224	46052
May-15	Sunday	24	850	549	500	297	226	288	634	923	1297	1762	2298	2394	2583	2771	2877	2947	2953	3045	3006	2583	2138	1714	1316	963	40914
May-15	Monday	25	649	377	290	206	213	440	802	1290	1961	2568	3275	3321	3378	3494	3511	3596	3502	3203	2709	2242	1842	1595	1275	718	46457
May-15	Tuesday	26	410	279	234	244	405	839	2220	2926	2860	2748	2771	2830	2743	2689	3007	3693	3996	3786	3249	2731	2631	1792	1217	852	51152
May-15	Wednesday	27	613	378	251	259	331	763	2089	2798	2788	2467	2597	2690	3082	3280	3931	5196	5443	5490	4162	2737	2302	1900	1270	871	57688
May-15	Thursday	28	669	361	306	278	375	793	2046	2783	2686	2486	2618	2846	2964	3446	4066	5205	5509	5259	4362	2774	2445	1815	1353	965	58410
May-15	Friday	29	676	404	321	335	407	738	2013	2623	2661	2699	3047	3188	3406	3786	4507	5311	5351	5517	3998	2907	2250	2106	1622	1227	61100
May-15	Saturday	30	879	577	472	279	276	525	1078	1660	2184	2706	3072	3072	3429	3051	3227	3559	3984	3138	2884	2632	2356	2233	1773	1264	50310
May-15	Sunday	31	762	570	488	301	228	330	730	1067	1547	2071	2797	2980	3262	3312	3251	3360	3164	3114	2699	2388	1874	1450	1020	694	43459
Jun-15	Monday	1	462	270	226	258	328	798	2026	2798	2670	2567	2716	2783	2988	3041	3915	5159	5543	5623	4120	2573	1986	1616	1157	864	56487
Jun-15	Tuesday	2	612	334	251	231	344	735	1943	2747	2732	2467	2488	2788	2864	3133	3699	5014	5600	4854	4074	2476	2098	1737	1165	919	55305
Jun-15	Wednesday	3	685	342	250	266	336	730	1810	2631	2544	2299	2454	2809	2948	3148	3749	5023	5504	5277	3864	2497	2169	1954	1318	903	55510
Jun-15	Thursday	4	644	412	335	259	356	754	2020	2788	2795	2616	2880	2967	3109	3490	3841	5232	4984	4464	4732	2896	2408	2041	1460	977	58460
Jun-15	Friday	5	752	414	310	310	389	773	1795	2644	2642	2591	2937	3289	3665	3937	4487	5029	5426	5589	3965	3047	2473	2169	1906	1461	62000
Jun-15	Saturday	6	905	562	522	315	308	511	1098	1629	1994	2568	2936	2889	2905	2975	3113	3203	3253	2896	2644	2744	2777	2246	1702	1376	48071
Jun-15	Sunday	7	902	576	567	269	236	318	722	1077	1575	1978	2793	2957	3216	3501	3400	3448	3467	3113	2711	2369	1879	1370	1082	1171	44697
Jun-15	Monday	8	487	295	245	212	372	736	1958	2838	2876	2872	2899	2946	3058	3324	3875	5100	5367	5376	4166	2468	2060	1695	1176	899	57300
Jun-15	Tuesday	9	587	392	249	254	367	729	1968	2816	2672	2535	2536	2785	2896	3188	3250	3857	3317	4791	4529	3045	2019	1452	1131	1085	52450
Jun-15	Wednesday	10	676	365	293	262	319	754	1862	2865	2719	2488	2721	2940	2666	3375	4016	5085	5602	5182	4283	2701	2157	2061	1633	1053	58078
Jun-15	Thursday	11	689	357	305	269	371	732	1934	2777	2754	2514	2748	3035	3099	3383	4149	5008	5174	5514	4425	2758	2331	2073	1377	959	58735
Jun-15	Friday	12	708	448	362	286	409	722	1798	2598	2626	2717	2912	3305	3664	3930	4611	5354	5458	5538	3715	2921	2222	2020	1667	1430	61421
Jun-15	Saturday	13	929	594	503	293	307	565	1254	1852	2307	2802	2939	3392	3032	2974	3337	3244	3255	3111	2736	2544	2201	2156	1757	1235	49319
Jun-15	Sunday	14	830	573	498	265	234	331	767	1093	1607	2158	2862	3001	3281	3371	3563	3436	3248	2917	2824	2254	1878	1382	1041	737	44151
Jun-15	Monday	15	459	271	230	240	408	808	1971	2791	2735	2522	2686	2816	3086	3186	3547	4699	5392	5552	3913	2327	2024	1676	1156	954	55449
Jun-15	Tuesday	16	618	349	263	256	380	754	1870	2775	2772	2454	2574	2783	2936	3349	3959	5261	5723	5395	3808	2596	2278	1788	1468	904	57313
Jun-15	Wednesday	17	672	420	285	248	382	780	1917	2821	2751	2501	2735	2949	3043	3374	4144	5062	5781	5468	3945	2740	2294	1923	1520	1114	58869
Jun-15	Thursday	18	640	386	306	309	382	807	1932	2820	2843	2747	2890	2983	3220	3429	4239	5211	5484	5104	3936	2792	2309	2029	1662	1034	59494
Jun-15	Friday	19	755	394	336	317	407	797	1834	2600	2919	2803	3108	3355	3697	4129	4835	5616	5284	4786	3971	2818	2305	2218	1860	1404	62548
Jun-15	Saturday	20	952	553	484	295	328	610	1222	1894	2408	2874	3327	3305	3173	3187	3175	3197	3214	2923	2669	2454	2358	2433	1773	1379	50187
Jun-15	Sunday	21	853	530	523	298	250	338	722	1104	1520	2263	2961	3153	3401	3429	3433	3242	3013	2836	2691	2161	1952	2023	1438	840	44974
Jun-15	Monday	22	510	296	246	266	385	802	1940	2645	2774	2548	2705	2865	2960	3204	3529	4761	5103	3821	4334	2466	1780	1516	1118	848	53422
Jun-15	Tuesday	23	610	327	289	284	378	804	1906	2683	2657	2461	2619	2646	2913	3242	3791	5149	5654	5506	3934	2710	2225	1994	1420	929	57131
Jun-15	Wednesday	24	695	373	314	246	343	785	1869	2791	2686	2592	2722	2921	3091	3314	4157	5211	5566	5064	4243	2686	2273	1907	1402	1062	58313
Jun-15	Thursday	25	656	390	302	275	330	740	1885	2787	2813	2603	2740	2953	3049	3550	4353	5441	5714	5503	4254	2949	2270	2006	1532	989	60084
Jun-15	Friday	26	729	454	371	287	402	839	1848	2740	2821	2693	3036	3311	3502	3568	4231	5189	4862	4377	3510	2681	2201	2083	1667	1341	58743
Jun-15	Saturday	27	923	547	456	320	356	629	1296	1869	2426	3001	3520	3365	3103	3171	3255	3279	3062	2737	2512	2198	1950	2018	1822	1293	49108
Jun-15	Sunday	28	821	567	505	291	235	372	733	1050	1548	2170	2906	2951	3169	3386	3337	3578	3244	2902	2678	1976	1544	1325	1009	662	42959
Jun-15	Monday	29	449	245	217	260	392	788	1898	2733	2718	2541	2681	2725	2979	3206	3358	4551	5399	5600	4127	2625	2014	1674	1163	900	55243
Jun-15	Tuesday	30	613	362	310	265	358	763	1895	2762	2632	2476	2670	2896	3013	3303	4016	5276	5685	5527	4347	3110	1930	1704	1163	886	57962
Jul-15	Wednesday	1	657	388	274	283	380	791	1980	2756	2727	2516	2735	2824	3096	3466	4099	5354	5792	5250	4410	2785	2312	1829	1504	946	59154
Jul-15	Thursday	2	677	387	305	312	387	793	1837	2631	2709	2817	3035	3241	3483	3870	4557	5399	5730	5062	3896	2910	2359	1935	1345	954	60631
Jul-15	Friday	3	750	401	313	255	319	497	1046	1672	1880	2167	2561	2746	3101	3169	3086	3520	3334	3034	2756	2311	1965	1922	1616	1209	45630
Jul-15	Saturday	4	787	527	518	282	244	379	777	1166	1468	1959	2402	2407	2278	2289	2273	2289	2288	2074	2223	1887	1962	1895	2438	1390	38202
Jul-15	Sunday	5	725	431	433	213	253	349	692	1214	1696	2515	3552	3809	4012	3989	3789	3416	3556	2959	2836	2152	1685	1484	1026	748	47534
Jul-15	Monday	6	470	290	247	228	397	804	1927	2771	2936	3082	3173	3201	3204	3408	3882	5172	5429	5586	3715	2486	2062	1740	1246	842	58298
Jul-15	Tuesday	7	556	356	285	268	372	797	1904	2780	2624	2455	2546	2792	2997	3063	3131	5291	5609	5662	3972	2519	1905	1837	1317	921	55959
Jul-15	Wednesday	8	627	375	275	272	350	747	1907	2767	2642	2499	2678	2918	3039	3331	4179	5272	5714	5670	3997	2672	2206	1836	1450	1227	58650

Jul-15 Thursday	9	648	438	273	289	357	739	1867	2760	2654	2603	2779	3127	3149	3590	4224	4532	5260	5703	4425	2851	2226	2033	1609	1025	59161
Jul-15 Friday	10	669	429	353	325	379	761	1715	2717	2753	2637	3004	3304	3793	4011	4638	5407	5567	5401	3759	2719	2371	2119	1759	1495	62085
Jul-15 Saturday	11	1003	613	467	323	327	635	1271	1805	2426	2926	3453	3297	3095	3129	3069	3158	3244	2948	2671	2474	2213	2279	1766	1211	49803
Jul-15 Sunday	12	858	548	447	278	216	357	720	1130	1462	1976	2714	2959	3138	3320	3356	3314	3351	2885	2611	2164	1871	1493	1135	692	42995
Jul-15 Monday	13	459	299	235	240	421	778	1926	2673	2740	2525	2727	2780	2987	3375	3792	5092	5348	5605	4087	2594	2034	1433	1067	890	56107
Jul-15 Tuesday	14	593	365	262	255	385	763	1906	2592	2412	2415	2669	2806	2976	3321	4114	5205	5573	5473	4095	2717	2183	1699	1156	947	56882
Jul-15 Wednesday	15	603	380	299	267	343	783	1869	2748	2700	2550	2777	3069	3199	3486	4098	5286	5676	5634	4228	2726	2270	1830	1316	984	59121
Jul-15 Thursday	16	692	382	304	263	372	754	1855	2744	2992	2776	2957	3096	3213	3479	4165	5270	5493	5485	4406	2688	2265	1992	1442	936	60021
Jul-15 Friday	17	691	435	354	339	370	778	1794	2556	2674	2831	3002	3273	3471	3682	4134	4803	5036	5395	4240	2848	2303	2122	1776	1324	60231
Jul-15 Saturday	18	900	593	521	325	329	625	1192	1874	2444	2942	3401	3206	3089	2974	3127	3154	3236	3046	2729	2387	2196	2349	1755	1310	49704
Jul-15 Sunday	19	943	598	534	285	269	341	692	1110	1534	2099	2945	3043	3415	3641	3461	3434	3052	3115	2719	2014	1484	1332	978	662	43700
Jul-15 Monday	20	464	280	247	230	370	796	1896	2751	2878	2703	2900	2927	3007	3175	3835	5038	5054	5465	4299	2498	2008	1660	1184	878	56543
Jul-15 Tuesday	21	641	357	292	265	376	755	1917	2788	2645	2515	2579	2826	3082	3160	3902	5200	5578	5065	4152	2577	2193	1776	1274	916	56831
Jul-15 Wednesday	22	657	371	278	256	329	773	1880	2821	2684	2524	2632	2837	2929	3359	4085	5228	5279	5656	4152	2692	2320	1925	1420	962	58049
Jul-15 Thursday	23	681	341	293	287	357	736	1910	2651	2912	2639	2858	3062	3246	3567	4263	5244	5338	4405	4329	3013	2142	1935	1309	925	58443
Jul-15 Friday	24	708	436	352	335	398	796	1870	2673	2618	2710	3061	3393	3742	3972	4688	5109	5818	5277	3524	2709	2137	1930	1585	1244	61085
Jul-15 Saturday	25	890	587	445	292	319	590	1168	1801	2331	2915	3433	3277	3009	2967	3178	3186	3102	2805	2727	2402	2205	2268	1700	1294	48891
Jul-15 Sunday	26	882	579	576	317	224	339	690	1082	1445	2105	2923	3061	3375	3566	3305	3402	3234	2879	2706	2193	1899	1499	1112	707	44100
Jul-15 Monday	27	464	294	237	218	365	808	1920	2774	2682	2572	2736	2779	3072	3183	3872	5133	4990	5773	3695	2484	2011	1630	1225	854	55771
Jul-15 Tuesday	28	603	383	276	271	373	729	1902	2719	2685	2444	2515	2737	3038	3208	4045	5270	5583	5595	3981	2764	2156	1660	1261	891	57089
Jul-15 Wednesday	29	628	376	266	273	348	787	1824	2734	2730	2430	2724	2715	3170	3366	4135	5209	5175	5377	4760	2818	2456	1777	1280	940	58298
Jul-15 Thursday	30	666	412	316	271	346	777	1939	2773	2990	2790	2935	3073	3233	3456	4141	5349	5405	4529	4420	2871	2356	2005	1364	936	59353
Jul-15 Friday	31	679	452	347	294	379	806	1782	2567	2746	2777	3158	3451	3857	3959	4523	5426	5836	5243	3905	2881	2253	1996	1573	1301	62191
Aug-15 Saturday	1	921	590	468	309	334	589	1222	1661	2119	2712	3299	3344	3301	3049	3284	3071	3087	2914	2547	2335	2194	2161	1751	1244	48506
Aug-15 Sunday	2	841	643	551	289	243	337	670	1022	1485	2039	2748	2996	3202	3326	3694	3192	2750	2579	2437	2010	1654	1321	1022	694	41745
Aug-15 Monday	3	409	274	236	216	347	758	1893	2687	2686	2615	2845	2957	3211	3071	3847	5082	4895	5262	4351	2440	1949	1558	1129	851	55569
Aug-15 Tuesday	4	614	383	284	263	357	751	1843	2757	2650	2441	2589	2785	2865	3233	3805	4712	5362	5283	4421	2675	2145	1799	1336	928	56281
Aug-15 Wednesday	5	632	390	278	293	374	803	1900	2709	2580	2396	2735	2875	2991	3397	4114	5352	5219	5162	4414	2844	2203	1835	1326	1143	57965
Aug-15 Thursday	6	684	398	302	278	366	770	1941	2742	2667	2535	2772	3036	3313	3598	3900	4828	4961	5518	4289	2624	2105	1720	1285	888	57520
Aug-15 Friday	7	679	406	347	281	378	743	1712	2623	2706	2723	2905	3305	3684	3946	4630	5189	5618	5423	3948	2906	2477	2191	1870	1455	62145
Aug-15 Saturday	8	930	601	442	321	355	579	1238	1874	2383	2789	3432	3196	3038	3168	3267	3417	3405	3261	2933	2777	2377	2316	1850	1395	51344
Aug-15 Sunday	9	814	563	508	305	237	328	719	1093	1573	2159	3072	3462	3424	3667	3635	3658	3677	3310	2981	2430	2026	1564	1108	692	47005
Aug-15 Monday	10	439	290	253	253	358	802	1900	2799	2646	2435	2831	2887	2977	3226	3907	5112	5678	4941	4228	2622	2109	1566	1131	837	56227
Aug-15 Tuesday	11	523	381	292	239	354	785	1923	2794	2698	2419	2679	2764	3033	3272	4016	5030	5355	5270	4284	2740	2169	1697	1298	887	56902
Aug-15 Wednesday	12	593	364	310	266	367	806	2009	3046	2771	2540	2782	2869	3157	3459	3929	5352	5604	5465	4235	2876	2281	1797	1330	1065	59273
Aug-15 Thursday	13	637	391	358	266	366	757	1937	3065	2795	2432	2695	2884	3068	3572	4241	5366	5781	5270	4203	2686	2403	1959	1545	1166	59843
Aug-15 Friday	14	712	399	343	287	388	730	1834	2813	2755	2704	3025	3391	3866	4057	4614	5633	5498	5478	3804	2888	2379	2201	1733	1616	63148
Aug-15 Saturday	15	879	565	501	264	383	605	1189	1812	2388	2822	3261	3276	3106	3194	3443	3427	3405	3248	2890	2558	2292	2200	1699	1255	50662
Aug-15 Sunday	16	780	604	531	293	228	368	673	1073	1473	2126	2772	3001	3370	3544	3548	3550	3279	3240	2981	2355	1827	1372	909	623	44520
Aug-15 Monday	17	432	261	208	233	347	819	2174	2619	2605	2504	2599	2860	3025	3345	3954	5133	5551	5448	3496	2424	1922	1459	1059	789	55266
Aug-15 Tuesday	18	538	361	273	262	338	782	2051	2689	2590	2313	2494	2768	2872	3272	3929	4449	5272	5111	4167	2432	1865	1413	1063	817	54121
Aug-15 Wednesday	19	565	329	274	229	356	789	1994	2681	2591	2472	2605	2805	2839	3355	3997	5199	5551	4910	4093	2477	2019	1301	1196	851	55478
Aug-15 Thursday	20	576	369	278	264	344	782	2053	2743	2688	2404	2655	2780	3048	3404	4125	4428	5375	5384	4304	2520	2020	1651	1244	886	56325
Aug-15 Friday	21	625	408	345	316	383	788	1966	2610	2748	2669	2885	3215	3594	3955	4433	5400	5482	4457	4361	2770	2222	1934	1646	1356	60568
Aug-15 Saturday	22	849	516	392	289	304	521	1131	1667	2115	2447	2971	2877	2890	3128	2989	3197	3102	2999	2783	2426	2017	1846	1454	1177	46087
Aug-15 Sunday	23	727	542	441	231	221	333	644	974	1345	1947	2638	2870	3286	3387	3428	3391	3142	3002	2813	2131	1561	1051	871	628	41604
Aug-15 Monday	24	398	212	218	232	358	831	2020	2757	2792	2386	2591	2738	2939	1904	2566	5293	5175	5215	4180	2539	2036	1470	1035	796	52681
Aug-15 Tuesday	25	526	317	251	230	375	814	2069	2790	2750	2378	2553	2762	2890	3171	3831	5210	5399	5327	4320	2635	2097	1598	1097	844	56234
Aug-15 Wednesday	26	536	324	291	271	340	808	1996	2774	2723	2335	2537	2712	2984	3327	3973	5239	5399	5426	4019	2673	2332	1646	1191	816	56672
Aug-15 Thursday	27	565	339	289	266	339	788	1994	2842	2782	2682	2865	3031	3071	3394	4013	5342	5576	4907	4525	2923	2218	1735	1222	891	58599
Aug-15 Friday	28	571	413	337	298	382	730	1863	2666	2783	2533	2811	3200	3689	3950	4696	5590	5709	5449	3836	2789	2157	1810	1589	1271	61122
Aug-15 Saturday	29	885	541	411	304	263	548	1008	1489	1831	2303	2626	2861	2931	3112	3223	3159	3182	2861	2571	2483	2179	2059	1561	1187	45578
Aug-15 Sunday	30	748	573	530	276	204	281	611	852	1182	1724	2566	2740	2966	3302	3355	3143	2673	2404	2207	1825	1372	1027	823	614	37998
Aug-15 Monday	31	359	212	191	223	331	685	1731	2205	2671	2269	2548	2743	2862	3047	3701	4687	5106	4816	4209	2509	2170	1507	1044	791	52617
Sep-15 Tuesday	1	502	364	287	259	342	791	2046	2702	2516	2243	2445	2701	2806	3309	3834	5149	5071	5114	4661	2801	2299	1721	1172	803	55938
Sep-15 Wednesday	2	518	336	280	252	298	771	2062	2750	2537	2348	2640	2758	2841	3280	3992	5196	5560	5600	4047	2762	2372	1731	1241	862	57034
Sep-15 Thursday	3	527	348	326	244	360	761	2030	2775	2728	2545	2716	3041	3310	3508	4140	5300	5561	5136	4437	3066	2219	1633	1253	856	58820
Sep-15 Friday	4	594	361	319	277	371	755	1868	2701	2546	2486	2961	3270	3857	4144	4908	5271	5550	4919	4151	2896	2293	1790	1583	1179	61050
Sep-15 Saturday	5	863	589	481	288	261	489	943	1442	2007	2416	2666	2712	2603	2736	2865	2954	2938	2999	2649	2373	2139	1836	1703	1163	44115
Sep-15 Sunday	6	788	560	460	262	170	290	564	894	1229	1800	2241	2386	2937	2969	3121	3067	2807	2749	2694	2022	1659	1393	1127	862	39051
Sep-15 Monday	7	549	346	282	161	218	369	785	1178	1698	2388	3128	3597	3506	3511	3675	3695	3207	2780	2388	2112	1733	1243	897	606	44052
Sep-15 Tuesday	8	347	224	196	218	358	840	2119	2929	2824	2609	2797	2922	3046	3365	3897	5197	5303	5345	4136	2698	2193	1590	1104	836	57093
Sep-15 Wednesday	9	523	334	296	265	348	754	2040	2843	2652	2399	2643	2671	3034	3336	3910	5264	5610	5320	5075	3006	2333	1698	1144	801	58299
Sep-15 Thursday	10	513	355	303	267	350	796	2100	2648	2843	2527	2716	2765	3198	3493	4007	4842	5248	5596	4624	2974	2257	1717	1218	855	58212

Sep-15	Friday	11	603	377	319	310	355	786	1971	2676	2687	2607	2930	3220	3720	4172	4762	5374	5638	5508	4316	2968	2305	1895	1586	1357	62442
Sep-15	Saturday	12	830	522	397	257	345	617	1075	1588	1927	2325	2733	2851	2990	3053	2960	3035	2964	2635	2438	2126	1922	1997	1501	1148	44236
Sep-15	Sunday	13	722	498	451	268	204	318	616	948	1436	1961	2694	2725	3144	3079	3180	3333	3256	2991	2771	2332	1842	1220	834	610	41433
Sep-15	Monday	14	411	272	208	224	357	821	1994	2714	2720	2561	2644	2696	3038	3289	3715	4948	5519	5285	4162	2758	2080	1482	1084	781	55763
Sep-15	Tuesday	15	540	334	266	263	351	790	2023	2775	2622	2291	2566	2689	2871	3345	3986	5126	5648	5461	3489	2930	2497	1650	1119	831	56463
Sep-15	Wednesday	16	574	344	284	276	336	806	2048	2784	2744	2539	2699	2748	3001	3362	4029	5331	5698	5282	4262	2732	2405	1638	1172	803	57897
Sep-15	Thursday	17	606	349	301	244	362	778	2087	2697	2718	2496	2639	2994	3134	3342	4021	5343	5672	5572	4215	2857	2261	1717	1228	915	58548
Sep-15	Friday	18	612	378	309	277	340	806	1948	2637	2657	2489	2845	3317	3822	4182	4728	5614	5454	5809	3903	2853	2229	1926	1801	1436	62372
Sep-15	Saturday	19	908	547	459	268	311	587	1091	1565	2124	2461	2750	2742	2951	2992	3089	3108	3214	2979	2663	2466	2270	1987	1618	1181	46331
Sep-15	Sunday	20	772	530	459	274	218	312	646	1000	1550	2078	2902	2983	3294	3513	3329	3254	3084	3051	2697	2288	1770	1149	831	582	42566
Sep-15	Monday	21	403	231	194	238	333	829	1985	2794	2606	2595	2663	2745	2932	3256	3833	5392	5562	5675	3720	2626	1998	1464	1027	723	55824
Sep-15	Tuesday	22	549	290	254	268	348	841	2089	2848	2622	2351	2509	2688	2911	3247	3801	5205	5396	5560	4154	2754	2174	1529	1116	812	56316
Sep-15	Wednesday	23	556	360	277	237	373	821	2065	2849	2622	2326	2515	2726	2948	3320	3972	5545	5457	5682	3877	2700	2168	1565	1162	815	56938
Sep-15	Thursday	24	536	328	282	243	370	823	2106	2787	2679	2596	2757	3017	3193	3423	3918	4918	5088	5198	3727	2564	2050	1569	1185	840	56197
Sep-15	Friday	25	578	363	313	278	324	741	1857	2646	2633	2545	2856	3232	3579	4030	4795	5489	5777	5690	3894	2991	2182	1976	1675	1332	61776
Sep-15	Saturday	26	890	551	475	297	280	494	1009	1605	2309	2471	2742	2847	2856	3086	3182	3137	3115	2813	2606	2391	1922	2004	1718	1161	45961
Sep-15	Sunday	27	740	508	441	232	234	302	649	1013	1503	2145	3068	3014	3340	3515	3389	3121	3064	2842	2503	2232	1514	1045	893	597	41904
Sep-15	Monday	28	401	225	198	212	368	810	2067	2738	2739	2446	2670	2733	2939	3101	3750	4977	5558	5655	3493	2583	1924	1395	1044	739	54765
Sep-15	Tuesday	29	507	297	247	256	364	792	2015	2745	2544	2430	2487	2705	2895	3239	2983	4441	4599	4870	4460	2936	2070	1512	1124	812	53330
Sep-15	Wednesday	30	571	309	261	251	318	768	2033	2771	2662	2367	2627	2820	3082	3265	4056	4838	3814	4543	4600	2721	2185	1509	1123	798	54292
Oct-15	Thursday	1	575	358	278	244	352	828	1991	2862	2655	2616	2821	2993	3261	3181	4436	4651	4751	4733	4031	2136	1939	1387	979	808	54866
Oct-15	Friday	2	588	345	277	251	306	645	1487	2398	2531	2494	2914	3429	3594	3815	4363	4949	4684	3918	2908	1981	1486	1215	1026	799	52403
Oct-15	Saturday	3	577	347	268	183	167	289	627	839	1162	1165	1438	1523	1538	1483	1490	1411	1238	1233	1086	889	644	514	449	349	20909
Oct-15	Sunday	4	241	151	121	96	98	195	409	611	900	1206	1773	1916	1745	1597	1536	1402	1396	1289	1277	937	681	523	404	311	20815
Oct-15	Monday	5	198	124	96	95	148	384	1090	1709	1709	1720	1844	1923	2136	2232	2620	3146	3427	3535	2326	1731	1268	889	789	661	35800
Oct-15	Tuesday	6	390	260	203	211	301	635	1646	2409	2268	2295	2380	2467	2547	2874	3470	4656	5112	5201	3953	2708	1982	1369	1112	772	51221
Oct-15	Wednesday	7	536	334	275	258	340	748	1803	2412	2497	2121	2225	2504	2761	3187	3833	5154	5570	5366	4192	3170	2360	1707	1192	847	55392
Oct-15	Thursday	8	633	367	289	249	355	793	2007	2720	2594	2531	2594	2701	2881	3345	4035	5346	5548	4678	2631	4114	2465	1741	1284	860	56761
Oct-15	Friday	9	656	406	335	305	361	715	1747	2669	2656	2410	2916	3220	3637	4237	4864	5524	5673	5602	3939	3037	2218	1903	1581	1380	61991
Oct-15	Saturday	10	916	530	503	286	326	483	1027	1429	1883	2150	2463	2672	2859	2983	2846	2736	2588	2606	2509	2266	1847	1630	1345	1031	41914
Oct-15	Sunday	11	721	472	425	244	227	317	636	976	1416	1955	2642	2664	3112	3292	3227	3241	3036	2854	2511	2331	1539	1032	858	622	40350
Oct-15	Monday	12	429	283	204	196	329	803	1943	2802	2729	2451	2578	2933	2997	3305	3926	4782	5278	5358	3641	2555	1893	1496	1092	791	54794
Oct-15	Tuesday	13	501	281	236	244	352	769	2083	2749	2642	2393	2576	2849	2964	3395	4198	5302	5748	5577	4220	2741	1990	1557	1129	815	57311
Oct-15	Wednesday	14	565	313	236	233	369	772	2110	2852	2704	2528	2691	2801	2972	3307	4072	5189	5494	5468	4489	2832	2331	1651	1247	836	58062
Oct-15	Thursday	15	593	342	272	248	394	767	2020	2833	2802	2467	2522	2735	3088	3522	4130	5169	5280	5437	4647	3128	2228	1749	1274	966	58613
Oct-15	Friday	16	646	432	346	281	372	775	1921	2662	2688	2744	2979	3258	3832	3120	3864	5268	4909	5401	5039	3370	2572	2417	1704	1269	61869
Oct-15	Saturday	17	970	494	455	268	308	533	1175	1737	2112	2417	2874	3097	3170	3225	3126	3240	3233	2932	2638	2459	1948	1984	1602	1255	47252
Oct-15	Sunday	18	798	486	418	240	215	293	625	1002	1567	2146	2964	3005	3241	3324	3312	3482	3520	3090	2720	2274	1567	1051	838	610	42788
Oct-15	Monday	19	441	209	191	236	366	840	2042	2706	2703	2391	2611	2779	2893	3136	3820	4980	4848	3906	3943	2406	1849	1421	1126	773	52616
Oct-15	Tuesday	20	479	317	293	254	335	818	1979	2812	2613	2354	2523	2657	2825	3361	4058	4501	5180	5531	4475	2926	2078	1604	1212	856	56041
Oct-15	Wednesday	21	569	313	254	274	341	841	2001	2773	2876	2421	2637	2844	3134	3348	4165	5278	5202	4410	4191	3633	2526	1649	1243	800	57723
Oct-15	Thursday	22	553	367	264	262	361	797	2019	2740	2688	2683	2911	2989	3171	3594	4384	5394	5381	5439	4318	2960	2309	1842	1525	929	59880
Oct-15	Friday	23	591	376	328	269	406	772	1914	2632	2747	2709	3038	3493	3901	4283	4910	5439	5491	5469	4187	3040	2050	1884	1694	1419	63042
Oct-15	Saturday	24	963	502	438	283	309	503	1120	1553	2080	2302	2549	2672	2875	3102	3116	3225	3344	2918	2844	2502	1899	2005	1936	1347	46387
Oct-15	Sunday	25	876	488	444	243	190	301	651	966	1506	2048	2882	2851	3305	3511	3437	3458	3225	2996	2701	2270	1516	1036	887	597	42385
Oct-15	Monday	26	383	218	190	199	351	853	2105	2705	2575	2465	2654	2805	3010	3252	3864	5188	5548	5101	3942	2368	1796	1384	1076	740	54772
Oct-15	Tuesday	27	519	318	236	209	330	761	2034	2589	2337	2601	2780	2874	2908	3101	3975	4945	4529	5029	4019	2466	2067	1479	1135	725	53966
Oct-15	Wednesday	28	534	338	236	239	338	760	1961	2690	2574	2418	2553	2660	2918	3356	3864	4370	5322	5139	3991	2603	2085	1485	1275	863	54572
Oct-15	Thursday	29	573	304	328	231	369	790	1969	2825	2765	2442	2654	2944	3223	3564	4284	5452	5562	5192	4259	2961	2336	1725	1261	903	58916
Oct-15	Friday	30	613	357	350	263	378	771	1856	2617	2665	2533	2892	3235	3670	4320	4677	5460	5509	5162	3884	2909	2146	1832	1822	1423	61344
Oct-15	Saturday	31	921	498	448	255	308	469	998	1448	1827	2117	2478	2630	2832	2770	3074	3069	3161	3196	2596	2071	1666	1544	1201	1090	42667
Nov-15	Sunday	1	802	506	521	421	471	323	651	1100	1589	2090	2732	3150	3398	3342	3333	3147	3055	2949	2550	1805	1280	943	677	491	41326
Nov-15	Monday	2	319	232	183	194	353	772	2041	2802	2697	2417	2574	2764	3050	3232	3839	4922	4772	4663	4219	2510	1752	1329	957	768	53361
Nov-15	Tuesday	3	503	325	257	220	319	690	2003	2438	2553	2444	2467	2579	2880	3083	4138	4592	5246	5418	3716	2229	1743	1455	1225	855	53378
Nov-15	Wednesday	4	519	311	273	242	362	770	1995	2715	2838	2428	2701	2706	3014	3403	4115	5315	5527	5231	4251	2501	1621	1774	1180	808	56600
Nov-15	Thursday	5	507	334	253	257	339	757	2092	2658	2725	2466	2694	2912	3181	3595	4487	5412	5824	5488	4615	2658	2041	1621	1301	835	59052
Nov-15	Friday	6	662	379	321	255	350	751	1913	2681	2629	2615	2875	3322	3747	4332	5125	5731	5738	5409	4350	2862	2092	1910	1652	1194	62895
Nov-15	Saturday	7	830	511	393	274	269	494	1109	1657	1930	2380	2801	3018	3158	3306	3529	3530	3394	3434	3138	2292	1806	1568	1480	1084	47385
Nov-15	Sunday	8	716	498	407	246	221	308	691	1160	1852	2336	3104	3086	3238	3352	3202	3017	2830	2760	2285	1719	1263	919	736	523	40469
Nov-15	Monday	9	326	235	185	197	309	701	1859	2367	2083	2360	2418	2584	2811	2915	3786	4533	4863	5066	2978	2569	1648	1329	1048	776	49946
Nov-15	Tuesday	10	503	287	231	204	334	781	2020	2778	2605	2426	2568	2654	2912	3122	3998	5292	5399	5261	4147	2553	2004	1527	1186	787	55579
Nov-15	Wednesday	11	543	304	253	225	333	745	2040	2648	2519	2375	2497	2665	3026	3288	4007	4885	5158	5100	3772	2548	2083	1649	1205	808	54676
Nov-15	Thursday	12	514	297	245	252	309	740	2062	2808	2700	2531	2579	2762	3145	3494	3544	4044	5280	5523	4113	2676	2187	1641	1229	884	55559
Nov-15	Friday	13	595	376	300	261	369	715	1881	2735	2730	2786	3028	3269	3663	4090	2366	5332	5112	5273	4759	2740	2198	2038	1712	1261	59589

Nov-15 Saturday	14	839	461	440	246	283	581	1206	1924	2362	2362	2510	2674	2888	2880	3004	3262	3269	3268	2758	2251	1823	1685	1712	1113	45801
Nov-15 Sunday	15	664	507	435	261	222	316	661	967	1439	1990	2594	2834	3070	3243	3314	3104	3211	2999	2466	1858	1380	1074	866	556	40031
Nov-15 Monday	16	312	238	214	213	351	796	2012	2552	2625	2416	2554	2666	2940	3170	3914	5042	5442	5200	4169	2390	1853	1361	1020	765	54215
Nov-15 Tuesday	17	486	298	263	229	351	789	2036	2770	2639	2260	2411	2622	2924	3235	4060	5081	5286	5377	3909	2773	1992	1436	1100	815	55142
Nov-15 Wednesday	18	505	329	280	236	329	803	1981	2744	2846	2437	2759	2745	3017	3471	4107	5284	5532	5220	3980	2826	2104	1594	1209	766	57104
Nov-15 Thursday	19	521	354	284	223	318	736	1847	2614	2619	2449	2625	2837	2998	3432	4092	5232	5525	5290	3751	2409	2085	1950	1286	908	56385
Nov-15 Friday	20	581	432	324	246	333	755	1885	2574	2704	2642	2909	3330	4003	4310	5117	5672	5859	5330	3757	3127	2092	1942	1719	1245	62888
Nov-15 Saturday	21	831	478	383	286	337	560	1206	1843	2424	2425	2496	2551	2697	2990	3165	3265	3056	3058	2484	2105	1827	1640	1388	998	44493
Nov-15 Sunday	22	658	455	459	238	223	356	595	948	1373	1839	2350	2585	2826	2902	2889	2819	2754	2778	2491	1968	1262	943	850	642	37203
Nov-15 Monday	23	341	222	195	208	350	821	1973	2711	2722	2678	2817	2888	3043	3333	4111	4875	5417	5481	4168	2459	1856	1412	972	815	55868
Nov-15 Tuesday	24	524	302	243	252	325	744	1941	2684	2603	2618	2830	3124	3343	3877	4653	4903	5710	5574	4349	2716	2049	1633	1185	857	59039
Nov-15 Wednesday	25	624	356	298	274	421	799	1748	2542	2577	2803	3223	3740	4291	4581	5012	4559	5463	4208	2998	1963	1896	1558	1261	971	58166
Nov-15 Thursday	26	610	351	247	196	239	324	685	1020	1412	2006	2303	2310	2161	1838	1832	1880	1888	1804	1745	1722	1667	1340	1158	970	31708
Nov-15 Friday	27	785	481	392	246	263	456	836	1276	1430	1866	2403	2558	2809	3047	3191	3563	3401	3346	3046	2347	1891	1745	1443	1035	43856
Nov-15 Saturday	28	627	413	380	277	288	499	1106	1719	2301	2657	2846	2871	2754	2705	2734	2742	2963	2856	2324	2048	1646	1517	1290	974	42537
Nov-15 Sunday	29	655	486	358	274	303	489	881	1212	1807	2583	3201	3088	3190	3176	3128	3018	2759	2844	2309	1847	1342	988	757	541	41236
Nov-15 Monday	30	389	237	181	201	356	848	2053	2789	2896	2521	2651	2745	3065	3196	3922	5029	5415	5407	3710	2245	1736	1474	1084	749	54899
Dec-15 Tuesday	1	502	300	247	255	359	753	2069	2745	2722	2328	2413	2610	2892	3238	4061	5187	5174	5087	4426	2505	1949	1573	1089	796	55280
Dec-15 Wednesday	2	531	366	243	237	361	776	1995	2722	2606	2318	2548	2728	3002	3249	4184	4511	4813	5021	4292	2502	1961	1490	1036	816	54308
Dec-15 Thursday	3	528	326	261	256	338	741	1952	2784	2312	2430	2504	2753	2899	3255	4221	5394	5498	5320	4214	2535	1668	1766	1279	848	56082
Dec-15 Friday	4	584	362	332	285	364	770	1909	2622	2650	2455	2815	3014	3500	3922	4492	5694	5479	5134	3694	2638	2122	1960	1850	1341	59988
Dec-15 Saturday	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Sunday	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Monday	7	484	248	214	218	348	696	1598	2293	2462	2470	2800	2639	2812	3062	3735	4891	5151	5155	3753	2324	1923	1523	1199	1225	53223
Dec-15 Tuesday	8	581	341	265	259	332	729	2054	2826	2561	2346	2432	2725	2912	3252	4005	5081	5459	5012	4181	2487	2099	1543	1364	784	55630
Dec-15 Wednesday	9	607	339	258	241	354	758	2004	2694	2771	2371	2530	2772	2887	3317	3769	5167	5570	5295	4006	2539	2051	1696	1210	884	56090
Dec-15 Thursday	10	545	312	276	265	341	748	1948	2902	2861	2627	2612	2865	3053	3552	4318	4899	5036	5179	3974	2955	2167	1889	1297	900	57521
Dec-15 Friday	11	636	393	316	282	338	775	1857	2560	2576	2397	2664	3161	3510	3972	4666	5272	5080	5250	3544	2541	2025	2071	1904	1413	59203
Dec-15 Saturday	12	808	494	440	258	329	484	1040	1416	1807	2080	2443	2704	2805	3037	3310	3343	3153	3287	2704	2396	2176	2295	1970	1420	46199
Dec-15 Sunday	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Monday	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Tuesday	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Wednesday	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-15 Thursday	17	593	348	286	241	316	659	1606	2381	2312	2500	2736	3046	3071	3521	4324	4875	5139	4700	4347	3018	2095	1762	1572	968	56416
Dec-15 Friday	18	646	429	283	280	351	680	1748	2517	2612	2592	2910	3165	3677	4116	3522	5719	5663	4933	3626	2668	2139	2143	2059	1404	59882
Dec-15 Saturday	19	899	516	418	259	342	555	1027	1517	2116	2287	2749	2760	2982	2982	3212	3284	3271	3098	2698	2290	1896	1984	1968	1352	46462
Dec-15 Sunday	20	884	503	392	227	217	343	668	845	1216	1699	2321	2452	2805	2992	2994	2935	2706	2787	2366	2007	1671	1246	1051	754	38081
Dec-15 Monday	21	456	243	229	220	364	729	1762	2414	2490	2460	2767	2989	3179	3722	4107	5270	5562	5193	4059	2527	1943	1689	1372	1041	56787
Dec-15 Tuesday	22	593	351	287	284	353	741	1671	2406	2434	2468	2799	3221	3298	3427	4257	5069	5354	4929	3802	2400	2032	1711	1537	930	56354
Dec-15 Wednesday	23	604	366	283	288	375	735	1569	2300	2588	2808	3196	3681	3776	4275	4724	5231	5195	4696	3300	2540	2213	1829	1653	1005	59230
Dec-15 Thursday	24	707	408	323	204	270	488	919	1458	1764	2165	2807	3291	3739	3532	3555	3191	2784	2486	2401	1861	1622	1348	1041	770	43134
Dec-15 Friday	25	496	298	204	148	139	216	426	621	789	1102	1442	1790	1851	1926	1869	1930	1870	1691	1702	1442	1364	1260	943	749	26268
Dec-15 Saturday	26	417	269	221	149	236	365	631	967	1467	1878	2343	2515	2589	2616	2569	2717	2850	2661	2514	2067	1741	1725	1284	931	37722
Dec-15 Sunday	27	672	418	456	233	244	379	653	899	1315	1810	2286	2448	2633	2695	2756	2684	2633	2611	2661	1835	1457	1148	953	626	36505
Dec-15 Monday	28	513	253	200	216	332	663	1434	2172	2434	2480	2833	3048	2959	3249	3728	4515	4899	4760	3185	2106	1656	1371	1023	759	50788
Dec-15 Tuesday	29	504	300	255	239	308	632	1490	2229	2276	2449	2666	2864	3078	3319	3823	4746	5010	5172	3652	2294	1742	1491	1162	782	52483
Dec-15 Wednesday	30	536	345	268	251	321	717	1551	2231	2313	2477	2819	3000	3214	3547	4055	4930	5068	5156	3602	2338	1905	1525	1198	857	54224
Dec-15 Thursday	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

30 Highest Hours of the year
100 Highest Hours of the year

AADT 52900

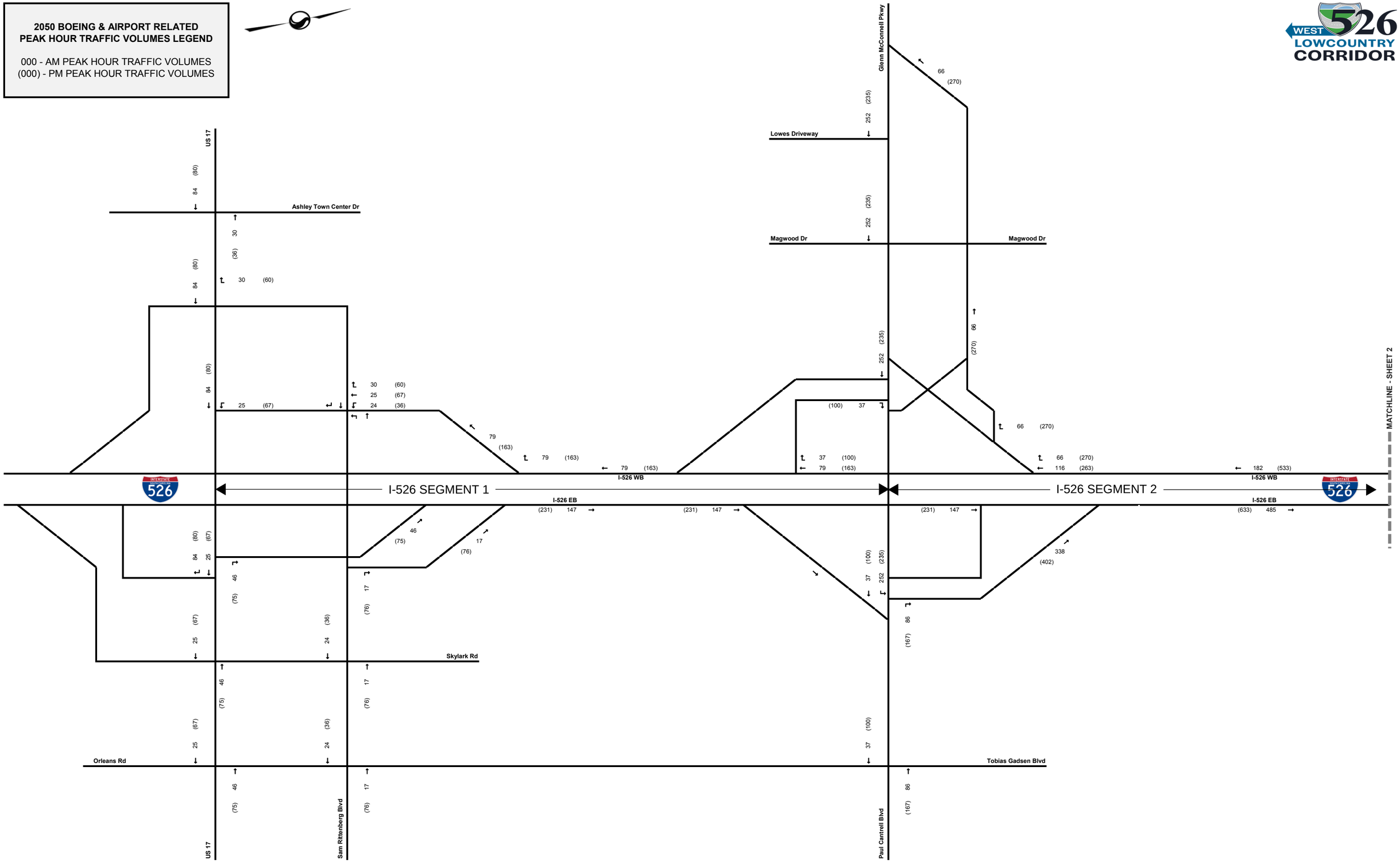
3.0 Priority Network Traffic Projections

3.1 Airport Connector Road Traffic Volumes

2050 BOEING & AIRPORT RELATED PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM PEAK HOUR TRAFFIC VOLUMES
(000) - PM PEAK HOUR TRAFFIC VOLUMES

WEST 526 LOWCOUNTRY CORRIDOR



2050 BOEING & AIRPORT RELATED PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM PEAK HOUR TRAFFIC VOLUMES
(000) - PM PEAK HOUR TRAFFIC VOLUMES

WEST 526 LOWCOUNTRY CORRIDOR

MATCHLINE - SHEET 1

MATCHLINE - SHEET 3

I-526 SEGMENT 2

I-526 SEGMENT 3

I-526 SEGMENT 4

I-526 WB

I-526 EB

Dorchester Rd

Airport Conn. Rd

Covington Dr

Michaux Pkwy

Bream Rd

Trailwood Dr

W. Montague Ave

Paramount Dr

Faber Place Dr

Faber Place Dr

Leeds Ave

Bridge View Dr

Oscar Johnson Dr

Leeds Ave

Stantec

2050 BOEING & AIRPORT RELATED TRAFFIC VOLUMES
SHEET 2: I-526 & LEEDS AND I-526 & DORCHESTER INTERCHANGES

2050 BOEING & AIRPORT RELATED PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM PEAK HOUR TRAFFIC VOLUMES
(000) - PM PEAK HOUR TRAFFIC VOLUMES

MATCHLINE - SHEET 6

MATCHLINE - SHEET 2

MATCHLINE - SHEET 4

MATCHLINE - SHEET 5

WEST 526 LOWCOUNTRY CORRIDOR

Michaux Pkwy

Trailwood Dr

Boeing Dr

S. Aviation Ave

International Blvd

Cone Ave

Remount Rd

W. Montague Ave

Darius Rucker Blvd

Centre Pointe Dr

I-26 SEGMENT 5

I-26 SEGMENT 4

I-26 SEGMENT 3

I-526 SEGMENT 4

I-526 SEGMENT 5

I-526 SEGMENT 5A

I-526 SEGMENT 6

I-26 EB

I-26 WB

I-26 EB CD

I-26 WB CD

I-526 WB

I-526 EB

I-26 EB to I-526 WB

I-26 EB to I-526 EB

I-526 EB to I-26 WB

I-526 EB to I-26 EB

I-26 WB to I-526 EB

I-26 WB to I-526 WB

I-526 EB CD to I-26 EB

I-26 WB to N. Rhett/Aviation

N. Rhett/Aviation to I-26 EB

Stantec

2050 BOEING & AIRPORT RELATED TRAFFIC VOLUMES
SHEET 3: I-526 & W. MONTAGUE, I-526 & INTERNATIONAL, I-26 & N. RHETT, AND I-26 & I-526 SYSTEM-TO-SYSTEM INTERCHANGES

2050 BOEING & AIRPORT RELATED PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM PEAK HOUR TRAFFIC VOLUMES
(000) - PM PEAK HOUR TRAFFIC VOLUMES

WEST 526 LOWCOUNTRY CORRIDOR

MATCHLINE - SHEET 6

N. Rhett Ave

Remount Rd

Harley St

I-526 SEGMENT 9

I-526 WB CD

← 500 (186)

I-526 WB

I-526 SEGMENT 6

I-526 SEGMENT 7

I-526 SEGMENT 8

I-526 EB

(442) 94 →

I-526 EB CD

MATCHLINE - SHEET 3

US 52/US 78/Rivers Ave

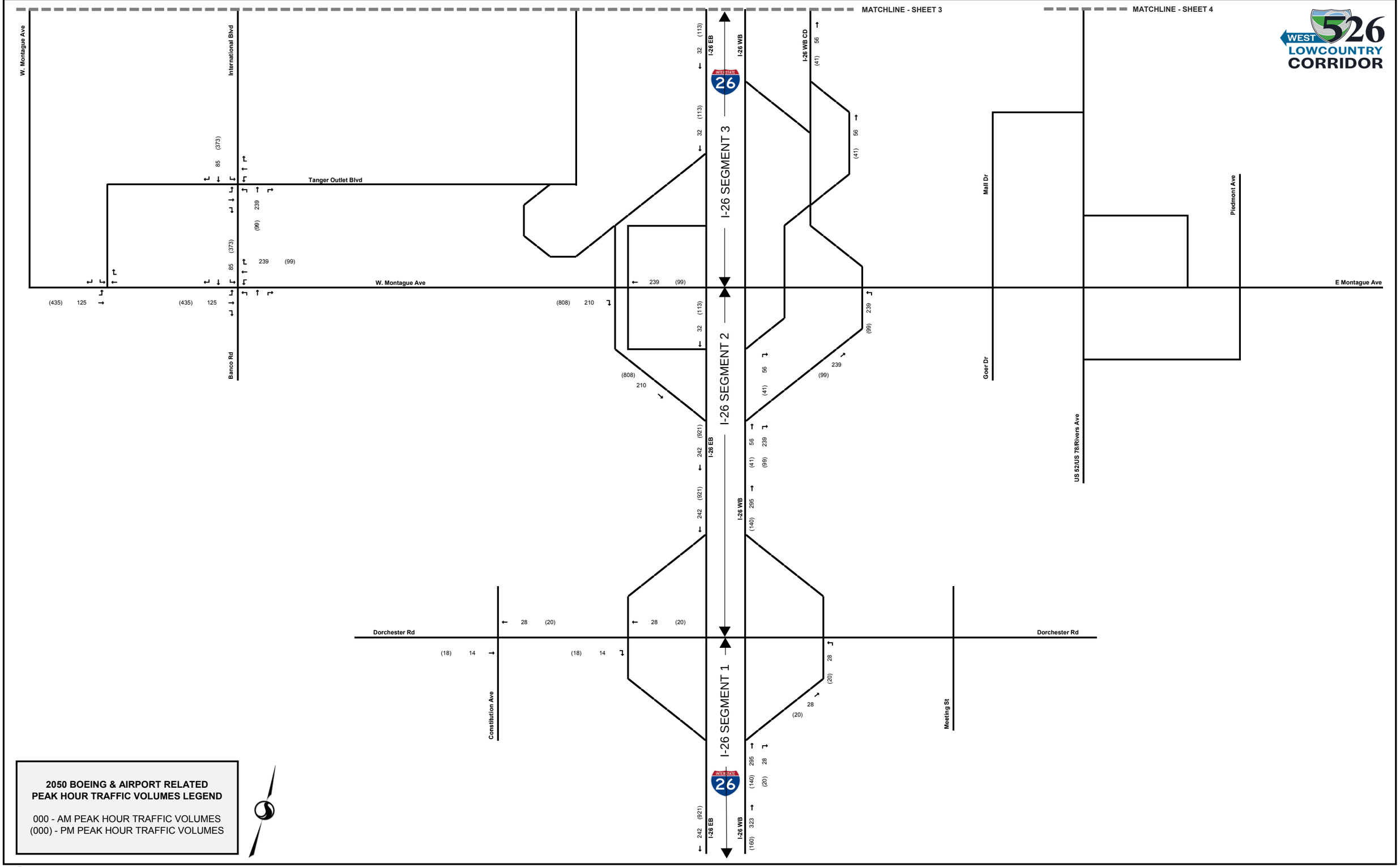
Braddock Ave

Virginia Ave

MATCHLINE - SHEET 5

Stantec

2050 BOEING & AIRPORT RELATED TRAFFIC VOLUMES
SHEET 4: I-526 & RIVERS, I-526 & N. RHETT, AND I-526 & VIRGINIA INTERCHANGES



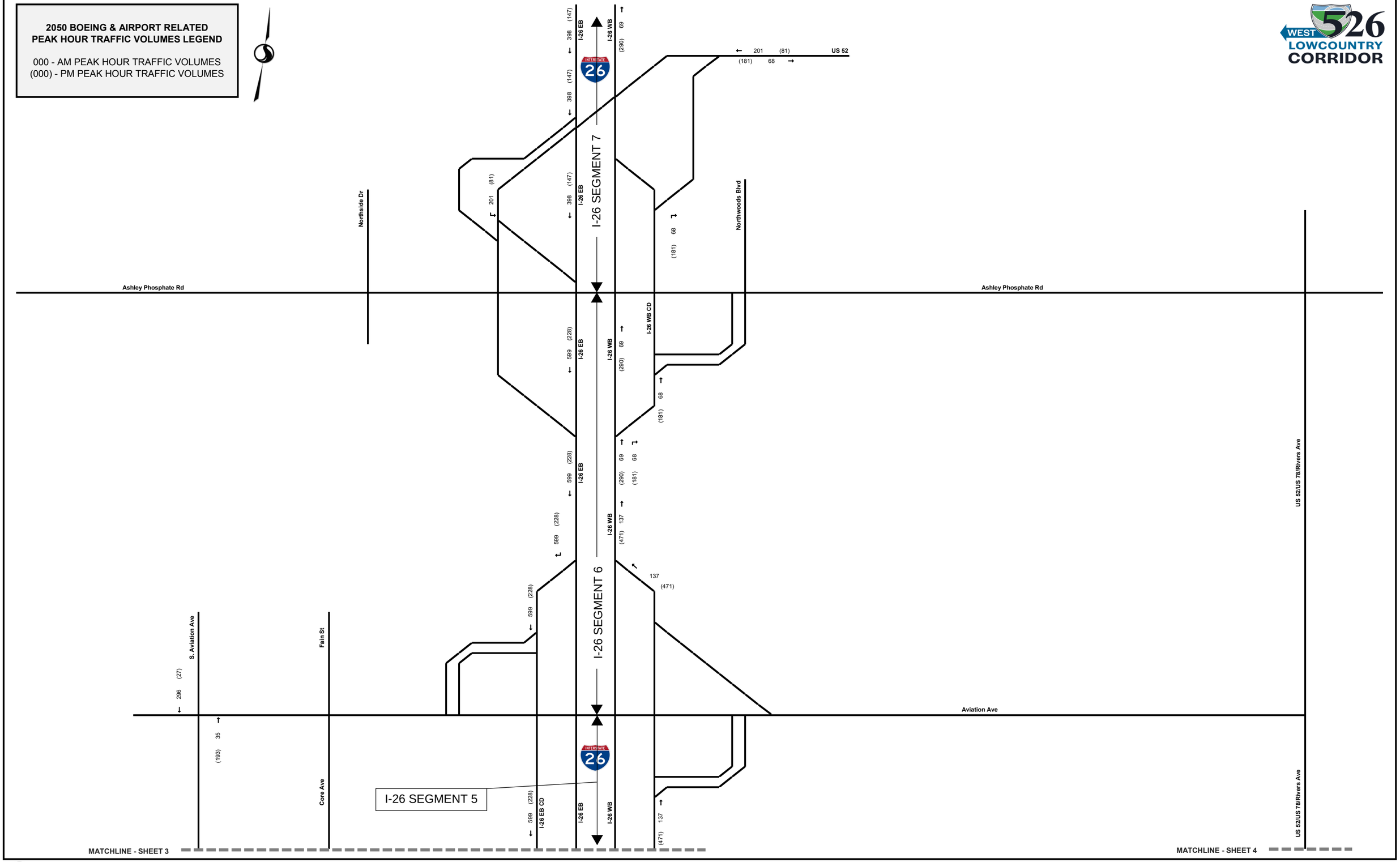
Stantec

2050 BOEING & AIRPORT RELATED TRAFFIC VOLUMES
SHEET 5: I-26 & MONTAGUE AND I-26 & DORCHESTER INTERCHANGES

2050 BOEING & AIRPORT RELATED PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM PEAK HOUR TRAFFIC VOLUMES
(000) - PM PEAK HOUR TRAFFIC VOLUMES

WEST 526 LOWCOUNTRY CORRIDOR



Stantec

2050 BOEING & AIRPORT RELATED TRAFFIC VOLUMES
SHEET 6: I-26 & AVIATION, I-26 & ASHLEY PHOSPHATE, AND I-26 & US 52 INTERCHANGES

4.0 Preliminary Alternatives Screening

4.1 HCS Output

4.1.1 Base Year

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1101	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	293	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	600	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	600	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	8.0	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	US-17 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1101	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	597	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	226	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1101	597	226	vph
Peak-hour factor, PHF	0.94	0.86	0.81	
Peak 15-min volume, v15	293	174	70	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1201	701	282	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1201 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	1902	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1201 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	1902	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 10.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.212	
Space mean speed in ramp influence area,	S_R = 56.2	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1698	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	452	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	926	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	926	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	12.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	SC 7 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1698	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	226	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	27	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1698	226	27	vph
Peak-hour factor, PHF	0.94	0.86	0.81	
Peak 15-min volume, v15	452	66	8	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1852	265	34	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1852 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2117	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1852 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2117	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 12.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.203	
Space mean speed in ramp influence area,	S_R = 56.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1924	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	512	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1049	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1049	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	14.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1924	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	27	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	226	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1924		27		226		vph
Peak-hour factor, PHF	0.94		0.81		0.86		
Peak 15-min volume, v15	512		8		66		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2098	34	265	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2098 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2098	4600	No
$v_{FO} = v_F - v_R$	2064	4600	No
v_R	34	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2098 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2098	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.366

Space mean speed in ramp influence area, S_R = 53.4 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.4 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1924	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	27	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	133	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1924		27		133		vph
Peak-hour factor, PHF	0.94		0.81		0.84		
Peak 15-min volume, v15	512		8		40		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2098	34	160	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2098 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2098	4600	No
$v_{FO} = v_F - v_R$	2064	4600	No
v_R	34	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2098 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2098	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.561	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1897	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	505	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1034	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1034	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	13.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1898	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	133	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2367	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1898		133		2367		vph
Peak-hour factor, PHF	0.94		0.84		0.91		
Peak 15-min volume, v15	505		40		650		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2070	160	2627	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2070 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2070	4600	No
$v_{FO} = v_F - v_R$	1910	4600	No
v_R	160	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2070 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2070	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1898	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	133	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	27	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1898	133	27	vph
Peak-hour factor, PHF	0.94	0.84	0.81	
Peak 15-min volume, v15	505	40	8	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2070	160	34	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2070 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2070	4600	No
$v_{FO} = v_F - v_R$	1910	4600	No
v_R	160	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2070 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2070	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1765	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	469	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	962	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	962	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	13.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1765	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	2367	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	133	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1765	2367	133	vph
Peak-hour factor, PHF	0.94	0.91	0.84	
Peak 15-min volume, v15	469	650	40	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1925	2627	160	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1925 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4552	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1925 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	4552	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 34.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.621	
Space mean speed in ramp influence area,	S_R = 48.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4132	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1099	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2253	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2253	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	57.1	mi/h
Number of lanes, N	2	
Density, D	39.4	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4132	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	874	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	163	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4132		874		163		vph
Peak-hour factor, PHF	0.94		0.90		0.81		
Peak 15-min volume, v15	1099		243		50		v
Trucks and buses	5		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4506	1000	203	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4506 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4506	4600	No
$v_{FO} = v_F - v_R$	3506	4600	No
v_R	1000	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4506 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4506	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 39.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence E

Speed Estimation

Intermediate speed variable, D_S = 0.453

Space mean speed in ramp influence area, S_R = 51.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 51.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3258	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	866	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1776	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1776	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	66.2	mi/h
Number of lanes, N	2	
Density, D	26.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1557	834	377	152	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	414	222	100	40	
Trucks and buses	5	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1698	896	407	164	pc/h

Volume ratio, VR	0.412	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	346	lc/h
Non-weaving vehicle index, INW	737	
Non-weaving lane change, LCNW	879	lc/h
Total lane changes, LCALL	1225	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.155	

Average weaving speed, SW	54.0	mi/h
Average non-weaving speed, SNW	54.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.5	mi/h
Weaving segment density, D	19.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.547	
Weaving segment flow rate, v	3088	veh/h
Weaving segment capacity, cW	5649	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6813	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1930	c
		Maximum	Analyzed	
v/c ratio		1.00	0.547	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3092	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	822	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1686	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1686	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	67.3	mi/h
Number of lanes, N	2	
Density, D	25.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Between Ramps#13&17
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2454	514	638	56	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	653	137	170	15	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2676	552	692	61	pc/h

Volume ratio, VR 0.312

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	295	lc/h
Non-weaving vehicle index, INW	829	
Non-weaving lane change, LCNW	807	lc/h
Total lane changes, LCALL	1102	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.176

Average weaving speed, SW	53.3	mi/h
Average non-weaving speed, SNW	53.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.5	mi/h
Weaving segment density, D	24.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.671	
Weaving segment flow rate, v	3884	veh/h
Weaving segment capacity, cW	5789	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5718	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1978	c
		Maximum	Analyzed	
v/c ratio		1.00	0.671	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2968	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	789	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1618	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1618	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	68.0	mi/h
Number of lanes, N	2	
Density, D	23.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2968	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	414	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	694	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2968	414	694	vph
Peak-hour factor, PHF	0.94	0.91	0.92	
Peak 15-min volume, v15	789	114	189	v
Trucks and buses	5	3	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3236	462	769	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3236 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3236	4600	No
$v_{FO} = v_F - v_R$	2774	4600	No
v_R	462	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3236 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3236	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.600	
Space mean speed in ramp influence area,	S_R = 49.2	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.2	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2968	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	414	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	884	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2968	414	884	vph
Peak-hour factor, PHF	0.94	0.91	0.92	
Peak 15-min volume, v15	789	114	240	v
Trucks and buses	5	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3236	462	970	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3236 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3236	4600	No
$v_{FO} = v_F - v_R$	2774	4600	No
v_R	462	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3236 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3236	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.600	
Space mean speed in ramp influence area,	S_R = 49.2	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2553	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	679	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1392	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1392	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	69.6	mi/h
Number of lanes, N	2	
Density, D	20.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	990	395	1563	489	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	263	105	416	130	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1080	424	1696	531	pc/h

Volume ratio, VR	0.568	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	250	lc/h
Non-weaving vehicle index, INW	317	
Non-weaving lane change, LCNW	822	lc/h
Total lane changes, LCALL	1072	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.140	

Average weaving speed, SW	54.5	mi/h
Average non-weaving speed, SNW	54.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.3	mi/h
Weaving segment density, D	22.9	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.883	
Weaving segment flow rate, v	3640	veh/h
Weaving segment capacity, cW	4121	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	8635	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1790	c
		Maximum	Analyzed	
v/c ratio		1.00	0.883	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1386	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	369	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	756	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	756	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	10.8	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1386	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1140	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2052	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1386	1140	2052	vph
Peak-hour factor, PHF	0.94	0.96	0.95	
Peak 15-min volume, v15	369	297	540	v
Trucks and buses	12	14	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.935	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1563	1271	2203	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1563 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2834	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1563 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2834	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.360	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.5	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1386	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1140	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	529	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1386	1140	529	vph
Peak-hour factor, PHF	0.94	0.96	0.90	
Peak 15-min volume, v15	369	297	147	v
Trucks and buses	12	14	11	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.935	0.948	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1563	1271	620	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1563 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2834	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1563 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2834	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.360	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2526	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	672	v
Trucks and buses	12	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, fp	1.00	
Flow rate, vp	1424	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1424	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	69.4	mi/h
Number of lanes, N	2	
Density, D	20.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2336	529	189	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	621	141	50	0	
Trucks and buses	12	11	4	11	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.943	0.948	0.980	0.948	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2634	594	205	0	pc/h

Volume ratio, VR	0.233	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	263	lc/h
Non-weaving vehicle index, INW	632	
Non-weaving lane change, LCNW	832	lc/h
Total lane changes, LCALL	1095	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.168	

Average weaving speed, SW	53.5	mi/h
Average non-weaving speed, SNW	54.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.3	mi/h
Weaving segment density, D	21.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.558	
Weaving segment flow rate, v	3239	veh/h
Weaving segment capacity, cW	5802	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4874	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2050	c
		Maximum	Analyzed	
v/c ratio		1.00	0.558	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2865	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	762	v
Trucks and buses	12	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, fp	1.00	
Flow rate, vp	1615	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1615	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.0	mi/h
Number of lanes, N	2	
Density, D	23.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2865	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	144	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	189	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2865		144		189		vph
Peak-hour factor, PHF	0.94		0.89		0.92		
Peak 15-min volume, v15	762		40		51		v
Trucks and buses	12		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.943	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3231	165	210	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3231 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3231	4600	No
$v_{FO} = v_F - v_R$	3066	4600	No
v_R	165	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3231 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3231	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 25.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.573	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2865	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	144	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	690	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2865		144		690		vph
Peak-hour factor, PHF	0.94		0.89		0.86		
Peak 15-min volume, v15	762		40		201		v
Trucks and buses	12		6		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.943	0.971	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3231	167	818	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3231 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3231	4600	No
$v_{FO} = v_F - v_R$	3064	4600	No
v_R	167	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3231 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3231	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 25.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.573	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2721	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	724	v
Trucks and buses	12	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, fp	1.00	
Flow rate, vp	1534	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1534	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	68.7	mi/h
Number of lanes, N	2	
Density, D	22.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2721	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	690	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	370	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2721	690	370	vph
Peak-hour factor, PHF	0.94	0.86	0.76	
Peak 15-min volume, v15	724	201	122	v
Trucks and buses	12	6	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.971	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3068	826	509	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3068 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3894	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3068 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3894	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 30.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.450	
Space mean speed in ramp influence area,	S_R = 51.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 51.9	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2721	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	690	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	144	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2721	690	144	vph
Peak-hour factor, PHF	0.94	0.86	0.89	
Peak 15-min volume, v15	724	201	40	v
Trucks and buses	12	6	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.971	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3068	826	165	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3068 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3894	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3068 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3894	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 30.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.450	
Space mean speed in ramp influence area,	S_R = 51.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 51.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3412	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	907	v
Trucks and buses	12	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, fp	1.00	
Flow rate, vp	1924	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1924	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	63.9	mi/h
Number of lanes, N	2	
Density, D	30.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3412	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	370	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	690	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3412		370		690		vph
Peak-hour factor, PHF	0.94		0.76		0.86		
Peak 15-min volume, v15	907		122		201		v
Trucks and buses	12		9		6		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.943	0.957	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3848	509	826	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD} = 3848$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3848	4600	No
$v_{FO} = v - v_R$	3339	4600	No
v_R	509	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3848 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3848	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 35.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence E

Speed Estimation

Intermediate speed variable, D_S = 0.344

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.8 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3412	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	370	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1424	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3412	370	1424	vph
Peak-hour factor, PHF	0.94	0.76	0.88	
Peak 15-min volume, v15	907	122	405	v
Trucks and buses	12	9	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.957	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3848	509	1634	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3848 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3848	4600	No
$v_{FO} = v_F - v_R$	3339	4600	No
v_R	509	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3848 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3848	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 35.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence E

Speed Estimation

Intermediate speed variable, D_S = 0.344

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3042	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	809	v
Trucks and buses	12	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, fp	1.00	
Flow rate, vp	1715	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1715	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	66.9	mi/h
Number of lanes, N	2	
Density, D	25.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3042	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1424	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	370	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3042	1424	370	vph
Peak-hour factor, PHF	0.94	0.88	0.76	
Peak 15-min volume, v15	809	405	122	v
Trucks and buses	12	2	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.943	0.990	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3430	1634	509	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3430 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5064	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3430 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5064	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 37.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.884	
Space mean speed in ramp influence area,	S_R = 44.1	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 44.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4466	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1188	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1623	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1623	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	67.9	mi/h
Number of lanes, N	3	
Density, D	23.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	600	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	160	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	327	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	327	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	4.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	US-17 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	600	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	567	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	568	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	600	567	568	vph
Peak-hour factor, PHF	0.94	0.86	0.81	
Peak 15-min volume, v15	160	165	175	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	654	666	708	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 654 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	1320	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 654 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	1320	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 6.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	M_S = 0.201	
Space mean speed in ramp influence area,	S_R = 56.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1167	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	310	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	636	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	636	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	8.5	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: PM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: SC 7 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2015 Existing Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1167	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	568	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	34	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1167	568	34	vph
Peak-hour factor, PHF	0.94	0.86	0.81	
Peak 15-min volume, v15	310	165	10	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1273	667	42	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1273 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	1940	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1273 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	1940	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 10.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.198	
Space mean speed in ramp influence area,	S_R = 56.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1735	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	461	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	946	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	946	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	12.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1735	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	34	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	568	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1735		34		568		vph
Peak-hour factor, PHF	0.94		0.81		0.86		
Peak 15-min volume, v15	461		10		165		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1892	42	667	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1892 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1892	4600	No
$v_{FO} = v_F - v_R$	1850	4600	No
v_R	42	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1892 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1892	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.367

Space mean speed in ramp influence area, S_R = 53.4 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.4 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1735	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	34	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	491	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1735	34	491	vph
Peak-hour factor, PHF	0.94	0.81	0.84	
Peak 15-min volume, v15	461	10	146	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1892	42	590	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1892 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1892	4600	No
$v_{FO} = v_F - v_R$	1850	4600	No
v_R	42	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 1892 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1892	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 17.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1701	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	452	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	927	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	927	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	12.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1701	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	491	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1669	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1701		491		1669		vph
Peak-hour factor, PHF	0.94		0.84		0.91		
Peak 15-min volume, v15	452		146		459		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1855	590	1852	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1855 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1855	4600	No
$v_{FO} = v_F - v_R$	1265	4600	No
v_R	590	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1855 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1855	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 15.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.611	
Space mean speed in ramp influence area,	S_R = 49.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.0	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1701	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	491	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	34	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1701		491		34		vph
Peak-hour factor, PHF	0.94		0.84		0.81		
Peak 15-min volume, v15	452		146		10		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1855	590	42	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD} = 1855$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1855	4600	No
$v_{FO} = v - v_F - v_R$	1265	4600	No
v_R	590	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 1855 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1855	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12} = 15.2$ pc/mi/ln D

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.611	
Space mean speed in ramp influence area,	S_R = 49.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1210	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	322	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	660	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	660	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	9.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1210	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	1669	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	491	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1210	1669	491	vph
Peak-hour factor, PHF	0.94	0.91	0.84	
Peak 15-min volume, v15	322	459	146	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1319	1852	590	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1319 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3171	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1319 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3171	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 24.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.344	
Space mean speed in ramp influence area,	S_R = 53.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2878	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	765	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1569	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1569	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	68.4	mi/h
Number of lanes, N	2	
Density, D	22.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2878	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	302	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1669	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2878		302		1669		vph
Peak-hour factor, PHF	0.94		0.90		0.81		
Peak 15-min volume, v15	765		84		515		v
Trucks and buses	5		12		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.943	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3138	356	2081	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3138 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3138	4600	No
$v_{FO} = v_F - v_R$	2782	4600	No
v_R	356	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3138 (Equation 13-15, 13-16, 18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3138	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 28.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.395	
Space mean speed in ramp influence area,	S_R = 52.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2576	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	685	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1404	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1404	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.5	mi/h
Number of lanes, N	2	
Density, D	20.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2293	611	283	245	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	610	163	75	65	
Trucks and buses	5	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2500	657	306	265	pc/h

Volume ratio, VR	0.258	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	346	lc/h
Non-weaving vehicle index, INW	1095	
Non-weaving lane change, LCNW	1065	lc/h
Total lane changes, LCALL	1411	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.173

Average weaving speed, SW	53.4	mi/h
Average non-weaving speed, SNW	54.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.9	mi/h
Weaving segment density, D	23.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.604	
Weaving segment flow rate, v	3638	veh/h
Weaving segment capacity, cW	6023	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5141	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2058	c
		Maximum	Analyzed	
v/c ratio		1.00	0.604	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2905	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	773	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1584	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1584	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	68.3	mi/h
Number of lanes, N	2	
Density, D	23.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Between Ramps#13&17
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2147	745	758	134	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	571	198	202	36	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2341	800	814	144	pc/h

Volume ratio, VR 0.394

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	295	lc/h
Non-weaving vehicle index, INW	753	
Non-weaving lane change, LCNW	755	lc/h
Total lane changes, LCALL	1050	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.169

Average weaving speed, SW	53.5	mi/h
Average non-weaving speed, SNW	53.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.5	mi/h
Weaving segment density, D	25.6	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.715	
Weaving segment flow rate, v	4000	veh/h
Weaving segment capacity, cW	5590	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6611	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1910	c
		Maximum	Analyzed	
v/c ratio		1.00	0.715	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2892	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	769	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1577	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1577	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	68.4	mi/h
Number of lanes, N	2	
Density, D	23.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2892	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	576	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	892	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2892		576		892		vph
Peak-hour factor, PHF	0.94		0.91		0.92		
Peak 15-min volume, v15	769		158		242		v
Trucks and buses	5		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3154	642	979	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3154 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3154	4600	No
$v_{FO} = v_F - v_R$	2512	4600	No
v_R	642	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3154 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3154	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 25.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.616

Space mean speed in ramp influence area, S_R = 48.9 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.9 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2892	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	576	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1338	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2892	576	1338	vph
Peak-hour factor, PHF	0.94	0.91	0.92	
Peak 15-min volume, v15	769	158	364	v
Trucks and buses	5	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3154	642	1469	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3154 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3154	4600	No
$v_{FO} = v_F - v_R$	2512	4600	No
v_R	642	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3154 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3154	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 25.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.616	
Space mean speed in ramp influence area,	S_R = 48.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2316	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	616	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1263	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1263	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	18.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	946	595	1370	743	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	252	158	364	198	
Trucks and buses	5	4	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.980	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1032	646	1487	806	pc/h

Volume ratio, VR	0.537	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	250	lc/h
Non-weaving vehicle index, INW	362	
Non-weaving lane change, LCNW	869	lc/h
Total lane changes, LCALL	1119	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.145	

Average weaving speed, SW	54.3	mi/h
Average non-weaving speed, SNW	53.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.0	mi/h
Weaving segment density, D	24.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.889	
Weaving segment flow rate, v	3875	veh/h
Weaving segment capacity, cW	4359	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	8264	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1819	c
		Maximum	Analyzed	
v/c ratio		1.00	0.889	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1542	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	410	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	841	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	841	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	12.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1542	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1227	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2113	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1542	1227	2113	vph
Peak-hour factor, PHF	0.94	0.96	0.95	
Peak 15-min volume, v15	410	320	556	v
Trucks and buses	7	9	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.957	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1698	1336	2269	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1698 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3034	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1698 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3034	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.375	
Space mean speed in ramp influence area,	S_R = 53.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.3	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1542	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1227	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	511	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1542	1227	511	vph
Peak-hour factor, PHF	0.94	0.96	0.90	
Peak 15-min volume, v15	410	320	142	v
Trucks and buses	7	9	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.957	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1698	1336	585	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1698 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3034	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1698 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3034	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{R} + 0.0078\, v_{12} - 0.00627\, L_A$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.375	
Space mean speed in ramp influence area,	S_R = 53.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3280	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	872	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1806	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1806	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	65.7	mi/h
Number of lanes, N	2	
Density, D	27.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2575	511	194	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	685	136	52	0	
Trucks and buses	7	6	3	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.971	0.985	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2835	560	209	0	pc/h

Volume ratio, VR 0.213

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	263	lc/h
Non-weaving vehicle index, INW	680	
Non-weaving lane change, LCNW	873	lc/h
Total lane changes, LCALL	1136	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.172

Average weaving speed, SW	53.4	mi/h
Average non-weaving speed, SNW	54.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.0	mi/h
Weaving segment density, D	22.2	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.582	
Weaving segment flow rate, v	3483	veh/h
Weaving segment capacity, cW	5986	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4673	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2065	c
		Maximum	Analyzed	
v/c ratio		1.00	0.582	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3086	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	821	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1699	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1699	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.1	mi/h
Number of lanes, N	2	
Density, D	25.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3086	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	495	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	194	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3086		495		194		vph
Peak-hour factor, PHF	0.94		0.89		0.92		
Peak 15-min volume, v15	821		139		53		v
Trucks and buses	7		3		3		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3398	565	214	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3398 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3398	4600	No
$v_{FO} = v_F - v_R$	2833	4600	No
v_R	565	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3398 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3398	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.609	
Space mean speed in ramp influence area,	S_R = 49.0	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.0	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3086	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	495	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	466	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3086		495		466		vph
Peak-hour factor, PHF	0.94		0.89		0.86		
Peak 15-min volume, v15	821		139		135		v
Trucks and buses	7		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3398	565	547	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3398 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3398	4600	No
$v_{FO} = v_F - v_R$	2833	4600	No
v_R	565	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3398 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3398	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.609

Space mean speed in ramp influence area, S_R = 49.0 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.0 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2591	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	689	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1426	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1426	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	69.4	mi/h
Number of lanes, N	2	
Density, D	20.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2591	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	466	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	493	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2591	466	493	vph
Peak-hour factor, PHF	0.94	0.86	0.76	
Peak 15-min volume, v15	689	135	162	v
Trucks and buses	7	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2853	547	668	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2853 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3400	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2853 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3400	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.375	
Space mean speed in ramp influence area,	S_R = 53.2	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.2	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2591	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	466	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	495	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2591	466	495	vph
Peak-hour factor, PHF	0.94	0.86	0.89	
Peak 15-min volume, v15	689	135	139	v
Trucks and buses	7	2	3	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2853	547	565	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2853 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3400	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2853 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3400	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{R} + 0.0078\, v_{12} - 0.00627\, L_A$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.375	
Space mean speed in ramp influence area,	S_R = 53.2	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3057	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	813	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1683	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1683	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	67.3	mi/h
Number of lanes, N	2	
Density, D	25.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3057	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	493	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	466	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3057		493		466		vph
Peak-hour factor, PHF	0.94		0.76		0.86		
Peak 15-min volume, v15	813		162		135		v
Trucks and buses	7		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3366	668	547	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3366 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3366	4600	No
$v_{FO} = v_F - v_R$	2698	4600	No
v_R	668	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3366 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3366	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 31.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.358	
Space mean speed in ramp influence area,	S_R = 53.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.6	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3057	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	493	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	770	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3057		493		770		vph
Peak-hour factor, PHF	0.94		0.76		0.88		
Peak 15-min volume, v15	813		162		219		v
Trucks and buses	7		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3366	668	884	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3366 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3366	4600	No
$v_{FO} = v_F - v_R$	2698	4600	No
v_R	668	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3366 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3366	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 31.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.358

Space mean speed in ramp influence area, S_R = 53.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2564	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	682	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1412	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1412	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	69.5	mi/h
Number of lanes, N	2	
Density, D	20.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2564	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	770	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	493	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2564	770	493	vph
Peak-hour factor, PHF	0.94	0.88	0.76	
Peak 15-min volume, v15	682	219	162	v
Trucks and buses	7	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2823	884	668	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2823 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3707	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2823 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3707	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 27.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.425	
Space mean speed in ramp influence area,	S_R = 52.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3333	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	886	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1223	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1223	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	17.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3736	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	994	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1384	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1384	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	69.6	mi/h
Number of lanes, N	3	
Density, D	19.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3736	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1204	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	659	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3736		1204		659		vph
Peak-hour factor, PHF	0.94		0.93		0.93		
Peak 15-min volume, v15	994		324		177		v
Trucks and buses	9		8		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.962	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4153	1346	716	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 4153$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4153	4600	No
$v_{FO} = v_F - v_R$	2807	4600	No
v_R	1346	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 4153 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4153	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.679	
Space mean speed in ramp influence area,	S_R = 47.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 47.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2533	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	674	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1408	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1408	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.5	mi/h
Number of lanes, N	2	
Density, D	20.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2533	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	659	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	275	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2533	659	275	vph
Peak-hour factor, PHF	0.94	0.93	0.85	
Peak 15-min volume, v15	674	177	81	v
Trucks and buses	9	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2816	716	330	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2816 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3532	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2816 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3532	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.400	
Space mean speed in ramp influence area,	S_R = 52.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.8	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2533	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	659	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1204	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2533	659	1204	vph
Peak-hour factor, PHF	0.94	0.93	0.93	
Peak 15-min volume, v15	674	177	324	v
Trucks and buses	9	2	8	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.962	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2816	716	1346	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2816 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3532	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2816 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3532	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.400	
Space mean speed in ramp influence area,	S_R = 52.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3192	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	849	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1774	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1774	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	66.2	mi/h
Number of lanes, N	2	
Density, D	26.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3192	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	275	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	659	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3192		275		659		vph
Peak-hour factor, PHF	0.94		0.85		0.93		
Peak 15-min volume, v15	849		81		177		v
Trucks and buses	9		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3549	330	716	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3549 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3549	4500	No
$v_{FO} = v_F - v_R$	3219	4500	No
v_R	330	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3549 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3549	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 28.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.393	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3192	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	275	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	208	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3192		275		208		vph
Peak-hour factor, PHF	0.94		0.85		0.93		
Peak 15-min volume, v15	849		81		56		v
Trucks and buses	9		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3549	330	228	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3549 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3549	4500	No
$v_{FO} = v_F - v_R$	3219	4500	No
v_R	330	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3549 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3549	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 29.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.393

Space mean speed in ramp influence area, S_R = 49.9 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.9 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2918	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	776	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1622	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1622	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.9	mi/h
Number of lanes, N	2	
Density, D	23.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2918	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	275	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2918	208	275	vph
Peak-hour factor, PHF	0.94	0.77	0.85	
Peak 15-min volume, v15	776	68	81	v
Trucks and buses	9	4	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3244	276	330	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3244 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3244	4600	No
$v_{FO} = v_F - v_R$	2968	4600	No
v_R	276	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3244 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3244	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.583

Space mean speed in ramp influence area, S_R = 49.5 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 49.5 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2918	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1036	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2918	208	1036	vph
Peak-hour factor, PHF	0.94	0.77	0.94	
Peak 15-min volume, v15	776	68	276	v
Trucks and buses	9	4	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3244	276	1113	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3244 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3244	4600	No
$v_{FO} = v_F - v_R$	2968	4600	No
v_R	276	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3244 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3244	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.583	
Space mean speed in ramp influence area,	S_R = 49.5	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2710	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	721	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1506	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1506	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.9	mi/h
Number of lanes, N	2	
Density, D	21.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1253	1036	1457	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	333	276	388	0	
Trucks and buses	9	2	7	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.990	0.966	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1393	1113	1604	0	pc/h

Volume ratio, VR 0.661

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.132	
Weaving segment flow rate, v	3934	veh/h
Weaving segment capacity, cW	3474	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	9769	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1608	c
		Maximum	Analyzed	
v/c ratio		1.00	1.132	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2289	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	609	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1272	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1272	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	2	
Density, D	18.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&34
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1346	287	943	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	358	76	251	0	
Trucks and buses	12	4	3	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.943	0.980	0.985	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1518	311	1018	0	pc/h

Volume ratio, VR 0.467

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1329	lc/h
Weaving lane changes, LCW	1463	lc/h
Non-weaving vehicle index, INW	167	
Non-weaving lane change, LCNW	33	lc/h
Total lane changes, LCALL	1496	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.498

Average weaving speed, SW	45.0	mi/h
Average non-weaving speed, SNW	45.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	45.5	mi/h
Weaving segment density, D	20.9	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.554	
Weaving segment flow rate, v	2686	veh/h
Weaving segment capacity, cW	4850	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7441	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1773	c
		Maximum	Analyzed	
v/c ratio		1.00	0.554	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1633	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	434	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	890	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	890	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	12.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 1/8/2016
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 WB
Weaving Location: Between Ramp #21 and 33
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1500	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1223	1293	410	580	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	325	344	109	154	
Trucks and buses	5	8	5	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.962	0.976	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1334	1431	447	642	pc/h

Volume ratio, VR 0.487

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.7	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1878	lc/h
Weaving lane changes, LCW	2224	lc/h
Non-weaving vehicle index, INW	800	
Non-weaving lane change, LCNW	642	lc/h
Total lane changes, LCALL	2866	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.377

Average weaving speed, SW	51.3	mi/h
Average non-weaving speed, SNW	45.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	48.1	mi/h
Weaving segment density, D	26.7	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.783	
Weaving segment flow rate, v	3760	veh/h
Weaving segment capacity, cW	4805	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7678	1500	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1877	c
		Maximum	Analyzed	
v/c ratio		1.00	0.783	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2516	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	669	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1372	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1372	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	2	
Density, D	19.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2516	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	580	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	391	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2516	580	391	vph
Peak-hour factor, PHF	0.94	0.91	0.92	
Peak 15-min volume, v15	669	159	106	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2744	644	429	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2744 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3388	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2744 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3388	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 26.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.355	
Space mean speed in ramp influence area,	S_R = 53.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 53.6	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2516	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	580	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	990	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2516	580	990	vph
Peak-hour factor, PHF	0.94	0.91	0.86	
Peak 15-min volume, v15	669	159	288	v
Trucks and buses	5	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2744	644	1180	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2744 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3388	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2744 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3388	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 26.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.355	
Space mean speed in ramp influence area,	S_R = 53.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 53.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3096	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	823	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1663	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1663	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.5	mi/h
Number of lanes, N	2	
Density, D	24.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	CD North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	776	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	580	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	776	580		vph
Peak-hour factor, PHF	0.91	0.82		
Peak 15-min volume, v15	213	177		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	861	714	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD}$ = 861 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	861	4500	No
$v_{FO} = v - v_F - v_R$	147	4500	No
v_R	714	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 861 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	861	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 7.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.492	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	196	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	52	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	107	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	107	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	1.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
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Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#14&24
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2459	342	637	49	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	654	91	169	13	
Trucks and buses	5	2	8	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.962	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2681	367	705	54	pc/h

Volume ratio, VR 0.282

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1072	lc/h
Weaving lane changes, LCW	1287	lc/h
Non-weaving vehicle index, INW	517	
Non-weaving lane change, LCNW	498	lc/h
Total lane changes, LCALL	1785	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.373

Average weaving speed, SW	47.8	mi/h
Average non-weaving speed, SNW	46.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	46.6	mi/h
Weaving segment density, D	27.2	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.647	
Weaving segment flow rate, v	3715	veh/h
Weaving segment capacity, cW	5737	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5387	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1960	c
		Maximum	Analyzed	
v/c ratio		1.00	0.647	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2801	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	745	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1527	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1527	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.8	mi/h
Number of lanes, N	2	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#9&16
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2186	248	615	369	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	581	66	164	98	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2384	266	661	396	pc/h

Volume ratio, VR	0.250	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	927	lc/h
Weaving lane changes, LCW	1247	lc/h
Non-weaving vehicle index, INW	962	
Non-weaving lane change, LCNW	933	lc/h
Total lane changes, LCALL	2180	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.271

Average weaving speed, SW	50.4	mi/h
Average non-weaving speed, SNW	47.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	48.1	mi/h
Weaving segment density, D	25.7	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.604	
Weaving segment flow rate, v	3617	veh/h
Weaving segment capacity, cW	5988	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5054	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2046	c
		Maximum	Analyzed	
v/c ratio		1.00	0.604	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

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Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2434	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	647	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1327	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1327	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	2	
Density, D	19.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2434	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	234	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	984	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2434	234	984	vph
Peak-hour factor, PHF	0.94	0.88	0.92	
Peak 15-min volume, v15	647	66	267	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2654	269	1080	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2654 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2923	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2654 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2923	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 24.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.341	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2667	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	709	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1454	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1454	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	2	
Density, D	21.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2667	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	994	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	566	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2667		994		566		vph
Peak-hour factor, PHF	0.94		0.92		0.85		
Peak 15-min volume, v15	709		270		166		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2908	1091	673	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2908 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2908	4600	No
$v_{FO} = v_F - v_R$	1817	4600	No
v_R	1091	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2908 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2908	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 24.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.331	
Space mean speed in ramp influence area,	S_R = 54.0	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 54.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1674	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	445	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	913	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	913	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	13.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1674	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	566	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	253	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1674		566		253		vph
Peak-hour factor, PHF	0.94		0.85		0.82		
Peak 15-min volume, v15	445		166		77		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1825	673	312	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1825 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1825	4600	No
$v_{FO} = v_F - v_R$	1152	4600	No
v_R	673	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 1825 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1825	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 16.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.619	
Space mean speed in ramp influence area,	S_R = 48.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.9	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1674	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	566	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	994	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	1674		566		994		vph
Peak-hour factor, PHF	0.94		0.85		0.92		
Peak 15-min volume, v15	445		166		270		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1825	673	1091	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD} = 1825$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1825	4600	No
$v_{FO} = v - v_R$	1152	4600	No
v_R	673	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1825 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1825	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 16.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.619	
Space mean speed in ramp influence area,	S_R = 48.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1108	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	295	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	604	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	604	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	8.6	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1108	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	253	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	566	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1108	253	566	vph
Peak-hour factor, PHF	0.94	0.82	0.85	
Peak 15-min volume, v15	295	77	166	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1208	312	673	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1208 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	1520	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1208 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	1520	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{R} + 0.0078\, v_{12} - 0.00627\, L_A$ = 13.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.287	
Space mean speed in ramp influence area,	S_R = 54.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 54.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1361	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	362	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	742	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	742	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	9.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	430	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	114	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	156	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	156	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	2.1	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5208	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1385	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1967	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1967	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	63.2	mi/h
Number of lanes, N	3	
Density, D	31.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5208	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1292	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	554	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5208		1292		554		vph
Peak-hour factor, PHF	0.94		0.93		0.88		
Peak 15-min volume, v15	1385		347		157		v
Trucks and buses	13		7		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.966	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5901	1438	636	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5901 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5901	4600	Yes
$v_{FO} = v_F - v_R$	4463	4600	No
v_R	1438	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5901 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5901	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 42.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.687

Space mean speed in ramp influence area, S_R = 47.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 47.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3916	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1041	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2218	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2218	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	58.0	mi/h
Number of lanes, N	2	
Density, D	38.3	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3916	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	554	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	367	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3916	554	367	vph
Peak-hour factor, PHF	0.94	0.88	0.91	
Peak 15-min volume, v15	1041	157	101	v
Trucks and buses	13	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4437	636	413	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4437 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5073	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4437 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5073	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.890	
Space mean speed in ramp influence area,	S_R = 44.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 44.0	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3916	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	554	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1292	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3916	554	1292	vph
Peak-hour factor, PHF	0.94	0.88	0.93	
Peak 15-min volume, v15	1041	157	347	v
Trucks and buses	13	2	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4437	636	1438	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4437 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5073	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4437 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5073	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 0.890

Space mean speed in ramp influence area, S_R = 44.0 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 44.0 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4470	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1189	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2532	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2532	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	49.4	mi/h
Number of lanes, N	2	
Density, D	51.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4470	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	367	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	554	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4470		367		554		vph
Peak-hour factor, PHF	0.94		0.91		0.88		
Peak 15-min volume, v15	1189		101		157		v
Trucks and buses	13		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5064	413	636	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5064 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5064	4500	Yes
$v_{FO} = v_F - v_R$	4651	4500	Yes
v_R	413	2100	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5064 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5064	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 42.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.8	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4470	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	367	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	90	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4470	367	90	vph
Peak-hour factor, PHF	0.94	0.91	0.47	
Peak 15-min volume, v15	1189	101	48	v
Trucks and buses	13	5	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5064	413	196	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 5064$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5064	4500	Yes
$v_{FO} = v_F - v_R$	4651	4500	Yes
v_R	413	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 5064 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5064	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 42.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4103	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1091	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2324	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2324	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	55.3	mi/h
Number of lanes, N	2	
Density, D	42.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4103	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	90	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	367	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4103		90		367		vph
Peak-hour factor, PHF	0.94		0.47		0.91		
Peak 15-min volume, v15	1091		48		101		v
Trucks and buses	13		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4649	196	413	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4649 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4649	4600	Yes
$v_{FO} = v_F - v_R$	4453	4600	No
v_R	196	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4649 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4649	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 38.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.576	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.6	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4103	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	90	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	523	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4103		90		523		vph
Peak-hour factor, PHF	0.94		0.47		0.91		
Peak 15-min volume, v15	1091		48		144		v
Trucks and buses	13		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4649	196	580	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4649 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4649	4600	Yes
$v_{FO} = v_F - v_R$	4453	4600	No
v_R	196	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4649 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4649	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 38.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.576

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4013	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1067	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2273	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2273	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	56.6	mi/h
Number of lanes, N	2	
Density, D	40.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2352	523	1660	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	626	139	441	0	
Trucks and buses	13	2	7	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.990	0.966	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2665	562	1828	0	pc/h

Volume ratio, VR	0.473	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	2390	lc/h
Weaving lane changes, LCW	2541	lc/h
Non-weaving vehicle index, INW	292	
Non-weaving lane change, LCNW	367	lc/h
Total lane changes, LCALL	2908	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.673	

Average weaving speed, SW	41.9	mi/h
Average non-weaving speed, SNW	34.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	37.8	mi/h
Weaving segment density, D	44.6	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.996	
Weaving segment flow rate, v	4747	veh/h
Weaving segment capacity, cW	4766	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7510	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1781	c
		Maximum	Analyzed	
v/c ratio		1.00	0.996	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2875	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	765	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1629	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1629	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	67.9	mi/h
Number of lanes, N	2	
Density, D	24.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&34
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2202	374	673	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	586	99	179	0	
Trucks and buses	13	3	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.985	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2495	404	734	0	pc/h

Volume ratio, VR	0.313	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1138	lc/h
Weaving lane changes, LCW	1272	lc/h
Non-weaving vehicle index, INW	274	
Non-weaving lane change, LCNW	234	lc/h
Total lane changes, LCALL	1506	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.500

Average weaving speed, SW	45.0	mi/h
Average non-weaving speed, SNW	46.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	45.7	mi/h
Weaving segment density, D	26.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.636	
Weaving segment flow rate, v	3412	veh/h
Weaving segment capacity, cW	5363	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5726	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1904	c
		Maximum	Analyzed	
v/c ratio		1.00	0.636	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2577	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	685	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1460	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	1460	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	2	
Density, D	21.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 1/8/2016
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 WB
Weaving Location: Between Ramp #21 and 33
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	3126	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2072	807	505	736	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	551	215	134	196	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2259	867	548	799	pc/h

Volume ratio, VR 0.316

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1415	lc/h
Weaving lane changes, LCW	1740	lc/h
Non-weaving vehicle index, INW	956	
Non-weaving lane change, LCNW	1746	lc/h
Total lane changes, LCALL	3486	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.246

Average weaving speed, SW	51.1	mi/h
Average non-weaving speed, SNW	42.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	45.0	mi/h
Weaving segment density, D	33.1	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.711	
Weaving segment flow rate, v	4364	veh/h
Weaving segment capacity, cW	6140	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5760	3126	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2098	c
		Maximum	Analyzed	
v/c ratio		1.00	0.711	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2879	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	766	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1570	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1570	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	68.4	mi/h
Number of lanes, N	2	
Density, D	22.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2879	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	564	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	364	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2879	564	364	vph
Peak-hour factor, PHF	0.94	0.91	0.84	
Peak 15-min volume, v15	766	155	108	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3139	626	438	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3139 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3765	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3139 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3765	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.408	
Space mean speed in ramp influence area,	S_R = 52.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.7	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2879	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	564	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1241	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2879	564	1241	vph
Peak-hour factor, PHF	0.94	0.91	0.90	
Peak 15-min volume, v15	766	155	345	v
Trucks and buses	5	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3139	626	1406	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3139 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3765	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3139 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3765	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.408	
Space mean speed in ramp influence area,	S_R = 52.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 52.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3443	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	916	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1850	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1850	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	65.1	mi/h
Number of lanes, N	2	
Density, D	28.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	909	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	564	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp	
Volume, V (vph)	909		564			vph
Peak-hour factor, PHF	0.91		0.90			
Peak 15-min volume, v15	250		157			v
Trucks and buses	2		5			%
Recreational vehicles	0		0			%
Terrain type:	Level		Level			
Grade	0.00	%	0.00	%		%
Length	0.00	mi	0.00	mi		mi
Trucks and buses PCE, ET	1.5		1.5			
Recreational vehicle PCE, ER	1.2		1.2			

Heavy vehicle adjustment, fHV	0.990	0.976	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	1009	642	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1009 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1009	4500	No
$v_{FO} = v_F - v_R$	367	4500	No
v_R	642	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1009 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1009	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 8.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.486	
Space mean speed in ramp influence area,	S_R = 48.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	345	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	92	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	188	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	188	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	3.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2015 Existing Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3008	513	69	139	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	800	136	18	37	
Trucks and buses	5	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3280	551	76	152	pc/h

Volume ratio, VR	0.154	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	627	lc/h
Weaving lane changes, LCW	842	lc/h
Non-weaving vehicle index, INW	649	
Non-weaving lane change, LCNW	641	lc/h
Total lane changes, LCALL	1483	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.322

Average weaving speed, SW	49.0	mi/h
Average non-weaving speed, SNW	49.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	49.0	mi/h
Weaving segment density, D	27.6	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.657	
Weaving segment flow rate, v	3960	veh/h
Weaving segment capacity, cW	6029	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4076	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2060	c
		Maximum	Analyzed	
v/c ratio		1.00	0.657	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3359	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	893	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1831	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1831	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	65.4	mi/h
Number of lanes, N	2	
Density, D	28.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#9&16
Analysis Year: 2015 Existing Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3290	513	69	139	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	875	136	18	37	
Trucks and buses	5	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3588	551	76	152	pc/h

Volume ratio, VR 0.144

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	0	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	0	lc/h
Weaving lane changes, LCW	320	lc/h
Non-weaving vehicle index, INW	1294	
Non-weaving lane change, LCNW	1130	lc/h
Total lane changes, LCALL	1450	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.197

Average weaving speed, SW	52.6	mi/h
Average non-weaving speed, SNW	53.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	53.0	mi/h
Weaving segment density, D	27.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.684	
Weaving segment flow rate, v	4261	veh/h
Weaving segment capacity, cW	6231	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3967	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2129	c
		Maximum	Analyzed	
v/c ratio		1.00	0.684	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3804	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1012	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2074	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2074	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	61.1	mi/h
Number of lanes, N	2	
Density, D	33.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3804	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	849	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	208	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3804	849	208	vph
Peak-hour factor, PHF	0.94	0.83	0.79	
Peak 15-min volume, v15	1012	256	66	v
Trucks and buses	5	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4148	1033	271	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4148 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5181	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4148 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5181	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.962	
Space mean speed in ramp influence area,	S_R = 42.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 42.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4653	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1238	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2537	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2537	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	49.3	mi/h
Number of lanes, N	2	
Density, D	51.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4653	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1782	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	660	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4653		1782		660		vph
Peak-hour factor, PHF	0.94		0.97		0.94		
Peak 15-min volume, v15	1238		459		176		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1855	709	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5074 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5074	4600	Yes
$v_{FO} = v_F - v_R$	3219	4600	No
v_R	1855	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5074 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5074	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 42.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 52.8	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 52.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2870	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	763	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1565	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1565	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	68.5	mi/h
Number of lanes, N	2	
Density, D	22.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2870	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	660	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	187	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2870		660		187		vph
Peak-hour factor, PHF	0.94		0.94		0.78		
Peak 15-min volume, v15	763		176		60		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3130	709	242	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3130 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3130	4600	No
$v_{FO} = v_F - v_R$	2421	4600	No
v_R	709	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3130 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3130	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.622

Space mean speed in ramp influence area, S_R = 48.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.8 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2870	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	660	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1782	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2870		660		1782		vph
Peak-hour factor, PHF	0.94		0.94		0.97		
Peak 15-min volume, v15	763		176		459		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3130	709	1855	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3130 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3130	4600	No
$v_{FO} = v_F - v_R$	2421	4600	No
v_R	709	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3130 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3130	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.622	
Space mean speed in ramp influence area,	S_R = 48.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2210	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	588	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1205	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	1205	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	17.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2210	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	187	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	660	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2210	187	660	vph
Peak-hour factor, PHF	0.94	0.78	0.94	
Peak 15-min volume, v15	588	60	176	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2410	242	709	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2410 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2652	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2410 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2652	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{R} + 0.0078\, v_{12} - 0.00627\, L_A$ = 22.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.324	
Space mean speed in ramp influence area,	S_R = 54.2	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 54.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2397	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	638	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1307	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	1307	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	74.0	mi/h
Number of lanes, N	2	
Density, D	17.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2015 Existing Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1029	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	274	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	374	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	374	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	5.0	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.2 Design Year No Build

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1610	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	428	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	886	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	886	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: US-17 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1610	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	873	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	380	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1610	873	380	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	428	232	101	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1773	938	408	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1773 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2711	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1773 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2711	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 16.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.245	
Space mean speed in ramp influence area,	S_R = 55.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2483	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	660	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1367	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1367	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	73.5	mi/h
Number of lanes, N	2	
Density, D	18.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: SC 7 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2483	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	380	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	36	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2483	380	36	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	660	101	10	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2734	408	39	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2734 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3142	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2734 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3142	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.261	
Space mean speed in ramp influence area,	S_R = 55.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	761	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1576	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1576	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	71.3	mi/h
Number of lanes, N	2	
Density, D	22.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	380	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		380		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		101		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	408	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3152 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	4600	No
$v_{FO} = v_F - v_R$	3113	4600	No
v_R	39	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3152 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3152	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.367	
Space mean speed in ramp influence area,	S_R = 53.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.4	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	208	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		208		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		55		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	223	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3152 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	4600	No
$v_{FO} = v_F - v_R$	3113	4600	No
v_R	39	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3152 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3152	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2827	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	752	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1556	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1556	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	71.6	mi/h
Number of lanes, N	2	
Density, D	21.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	3788	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		3788		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		1007		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	4070	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3113 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	4600	No
$v_{FO} = v_F - v_R$	2890	4600	No
v_R	223	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3113 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3113	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.578

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	36	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		36		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		10		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	39	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3113 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	4600	No
$v_{FO} = v_F - v_R$	2890	4600	No
v_R	223	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3113 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3113	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.578

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2619	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	697	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1442	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1442	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	2	
Density, D	20.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2619	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	3788	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	208	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2619	3788	208	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	697	1007	55	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2884	4070	223	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2884 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6954	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2884 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	6954	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 53.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 4.336

Space mean speed in ramp influence area, S_R = -18.0 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6407	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1704	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	3527	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	3527	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	7.2	mi/h
Number of lanes, N	2	
Density, D	490.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6407	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	1273	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	261	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6407		1273		261		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1704		339		69		v
Trucks and buses	7		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, f_{HV}	0.966	0.971	0.990	
Driver population factor, f_P	1.00	1.00	1.00	
Flow rate, v_p	7055	1395	280	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD}$ = 7055 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7055	4600	Yes
$v_{FO} = v - v_R$	5660	4600	Yes
v_R	1395	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 7055 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	7055	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 61.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.489

Space mean speed in ramp influence area, S_R = 51.2 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 51.2 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1365	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2826	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2826	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	39.3	mi/h
Number of lanes, N	2	
Density, D	71.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Between Ramps #8&11
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4576	187	348	74	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1217	50	93	20	
Trucks and buses	7	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5038	201	376	80	pc/h

Volume ratio, VR 0.101

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	577	lc/h
Weaving lane changes, LCW	923	lc/h
Non-weaving vehicle index, INW	2027	
Non-weaving lane change, LCNW	2830	lc/h
Total lane changes, LCALL	3753	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.374

Average weaving speed, SW	47.7	mi/h
Average non-weaving speed, SNW	46.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	46.8	mi/h
Weaving segment density, D	40.5	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.871	
Weaving segment flow rate, v	5503	veh/h
Weaving segment capacity, cW	6319	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3552	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2180	c
		Maximum	Analyzed	
v/c ratio		1.00	0.871	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4967	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1321	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2734	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2734	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	42.7	mi/h
Number of lanes, N	2	
Density, D	64.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3940	844	823	65	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1048	224	219	17	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4338	907	893	71	pc/h

Volume ratio, VR 0.290

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.036	
Weaving segment flow rate, v	6000	veh/h
Weaving segment capacity, cW	5788	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5476	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1997	c
		Maximum	Analyzed	
v/c ratio		1.00	1.036	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4989	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1327	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2747	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	2747	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	42.2	mi/h
Number of lanes, N	2	
Density, D	65.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	890	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4986		852		890		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1326		227		237		v
Trucks and buses	7		3		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	966	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD}$ = 5490 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5490	4600	Yes
$v_{FO} = v - v_R$	4570	4600	No
v_R	920	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5490 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5490	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 45.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.641

Space mean speed in ramp influence area, S_R = 48.5 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 48.5 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1342	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4986	852	1342	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1326	227	357	v
Trucks and buses	7	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	1442	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD}$ = 5490 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v$	5490	4600	Yes
$v_{FO} = v - v_R$	4570	4600	No
v_R	920	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5490 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5490	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 45.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.641	
Space mean speed in ramp influence area,	S_R = 48.5	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1099	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2276	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2276	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	56.6	mi/h
Number of lanes, N	2	
Density, D	40.2	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2074	687	2060	702	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	552	183	548	187	
Trucks and buses	7	2	7	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.966	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2284	738	2268	773	pc/h

Volume ratio, VR 0.496

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.253	
Weaving segment flow rate, v	5858	veh/h
Weaving segment capacity, cW	4677	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7777	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1856	c
		Maximum	Analyzed	
v/c ratio		1.00	1.253	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2704	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	719	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1489	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1489	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	69.0	mi/h
Number of lanes, N	2	
Density, D	21.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2772	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	2772	vph
Peak-hour factor, PHF	0.94	0.96	0.95	
Peak 15-min volume, v15	719	380	729	v
Trucks and buses	9	15	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1634	3020	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3006 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4640	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3006 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	4640	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 37.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 0.698

Space mean speed in ramp influence area, S_R = 47.4 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 47.4 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	677	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	677	vph
Peak-hour factor, PHF	0.94	0.96	0.90	
Peak 15-min volume, v15	719	380	188	v
Trucks and buses	9	15	15	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.930	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1634	809	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3006 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4640	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3006 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	4640	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 37.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.698	
Space mean speed in ramp influence area,	S_R = 47.4	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 47.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4163	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1107	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2314	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2314	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	55.6	mi/h
Number of lanes, N	2	
Density, D	41.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3924	677	296	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1044	180	79	0	
Trucks and buses	9	15	4	15	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.930	0.980	0.930	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4362	774	321	0	pc/h

Volume ratio, VR	0.201	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1095	lc/h
Weaving lane changes, LCW	1358	lc/h
Non-weaving vehicle index, INW	1047	
Non-weaving lane change, LCNW	1188	lc/h
Total lane changes, LCALL	2546	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.326	

Average weaving speed, SW	48.9	mi/h
Average non-weaving speed, SNW	43.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	44.4	mi/h
Weaving segment density, D	41.0	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.877	
Weaving segment flow rate, v	5223	veh/h
Weaving segment capacity, cW	5957	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4543	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2075	c
		Maximum	Analyzed	
v/c ratio		1.00	0.877	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4544	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1209	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2526	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2526	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	49.6	mi/h
Number of lanes, N	2	
Density, D	50.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	296	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		296		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		79		v
Trucks and buses	9		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5052	216	321	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5052 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	4600	Yes
$v_{FO} = v_F - v_R$	4836	4600	Yes
v_R	216	1900	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5052 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5052	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 40.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		937		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		249		v
Trucks and buses	9		4		6		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5052	216	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 5052$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	4600	Yes
$v_{FO} = v_F - v_R$	4836	4600	Yes
v_R	216	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5052 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5052	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 40.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4345	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1156	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2415	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2415	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	52.9	mi/h
Number of lanes, N	2	
Density, D	45.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	126	v
Trucks and buses	9	6	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4830 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4830 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5857	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 45.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.622	
Space mean speed in ramp influence area,	S_R = 30.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 30.8	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	199	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	199	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	53	v
Trucks and buses	9	6	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	216	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4830 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4830 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5857	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 45.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.622	
Space mean speed in ramp influence area,	S_R = 30.8	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 30.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5282	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1405	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2936	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2936	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	35.0	mi/h
Number of lanes, N	2	
Density, D	83.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5282	475	937	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1405	126	249	v
Trucks and buses	9	9	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.957	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 5872$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	4600	Yes
$v_{FO} = v_F - v_R$	5344	4600	Yes
v_R	528	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 5872 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5872	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 52.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.346

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.8 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1934	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5282	475	1934	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1405	126	514	v
Trucks and buses	9	9	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.957	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	2078	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5872 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	4600	Yes
$v_{FO} = v_F - v_R$	5344	4600	Yes
v_R	528	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5872 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5872	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 52.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.346

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2672	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2672	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	44.9	mi/h
Number of lanes, N	2	
Density, D	59.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1934	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4807	1934	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1278	514	126	v
Trucks and buses	9	2	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5344	2078	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 5344 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7422	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5344 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	7422	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 55.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 6.789

Space mean speed in ramp influence area, S_R = -62.2 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6741	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1793	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2498	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2498	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	50.5	mi/h
Number of lanes, N	3	
Density, D	49.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1083	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	288	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	590	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	590	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	7.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	US-17 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1083	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	976	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	978	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1083	976	978	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	288	260	260	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1181	1049	1051	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1181 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2230	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1181 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2230	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 13.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.222	
Space mean speed in ramp influence area,	S_R = 56.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2059	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	548	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1123	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1123	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	74.8	mi/h
Number of lanes, N	2	
Density, D	15.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	SC 7 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2059	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	978	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	46	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2059	978	46	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	548	260	12	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2245	1051	49	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2245 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3296	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2245 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3296	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.276	
Space mean speed in ramp influence area,	S_R = 55.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Opening Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3037	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	808	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1656	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1656	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	70.2	mi/h
Number of lanes, N	2	
Density, D	23.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	978	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3037		46		978		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	808		12		260		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	1051	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3312 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	4600	No
$v_{FO} = v_F - v_R$	3263	4600	No
v_R	49	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3312	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 29.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.367

Space mean speed in ramp influence area, S_R = 53.4 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 53.4 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	765	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3037		46		765		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	808		12		203		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	822	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3312 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	4600	No
$v_{FO} = v_F - v_R$	3263	4600	No
v_R	49	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3312	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 29.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.562

Space mean speed in ramp influence area, S_R = 49.9 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.9 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2991	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	795	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1631	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1631	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	70.6	mi/h
Number of lanes, N	2	
Density, D	23.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		686		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3261 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	4600	No
$v_{FO} = v_F - v_R$	2439	4600	No
v_R	822	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3261 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3261	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 27.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	46	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		46		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		12		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	49	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3261 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	4600	No
$v_{FO} = v_F - v_R$	2439	4600	No
v_R	822	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3261 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3261	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2226	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	592	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1214	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1214	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2226	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	2581	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	765	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2226	2581	765	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	592	686	203	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2427	2773	822	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2427 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5200	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2427 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5200	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 39.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.958	
Space mean speed in ramp influence area,	S_R = 42.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 42.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2621	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2621	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	46.6	mi/h
Number of lanes, N	2	
Density, D	56.3	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	440	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4807		440		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		117		686		v
Trucks and buses	5		12		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.943	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5242	496	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5242 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5242	4600	Yes
$v_{FO} = v_F - v_R$	4746	4600	Yes
v_R	496	2100	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5242 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5242	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 46.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.408

Space mean speed in ramp influence area, S_R = 52.7 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 52.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1161	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2381	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2381	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	53.8	mi/h
Number of lanes, N	2	
Density, D	44.2	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4020	1003	372	304	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1069	267	99	81	
Trucks and buses	5	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4384	1078	402	328	pc/h

Volume ratio, VR	0.239	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1480	lc/h
Weaving lane changes, LCW	1826	lc/h
Non-weaving vehicle index, INW	1866	
Non-weaving lane change, LCNW	2575	lc/h
Total lane changes, LCALL	4401	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.424	

Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	39.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.9	mi/h
Weaving segment density, D	50.4	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.995	
Weaving segment flow rate, v	6041	veh/h
Weaving segment capacity, cW	6070	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4939	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2074	c
		Maximum	Analyzed	
v/c ratio		1.00	0.995	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5001	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1330	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2727	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2727	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	43.0	mi/h
Number of lanes, N	2	
Density, D	63.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3431	998	1592	331	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	913	265	423	88	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3741	1072	1711	356	pc/h

Volume ratio, VR 0.405

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.206	
Weaving segment flow rate, v	6713	veh/h
Weaving segment capacity, cW	5564	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6732	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1901	c
		Maximum	Analyzed	
v/c ratio		1.00	1.206	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4410	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1173	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2404	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	2404	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	53.2	mi/h
Number of lanes, N	2	
Density, D	45.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1925	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4410		795		1925		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1173		211		512		v
Trucks and buses	5		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2068	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 4809$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	4600	Yes
$v_{FO} = v_F - v_R$	3951	4600	No
v_R	858	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 4809 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4809	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 39.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.635	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2572	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4410	795	2572	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1173	211	684	v
Trucks and buses	5	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2764	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4809 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	4600	Yes
$v_{FO} = v_F - v_R$	3951	4600	No
v_R	858	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4809 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4809	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 39.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.635	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3615	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	961	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1971	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1971	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	63.1	mi/h
Number of lanes, N	2	
Density, D	31.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1839	1124	1774	1303	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	489	299	472	347	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2005	1208	1925	1414	pc/h
Volume ratio, VR		0.478			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.305	
Weaving segment flow rate, v	6393	veh/h
Weaving segment capacity, cW	4897	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7572	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1871	c
		Maximum	Analyzed	
v/c ratio		1.00	1.305	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3030	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	806	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1652	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1652	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.6	mi/h
Number of lanes, N	2	
Density, D	24.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	3157	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	3157	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	840	v
Trucks and buses	6	16	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	3426	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3320 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3320 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5125	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.950	
Space mean speed in ramp influence area,	S_R = 42.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 42.9	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	654	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	654	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	174	v
Trucks and buses	6	16	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	720	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 3320 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3320 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5125	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.950	
Space mean speed in ramp influence area,	S_R = 42.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 42.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4601	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1224	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	2521	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2521	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	49.8	mi/h
Number of lanes, N	2	
Density, D	50.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4222	654	312	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1123	174	83	0	
Trucks and buses	6	7	3	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.971	0.966	0.985	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4626	720	337	0	pc/h

Volume ratio, VR	0.186	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1057	lc/h
Weaving lane changes, LCW	1320	lc/h
Non-weaving vehicle index, INW	1110	
Non-weaving lane change, LCNW	1242	lc/h
Total lane changes, LCALL	2562	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.328	

Average weaving speed, SW	48.9	mi/h
Average non-weaving speed, SNW	43.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	44.2	mi/h
Weaving segment density, D	42.8	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.908	
Weaving segment flow rate, v	5518	veh/h
Weaving segment capacity, cW	6076	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4393	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2086	c
		Maximum	Analyzed	
v/c ratio		1.00	0.908	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4942	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1314	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	2708	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2708	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	43.6	mi/h
Number of lanes, N	2	
Density, D	62.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	313	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4942		711		313		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1314		189		83		v
Trucks and buses	6		3		3		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.985	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5415	768	338	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5415 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	4600	Yes
$v_{FO} = v_F - v_R$	4647	4600	Yes
v_R	768	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5415 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5415	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 44.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.627

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.7 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4942		711		633		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1314		189		168		v
Trucks and buses	6		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5415	768	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5415 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	4600	Yes
$v_{FO} = v_F - v_R$	4647	4600	Yes
v_R	768	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5415 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5415	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 44.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.627

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4231	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1125	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	2318	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2318	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	55.5	mi/h
Number of lanes, N	2	
Density, D	41.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4636 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4636 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5316	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 1.052

Space mean speed in ramp influence area, S_R = 41.1 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 41.1 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	711	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	711	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	189	v
Trucks and buses	6	2	3	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	768	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4636 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4636 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5316	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 1.052

Space mean speed in ramp influence area, S_R = 41.1 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 41.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4864	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1294	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	2665	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2665	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	45.1	mi/h
Number of lanes, N	2	
Density, D	59.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4864		649		633		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1294		173		168		v
Trucks and buses	6		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5330 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	4600	Yes
$v_{FO} = v_F - v_R$	4619	4600	Yes
v_R	711	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5330 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5330	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 48.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.362	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 53.5	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	986	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4864		649		986		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1294		173		262		v
Trucks and buses	6		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	1059	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5330 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	4600	Yes
$v_{FO} = v_F - v_R$	4619	4600	Yes
v_R	711	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5330 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5330	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 48.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.362

Space mean speed in ramp influence area, S_R = 53.5 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 53.5 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4215	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	2309	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2309	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	55.7	mi/h
Number of lanes, N	2	
Density, D	41.4	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4215	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	986	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4215	986	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1121	262	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4619	1059	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4619 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5678	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4619 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5678	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 42.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 1.407

Space mean speed in ramp influence area, S_R = 34.7 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 34.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5201	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1383	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1900	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1900	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	64.3	mi/h
Number of lanes, N	3	
Density, D	29.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5728	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1523	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	59.2	mi/h
Number of lanes, N	3	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5728	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1865	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5728		1865		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1523		496		250		v
Trucks and buses	13		8		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.962	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6490	2063	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 6490 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6490	4600	Yes
$v_{FO} = v_F - v_R$	4427	4600	No
v_R	2063	1900	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 6490 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	6490	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 47.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.744	
Space mean speed in ramp influence area,	S_R = 46.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 46.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1027	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2188	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2188	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	58.7	mi/h
Number of lanes, N	2	
Density, D	37.3	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	381	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	381	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	101	v
Trucks and buses	13	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	413	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4377 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4377 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5388	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 43.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.120	
Space mean speed in ramp influence area,	S_R = 39.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 39.8	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1865	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	1865	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	496	v
Trucks and buses	13	2	8	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.962	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	2063	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4377 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4377 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5388	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 43.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.120	
Space mean speed in ramp influence area,	S_R = 39.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 39.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4804	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2721	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2721	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	43.2	mi/h
Number of lanes, N	2	
Density, D	63.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		250		v
Trucks and buses	13		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 5443$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	4500	Yes
$v_{FO} = v_F - v_R$	5030	4500	Yes
v_R	413	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5443 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5443	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 45.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.8	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	324	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		324		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		86		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	352	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5443 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	4500	Yes
$v_{FO} = v_F - v_R$	5030	4500	Yes
v_R	413	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5443 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5443	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 45.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4423	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1176	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2506	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2506	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	50.2	mi/h
Number of lanes, N	2	
Density, D	49.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	381	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4423		324		381		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1176		86		101		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	413	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5011 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	4600	Yes
$v_{FO} = v_F - v_R$	4659	4600	Yes
v_R	352	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5011 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5011	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 41.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.590	
Space mean speed in ramp influence area,	S_R = 49.4	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.4	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1326	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4423	324	1326	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1176	86	353	v
Trucks and buses	13	4	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	1425	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5011 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	4600	Yes
$v_{FO} = v_F - v_R$	4659	4600	Yes
v_R	352	1900	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5011 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5011	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 41.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.590	
Space mean speed in ramp influence area,	S_R = 49.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4099	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1090	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2322	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2322	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	55.4	mi/h
Number of lanes, N	2	
Density, D	41.9	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2137	1406	1959	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	568	374	521	0	
Trucks and buses	13	2	9	9	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.990	0.957	0.957	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2421	1511	2178	0	pc/h
Volume ratio, VR		0.604			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.537	
Weaving segment flow rate, v	5738	veh/h
Weaving segment capacity, cW	3732	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	9064	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1662	c
		Maximum	Analyzed	
v/c ratio		1.00	1.537	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3547	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	943	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2009	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	2009	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	62.4	mi/h
Number of lanes, N	2	
Density, D	32.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&34
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2336	473	1207	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	621	126	321	0	
Trucks and buses	13	8	4	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.962	0.980	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2647	523	1310	0	pc/h

Volume ratio, VR	0.409	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1833	lc/h
Weaving lane changes, LCW	1967	lc/h
Non-weaving vehicle index, INW	291	
Non-weaving lane change, LCNW	266	lc/h
Total lane changes, LCALL	2233	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.683	

Average weaving speed, SW	41.7	mi/h
Average non-weaving speed, SNW	39.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.5	mi/h
Weaving segment density, D	36.9	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.819	
Weaving segment flow rate, v	4207	veh/h
Weaving segment capacity, cW	5135	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6784	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1823	c
		Maximum	Analyzed	
v/c ratio		1.00	0.819	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2814	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	748	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1534	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	1534	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	68.7	mi/h
Number of lanes, N	2	
Density, D	22.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 WB
Weaving Location:	Between Ramp #21 and 33
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1500	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1869	2560	940	680	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	497	681	250	181	
Trucks and buses	5	2	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2038	2751	1025	741	pc/h

Volume ratio, VR	0.576	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.573	
Weaving segment flow rate, v	6396	veh/h
Weaving segment capacity, cW	4065	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	8729	1500	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1797	c
		Maximum	Analyzed	
v/c ratio		1.00	1.573	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4006	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1065	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2184	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	2184	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	58.8	mi/h
Number of lanes, N	2	
Density, D	37.2	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	588	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	588	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	156	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	632	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4368 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4368 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5365	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 41.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.073	
Space mean speed in ramp influence area,	S_R = 40.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 40.7	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2036	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	2036	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	541	v
Trucks and buses	5	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	2220	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4368 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4368 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	5365	4600	Yes

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 41.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.073	
Space mean speed in ramp influence area,	S_R = 40.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 40.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2022	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	538	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1086	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1086	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	19.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2022	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2022	928		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	538	247		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	2173	997	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2173 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2173	4500	No
$v_{FO} = v_F - v_R$	1176	4500	No
v_R	997	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2173 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2173	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 18.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.518	
Space mean speed in ramp influence area,	S_R = 48.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4934	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1312	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2690	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	2690	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	43.4	mi/h
Number of lanes, N	2	
Density, D	62.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4125	521	811	134	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1097	139	216	36	
Trucks and buses	5	2	8	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.962	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4498	560	897	148	pc/h
Volume ratio, VR		0.239			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.020	
Weaving segment flow rate, v	5955	veh/h
Weaving segment capacity, cW	5839	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4936	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1995	c
		Maximum	Analyzed	
v/c ratio		1.00	1.020	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4636	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1233	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2528	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2528	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	49.5	mi/h
Number of lanes, N	2	
Density, D	51.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#9&16
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3604	392	1042	545	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	959	104	277	145	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3930	421	1120	586	pc/h

Volume ratio, VR	0.254	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1541	lc/h
Weaving lane changes, LCW	1861	lc/h
Non-weaving vehicle index, INW	1563	
Non-weaving lane change, LCNW	1858	lc/h
Total lane changes, LCALL	3719	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.413	

Average weaving speed, SW	46.8	mi/h
Average non-weaving speed, SNW	39.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.9	mi/h
Weaving segment density, D	49.4	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.989	
Weaving segment flow rate, v	5910	veh/h
Weaving segment capacity, cW	5977	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5100	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2042	c
		Maximum	Analyzed	
v/c ratio		1.00	0.989	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3999	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1064	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2180	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2180	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	58.9	mi/h
Number of lanes, N	2	
Density, D	37.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3999	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	359	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1599	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3999	359	1599	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1064	95	425	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4361	386	1718	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4361 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4747	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4361 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	4747	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 38.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 0.718

Space mean speed in ramp influence area, S_R = 47.1 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 47.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4358	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1159	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2376	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2376	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	54.0	mi/h
Number of lanes, N	2	
Density, D	44.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4358	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1572	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	767	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4358		1572		767		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1159		418		204		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4752	1689	824	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 4752$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4752	4600	Yes
$v_{FO} = v_F - v_R$	3063	4600	No
v_R	1689	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 4752 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4752	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 40.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.385	
Space mean speed in ramp influence area,	S_R = 53.1	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 53.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	741	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1519	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1519	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	68.8	mi/h
Number of lanes, N	2	
Density, D	22.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	424	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		424		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		113		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	456	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	4600	No
$v_{FO} = v_F - v_R$	2214	4600	No
v_R	824	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.6 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1572	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		1572		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		418		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	1689	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	4600	No
$v_{FO} = v_F - v_R$	2214	4600	No
v_R	824	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2019	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	537	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1101	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	1101	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	15.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2019	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	424	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	767	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2019	424	767	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	537	113	204	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2202	456	824	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2202 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2658	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2202 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2658	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{R} + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.325	
Space mean speed in ramp influence area,	S_R = 54.2	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 54.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2443	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	650	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1332	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	1332	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	73.8	mi/h
Number of lanes, N	2	
Density, D	18.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	788	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	210	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	430	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	430	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	5.7	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7783	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2070	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2912	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2912	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	36.0	mi/h
Number of lanes, N	3	
Density, D	80.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7783	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	2001	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7783		2001		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	2070		532		202		v
Trucks and buses	11		7		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.966	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8735	2203	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 8735 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8735	4600	Yes
$v_{FO} = v_F - v_R$	6532	4600	Yes
v_R	2203	1900	Yes
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 8735 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	8735	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 66.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.756	
Space mean speed in ramp influence area,	S_R = 46.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 46.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5782	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1538	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	3245	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	3245	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	21.5	mi/h
Number of lanes, N	2	
Density, D	151.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	511	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	511	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	136	v
Trucks and buses	11	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	557	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 6489 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 6489 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	7306	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 58.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 6.075

Space mean speed in ramp influence area, S_R = -49.3 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2001	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	2001	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	532	v
Trucks and buses	11	2	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	2203	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 6489 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 6489 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	7306	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 58.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 6.075

Space mean speed in ramp influence area, S_R = -49.3 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6542	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1740	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	3671	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	3671	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		202		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 7342 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	4500	Yes
$v_{FO} = v_F - v_R$	6785	4500	Yes
v_R	557	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 7342 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	7342	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 61.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.413

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	140	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		140		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		37		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	153	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 7342 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	4500	Yes
$v_{FO} = v_F - v_R$	6785	4500	Yes
v_R	557	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 7342 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	7342	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 62.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.413	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6031	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1604	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	3384	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	3384	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	14.7	mi/h
Number of lanes, N	2	
Density, D	230.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	511	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		511		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		136		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	557	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 6769$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	4600	Yes
$v_{FO} = v_F - v_R$	6616	4600	Yes
v_R	153	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 6769 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	6769	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\ v_{12} - 0.009\ L_D$ = 56.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	585	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		585		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		156		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	629	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 6769 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	4600	Yes
$v_{FO} = v_F - v_R$	6616	4600	Yes
v_R	153	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 6769 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	6769	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 56.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5891	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1567	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	3306	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	3306	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	18.6	mi/h
Number of lanes, N	2	
Density, D	178.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #29, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3660	585	2232	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	973	156	594	0	
Trucks and buses	11	2	12	12	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.990	0.943	0.943	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4108	629	2517	0	pc/h

Volume ratio, VR 0.434

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.331	
Weaving segment flow rate, v	6876	veh/h
Weaving segment capacity, cW	5164	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7062	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1816	c
		Maximum	Analyzed	
v/c ratio		1.00	1.331	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4244	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1129	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2382	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	2382	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	53.8	mi/h
Number of lanes, N	2	
Density, D	44.3	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&32
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3384	571	861	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	900	152	229	0	
Trucks and buses	11	3	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.985	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3798	617	939	0	pc/h

Volume ratio, VR 0.291

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1556	lc/h
Weaving lane changes, LCW	1690	lc/h
Non-weaving vehicle index, INW	418	
Non-weaving lane change, LCNW	503	lc/h
Total lane changes, LCALL	2193	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.673

Average weaving speed, SW	41.9	mi/h
Average non-weaving speed, SNW	40.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.7	mi/h
Weaving segment density, D	43.8	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.928	
Weaving segment flow rate, v	5075	veh/h
Weaving segment capacity, cW	5468	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5484	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1923	c
		Maximum	Analyzed	
v/c ratio		1.00	0.928	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3954	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1052	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2177	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	2177	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	58.9	mi/h
Number of lanes, N	2	
Density, D	36.9	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Weaving Location:	Between Ramp #21 and 30
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	3126	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3321	1287	634	1074	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	883	342	169	286	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3657	1383	688	1165	pc/h

Volume ratio, VR	0.300	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.088	
Weaving segment flow rate, v	6660	veh/h
Weaving segment capacity, cW	6122	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5589	3126	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2112	c
		Maximum	Analyzed	
v/c ratio		1.00	1.088	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4608	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1226	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2537	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	2537	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	49.3	mi/h
Number of lanes, N	2	
Density, D	51.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	555	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	555	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	148	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	596	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 5074 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5074 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	6292	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 48.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 2.346

Space mean speed in ramp influence area, S_R = 17.8 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 17.8 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1714	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	1714	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	456	v
Trucks and buses	7	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	1860	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 5074 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5074 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	6292	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 48.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 2.346

Space mean speed in ramp influence area, S_R = 17.8 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 17.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3313	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	881	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1780	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1780	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	32.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3313	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	2007	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3313	2007		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	881	534		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3560	2156	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3560 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3560	4500	No
$v_{FO} = v_F - v_R$	1404	4500	No
v_R	2156	2000	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3560 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3560	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 30.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.622

Space mean speed in ramp influence area, S_R = 46.9 mph

Space mean speed in outer lanes, S_O = N/A mph

Space mean speed for all vehicles, S = 46.9 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5742	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1527	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	3161	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	3161	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	23.3	mi/h
Number of lanes, N	2	
Density, D	135.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
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Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5177	532	558	15	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1377	141	148	4	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5700	572	611	16	pc/h
Volume ratio, VR		0.171			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.123	
Weaving segment flow rate, v	6666	veh/h
Weaving segment capacity, cW	5933	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4247	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2047	c
		Maximum	Analyzed	
v/c ratio		1.00	1.123	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5697	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1515	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	3136	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	3136	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	26.5	mi/h
Number of lanes, N	2	
Density, D	118.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#9&16
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5546	817	163	173	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1475	217	43	46	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	6107	878	179	190	pc/h

Volume ratio, VR	0.144	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.151	
Weaving segment flow rate, v	7106	veh/h
Weaving segment capacity, cW	6171	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3969	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2129	c
		Maximum	Analyzed	
v/c ratio		1.00	1.151	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1693	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	3505	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	3505	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	8.4	mi/h
Number of lanes, N	2	
Density, D	418.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6367	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1303	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	349	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6367	1303	349	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1693	347	93	v
Trucks and buses	7	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7010	1400	382	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 7010 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	8410	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 7010 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	8410	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 66.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 17.786

Space mean speed in ramp influence area, S_R = -260.1 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7670	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2040	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	4223	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	4223	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7670	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	2883	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	887	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7670	2883	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	2040	767	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8445	3098	953	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v - v_F) P_{FD} = 8445$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v$	8445	4600	Yes
$v_{FO} = v - v_R$	5347	4600	Yes
v_R	3098	2100	Yes
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 8445 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	8445	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 71.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.512	
Space mean speed in ramp influence area,	S_R = 50.8	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 50.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4787	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1273	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2635	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	2635	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	46.1	mi/h
Number of lanes, N	2	
Density, D	57.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	314	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4787		887		314		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1273		236		84		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	337	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5271 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	4600	Yes
$v_{FO} = v_F - v_R$	4318	4600	No
v_R	953	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5271 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5271	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 46.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.644	
Space mean speed in ramp influence area,	S_R = 48.4	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.4	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2883	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4787	887	2883	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1273	236	767	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	3098	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5271 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	4600	Yes
$v_{FO} = v_F - v_R$	4318	4600	No
v_R	953	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5271 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5271	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 46.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.644	
Space mean speed in ramp influence area,	S_R = 48.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3900	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1037	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2147	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	2147	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	59.6	mi/h
Number of lanes, N	2	
Density, D	36.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3900	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	314	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	887	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3900	314	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1037	84	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4294	337	953	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 4294 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4631	4600	Yes

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4294 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	4631	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 37.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.669	
Space mean speed in ramp influence area,	S_R = 48.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4214	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2320	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	2320	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	55.7	mi/h
Number of lanes, N	2	
Density, D	41.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	475	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	655	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	655	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	8.7	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.3 Design Year Build Mainline Cross-Section Alternatives

4.1.3.1 6-Lane Cross-Section

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1610	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	428	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	886	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	886	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: US-17 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1610	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	873	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	380	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1610	873	380	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	428	232	101	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1773	938	408	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1773 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2711	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1773 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2711	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 16.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.245	
Space mean speed in ramp influence area,	S_R = 55.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2483	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	660	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1367	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1367	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	73.5	mi/h
Number of lanes, N	2	
Density, D	18.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: SC 7 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2483	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	380	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	36	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2483	380	36	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	660	101	10	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2734	408	39	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2734 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3142	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2734 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3142	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.261	
Space mean speed in ramp influence area,	S_R = 55.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	761	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1051	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1051	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	14.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	380	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		380		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		101		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	408	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 2903.25 (Equation 13-12 or 13-13)

P_{FD} = 0.679 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2154 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	6900	No
$v_{FO} = v_F - v_R$	3113	6900	No
v_R	39	2100	No
v_3 or v_{av34}	998 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2154 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2154	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.367	
Space mean speed in ramp influence area,	S_R = 53.4	mph
Space mean speed in outer lanes,	S_O = 65.8	mph
Space mean speed for all vehicles,	S = 56.8	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	208	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		208		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		55		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	223	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 215.58 (Equation 13-12 or 13-13)

P_{FD} = 0.679 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2154 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	6900	No
$v_{FO} = v_F - v_R$	3113	6900	No
v_R	39	1900	No
v_3 or v_{av34}	998 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2154 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2154	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_O = 65.8	mph
Space mean speed for all vehicles,	S = 54.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2827	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	752	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1038	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1038	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	13.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	3788	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		3788		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		1007		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	4070	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.672 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2165 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	6900	No
$v_{FO} = v_F - v_R$	2890	6900	No
v_R	223	1900	No
v_3 or v_{av34}	948 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2165 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2165	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.578

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 65.8 mph

Space mean speed for all vehicles, S = 53.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	36	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		36		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		10		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	39	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.672 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2165 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	6900	No
$v_{FO} = v_F - v_R$	2890	6900	No
v_R	223	1900	No
v_3 or v_{av34}	948 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2165 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2165	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.578	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_0 = 65.8	mph
Space mean speed for all vehicles,	S = 53.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2619	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	697	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	961	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	961	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	13.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2619	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	3788	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	208	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2619	3788	208	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	697	1007	55	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2884	4070	223	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1783.66 (Equation 13-6 or 13-7)

P_{FM} = 0.553 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 1595 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6954	6900	Yes
v_3 or v_{av34}	1289 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1648 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5718	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 43.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.438	
Space mean speed in ramp influence area,	S_R = 34.1	mph
Space mean speed in outer lanes,	S_O = 57.4	mph
Space mean speed for all vehicles,	S = 36.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6407	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1704	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2352	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2352	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	54.6	mi/h
Number of lanes, N	3	
Density, D	43.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6407	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	1273	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	261	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6407	1273	261	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1704	339	69	v
Trucks and buses	7	6	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7055	1395	280	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.519 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 4335 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7055	6900	Yes
$v_{FO} = v - v_R$	5660	6900	No
v_R	1395	2100	No
v_3 or v_{av34}	2720 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4355 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4355	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 38.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.489	
Space mean speed in ramp influence area,	S_R = 51.2	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 54.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1365	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1884	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1884	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	64.6	mi/h
Number of lanes, N	3	
Density, D	29.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4576	187	348	74	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1217	50	93	20	
Trucks and buses	7	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5038	201	376	80	pc/h
Volume ratio, VR		0.101			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	577	lc/h
Weaving lane changes, LCW	1193	lc/h
Non-weaving vehicle index, INW	2027	
Non-weaving lane change, LCNW	2830	lc/h
Total lane changes, LCALL	4023	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.395

Average weaving speed, SW	47.2	mi/h
Average non-weaving speed, SNW	49.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	48.8	mi/h
Weaving segment density, D	29.2	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.653	
Weaving segment flow rate, v	5503	veh/h
Weaving segment capacity, cW	8425	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3552	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2180	c
		Maximum	Analyzed	
v/c ratio		1.00	0.653	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4967	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1321	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1823	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1823	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	65.5	mi/h
Number of lanes, N	3	
Density, D	27.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3940	844	823	65	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1048	224	219	17	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4338	907	893	71	pc/h

Volume ratio, VR	0.290	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1800	lc/h
Weaving lane changes, LCW	2324	lc/h
Non-weaving vehicle index, INW	1336	
Non-weaving lane change, LCNW	1054	lc/h
Total lane changes, LCALL	3378	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.425	

Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	39.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	41.4	mi/h
Weaving segment density, D	37.5	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.777	
Weaving segment flow rate, v	6000	veh/h
Weaving segment capacity, cW	7718	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5476	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1997	c
		Maximum	Analyzed	
v/c ratio		1.00	0.777	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4986	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1326	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1830	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1830	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	65.4	mi/h
Number of lanes, N	3	
Density, D	28.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	890	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4986		852		890		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1326		227		237		v
Trucks and buses	7		3		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	966	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.580 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3573 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5490	6900	No
$v_{FO} = v_F - v_R$	4570	6900	No
v_R	920	1900	No
v_3 or v_{av34}	1917 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3573 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3573	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 29.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.641	
Space mean speed in ramp influence area,	S_R = 48.5	mph
Space mean speed in outer lanes,	S_O = 62.2	mph
Space mean speed for all vehicles,	S = 52.5	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1342	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4986		852		1342		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1326		227		357		v
Trucks and buses	7		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	1442	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.580 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3573 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5490	6900	No
$v_{FO} = v_F - v_R$	4570	6900	No
v_R	920	1900	No
v_3 or v_{av34}	1917 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3573 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3573	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 29.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.641	
Space mean speed in ramp influence area,	S_R = 48.5	mph
Space mean speed in outer lanes,	S_O = 62.2	mph
Space mean speed for all vehicles,	S = 52.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1099	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1517	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1517	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.8	mi/h
Number of lanes, N	3	
Density, D	22.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Ramps #20, 25, 26
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2074	687	2060	702	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	552	183	548	187	
Trucks and buses	7	2	7	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.966	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2284	738	2268	773	pc/h

Volume ratio, VR 0.496

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.253	
Weaving segment flow rate, v	5858	veh/h
Weaving segment capacity, cW	4677	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7777	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1856	c
		Maximum	Analyzed	
v/c ratio		1.00	1.253	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2704	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	719	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	992	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	992	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	14.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2772	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	2772	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	719	388	737	v
Trucks and buses	9	15	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1669	3052	pcph

Estimation of V12 Merge Areas

L_{EQ} = 147.43 (Equation 13-6 or 13-7)

P_{FM} = 0.593 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1782 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4675	6900	No
v_3 or v_{av34}	1224 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1782 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3451	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.417

Space mean speed in ramp influence area, S_R = 52.5 mph

Space mean speed in outer lanes, S_O = 57.4 mph

Space mean speed for all vehicles, S = 53.7 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	677	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	677	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	719	388	180	v
Trucks and buses	9	15	15	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.930	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1669	774	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.593 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1782 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4675	6900	No
v_3 or v_{av34}	1224 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1782 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3451	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.417

Space mean speed in ramp influence area, S_R = 52.5 mph

Space mean speed in outer lanes, S_0 = 57.4 mph

Space mean speed for all vehicles, S = 53.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4163	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1107	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1543	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1543	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.6	mi/h
Number of lanes, N	3	
Density, D	22.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3924	677	296	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1044	180	79	0	
Trucks and buses	9	15	4	15	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.930	0.980	0.930	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4362	774	321	0	pc/h

Volume ratio, VR	0.201	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1095	lc/h
Weaving lane changes, LCW	1563	lc/h
Non-weaving vehicle index, INW	1047	
Non-weaving lane change, LCNW	995	lc/h
Total lane changes, LCALL	2558	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.327	

Average weaving speed, SW	48.9	mi/h
Average non-weaving speed, SNW	45.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	46.2	mi/h
Weaving segment density, D	29.5	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.657	
Weaving segment flow rate, v	5223	veh/h
Weaving segment capacity, cW	7943	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4543	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2075	c
		Maximum	Analyzed	
v/c ratio		1.00	0.657	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4544	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1209	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1684	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1684	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.3	mi/h
Number of lanes, N	3	
Density, D	25.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	296	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		296		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		79		v
Trucks and buses	9		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, f_{HV}	0.957	0.980	0.980	
Driver population factor, f_P	1.00	1.00	1.00	
Flow rate, v_p	5052	216	321	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.624 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3233 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	6900	No
$v_{FO} = v_F - v_R$	4836	6900	No
v_R	216	1900	No
v_3 or v_{av34}	1819 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3233 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3233	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 25.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 62.6 mph

Space mean speed for all vehicles, S = 53.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		937		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		249		v
Trucks and buses	9		4		6		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5052	216	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.624 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3233 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	6900	No
$v_{FO} = v_F - v_R$	4836	6900	No
v_R	216	1900	No
v_3 or v_{av34}	1819 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3233 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3233	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 25.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 62.6 mph

Space mean speed for all vehicles, S = 53.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4345	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1156	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1610	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1610	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	68.1	mi/h
Number of lanes, N	3	
Density, D	23.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	126	v
Trucks and buses	9	6	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = 2727.34 (Equation 13-6 or 13-7)

P_{FM} = 0.599 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2895 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	6900	No
v_3 or v_{av34}	1935 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2895 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3922	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 30.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.455

Space mean speed in ramp influence area, S_R = 51.8 mph

Space mean speed in outer lanes, S_O = 54.8 mph

Space mean speed for all vehicles, S = 52.8 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	199	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	199	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	53	v
Trucks and buses	9	6	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	216	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1291.74 (Equation 13-6 or 13-7)

P_{FM} = 0.575 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 2776 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	6900	No
v_3 or v_{av34}	2054 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2776 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3803	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.433

Space mean speed in ramp influence area, S_R = 52.2 mph

Space mean speed in outer lanes, S_O = 54.4 mph

Space mean speed for all vehicles, S = 53.0 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5282	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1405	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1957	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1957	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	63.4	mi/h
Number of lanes, N	3	
Density, D	30.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5282		475		937		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1405		126		249		v
Trucks and buses	9		9		6		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.957	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 6189.43 (Equation 13-12 or 13-13)

P_{FD} = 0.589 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3675 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	6900	No
$v_{FO} = v_F - v_R$	5344	6900	No
v_R	528	2100	No
v_3 or v_{av34}	2197 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3675 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3675	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 33.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.346	
Space mean speed in ramp influence area,	S_R = 53.8	mph
Space mean speed in outer lanes,	S_O = 61.2	mph
Space mean speed for all vehicles,	S = 56.3	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1934	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5282		475		1934		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1405		126		514		v
Trucks and buses	9		9		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.957	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	2078	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.589 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3675 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	6900	No
$v_{FO} = v_F - v_R$	5344	6900	No
v_R	528	2100	No
v_3 or v_{av34}	2197 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3675 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3675	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 33.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.346

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = 61.2 mph

Space mean speed for all vehicles, S = 56.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1781	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1781	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	66.1	mi/h
Number of lanes, N	3	
Density, D	27.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1934	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4807	1934	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1278	514	126	v
Trucks and buses	9	2	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5344	2078	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = 977.27 (Equation 13-6 or 13-7)

P_{FM} = 0.608 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 3249 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7422	6900	Yes
v_3 or v_{av34}	2095 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3249 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5327	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 39.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 1.069

Space mean speed in ramp influence area, S_R = 40.8 mph

Space mean speed in outer lanes, S_O = 54.3 mph

Space mean speed for all vehicles, S = 43.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6741	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1793	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2498	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2498	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	50.5	mi/h
Number of lanes, N	3	
Density, D	49.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1083	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	288	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	590	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	590	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	7.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	US-17 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1083	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	976	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	978	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1083	976	978	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	288	260	260	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1181	1049	1051	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1181 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2230	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1181 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2230	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 13.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.222	
Space mean speed in ramp influence area,	S_R = 56.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2059	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	548	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1123	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1123	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	74.8	mi/h
Number of lanes, N	2	
Density, D	15.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	SC 7 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2059	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	978	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	46	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2059	978	46	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	548	260	12	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2245	1051	49	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2245 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3296	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2245 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3296	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.276	
Space mean speed in ramp influence area,	S_R = 55.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Opening Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3037	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	808	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1104	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1104	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	74.9	mi/h
Number of lanes, N	3	
Density, D	14.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	978	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3037		46		978		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	808		12		260		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	1051	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 7326.49 (Equation 13-12 or 13-13)

P_{FD} = 0.675 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2251 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	6900	No
$v_{FO} = v_F - v_R$	3263	6900	No
v_R	49	2100	No
v_3 or v_{av34}	1061 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2251 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2251	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 20.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.367

Space mean speed in ramp influence area, S_R = 53.4 mph

Space mean speed in outer lanes, S_O = 65.6 mph

Space mean speed for all vehicles, S = 56.8 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	765	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3037	46	765	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	808	12	203	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	822	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 801.51 (Equation 13-12 or 13-13)

P_{FD} = 0.675 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2251 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	6900	No
$v_{FO} = v_F - v_R$	3263	6900	No
v_R	49	1900	No
v_3 or v_{av34}	1061 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2251 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2251	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 20.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_O = 65.6	mph
Space mean speed for all vehicles,	S = 54.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2991	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	795	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1087	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1087	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	74.9	mi/h
Number of lanes, N	3	
Density, D	14.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		686		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.641 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2385 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	6900	No
$v_{FO} = v_F - v_R$	2439	6900	No
v_R	822	1900	No
v_3 or v_{av34}	876 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2385 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2385	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_O = 65.8	mph
Space mean speed for all vehicles,	S = 52.3	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	46	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		46		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		12		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	49	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.641 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2385 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	6900	No
$v_{FO} = v_F - v_R$	2439	6900	No
v_R	822	1900	No
v_3 or v_{av34}	876 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2385 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2385	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 19.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = 65.8 mph

Space mean speed for all vehicles, S = 52.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2226	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	592	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	809	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	809	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	11.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2226	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	2581	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	765	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2226	2581	765	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	592	686	203	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2427	2773	822	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1408.30 (Equation 13-6 or 13-7)

P_{FM} = 0.577 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 1400 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5200	6900	No
v_3 or v_{av34}	1027 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1400 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4173	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 31.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.504	
Space mean speed in ramp influence area,	S_R = 50.9	mph
Space mean speed in outer lanes,	S_O = 58.1	mph
Space mean speed for all vehicles,	S = 52.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1747	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1747	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	66.5	mi/h
Number of lanes, N	3	
Density, D	26.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	440	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4807		440		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		117		686		v
Trucks and buses	5		12		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.943	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5242	496	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 18021.71 Equation 13-12 or 13-13)

P_{FD} = 0.606 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3373 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5242	6900	No
$v_{FO} = v_F - v_R$	4746	6900	No
v_R	496	2100	No
v_3 or v_{av34}	1869 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3373 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3373	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 30.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.408	
Space mean speed in ramp influence area,	S_R = 52.7	mph
Space mean speed in outer lanes,	S_0 = 62.4	mph
Space mean speed for all vehicles,	S = 55.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1161	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1587	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1587	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	68.3	mi/h
Number of lanes, N	3	
Density, D	23.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4020	1003	372	304	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1069	267	99	81	
Trucks and buses	5	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4384	1078	402	328	pc/h

Volume ratio, VR	0.239	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1480	lc/h
Weaving lane changes, LCW	2096	lc/h
Non-weaving vehicle index, INW	1866	
Non-weaving lane change, LCNW	2550	lc/h
Total lane changes, LCALL	4646	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.443	

Average weaving speed, SW	46.2	mi/h
Average non-weaving speed, SNW	41.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.9	mi/h
Weaving segment density, D	36.1	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.746	
Weaving segment flow rate, v	6041	veh/h
Weaving segment capacity, cW	8094	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4939	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2074	c
		Maximum	Analyzed	
v/c ratio		1.00	0.746	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5001	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1330	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1818	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1818	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	65.6	mi/h
Number of lanes, N	3	
Density, D	27.7	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3431	998	1592	331	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	913	265	423	88	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3741	1072	1711	356	pc/h

Volume ratio, VR 0.405

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.160	
Weaving segment flow rate, v	6713	veh/h
Weaving segment capacity, cW	5788	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6732	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1901	c
		Maximum	Analyzed	
v/c ratio		1.00	1.160	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4410	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1173	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1603	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1603	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	68.1	mi/h
Number of lanes, N	3	
Density, D	23.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1925	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4410		795		1925		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1173		211		512		v
Trucks and buses	5		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2068	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.600 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3230 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	6900	No
$v_{FO} = v_F - v_R$	3951	6900	No
v_R	858	1900	No
v_3 or v_{av34}	1579 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3230 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3230	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.635

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_O = 63.6 mph

Space mean speed for all vehicles, S = 52.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2572	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4410	795	2572	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1173	211	684	v
Trucks and buses	5	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2764	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.600 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3230 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	6900	No
$v_{FO} = v_F - v_R$	3951	6900	No
v_R	858	1900	No
v_3 or v_{av34}	1579 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3230 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3230	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.635

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = 63.6 mph

Space mean speed for all vehicles, S = 52.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3615	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	961	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1314	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1314	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	3	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Ramps #20, 25, 26
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1839	1124	1774	1303	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	489	299	472	347	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2005	1208	1925	1414	pc/h

Volume ratio, VR 0.478

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.305	
Weaving segment flow rate, v	6393	veh/h
Weaving segment capacity, cW	4897	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7572	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1871	c
		Maximum	Analyzed	
v/c ratio		1.00	1.305	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3030	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	806	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1101	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1101	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	15.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	3157	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	3157	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	840	v
Trucks and buses	6	16	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	3426	pcph

Estimation of V12 Merge Areas

L_{EQ} = 243.73 (Equation 13-6 or 13-7)

P_{FM} = 0.593 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1968 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	6900	No
v_3 or v_{av34}	1352 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1968 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3773	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 30.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.463	
Space mean speed in ramp influence area,	S_R = 51.7	mph
Space mean speed in outer lanes,	S_O = 56.9	mph
Space mean speed for all vehicles,	S = 53.0	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	654	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	654	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	174	v
Trucks and buses	6	16	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	720	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.593 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1968 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	6900	No
v_3 or v_{av34}	1352 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1968 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3773	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 30.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.463	
Space mean speed in ramp influence area,	S_R = 51.7	mph
Space mean speed in outer lanes,	S_O = 56.9	mph
Space mean speed for all vehicles,	S = 53.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4601	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1224	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1681	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1681	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.3	mi/h
Number of lanes, N	3	
Density, D	25.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4222	654	312	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1123	174	83	0	
Trucks and buses	6	7	3	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.971	0.966	0.985	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4626	720	337	0	pc/h

Volume ratio, VR	0.186	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1057	lc/h
Weaving lane changes, LCW	1525	lc/h
Non-weaving vehicle index, INW	1110	
Non-weaving lane change, LCNW	1050	lc/h
Total lane changes, LCALL	2575	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.329	

Average weaving speed, SW	48.9	mi/h
Average non-weaving speed, SNW	45.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	46.1	mi/h
Weaving segment density, D	30.8	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.681	
Weaving segment flow rate, v	5518	veh/h
Weaving segment capacity, cW	8101	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4393	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2086	c
		Maximum	Analyzed	
v/c ratio		1.00	0.681	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4942	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1314	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1805	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1805	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	65.8	mi/h
Number of lanes, N	3	
Density, D	27.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	313	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4942	711	313	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1314	189	83	v
Trucks and buses	6	3	3	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.985	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5415	768	338	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.589 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3506 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	6900	No
$v_{FO} = v_F - v_R$	4647	6900	No
v_R	768	1900	No
v_3 or v_{av34}	1909 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3506 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3506	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.627

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = 62.3 mph

Space mean speed for all vehicles, S = 52.8 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4942		711		633		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1314		189		168		v
Trucks and buses	6		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5415	768	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.589 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3506 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	6900	No
$v_{FO} = v_F - v_R$	4647	6900	No
v_R	768	1900	No
v_3 or v_{av34}	1909 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3506 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3506	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.627

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = 62.3 mph

Space mean speed for all vehicles, S = 52.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4231	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1125	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1545	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1545	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	68.6	mi/h
Number of lanes, N	3	
Density, D	22.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = 3672.62 (Equation 13-6 or 13-7)

P_{FM} = 0.599 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2779 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	6900	No
v_3 or v_{av34}	1857 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2779 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3459	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 27.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.382

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_O = 55.1 mph

Space mean speed for all vehicles, S = 53.8 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	711	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	711	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	189	v
Trucks and buses	6	2	3	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	768	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1175.96 (Equation 13-6 or 13-7)

P_{FM} = 0.582 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 2698 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	6900	No
v_3 or v_{av34}	1938 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2698 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3378	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 26.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.373	
Space mean speed in ramp influence area,	S_R = 53.3	mph
Space mean speed in outer lanes,	S_O = 54.8	mph
Space mean speed for all vehicles,	S = 53.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4864	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1294	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1777	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1777	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	66.1	mi/h
Number of lanes, N	3	
Density, D	26.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4864	649	633	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1294	173	168	v
Trucks and buses	6	6	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 4872.67 (Equation 13-12 or 13-13)

P_{FD} = 0.594 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3455 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	6900	No
$v_{FO} = v - v_R$	4619	6900	No
v_R	711	2100	No
v_3 or v_{av34}	1875 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3455 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3455	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 32.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.362

Space mean speed in ramp influence area, S_R = 53.5 mph

Space mean speed in outer lanes, S_0 = 62.4 mph

Space mean speed for all vehicles, S = 56.3 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	986	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4864		649		986		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1294		173		262		v
Trucks and buses	6		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	1059	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.594 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3455 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	6900	No
$v_{FO} = v_F - v_R$	4619	6900	No
v_R	711	2100	No
v_3 or v_{av34}	1875 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3455 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3455	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 32.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.362

Space mean speed in ramp influence area, S_R = 53.5 mph

Space mean speed in outer lanes, S_0 = 62.4 mph

Space mean speed for all vehicles, S = 56.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4215	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1540	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1540	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	68.7	mi/h
Number of lanes, N	3	
Density, D	22.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4215	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	986	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4215	986	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1121	262	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4619	1059	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = 604.05 (Equation 13-6 or 13-7)

P_{FM} = 0.608 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2808 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5678	6900	No
v_3 or v_{av34}	1811 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2808 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3867	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.453	
Space mean speed in ramp influence area,	S_R = 51.8	mph
Space mean speed in outer lanes,	S_O = 55.3	mph
Space mean speed for all vehicles,	S = 52.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5201	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1383	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1900	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1900	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	64.3	mi/h
Number of lanes, N	3	
Density, D	29.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5728	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1523	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	59.2	mi/h
Number of lanes, N	3	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5728	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1865	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5728		1865		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1523		496		250		v
Trucks and buses	13		8		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.962	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6490	2063	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.503 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4289 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6490	6900	No
$v_{FO} = v_F - v_R$	4427	6900	No
v_R	2063	1900	Yes
v_3 or v_{av34}	2201 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4289 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4289	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.744	
Space mean speed in ramp influence area,	S_R = 46.6	mph
Space mean speed in outer lanes,	S_O = 61.1	mph
Space mean speed for all vehicles,	S = 50.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1027	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1459	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1459	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	3	
Density, D	21.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	381	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	381	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	101	v
Trucks and buses	13	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	413	pcph

Estimation of V12 Merge Areas

L_{EQ} = 2376.29 (Equation 13-6 or 13-7)

P_{FM} = 0.594 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2601 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	6900	No
v_3 or v_{av34}	1776 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2601 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3612	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.411

Space mean speed in ramp influence area, S_R = 52.6 mph

Space mean speed in outer lanes, S_O = 55.4 mph

Space mean speed for all vehicles, S = 53.5 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1865	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	1865	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	496	v
Trucks and buses	13	2	8	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.962	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	2063	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1370.83 (Equation 13-6 or 13-7)

P_{FM} = 0.594 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2601 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	6900	No
v_3 or v_{av34}	1776 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2601 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3612	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.411	
Space mean speed in ramp influence area,	S_R = 52.6	mph
Space mean speed in outer lanes,	S_O = 55.4	mph
Space mean speed for all vehicles,	S = 53.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4804	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1814	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1814	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	65.6	mi/h
Number of lanes, N	3	
Density, D	27.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		250		v
Trucks and buses	13		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 6134.67 (Equation 13-12 or 13-13)

P_{FD} = 0.605 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3456 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	6750	No
$v_{FO} = v_F - v_R$	5030	6750	No
v_R	413	2100	No
v_3 or v_{av34}	1987 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3456 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3456	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 28.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.400

Space mean speed in ramp influence area, S_R = 49.8 mph

Space mean speed in outer lanes, S_0 = 56.5 mph

Space mean speed for all vehicles, S = 52.0 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	324	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		324		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		86		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	352	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 427.79 (Equation 13-12 or 13-13)

P_{FD} = 0.605 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3456 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	6750	No
$v_{FO} = v_F - v_R$	5030	6750	No
v_R	413	2100	No
v_3 or v_{av34}	1987 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3456 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3456	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_O = 56.5	mph
Space mean speed for all vehicles,	S = 52.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4423	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1176	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1670	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1670	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.4	mi/h
Number of lanes, N	3	
Density, D	24.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	381	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4423		324		381		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1176		86		101		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	413	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.619 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3234 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	6900	No
$v_{FO} = v_F - v_R$	4659	6900	No
v_R	352	1900	No
v_3 or v_{av34}	1777 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3234 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3234	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.590

Space mean speed in ramp influence area, S_R = 49.4 mph

Space mean speed in outer lanes, S_0 = 62.8 mph

Space mean speed for all vehicles, S = 53.4 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1407	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4423		324		1407		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1176		86		374		v
Trucks and buses	13		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	1512	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.619 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3234 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	6900	No
$v_{FO} = v_F - v_R$	4659	6900	No
v_R	352	1900	No
v_3 or v_{av34}	1777 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3234 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3234	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.590

Space mean speed in ramp influence area, S_R = 49.4 mph

Space mean speed in outer lanes, S_0 = 62.8 mph

Space mean speed for all vehicles, S = 53.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4099	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1090	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1548	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1548	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.6	mi/h
Number of lanes, N	3	
Density, D	22.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2137	1406	1959	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	568	374	521	0	
Trucks and buses	13	2	9	9	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.990	0.957	0.957	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2421	1511	2178	0	pc/h
Volume ratio, VR		0.604			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.537	
Weaving segment flow rate, v	5738	veh/h
Weaving segment capacity, cW	3732	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	9064	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1662	c
		Maximum	Analyzed	
v/c ratio		1.00	1.537	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3547	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	943	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1340	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1340	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	3	
Density, D	19.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&34
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2336	473	1207	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	621	126	321	0	
Trucks and buses	13	8	4	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.962	0.980	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2647	523	1310	0	pc/h

Volume ratio, VR	0.409	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1833	lc/h
Weaving lane changes, LCW	2071	lc/h
Non-weaving vehicle index, INW	291	
Non-weaving lane change, LCNW	73	lc/h
Total lane changes, LCALL	2144	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.661	

Average weaving speed, SW	42.1	mi/h
Average non-weaving speed, SNW	41.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	41.7	mi/h
Weaving segment density, D	26.9	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.764	
Weaving segment flow rate, v	4207	veh/h
Weaving segment capacity, cW	5508	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6784	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1823	c
		Maximum	Analyzed	
v/c ratio		1.00	0.764	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2814	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	748	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1023	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	1023	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	14.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 1/8/2016
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 WB
Weaving Location: Between Ramp #21 and 33
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1500	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1869	2560	940	680	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	497	681	250	181	
Trucks and buses	5	2	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2038	2751	1025	741	pc/h

Volume ratio, VR 0.576

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.573	
Weaving segment flow rate, v	6396	veh/h
Weaving segment capacity, cW	4065	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	8729	1500	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1797	c
		Maximum	Analyzed	
v/c ratio		1.00	1.573	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4006	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1065	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1456	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1456	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	3	
Density, D	21.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	588	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	588	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	156	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	632	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.600 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2622 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	6900	No
v_3 or v_{av34}	1746 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2622 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3619	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.385

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_O = 55.5 mph

Space mean speed for all vehicles, S = 53.8 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2036	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	2036	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	541	v
Trucks and buses	5	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	2220	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1722.97 (Equation 13-6 or 13-7)

P_{FM} = 0.600 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2622 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	6900	No
v_3 or v_{av34}	1746 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2622 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3619	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.385

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_O = 55.5 mph

Space mean speed for all vehicles, S = 53.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1769	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	470	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	950	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	950	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	CD North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	1769	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1769	928		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	470	247		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	1901	997	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1901 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1901	4500	No
$v_{FO} = v_F - v_R$	904	4500	No
v_R	997	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1901 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1901	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 16.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.518	
Space mean speed in ramp influence area,	S_R = 48.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4934	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1312	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1793	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	1793	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	68.0	mi/h
Number of lanes, N	3	
Density, D	26.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4125	521	811	134	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1097	139	216	36	
Trucks and buses	5	2	8	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.962	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4498	560	897	148	pc/h

Volume ratio, VR	0.239	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1457	lc/h
Weaving lane changes, LCW	1839	lc/h
Non-weaving vehicle index, INW	878	
Non-weaving lane change, LCNW	699	lc/h
Total lane changes, LCALL	2538	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.493

Average weaving speed, SW	45.1	mi/h
Average non-weaving speed, SNW	42.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.9	mi/h
Weaving segment density, D	35.6	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.765	
Weaving segment flow rate, v	5955	veh/h
Weaving segment capacity, cW	7785	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4936	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1995	c
		Maximum	Analyzed	
v/c ratio		1.00	0.765	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4636	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1233	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1685	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1685	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.3	mi/h
Number of lanes, N	3	
Density, D	25.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#9&16
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3604	392	1042	545	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	959	104	277	145	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3930	421	1120	586	pc/h

Volume ratio, VR 0.254

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1541	lc/h
Weaving lane changes, LCW	2109	lc/h
Non-weaving vehicle index, INW	1563	
Non-weaving lane change, LCNW	1743	lc/h
Total lane changes, LCALL	3852	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.425

Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	41.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.8	mi/h
Weaving segment density, D	35.4	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.742	
Weaving segment flow rate, v	5910	veh/h
Weaving segment capacity, cW	7969	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5100	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2042	c
		Maximum	Analyzed	
v/c ratio		1.00	0.742	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3999	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1064	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1454	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1454	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	3	
Density, D	21.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3999	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	359	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1599	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3999	359	1599	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1064	95	425	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4361	386	1718	pcph

Estimation of V12 Merge Areas

L_{EQ} = 998.70 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2599 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4747	6900	No
v_3 or v_{av34}	1762 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2599 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2985	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 24.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.345

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = 55.5 mph

Space mean speed for all vehicles, S = 54.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4358	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1159	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1584	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1584	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	68.3	mi/h
Number of lanes, N	3	
Density, D	23.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4358	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1572	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	767	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4358		1572		767		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1159		418		204		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4752	1689	824	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 2202.19 (Equation 13-12 or 13-13)

P_{FD} = 0.573 Using Equation 7

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3444 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4752	6900	No
$v_{FO} = v_F - v_R$	3063	6900	No
v_R	1689	2100	No
v_3 or v_{av34}	1308 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3444 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3444	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 28.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.385

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_0 = 64.6 mph

Space mean speed for all vehicles, S = 55.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	741	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1013	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1013	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	14.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	424	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		424		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		113		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	456	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.646 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2255 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	6900	No
$v_{FO} = v_F - v_R$	2214	6900	No
v_R	824	1900	No
v_3 or v_{av34}	783 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2255 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2255	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 20.0+ pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = 65.8 mph

Space mean speed for all vehicles, S = 52.1 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1572	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		1572		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		418		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	1689	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.646 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2255 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	6900	No
$v_{FO} = v_F - v_R$	2214	6900	No
v_R	824	1900	No
v_3 or v_{av34}	783 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2255 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2255	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 20.0+ pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = 65.8 mph

Space mean speed for all vehicles, S = 52.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2019	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	537	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	734	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	734	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	10.5	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2019	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	424	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	767	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2019	424	767	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	537	113	204	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2202	456	824	pcph

Estimation of V12 Merge Areas

L_{EQ} = 547.21 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1312 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2658	6900	No
v_3 or v_{av34}	890 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1768	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 15.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.292	
Space mean speed in ramp influence area,	S_R = 54.7	mph
Space mean speed in outer lanes,	S_O = 58.6	mph
Space mean speed for all vehicles,	S = 56.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2443	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	650	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	888	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	888	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	788	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	210	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	430	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	430	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	5.7	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7783	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2070	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2912	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2912	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	36.0	mi/h
Number of lanes, N	3	
Density, D	80.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7783	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	2001	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7783		2001		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	2070		532		202		v
Trucks and buses	11		7		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.966	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8735	2203	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.440 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5079 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8735	6900	Yes
$v_{FO} = v_F - v_R$	6532	6900	No
v_R	2203	1900	Yes
v_3 or v_{av34}	3656 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 6035 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	6035	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 43.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.756	
Space mean speed in ramp influence area,	S_R = 46.4	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5782	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1538	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	59.2	mi/h
Number of lanes, N	3	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	511	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	511	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	136	v
Trucks and buses	11	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	557	pcph

Estimation of V12 Merge Areas

L_{EQ} = 3204.83 (Equation 13-6 or 13-7)

P_{FM} = 0.594 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 3856 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	6900	Yes
v_3 or v_{av34}	2633 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3856 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4673	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 37.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.684	
Space mean speed in ramp influence area,	S_R = 47.7	mph
Space mean speed in outer lanes,	S_O = 51.5	mph
Space mean speed for all vehicles,	S = 49.0	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2001	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	2001	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	532	v
Trucks and buses	11	2	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	2203	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1781.28 (Equation 13-6 or 13-7)

P_{FM} = 0.583 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 3781 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	6900	Yes
v_3 or v_{av34}	2708 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3789 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4606	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 37.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, M_S = 0.657

Space mean speed in ramp influence area, S_R = 48.2 mph

Space mean speed in outer lanes, S_0 = 51.1 mph

Space mean speed for all vehicles, S = 49.2 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	9/23/16
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6542	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1740	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2447	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2447	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	52.0	mi/h
Number of lanes, N	3	
Density, D	47.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		202		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 4136.00 (Equation 13-12 or 13-13)

P_{FD} = 0.551 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4294 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	6750	Yes
$v_{FO} = v_F - v_R$	6785	6750	Yes
v_R	557	2100	No
v_3 or v_{av34}	3048 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	Yes	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 4642 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4642	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 38.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.413

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 53.7 mph

Space mean speed for all vehicles, S = 51.1 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	140	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		140		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		37		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	153	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 215.88 (Equation 13-12 or 13-13)

P_{FD} = 0.551 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4294 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	6750	Yes
$v_{FO} = v_F - v_R$	6785	6750	Yes
v_R	557	2100	No
v_3 or v_{av34}	3048 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	Yes	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 4642 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4642	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 38.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.413	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_O = 53.7	mph
Space mean speed for all vehicles,	S = 51.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6031	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1604	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2256	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2256	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	57.1	mi/h
Number of lanes, N	3	
Density, D	39.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	511	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		511		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		136		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	557	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.584 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4015 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	6900	No
$v_{FO} = v_F - v_R$	6616	6900	No
v_R	153	1900	No
v_3 or v_{av34}	2754 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4069 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4069	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 33.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.572

Space mean speed in ramp influence area, S_R = 49.7 mph

Space mean speed in outer lanes, S_0 = 59.2 mph

Space mean speed for all vehicles, S = 53.1 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	585	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		585		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		156		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	629	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.584 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4015 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	6900	No
$v_{FO} = v_F - v_R$	6616	6900	No
v_R	153	1900	No
v_3 or v_{av34}	2754 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4069 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4069	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 33.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 53.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5891	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1567	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2204	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2204	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	58.3	mi/h
Number of lanes, N	3	
Density, D	37.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #29, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3660	585	2232	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	973	156	594	0	
Trucks and buses	11	2	12	12	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.990	0.943	0.943	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4108	629	2517	0	pc/h

Volume ratio, VR 0.434

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.311	
Weaving segment flow rate, v	6876	veh/h
Weaving segment capacity, cW	5245	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7062	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1816	c
		Maximum	Analyzed	
v/c ratio		1.00	1.311	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4244	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1129	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	1588	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1588	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	68.3	mi/h
Number of lanes, N	3	
Density, D	23.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&32
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3384	571	861	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	900	152	229	0	
Trucks and buses	11	3	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.985	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3798	617	939	0	pc/h

Volume ratio, VR	0.291	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1556	lc/h
Weaving lane changes, LCW	1794	lc/h
Non-weaving vehicle index, INW	418	
Non-weaving lane change, LCNW	310	lc/h
Total lane changes, LCALL	2104	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.651	

Average weaving speed, SW	42.2	mi/h
Average non-weaving speed, SNW	42.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.3	mi/h
Weaving segment density, D	31.6	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.696	
Weaving segment flow rate, v	5075	veh/h
Weaving segment capacity, cW	7291	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5484	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1923	c
		Maximum	Analyzed	
v/c ratio		1.00	0.696	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3954	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1052	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1451	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	1451	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	3	
Density, D	20.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Weaving Location:	Between Ramp #21 and 30
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	3126	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3321	1287	634	1074	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	883	342	169	286	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3657	1383	688	1165	pc/h
Volume ratio, VR		0.300			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	2071	lc/h
Weaving lane changes, LCW	2649	lc/h
Non-weaving vehicle index, INW	1507	
Non-weaving lane change, LCNW	2187	lc/h
Total lane changes, LCALL	4836	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.319

Average weaving speed, SW	49.1	mi/h
Average non-weaving speed, SNW	36.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	39.8	mi/h
Weaving segment density, D	43.3	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.863	
Weaving segment flow rate, v	6660	veh/h
Weaving segment capacity, cW	7718	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5589	3126	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2112	c
		Maximum	Analyzed	
v/c ratio		1.00	0.863	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4608	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1226	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1691	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1691	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	67.2	mi/h
Number of lanes, N	3	
Density, D	25.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	555	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	555	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	148	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	596	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.600 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 3046 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	6900	No
v_3 or v_{av34}	2028 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3046 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4264	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 33.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.517	
Space mean speed in ramp influence area,	S_R = 50.7	mph
Space mean speed in outer lanes,	S_O = 54.5	mph
Space mean speed for all vehicles,	S = 51.9	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1714	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	1714	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	456	v
Trucks and buses	7	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	1860	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1921.35 (Equation 13-6 or 13-7)

P_{FM} = 0.600 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 3046 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	6900	No
v_3 or v_{av34}	2028 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3046 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4264	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 33.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.517	
Space mean speed in ramp influence area,	S_R = 50.7	mph
Space mean speed in outer lanes,	S_O = 54.5	mph
Space mean speed for all vehicles,	S = 51.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Int. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2861	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	761	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1537	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1537	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	27.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	CD North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2861	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2861	1134		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	761	302		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3074	1218	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3074 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3074	4500	No
$v_{FO} = v_F - v_R$	1856	4500	No
v_R	1218	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3074 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3074	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.538	
Space mean speed in ramp influence area,	S_R = 48.0	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5742	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1527	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2107	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	2107	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	61.4	mi/h
Number of lanes, N	3	
Density, D	34.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5177	532	558	15	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1377	141	148	4	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5700	572	611	16	pc/h

Volume ratio, VR	0.171	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1183	lc/h
Weaving lane changes, LCW	1565	lc/h
Non-weaving vehicle index, INW	1080	
Non-weaving lane change, LCNW	919	lc/h
Total lane changes, LCALL	2484	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.484	

Average weaving speed, SW	45.3	mi/h
Average non-weaving speed, SNW	43.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.6	mi/h
Weaving segment density, D	39.6	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.843	
Weaving segment flow rate, v	6666	veh/h
Weaving segment capacity, cW	7911	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4247	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2047	c
		Maximum	Analyzed	
v/c ratio		1.00	0.843	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5697	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1515	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2091	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	2091	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	60.8	mi/h
Number of lanes, N	3	
Density, D	34.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#9&16
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5546	817	163	173	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1475	217	43	46	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	6107	878	179	190	pc/h

Volume ratio, VR	0.144	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1057	lc/h
Weaving lane changes, LCW	1625	lc/h
Non-weaving vehicle index, INW	2179	
Non-weaving lane change, LCNW	3093	lc/h
Total lane changes, LCALL	4718	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.499	

Average weaving speed, SW	45.0	mi/h
Average non-weaving speed, SNW	43.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.8	mi/h
Weaving segment density, D	42.0	pc/mi/ln
Level of service, LOS	E	
Weaving segment v/c ratio	0.864	
Weaving segment flow rate, v	7106	veh/h
Weaving segment capacity, cW	8228	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3969	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2129	c
		Maximum	Analyzed	
v/c ratio		1.00	0.864	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1693	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2337	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	2337	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	42.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6367	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1303	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	349	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6367	1303	349	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1693	347	93	v
Trucks and buses	7	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7010	1400	382	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1782.58 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 4178 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	8410	6900	Yes
v_3 or v_{av34}	2832 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	Yes	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 4310 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5710	4600	Yes

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 45.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 1.445	
Space mean speed in ramp influence area,	S_R = 34.0	mph
Space mean speed in outer lanes,	S_O = 51.1	mph
Space mean speed for all vehicles,	S = 38.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7670	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2040	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2815	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2815	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	39.7	mi/h
Number of lanes, N	3	
Density, D	70.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7670	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	2883	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	887	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7670		2883		887		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	2040		767		236		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8445	3098	953	pcph

Estimation of V12 Diverge Areas

L_{EQ} = -3605.33 Equation 13-12 or 13-13)

P_{FD} = 0.406 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5271 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8445	6900	Yes
$v_{FO} = v_F - v_R$	5347	6900	No
v_R	3098	2100	Yes
v_3 or v_{av34}	3174 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	Yes	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 5745 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5745	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 48.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.512	
Space mean speed in ramp influence area,	S_R = 50.8	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 53.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4787	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1273	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1757	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1757	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	66.4	mi/h
Number of lanes, N	3	
Density, D	26.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	314	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4787	887	314	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1273	236	84	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	337	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.584 Using Equation 5

$v_{12} = v_R + (v - v_F) P_{FD}$ = 3476 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	6900	No
$v_{FO} = v - v_R$	4318	6900	No
v_R	953	1900	No
v_3 or v_{av34}	1795 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3476 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3476	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 30.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.644	
Space mean speed in ramp influence area,	S_R = 48.4	mph
Space mean speed in outer lanes,	S_O = 62.7	mph
Space mean speed for all vehicles,	S = 52.5	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2883	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4787	887	2883	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1273	236	767	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	3098	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.584 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3476 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	6900	No
$v_{FO} = v_F - v_R$	4318	6900	No
v_R	953	1900	No
v_3 or v_{av34}	1795 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3476 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3476	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 30.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.644

Space mean speed in ramp influence area, S_R = 48.4 mph

Space mean speed in outer lanes, S_0 = 62.7 mph

Space mean speed for all vehicles, S = 52.5 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3900	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1037	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1431	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	1431	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	69.4	mi/h
Number of lanes, N	3	
Density, D	20.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3900	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	314	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	887	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3900	314	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1037	84	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4294	337	953	pcph

Estimation of V12 Merge Areas

L_{EQ} = 969.43 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2558 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4631	6900	No
v_3 or v_{av34}	1736 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2558 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2895	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 55.6	mph
Space mean speed for all vehicles,	S = 54.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4214	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1547	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	1547	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	71.7	mi/h
Number of lanes, N	3	
Density, D	21.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	475	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	983	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	983	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	13.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.3.2 8-Lane Cross-Section

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1610	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	428	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	886	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	886	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: US-17 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1610	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	873	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	380	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1610	873	380	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	428	232	101	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1773	938	408	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1773 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2711	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1773 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2711	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 16.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.245	
Space mean speed in ramp influence area,	S_R = 55.6	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2483	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	660	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1367	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1367	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	73.5	mi/h
Number of lanes, N	2	
Density, D	18.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/6/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Junction: SC 7 WB On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2483	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	380	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	36	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2483	380	36	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	660	101	10	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2734	408	39	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2734 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3142	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2734 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3142	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.261	
Space mean speed in ramp influence area,	S_R = 55.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	761	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1576	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1576	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	71.3	mi/h
Number of lanes, N	2	
Density, D	22.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	380	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		380		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		101		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	408	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 2903.25 (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3152 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	4600	No
$v_{FO} = v_F - v_R$	3113	4600	No
v_R	39	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3152 (Equation 13-15, 13-16, 18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3152	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.367	
Space mean speed in ramp influence area,	S_R = 53.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.4	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2863	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	36	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	208	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2863		36		208		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	761		10		55		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3152	39	223	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 215.58 (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3152 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3152	4600	No
$v_{FO} = v_F - v_R$	3113	4600	No
v_R	39	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3152 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3152	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2827	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	752	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1556	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1556	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	71.6	mi/h
Number of lanes, N	2	
Density, D	21.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	3788	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		3788		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		1007		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	4070	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3113 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	4600	No
$v_{FO} = v_F - v_R$	2890	4600	No
v_R	223	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3113 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3113	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.578

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2827	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	208	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	36	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2827		208		36		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	752		55		10		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3113	223	39	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3113 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3113	4600	No
$v_{FO} = v_F - v_R$	2890	4600	No
v_R	223	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3113 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3113	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.578

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 49.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2619	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	697	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1442	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1442	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	2	
Density, D	20.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2619	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	3788	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	208	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2619	3788	208	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	697	1007	55	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2884	4070	223	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.099 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -284 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6954	9200	No
v_3 or v_{av34}	1584 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1153 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5223	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 39.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence E

Speed Estimation

Intermediate speed variable,	M_S = 0.975	
Space mean speed in ramp influence area,	S_R = 42.5	mph
Space mean speed in outer lanes,	S_O = 58.7	mph
Space mean speed for all vehicles,	S = 45.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6407	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1704	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1764	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1764	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	66.3	mi/h
Number of lanes, N	4	
Density, D	26.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6407	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	1273	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	261	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6407	1273	261	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1704	339	69	v
Trucks and buses	7	6	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7055	1395	280	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3863 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7055	9200	No
$v_{FO} = v_F - v_R$	5660	9200	No
v_R	1395	2100	No
v_3 or v_{av34}	1596 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3863 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3863	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 34.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.489	
Space mean speed in ramp influence area,	S_R = 51.2	mph
Space mean speed in outer lanes,	S_0 = 63.5	mph
Space mean speed for all vehicles,	S = 56.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1365	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1413	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1413	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.5	mi/h
Number of lanes, N	4	
Density, D	20.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Between Ramps #8&11
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4576	187	348	74	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1217	50	93	20	
Trucks and buses	7	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5038	201	376	80	pc/h

Volume ratio, VR 0.101

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	577	lc/h
Weaving lane changes, LCW	1539	lc/h
Non-weaving vehicle index, INW	2027	
Non-weaving lane change, LCNW	2830	lc/h
Total lane changes, LCALL	4369	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.422

Average weaving speed, SW	46.6	mi/h
Average non-weaving speed, SNW	50.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	50.0	mi/h
Weaving segment density, D	22.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.522	
Weaving segment flow rate, v	5503	veh/h
Weaving segment capacity, cW	10531	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3552	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2180	c
		Maximum	Analyzed	
v/c ratio		1.00	0.522	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4967	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1321	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1367	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1367	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	4	
Density, D	19.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3940	844	823	65	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1048	224	219	17	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4338	907	893	71	pc/h

Volume ratio, VR	0.290	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1800	lc/h
Weaving lane changes, LCW	2618	lc/h
Non-weaving vehicle index, INW	1336	
Non-weaving lane change, LCNW	872	lc/h
Total lane changes, LCALL	3490	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.437	

Average weaving speed, SW	46.3	mi/h
Average non-weaving speed, SNW	41.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.5	mi/h
Weaving segment density, D	29.2	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.750	
Weaving segment flow rate, v	6000	veh/h
Weaving segment capacity, cW	7999	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5476	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1997	c
		Maximum	Analyzed	
v/c ratio		1.00	0.750	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4986	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1326	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1372	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1372	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	4	
Density, D	19.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	890	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4986		852		890		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1326		227		237		v
Trucks and buses	7		3		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	966	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2913 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5490	9200	No
$v_{FO} = v - v_R$	4570	9200	No
v_R	920	1900	No
v_3 or v_{av34}	1288 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2913 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2913	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 23.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.641	
Space mean speed in ramp influence area,	S_R = 48.5	mph
Space mean speed in outer lanes,	S_O = 64.7	mph
Space mean speed for all vehicles,	S = 54.9	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4986	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1342	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4986	852	1342	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1326	227	357	v
Trucks and buses	7	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5490	920	1442	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2913 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5490	9200	No
$v_{FO} = v - v_R$	4570	9200	No
v_R	920	1900	No
v_3 or v_{av34}	1288 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2913 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2913	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 23.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.641

Space mean speed in ramp influence area, S_R = 48.5 mph

Space mean speed in outer lanes, S_0 = 64.7 mph

Space mean speed for all vehicles, S = 54.9 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4134	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1099	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1138	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1138	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	16.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2074	687	2060	702	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	552	183	548	187	
Trucks and buses	7	2	7	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.966	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2284	738	2268	773	pc/h

Volume ratio, VR 0.496

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.253	
Weaving segment flow rate, v	5858	veh/h
Weaving segment capacity, cW	4677	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7777	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1856	c
		Maximum	Analyzed	
v/c ratio		1.00	1.253	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2704	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	719	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	744	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	744	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	10.6	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2772	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	2772	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	719	388	737	v
Trucks and buses	9	15	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1669	3052	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.009 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 28 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4675	9200	No
v_3 or v_{av34}	1489 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1202 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2871	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.363	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_O = 58.6	mph
Space mean speed for all vehicles,	S = 55.3	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2704	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	677	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2704	1459	677	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	719	388	180	v
Trucks and buses	9	15	15	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.930	0.930	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3006	1669	774	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.009 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 28 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4675	9200	No
v_3 or v_{av34}	1489 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1202 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2871	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.363	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_O = 58.6	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4163	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1107	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1157	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1157	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	16.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Eastbound
Weaving Location: Between Ramps #27&36
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3924	677	296	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1044	180	79	0	
Trucks and buses	9	15	4	15	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.957	0.930	0.980	0.930	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4362	774	321	0	pc/h

Volume ratio, VR 0.201

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1095	lc/h
Weaving lane changes, LCW	1827	lc/h
Non-weaving vehicle index, INW	1047	
Non-weaving lane change, LCNW	803	lc/h
Total lane changes, LCALL	2630	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.335

Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	46.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	47.2	mi/h
Weaving segment density, D	23.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.526	
Weaving segment flow rate, v	5223	veh/h
Weaving segment capacity, cW	9928	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4543	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2075	c
		Maximum	Analyzed	
v/c ratio		1.00	0.526	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4544	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1209	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1263	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1263	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	18.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	296	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		296		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		79		v
Trucks and buses	9		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, f_{HV}	0.957	0.980	0.980	
Driver population factor, f_P	1.00	1.00	1.00	
Flow rate, v_p	5052	216	321	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2324 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	9200	No
$v_{FO} = v_F - v_R$	4836	9200	No
v_R	216	1900	No
v_3 or v_{av34}	1364 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2324 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2324	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 64.4 mph

Space mean speed for all vehicles, S = 56.6 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4544	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	199	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4544		199		937		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1209		53		249		v
Trucks and buses	9		4		6		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.980	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5052	216	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2324 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5052	9200	No
$v_{FO} = v_F - v_R$	4836	9200	No
v_R	216	1900	No
v_3 or v_{av34}	1364 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2324 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2324	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.577

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 64.4 mph

Space mean speed for all vehicles, S = 56.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4345	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1156	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1208	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1208	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	126	v
Trucks and buses	9	6	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.089 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 432 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	9200	No
v_3 or v_{av34}	2199 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1932 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2959	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.333	
Space mean speed in ramp influence area,	S_R = 54.0	mph
Space mean speed in outer lanes,	S_O = 56.6	mph
Space mean speed for all vehicles,	S = 55.2	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4345	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	937	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	199	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4345	937	199	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1156	249	53	v
Trucks and buses	9	6	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.971	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4830	1027	216	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.089 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 432 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5857	9200	No
v_3 or v_{av34}	2199 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1932 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2959	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_R - 0.00627\, L_{12}$ = 23.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.333	
Space mean speed in ramp influence area,	S_R = 54.0	mph
Space mean speed in outer lanes,	S_O = 56.6	mph
Space mean speed for all vehicles,	S = 55.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5282	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1405	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1468	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1468	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	4	
Density, D	21.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	937	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5282	475	937	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1405	126	249	v
Trucks and buses	9	9	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.957	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	1027	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2858 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	9200	No
$v_{FO} = v - v_R$	5344	9200	No
v_R	528	2100	No
v_3 or v_{av34}	1507 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2858 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2858	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 26.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.346

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_0 = 63.8 mph

Space mean speed for all vehicles, S = 58.5 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5282	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	475	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1934	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5282	475	1934	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1405	126	514	v
Trucks and buses	9	9	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.957	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5872	528	2078	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2858 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5872	9200	No
$v_{FO} = v_F - v_R$	5344	9200	No
v_R	528	2100	No
v_3 or v_{av34}	1507 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2858 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2858	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 26.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.346

Space mean speed in ramp influence area, S_R = 53.8 mph

Space mean speed in outer lanes, S_O = 63.8 mph

Space mean speed for all vehicles, S = 58.5 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1336	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1336	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	4	
Density, D	19.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1934	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	475	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4807	1934	475	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1278	514	126	v
Trucks and buses	9	2	9	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.957	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5344	2078	528	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.042 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -223 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7422	9200	No
v_3 or v_{av34}	2783 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2137 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4215	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 30.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.531	
Space mean speed in ramp influence area,	S_R = 50.5	mph
Space mean speed in outer lanes,	S_O = 56.0	mph
Space mean speed for all vehicles,	S = 52.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	6741	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1793	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1873	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1873	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	64.7	mi/h
Number of lanes, N	4	
Density, D	28.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between US 17 & Sam Rittenberg
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1083	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	288	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	590	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	590	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	7.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	US-17 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	1083	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	976	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	978	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1083	976	978	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	288	260	260	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	1181	1049	1051	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1181 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2230	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1181 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	2230	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 13.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.222	
Space mean speed in ramp influence area,	S_R = 56.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 56.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Btwn US 17 WB Ramp & SC 7 Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2059	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	548	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1123	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1123	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	74.8	mi/h
Number of lanes, N	2	
Density, D	15.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	SC 7 WB On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2059	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	978	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	46	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4005	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2059	978	46	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	548	260	12	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2245	1051	49	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 2245 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3296	4600	No

v_3 or v_{av34} = 0 pc/h (Equation 13-14 or 13-17)

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2245 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{R12}	3296	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.276	
Space mean speed in ramp influence area,	S_R = 55.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between SC 7 & SC 461
Jurisdiction:	SCDOT
Analysis Year:	2043 Opening Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3037	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	808	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1656	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1656	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	70.2	mi/h
Number of lanes, N	2	
Density, D	23.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	978	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4060	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3037		46		978		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	808		12		260		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	1051	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 7326.49 (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3312 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	4600	No
$v_{FO} = v_F - v_R$	3263	4600	No
v_R	49	2100	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3312	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 29.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.367	
Space mean speed in ramp influence area,	S_R = 53.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 53.4	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #1
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell EB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3037	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	46	vph
Length of first accel/decel lane	335	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	765	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3037		46		765		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	808		12		203		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3312	49	822	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 801.51 (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD} = 3312$ pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3312	4600	No
$v_{FO} = v_F - v_R$	3263	4600	No
v_R	49	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3312	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 29.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.562	
Space mean speed in ramp influence area,	S_R = 49.9	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell EB-WB Off-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2991	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	795	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1631	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.8	mi/h
Free-flow speed, FFS	72.6	mi/h

LOS and Performance Measures

Flow rate, vp	1631	pc/h/ln
Free-flow speed, FFS	72.6	mi/h
Average passenger-car speed, S	70.6	mi/h
Number of lanes, N	2	
Density, D	23.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1155	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		686		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3261 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	4600	No
$v_{FO} = v_F - v_R$	2439	4600	No
v_R	822	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3261 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3261	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 27.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #2
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell WB Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2991	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	765	vph
Length of first accel/decel lane	560	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	46	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1000	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2991		765		46		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	795		203		12		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3261	822	49	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3261 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3261	4600	No
$v_{FO} = v_F - v_R$	2439	4600	No
v_R	822	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3261 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3261	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 27.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell Off to On-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2226	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	592	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1214	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1214	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #3
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Paul Cantrell On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2226	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	2581	vph
Length of first accel/decel lane	775	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	765	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1055	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2226	2581	765	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	592	686	203	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2427	2773	822	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.063 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 153 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5200	9200	No
v_3 or v_{av34}	1137 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 970 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3743	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 28.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, M_S = 0.416

Space mean speed in ramp influence area, S_R = 52.5 mph

Space mean speed in outer lanes, S_O = 59.2 mph

Space mean speed for all vehicles, S = 54.2 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Paul Cantrell to SC 61
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4807	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1310	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1310	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	4	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #7
Agency/Co.:	Stantec
Date performed:	11/6/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	I-526 Off Ramp to Leeds Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4807	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	440	vph
Length of first accel/decel lane	345	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2581	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4807		440		2581		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		117		686		v
Trucks and buses	5		12		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.943	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5242	496	2773	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2565 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5242	9200	No
$v_{FO} = v_F - v_R$	4746	9200	No
v_R	496	2100	No
v_3 or v_{av34}	1338 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2565 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2565	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 23.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.408	
Space mean speed in ramp influence area,	S_R = 52.7	mph
Space mean speed in outer lanes,	S_0 = 64.5	mph
Space mean speed for all vehicles,	S = 58.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/12/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1161	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1190	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1190	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #8&11
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1980	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4020	1003	372	304	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1069	267	99	81	
Trucks and buses	5	2	3	3	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.985	0.985	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4384	1078	402	328	pc/h

Volume ratio, VR	0.239	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1480	lc/h
Weaving lane changes, LCW	2442	lc/h
Non-weaving vehicle index, INW	1866	
Non-weaving lane change, LCNW	2525	lc/h
Total lane changes, LCALL	4967	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.467	

Average weaving speed, SW	45.7	mi/h
Average non-weaving speed, SNW	43.4	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.9	mi/h
Weaving segment density, D	28.2	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.617	
Weaving segment flow rate, v	6041	veh/h
Weaving segment capacity, cW	9796	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4939	1980	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2074	c
		Maximum	Analyzed	
v/c ratio		1.00	0.617	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5001	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1330	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1363	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1363	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	4	
Density, D	19.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps#13&17
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1515	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3431	998	1592	331	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	913	265	423	88	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3741	1072	1711	356	pc/h
Volume ratio, VR		0.405			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.160	
Weaving segment flow rate, v	6713	veh/h
Weaving segment capacity, cW	5788	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6732	1515	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1901	c
		Maximum	Analyzed	
v/c ratio		1.00	1.160	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Montague Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4410	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1173	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1202	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.17	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.2	mi/h
Free-flow speed, FFS	69.2	mi/h

LOS and Performance Measures

Flow rate, vp	1202	pc/h/ln
Free-flow speed, FFS	69.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1925	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	3650	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4410		795		1925		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1173		211		512		v
Trucks and buses	5		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2068	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2581 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	9200	No
$v_{FO} = v_F - v_R$	3951	9200	No
v_R	858	1900	No
v_3 or v_{av34}	1114 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2581 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2581	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 20.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.635	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_0 = 65.4	mph
Space mean speed for all vehicles,	S = 55.1	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #19
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	International Blvd WBOff-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4410	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	795	vph
Length of first accel/decel lane	630	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2572	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4410	795	2572	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1173	211	684	v
Trucks and buses	5	3	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4809	858	2764	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2581 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4809	9200	No
$v_{FO} = v_F - v_R$	3951	9200	No
v_R	858	1900	No
v_3 or v_{av34}	1114 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2581 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2581	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 20.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.635	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_0 = 65.4	mph
Space mean speed for all vehicles,	S = 55.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3615	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	961	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	985	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	985	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	14.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Ramps #20, 25, 26
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1970	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1839	1124	1774	1303	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	489	299	472	347	
Trucks and buses	5	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2005	1208	1925	1414	pc/h
Volume ratio, VR		0.478			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.305	
Weaving segment flow rate, v	6393	veh/h
Weaving segment capacity, cW	4897	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7572	1970	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1871	c
		Maximum	Analyzed	
v/c ratio		1.00	1.305	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Off-Ramp to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3030	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	806	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	826	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	826	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	3157	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	3157	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	840	v
Trucks and buses	6	16	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	3426	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.008 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -25 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	9200	No
v_3 or v_{av34}	1672 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1328 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3133	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 25.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.383

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_O = 58.2 mph

Space mean speed for all vehicles, S = 55.0 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #30
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	On Ramp from I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3030	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	545	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	654	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	725	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3030	1571	654	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	806	418	174	v
Trucks and buses	6	16	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.926	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3320	1805	720	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.008 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -25 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5125	9200	No
v_3 or v_{av34}	1672 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1328 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3133	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 25.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.383	
Space mean speed in ramp influence area,	S_R = 53.1	mph
Space mean speed in outer lanes,	S_O = 58.2	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/13/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of I-526 On-Ramp/I-26
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4601	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1224	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1260	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1260	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	18.0+	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Weaving Location:	Between Ramps #27&36
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1600	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4222	654	312	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1123	174	83	0	
Trucks and buses	6	7	3	7	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.971	0.966	0.985	0.966	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4626	720	337	0	pc/h

Volume ratio, VR	0.186	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1057	lc/h
Weaving lane changes, LCW	1789	lc/h
Non-weaving vehicle index, INW	1110	
Non-weaving lane change, LCNW	857	lc/h
Total lane changes, LCALL	2646	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.336	

Average weaving speed, SW	48.7	mi/h
Average non-weaving speed, SNW	46.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	47.2	mi/h
Weaving segment density, D	24.1	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.545	
Weaving segment flow rate, v	5518	veh/h
Weaving segment capacity, cW	10126	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4393	1600	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2086	c
		Maximum	Analyzed	
v/c ratio		1.00	0.545	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	South of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4942	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1314	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1354	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1354	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	4	
Density, D	19.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	313	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1475	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4942		711		313		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1314		189		83		v
Trucks and buses	6		3		3		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, f_{HV}	0.971	0.985	0.985	
Driver population factor, f_P	1.00	1.00	1.00	
Flow rate, v_p	5415	768	338	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2794 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	9200	No
$v_{FO} = v - v_R$	4647	9200	No
v_R	768	1900	No
v_3 or v_{av34}	1310 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2794 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2794	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 21.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.627	
Space mean speed in ramp influence area,	S_R = 48.7	mph
Space mean speed in outer lanes,	S_0 = 64.6	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #37
Agency/Co.:	Stantec
Date performed:	11/13/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	North of Rivers Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4942	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	750	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	930	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4942		711		633		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1314		189		168		v
Trucks and buses	6		3		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.985	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5415	768	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2794 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5415	9200	No
$v_{FO} = v_F - v_R$	4647	9200	No
v_R	768	1900	No
v_3 or v_{av34}	1310 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2794 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2794	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 21.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.627

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = 64.6 mph

Space mean speed for all vehicles, S = 55.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	I-526 EB North of Rivers Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4231	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1125	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1159	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1159	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	16.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.133 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 616 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	9200	No
v_3 or v_{av34}	2010 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1854 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2534	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.0+ pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.307

Space mean speed in ramp influence area, S_R = 54.5 mph

Space mean speed in outer lanes, S_O = 56.8 mph

Space mean speed for all vehicles, S = 55.7 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #38, 39
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Rivers Ave On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4231	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	633	vph
Length of first accel/decel lane	785	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	711	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4231	633	711	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1125	168	189	v
Trucks and buses	6	2	3	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.985	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4636	680	768	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.133 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 616 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5316	9200	No
v_3 or v_{av34}	2010 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1854 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2534	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.0+ pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.307	
Space mean speed in ramp influence area,	S_R = 54.5	mph
Space mean speed in outer lanes,	S_O = 56.8	mph
Space mean speed for all vehicles,	S = 55.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4864	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1294	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1332	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1332	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	4	
Density, D	19.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	633	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4990	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4864		649		633		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1294		173		168		v
Trucks and buses	6		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	680	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2725 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	9200	No
$v_{FO} = v_F - v_R$	4619	9200	No
v_R	711	2100	No
v_3 or v_{av34}	1302 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2725 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2725	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 25.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.362	
Space mean speed in ramp influence area,	S_R = 53.5	mph
Space mean speed in outer lanes,	S_0 = 64.6	mph
Space mean speed for all vehicles,	S = 58.4	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #44
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	Off-Ramp to N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4864	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	649	vph
Length of first accel/decel lane	215	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	986	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1940	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4864		649		986		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1294		173		262		v
Trucks and buses	6		6		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.971	0.971	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5330	711	1059	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2725 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5330	9200	No
$v_{FO} = v - v_R$	4619	9200	No
v_R	711	2100	No
v_3 or v_{av34}	1302 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2725 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2725	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 25.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.362

Space mean speed in ramp influence area, S_R = 53.5 mph

Space mean speed in outer lanes, S_0 = 64.6 mph

Space mean speed for all vehicles, S = 58.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4215	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1155	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	1155	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	16.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #45
Agency/Co.:	Stantec
Date performed:	11/16/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Eastbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4215	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	986	vph
Length of first accel/decel lane	1090	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	649	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1950	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4215	986	649	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1121	262	173	v
Trucks and buses	6	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.971	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4619	1059	711	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.085 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 395 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5678	9200	No
v_3 or v_{av34}	2112 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1847 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2906	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 20.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.338	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 56.8	mph
Space mean speed for all vehicles,	S = 55.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5201	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1383	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, fp	1.00	
Flow rate, vp	1425	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1425	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	69.4	mi/h
Number of lanes, N	4	
Density, D	20.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5728	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1523	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	59.2	mi/h
Number of lanes, N	3	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5728	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1865	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	5728		1865		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1523		496		250		v
Trucks and buses	13		8		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.962	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6490	2063	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.503 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4289 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6490	6900	No
$v_{FO} = v_F - v_R$	4427	6900	No
v_R	2063	1900	Yes
v_3 or v_{av34}	2201 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4289 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4289	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 28.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.744	
Space mean speed in ramp influence area,	S_R = 46.6	mph
Space mean speed in outer lanes,	S_O = 61.1	mph
Space mean speed for all vehicles,	S = 50.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3863	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1027	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1459	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1459	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	3	
Density, D	21.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	381	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	381	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	101	v
Trucks and buses	13	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	413	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1529.06 (Equation 13-6 or 13-7)

P_{FM} = 0.619 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2712 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	6900	No
v_3 or v_{av34}	1665 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2712 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3723	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 24.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.347

Space mean speed in ramp influence area, S_R = 53.7 mph

Space mean speed in outer lanes, S_O = 55.8 mph

Space mean speed for all vehicles, S = 54.4 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3863	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	941	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1865	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3863	941	1865	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1027	250	496	v
Trucks and buses	13	2	8	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.939	0.990	0.962	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4377	1011	2063	pcph

Estimation of V12 Merge Areas

L_{EQ} = 1770.43 (Equation 13-6 or 13-7)

P_{FM} = 0.609 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 2664 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5388	6900	No
v_3 or v_{av34}	1713 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2664 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3675	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 24.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 55.6	mph
Space mean speed for all vehicles,	S = 54.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4804	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1278	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1361	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1361	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	4	
Density, D	19.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	941	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		941		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		250		v
Trucks and buses	13		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2606 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	9000	No
$v_{FO} = v - v_R$	5030	9000	No
v_R	413	2100	No
v_3 or v_{av34}	1418 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2606 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2606	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 20.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.400	
Space mean speed in ramp influence area,	S_R = 49.8	mph
Space mean speed in outer lanes,	S_O = 58.7	mph
Space mean speed for all vehicles,	S = 54.1	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4804	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	381	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	324	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4804		381		324		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1278		101		86		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5443	413	352	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2606 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5443	9000	No
$v_{FO} = v_F - v_R$	5030	9000	No
v_R	413	2100	No
v_3 or v_{av34}	1418 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2606 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2606	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.400

Space mean speed in ramp influence area, S_R = 49.8 mph

Space mean speed in outer lanes, S_0 = 58.7 mph

Space mean speed for all vehicles, S = 54.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4423	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1176	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1253	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1253	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	381	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4423		324		381		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1176		86		101		v
Trucks and buses	13		4		4		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	413	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2383 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	9200	No
$v_{FO} = v_F - v_R$	4659	9200	No
v_R	352	1900	No
v_3 or v_{av34}	1314 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2383 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2383	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 18.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.590

Space mean speed in ramp influence area, S_R = 49.4 mph

Space mean speed in outer lanes, S_0 = 64.6 mph

Space mean speed for all vehicles, S = 56.3 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4423	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	324	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1407	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4423		324		1407		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1176		86		374		v
Trucks and buses	13		4		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.939	0.980	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5011	352	1512	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2383 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5011	9200	No
$v_{FO} = v_F - v_R$	4659	9200	No
v_R	352	1900	No
v_3 or v_{av34}	1314 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2383 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2383	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 18.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.590

Space mean speed in ramp influence area, S_R = 49.4 mph

Space mean speed in outer lanes, S_0 = 64.6 mph

Space mean speed for all vehicles, S = 56.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4099	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1090	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1161	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1161	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	16.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2137	1406	1959	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	568	374	521	0	
Trucks and buses	13	2	9	9	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.990	0.957	0.957	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2421	1511	2178	0	pc/h
Volume ratio, VR		0.604			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.537	
Weaving segment flow rate, v	5738	veh/h
Weaving segment capacity, cW	3732	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	9064	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1662	c
		Maximum	Analyzed	
v/c ratio		1.00	1.537	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3547	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	943	v
Trucks and buses	13	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.939	
Driver population factor, fp	1.00	
Flow rate, vp	1005	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1005	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	14.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&34
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2336	473	1207	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	621	126	321	0	
Trucks and buses	13	8	4	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.962	0.980	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2647	523	1310	0	pc/h

Volume ratio, VR	0.409	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1833	lc/h
Weaving lane changes, LCW	2204	lc/h
Non-weaving vehicle index, INW	291	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	2204	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.676	

Average weaving speed, SW	41.9	mi/h
Average non-weaving speed, SNW	42.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.2	mi/h
Weaving segment density, D	21.2	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.764	
Weaving segment flow rate, v	4207	veh/h
Weaving segment capacity, cW	5508	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6784	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1823	c
		Maximum	Analyzed	
v/c ratio		1.00	0.764	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2814	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	748	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	767	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	767	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	11.0-	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 1/8/2016
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 WB
Weaving Location: Between Ramp #21 and 33
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1500	ft
Freeway free-flow speed, FFS	65	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2350	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1869	2560	940	680	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	497	681	250	181	
Trucks and buses	5	2	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2038	2751	1025	741	pc/h

Volume ratio, VR 0.576

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.573	
Weaving segment flow rate, v	6396	veh/h
Weaving segment capacity, cW	4065	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	8729	1500	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2350	1797	c
		Maximum	Analyzed	
v/c ratio		1.00	1.573	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4006	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1065	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1092	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1092	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	15.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	588	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	588	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	156	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	632	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.093 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 407 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	9200	No
v_3 or v_{av34}	1980 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1747 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2744	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.300	
Space mean speed in ramp influence area,	S_R = 54.6	mph
Space mean speed in outer lanes,	S_O = 57.1	mph
Space mean speed for all vehicles,	S = 55.8	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4006	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2036	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4006	928	2036	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1065	247	541	v
Trucks and buses	5	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4368	997	2220	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.093 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 407 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5365	9200	No
v_3 or v_{av34}	1980 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1747 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2744	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 21.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.300	
Space mean speed in ramp influence area,	S_R = 54.6	mph
Space mean speed in outer lanes,	S_O = 57.1	mph
Space mean speed for all vehicles,	S = 55.8	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Intl. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1769	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	470	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	950	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	950	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	CD North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	1769	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	928	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	1769	928		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	470	247		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	1901	997	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1901 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	1901	4500	No
$v_{FO} = v_F - v_R$	904	4500	No
v_R	997	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1901 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1901	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 16.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.518	
Space mean speed in ramp influence area,	S_R = 48.3	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4934	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1312	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1345	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	1345	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	73.7	mi/h
Number of lanes, N	4	
Density, D	18.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#14&24
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	4125	521	811	134	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1097	139	216	36	
Trucks and buses	5	2	8	8	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.962	0.962	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4498	560	897	148	pc/h

Volume ratio, VR 0.239

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1457	lc/h
Weaving lane changes, LCW	2053	lc/h
Non-weaving vehicle index, INW	878	
Non-weaving lane change, LCNW	506	lc/h
Total lane changes, LCALL	2559	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.496

Average weaving speed, SW	45.1	mi/h
Average non-weaving speed, SNW	43.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	44.0	mi/h
Weaving segment density, D	27.8	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.612	
Weaving segment flow rate, v	5955	veh/h
Weaving segment capacity, cW	9732	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4936	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1995	c
		Maximum	Analyzed	
v/c ratio		1.00	0.612	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4636	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1233	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1264	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1264	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	18.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#9&16
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3604	392	1042	545	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	959	104	277	145	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3930	421	1120	586	pc/h

Volume ratio, VR 0.254

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1541	lc/h
Weaving lane changes, LCW	2429	lc/h
Non-weaving vehicle index, INW	1563	
Non-weaving lane change, LCNW	1628	lc/h
Total lane changes, LCALL	4057	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.443

Average weaving speed, SW	46.2	mi/h
Average non-weaving speed, SNW	43.1	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.8	mi/h
Weaving segment density, D	27.6	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.642	
Weaving segment flow rate, v	5910	veh/h
Weaving segment capacity, cW	9203	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5100	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2042	c
		Maximum	Analyzed	
v/c ratio		1.00	0.642	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3999	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1064	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1090	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1090	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	15.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3999	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	359	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1599	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3999	359	1599	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1064	95	425	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4361	386	1718	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.170 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 739 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4747	9200	No
v_3 or v_{av34}	1811 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1744 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2130	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 17.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.301	
Space mean speed in ramp influence area,	S_R = 54.6	mph
Space mean speed in outer lanes,	S_O = 57.1	mph
Space mean speed for all vehicles,	S = 55.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Build Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4358	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1159	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1188	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1188	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4358	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1572	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	767	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4358		1572		767		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1159		418		204		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4752	1689	824	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3024 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4752	9200	No
$v_{FO} = v_F - v_R$	3063	9200	No
v_R	1689	2100	No
v_3 or v_{av34}	864 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3024 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3024	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.385

Space mean speed in ramp influence area, S_R = 53.1 mph

Space mean speed in outer lanes, S_O = 65.8 mph

Space mean speed for all vehicles, S = 57.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	741	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1519	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1519	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	68.8	mi/h
Number of lanes, N	2	
Density, D	22.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	424	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		424		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		113		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	456	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	4600	No
$v_{FO} = v_F - v_R$	2214	4600	No
v_R	824	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.632

Space mean speed in ramp influence area, S_R = 48.6 mph

Space mean speed in outer lanes, S_0 = N/A mph

Space mean speed for all vehicles, S = 48.6 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2786	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1572	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	2786		767		1572		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	741		204		418		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3038	824	1689	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3038	4600	No
$v_{FO} = v_F - v_R$	2214	4600	No
v_R	824	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 48.6	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.6	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2019	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	537	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1101	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	1101	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	15.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2019	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	424	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	767	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2019	424	767	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	537	113	204	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2202	456	824	pcph

Estimation of V12 Merge Areas

L_{EQ} = 547.21 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1312 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2658	6900	No
v_3 or v_{av34}	890 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1312 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1768	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 15.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.292	
Space mean speed in ramp influence area,	S_R = 54.7	mph
Space mean speed in outer lanes,	S_O = 58.6	mph
Space mean speed for all vehicles,	S = 56.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2443	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	650	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	888	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	888	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	11.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	788	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	210	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	286	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	286	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	3.8	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3900	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	314	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	887	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3900	314	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1037	84	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4294	337	953	pcph

Estimation of V12 Merge Areas

L_{EQ} = 969.43 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2558 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4631	6900	No
v_3 or v_{av34}	1736 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2558 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2895	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 55.6	mph
Space mean speed for all vehicles,	S = 54.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7783	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2070	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2912	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.0	mi/h
Free-flow speed, FFS	70.4	mi/h

LOS and Performance Measures

Flow rate, vp	2912	pc/h/ln
Free-flow speed, FFS	70.4	mi/h
Average passenger-car speed, S	36.0	mi/h
Number of lanes, N	3	
Density, D	80.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #46
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 WB Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7783	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	2001	vph
Length of first accel/decel lane	1400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7783		2001		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	2070		532		202		v
Trucks and buses	11		7		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.966	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8735	2203	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.440 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5079 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8735	6900	Yes
$v_{FO} = v_F - v_R$	6532	6900	No
v_R	2203	1900	Yes
v_3 or v_{av34}	3656 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 6035 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	6035	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\ v_R - 0.009\ L_D$ = 43.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.756	
Space mean speed in ramp influence area,	S_R = 46.4	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 49.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off-Ramp to NRhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5782	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1538	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	59.2	mi/h
Number of lanes, N	3	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	511	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	511	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	136	v
Trucks and buses	11	2	5	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	557	pcph

Estimation of V12 Merge Areas

L_{EQ} = 2062.20 (Equation 13-6 or 13-7)

P_{FM} = 0.619 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 4020 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	6900	Yes
v_3 or v_{av34}	2469 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 4020 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4837	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 33.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.678	
Space mean speed in ramp influence area,	S_R = 47.8	mph
Space mean speed in outer lanes,	S_O = 52.5	mph
Space mean speed for all vehicles,	S = 49.3	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #48
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	NRhett On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	5782	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	760	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	2001	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1600	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5782	760	2001	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1538	202	532	v
Trucks and buses	11	2	7	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.948	0.990	0.966	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6489	817	2203	pcph

Estimation of V12 Merge Areas

L_{EQ} = 2180.88 (Equation 13-6 or 13-7)

P_{FM} = 0.583 Using Equation 2

$v_{12} = v_F (P_{FM})$ = 3781 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7306	6900	Yes
v_3 or v_{av34}	2708 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 3789 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4606	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 31.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 0.576	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_O = 51.1	mph
Space mean speed for all vehicles,	S = 50.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	9/23/16
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	East of Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6542	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1740	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	1836	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1836	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	65.3	mi/h
Number of lanes, N	4	
Density, D	28.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	760	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4900	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		760		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		202		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	817	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3515 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	9000	No
$v_{FO} = v_F - v_R$	6785	9000	No
v_R	557	2100	No
v_3 or v_{av34}	1913 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3515 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3515	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 28.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable, D_S = 0.413

Space mean speed in ramp influence area, S_R = 49.6 mph

Space mean speed in outer lanes, S_0 = 56.8 mph

Space mean speed for all vehicles, S = 53.1 mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #40
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	55.0	mph
Volume on freeway	6542	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	40.0	mph
Volume on ramp	511	vph
Length of first accel/decel lane	600	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	140	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1340	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6542		511		140		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1740		136		37		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7342	557	153	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3515 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7342	9000	No
$v_{FO} = v_F - v_R$	6785	9000	No
v_R	557	2100	No
v_3 or v_{av34}	1913 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3515 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3515	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 29.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.413	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_0 = 56.8	mph
Space mean speed for all vehicles,	S = 53.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramp to Rivers
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6031	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1604	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	1692	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1692	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.2	mi/h
Number of lanes, N	4	
Density, D	25.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	511	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1400	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		511		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		136		v
Trucks and buses	11		5		5		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.976	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	557	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	9200	No
$v_{FO} = v_F - v_R$	6616	9200	No
v_R	153	1900	No
v_3 or v_{av34}	1865 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 24.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.572	
Space mean speed in ramp influence area,	S_R = 49.7	mph
Space mean speed in outer lanes,	S_O = 62.4	mph
Space mean speed for all vehicles,	S = 56.0	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #41
Agency/Co.:	Stantec
Date performed:	11/17/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp to Rivers NB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6031	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	140	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	585	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	880	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	6031		140		585		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1604		37		156		v
Trucks and buses	11		5		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.948	0.976	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6769	153	629	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3038 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6769	9200	No
$v_{FO} = v_F - v_R$	6616	9200	No
v_R	153	1900	No
v_3 or v_{av34}	1865 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3038 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3038	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 24.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.572

Space mean speed in ramp influence area, S_R = 49.7 mph

Space mean speed in outer lanes, S_0 = 62.4 mph

Space mean speed for all vehicles, S = 56.0 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Rivers On-Ramp to Off-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5891	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1567	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	1653	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1653	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	67.6	mi/h
Number of lanes, N	4	
Density, D	24.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #29, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3660	585	2232	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	973	156	594	0	
Trucks and buses	11	2	12	12	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.990	0.943	0.943	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	4108	629	2517	0	pc/h

Volume ratio, VR 0.434

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.311	
Weaving segment flow rate, v	6876	veh/h
Weaving segment capacity, cW	5245	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7062	730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1816	c
		Maximum	Analyzed	
v/c ratio		1.00	1.311	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/20/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 On/Off Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4244	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1129	v
Trucks and buses	11	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.948	
Driver population factor, fp	1.00	
Flow rate, vp	1191	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.0	mi/h
Free-flow speed, FFS	68.4	mi/h

LOS and Performance Measures

Flow rate, vp	1191	pc/h/ln
Free-flow speed, FFS	68.4	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	17.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps #31&32
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3384	571	861	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	900	152	229	0	
Trucks and buses	11	3	5	5	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.985	0.976	0.976	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3798	617	939	0	pc/h

Volume ratio, VR	0.291	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1556	lc/h
Weaving lane changes, LCW	1927	lc/h
Non-weaving vehicle index, INW	418	
Non-weaving lane change, LCNW	117	lc/h
Total lane changes, LCALL	2044	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.637	

Average weaving speed, SW	42.5	mi/h
Average non-weaving speed, SNW	43.7	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.3	mi/h
Weaving segment density, D	24.7	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.648	
Weaving segment flow rate, v	5075	veh/h
Weaving segment capacity, cW	7828	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5484	550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1923	c
		Maximum	Analyzed	
v/c ratio		1.00	0.648	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 EB Off-Ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3954	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1052	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1088	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.67	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.3	mi/h
Free-flow speed, FFS	68.1	mi/h

LOS and Performance Measures

Flow rate, vp	1088	pc/h/ln
Free-flow speed, FFS	68.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	4	
Density, D	15.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

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Phone: Fax:
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Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 1/8/2016
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 WB
Weaving Location: Between Ramp #21 and 30
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	3126	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3321	1287	634	1074	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	883	342	169	286	
Trucks and buses	7	2	4	4	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.980	0.980	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3657	1383	688	1165	pc/h

Volume ratio, VR 0.300

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	2071	lc/h
Weaving lane changes, LCW	2973	lc/h
Non-weaving vehicle index, INW	1507	
Non-weaving lane change, LCNW	2056	lc/h
Total lane changes, LCALL	5029	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.329

Average weaving speed, SW	48.9	mi/h
Average non-weaving speed, SNW	38.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	41.1	mi/h
Weaving segment density, D	33.5	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.863	
Weaving segment flow rate, v	6660	veh/h
Weaving segment capacity, cW	7718	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5589	3126	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2112	c
		Maximum	Analyzed	
v/c ratio		1.00	0.863	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between I-26 and International
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4608	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1226	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1268	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	7.7	mi/h
Free-flow speed, FFS	67.7	mi/h

LOS and Performance Measures

Flow rate, vp	1268	pc/h/ln
Free-flow speed, FFS	67.7	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	4	
Density, D	18.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	555	vph
Position of adjacent Ramp	Downstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	3090	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	555	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	148	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	596	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.066 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 333 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	9200	No
v_3 or v_{av34}	2370 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2029 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3247	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 56.3	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #22
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Int. Blvd. On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4608	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	815	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1714	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2710	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4608	1134	1714	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1226	302	456	v
Trucks and buses	7	2	4	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.980	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5074	1218	1860	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.066 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 333 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6292	9200	No
v_3 or v_{av34}	2370 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2029 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3247	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 56.3	mph
Space mean speed for all vehicles,	S = 55.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	CD Btwn. Int. Blvd & Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2861	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	761	v
Trucks and buses	2	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.990	
Driver population factor, fp	1.00	
Flow rate, vp	1537	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1537	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	27.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #23
Agency/Co.:	Stantec
Date performed:	1/8/2016
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 WB
Junction:	CD North of Montague Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2861	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1134	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2861	1134		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	761	302		v
Trucks and buses	2	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.990	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3074	1218	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3074 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3074	4500	No
$v_{FO} = v_F - v_R$	1856	4500	No
v_R	1218	2000	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 3074 (Equation 13-15, 13-16, 18, or 19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3074	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 26.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.538	
Space mean speed in ramp influence area,	S_R = 48.0	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.0	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Montague & Dorchester
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	5742	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1527	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1581	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	73.6	mi/h

LOS and Performance Measures

Flow rate, vp	1581	pc/h/ln
Free-flow speed, FFS	73.6	mi/h
Average passenger-car speed, S	71.3	mi/h
Number of lanes, N	4	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Between Ramps#14&24
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	945	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5177	532	558	15	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1377	141	148	4	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	5700	572	611	16	pc/h

Volume ratio, VR	0.171	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1183	lc/h
Weaving lane changes, LCW	1779	lc/h
Non-weaving vehicle index, INW	1080	
Non-weaving lane change, LCNW	727	lc/h
Total lane changes, LCALL	2506	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.488	

Average weaving speed, SW	45.2	mi/h
Average non-weaving speed, SNW	44.9	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	44.9	mi/h
Weaving segment density, D	30.7	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.674	
Weaving segment flow rate, v	6666	veh/h
Weaving segment capacity, cW	9889	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	4247	945	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2047	c
		Maximum	Analyzed	
v/c ratio		1.00	0.674	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between On/Off Ramps to Dorch.
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5697	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1515	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1568	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.33	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	6.6	mi/h
Free-flow speed, FFS	68.8	mi/h

LOS and Performance Measures

Flow rate, vp	1568	pc/h/ln
Free-flow speed, FFS	68.8	mi/h
Average passenger-car speed, S	68.4	mi/h
Number of lanes, N	4	
Density, D	22.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 12/8/2015
Analysis Time Period: PM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Weaving Location: Between Ramps#9&16
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1730	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5546	817	163	173	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1475	217	43	46	
Trucks and buses	7	2	6	6	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.971	0.971	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	6107	878	179	190	pc/h

Volume ratio, VR 0.144

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	2.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1057	lc/h
Weaving lane changes, LCW	1945	lc/h
Non-weaving vehicle index, INW	2179	
Non-weaving lane change, LCNW	3093	lc/h
Total lane changes, LCALL	5038	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.525

Average weaving speed, SW	44.5	mi/h
Average non-weaving speed, SNW	45.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	45.2	mi/h
Weaving segment density, D	32.5	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.691	
Weaving segment flow rate, v	7106	veh/h
Weaving segment capacity, cW	10285	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	3969	1730	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	2129	c
		Maximum	Analyzed	
v/c ratio		1.00	0.691	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	1/8/2016
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 WB
From/To:	North of Leeds Avenue
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6367	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1693	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1753	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1753	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	66.5	mi/h
Number of lanes, N	4	
Density, D	26.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #10
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Leeds On-Ramp to I-526 WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	6367	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1303	vph
Length of first accel/decel lane	660	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	349	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	2120	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6367	1303	349	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1693	347	93	v
Trucks and buses	7	2	6	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.971	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7010	1400	382	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.043 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 300 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	8410	9200	No
v_3 or v_{av34}	3355 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2804 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4204	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 33.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.529	
Space mean speed in ramp influence area,	S_R = 50.5	mph
Space mean speed in outer lanes,	S_O = 54.2	mph
Space mean speed for all vehicles,	S = 52.3	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Between Paul Cantrell & Leeds
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7670	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	2040	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2111	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	2111	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	4	
Density, D	35.0-	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7670	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	2883	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	887	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7670	2883	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	2040	767	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8445	3098	953	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5429 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8445	9200	No
$v_{FO} = v_F - v_R$	5347	9200	No
v_R	3098	2100	Yes
v_3 or v_{av34}	1508 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5429 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5429	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 45.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable, D_S = 0.512

Space mean speed in ramp influence area, S_R = 50.8 mph

Space mean speed in outer lanes, S_0 = 63.8 mph

Space mean speed for all vehicles, S = 54.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	Btwn I-526 Off-Ramps to P.Cant
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4787	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1273	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2635	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.17	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.7	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	2635	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	46.1	mi/h
Number of lanes, N	2	
Density, D	57.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	314	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	4787		887		314		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1273		236		84		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	337	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5271 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	4600	Yes
$v_{FO} = v_F - v_R$	4318	4600	No
v_R	953	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5271 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5271	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 46.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.644	
Space mean speed in ramp influence area,	S_R = 48.4	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.4	mph

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #5
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Off-Ramp Loop to P Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	60.0	mph
Volume on freeway	4787	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	887	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	2883	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4787	887	2883	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1273	236	767	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5271	953	3098	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5271 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5271	4600	Yes
$v_{FO} = v_F - v_R$	4318	4600	No
v_R	953	1900	No
v_3 or v_{av34}	0 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5271 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	5271	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 46.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.644	
Space mean speed in ramp influence area,	S_R = 48.4	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 48.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Hour
Freeway/Direction:	I-526 Westbound
From/To:	South of Paul Cantrell
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3900	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1037	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	2147	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	3.2	mi/h
Free-flow speed, FFS	72.2	mi/h

LOS and Performance Measures

Flow rate, vp	2147	pc/h/ln
Free-flow speed, FFS	72.2	mi/h
Average passenger-car speed, S	59.6	mi/h
Number of lanes, N	2	
Density, D	36.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #6
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Paul Cantrell On-Ramp to I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	3900	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	314	vph
Length of first accel/decel lane	650	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	887	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	1230	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3900	314	887	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1037	84	236	v
Trucks and buses	7	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4294	337	953	pcph

Estimation of V12 Merge Areas

L_{EQ} = 969.43 (Equation 13-6 or 13-7)

P_{FM} = 0.596 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2558 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4631	6900	No
v_3 or v_{av34}	1736 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2558 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2895	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 23.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.340	
Space mean speed in ramp influence area,	S_R = 53.9	mph
Space mean speed in outer lanes,	S_O = 55.6	mph
Space mean speed for all vehicles,	S = 54.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/19/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound
From/To:	South of Savage Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4214	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1121	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1547	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	1547	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	71.7	mi/h
Number of lanes, N	3	
Density, D	21.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/6/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound
From/To:	North of US 17
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1786	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	475	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	655	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	655	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	3	
Density, D	8.7	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4 Design Year Build Alternatives

4.1.4.1 CD Road – I-26

4.1.4.1.1 I-26 EB

4.1.4.1.1.1 AM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	12050	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	3205	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	3349	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	3349	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	16.4	mi/h
Number of lanes, N	4	
Density, D	203.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Eastbound
Junction: I-26 EB to CD On-Ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	12050	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	4688	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane	1000	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	401	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	12050	4688	401	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	3205	1247	107	v
Trucks and buses	9	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	13396	5037	431	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 7210 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	13396	9200	Yes
$v_{FO} = v_F - v_R$	8359	9200	No
v_R	5037	3800	Yes
v_3 or v_{av34}	3093 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 7996 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	7996	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 46.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 1.011	
Space mean speed in ramp influence area,	S_R = 41.8	mph
Space mean speed in outer lanes,	S_O = 59.2	mph
Space mean speed for all vehicles,	S = 47.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4688	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1247	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1704	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1704	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	31.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Junction:	I-26 EB to CD On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4688	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	767	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	401	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	740	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4688	767	401	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1247	204	107	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5112	824	431	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.594 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3372 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5112	6750	No
$v_{FO} = v_F - v_R$	4288	6750	No
v_R	824	1900	No
v_3 or v_{av34}	1740 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3372 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3372	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 24.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.632	
Space mean speed in ramp influence area,	S_R = 46.8	mph
Space mean speed in outer lanes,	S_O = 57.4	mph
Space mean speed for all vehicles,	S = 49.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3921	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1043	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1425	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1425	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	25.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/7/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound CD
Weaving Location:	Ramps #73, 74, 75
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	1200	ft
Freeway free-flow speed, FFS	55	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2250	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3131	714	790	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	833	190	210	0	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3414	767	849	0	pc/h

Volume ratio, VR 0.321

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1616	lc/h
Weaving lane changes, LCW	1942	lc/h
Non-weaving vehicle index, INW	410	
Non-weaving lane change, LCNW	583	lc/h
Total lane changes, LCALL	2525	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.406

Average weaving speed, SW	43.4	mi/h
Average non-weaving speed, SNW	37.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	39.1	mi/h
Weaving segment density, D	32.2	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.673	
Weaving segment flow rate, v	4908	veh/h
Weaving segment capacity, cW	7288	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5813	1200	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2250	1897	c
		Maximum	Analyzed	
v/c ratio		1.00	0.673	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	Btw Remount on and off-ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3845	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1023	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1398	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1398	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	25.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #76
Agency/Co.:	Stantec
Date performed:	11/24/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound CD
Junction:	CD merge from Remount
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3845	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	465	vph
Length of first accel/decel lane	850	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	790	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	695	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3845	465	790	vph
Peak-hour factor, PHF	0.94	0.78	0.98	
Peak 15-min volume, v15	1023	149	202	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4193	602	814	pcph

Estimation of V12 Merge Areas

L_{EQ} = 308.53 (Equation 13-6 or 13-7)

P_{FM} = 0.601 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2521 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4795	6750	No
v_3 or v_{av34}	1672 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2521 (Equation 13-15, 13-16, 18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3123	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 24.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.367

Space mean speed in ramp influence area, S_R = 50.2 mph

Space mean speed in outer lanes, S_0 = 50.8 mph

Space mean speed for all vehicles, S = 50.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	CD South of Remount Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4310	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1146	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1567	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1567	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	28.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	South of Remount on Mainline
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	7362	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1958	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	2046	pc/h/ln

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	1.9	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	2046	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	61.7	mi/h
Number of lanes, N	4	
Density, D	33.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Eastbound CD
Junction: I-26 EB CD to I-26 EB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	4310	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1082	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	465	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4555	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4310	1082	465	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1146	288	124	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	4700	1163	500	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 5511.95 (Equation 13-12 or 13-13)

P_{FD} = 0.600 Using Equation 6

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3285 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4700	6750	No
$v_{FO} = v_F - v_R$	3537	6750	No
v_R	1163	1900	No
v_3 or v_{av34}	1415 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3285 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3285	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 23.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.663	
Space mean speed in ramp influence area,	S_R = 46.4	mph
Space mean speed in outer lanes,	S_O = 58.7	mph
Space mean speed for all vehicles,	S = 49.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	CD off-ramp to I-526 EB & WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3228	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	859	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1173	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1173	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	21.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Eastbound CD
Junction: I-26 EB CD to I-526 EB & WB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3228	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1567	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1175	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	450	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3228	1567	1175	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	859	417	313	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3520	1684	1262	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.595 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2776 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3520	6750	No
$v_{FO} = v_F - v_R$	1836	6750	No
v_R	1684	1900	No
v_3 or v_{av34}	744 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2776 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2776	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 19.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.710

Space mean speed in ramp influence area, S_R = 45.8 mph

Space mean speed in outer lanes, S_O = 60.3 mph

Space mean speed for all vehicles, S = 48.2 mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Eastbound
Junction: I-26 EB to I-526 EB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	7362	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1459	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1082	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7362		1459		1082		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	1958		388		288		v
Trucks and buses	9		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8184	1568	1163	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 4453 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8184	9400	No
$v_{FO} = v - v_R$	6616	9400	No
v_R	1568	1900	No
v_3 or v_{av34}	1865 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4453 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4453	4400	Yes

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 33.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	D_S = 0.699	
Space mean speed in ramp influence area,	S_R = 48.9	mph
Space mean speed in outer lanes,	S_O = 67.9	mph
Space mean speed for all vehicles,	S = 56.1	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	5903	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1570	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1641	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1641	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.2	mi/h
Number of lanes, N	4	
Density, D	25.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #72
Agency/Co.:	Stantec
Date performed:	11/24/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Junction:	Aviation + Remount to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	5903	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	1082	vph
Length of first accel/decel lane	470	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1459	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5903	1082	1459	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1570	288	388	v
Trucks and buses	9	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	6562	1163	1568	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.072 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 475 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7725	9400	No
v_3 or v_{av34}	3043 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		Yes	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2624 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3787	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 31.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.470	
Space mean speed in ramp influence area,	S_R = 54.2	mph
Space mean speed in outer lanes,	S_O = 59.7	mph
Space mean speed for all vehicles,	S = 56.9	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6985	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1858	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1941	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1941	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	60.8	mi/h
Number of lanes, N	4	
Density, D	31.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	South of Ramp #25
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	1372	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	365	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	748	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	748	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	10.0	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:
Agency/Co.: Stantec
Date Performed: 04/13/2017
Analysis Time Period: AM Peak Period
Freeway/Dir of Travel: I-26 Eastbound
Weaving Location: Between Ramps #25&58
Analysis Year: 2043 Future Conditions
Description: 171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1000	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	5954	1372	1031	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	1584	365	274	0	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	6492	1474	1108	0	pc/h
Volume ratio, VR		0.285			

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN		lc/h
Weaving lane changes, LCW		lc/h
Non-weaving vehicle index, INW		
Non-weaving lane change, LCNW		lc/h
Total lane changes, LCALL		lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W

Average weaving speed, SW		mi/h
Average non-weaving speed, SNW		mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S		mi/h
Weaving segment density, D		pc/mi/ln
Level of service, LOS	F	
Weaving segment v/c ratio	1.076	
Weaving segment flow rate, v	8853	veh/h
Weaving segment capacity, cW	8229	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5419	1000	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1962	c
		Maximum	Analyzed	
v/c ratio		1.00	1.076	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	South of Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	7420	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1973	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2023	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	2023	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	59.5	mi/h
Number of lanes, N	4	
Density, D	34.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.1.1.2 PM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	7178	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1909	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1995	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	4.5	mi/h
Free-flow speed, FFS	70.9	mi/h

LOS and Performance Measures

Flow rate, vp	1995	pc/h/ln
Free-flow speed, FFS	70.9	mi/h
Average passenger-car speed, S	62.7	mi/h
Number of lanes, N	4	
Density, D	31.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Junction:	I-26 EB to CD On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7178	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	2447	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane	1000	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	401	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7178	2447	401	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1909	651	107	v
Trucks and buses	9	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	7980	2629	431	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4020 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7980	9200	No
$v_{FO} = v_F - v_R$	5351	9200	No
v_R	2629	3800	No
v_3 or v_{av34}	1980 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 4020 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4020	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 11.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.795

Space mean speed in ramp influence area, S_R = 45.7 mph

Space mean speed in outer lanes, S_0 = 62.0 mph

Space mean speed for all vehicles, S = 52.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2447	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	651	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	889	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	889	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	16.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Junction:	I-26 EB to CD On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2447	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	241	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	577	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	740	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2447	241	577	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	651	64	153	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2668	259	620	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.681 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1900 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	2668	6750	No
$v_{FO} = v_F - v_R$	2409	6750	No
v_R	259	1900	No
v_3 or v_{av34}	768 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 1900 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1900	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 11.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.581

Space mean speed in ramp influence area, S_R = 47.4 mph

Space mean speed in outer lanes, S_0 = 60.3 mph

Space mean speed for all vehicles, S = 50.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2206	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	587	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	802	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	802	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	14.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/7/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound CD
Weaving Location:	Ramps #73, 74, 75
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	4	ln
Weaving segment length, LS	530	ft
Freeway free-flow speed, FFS	55	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2250	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1800	994	406	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	479	264	108	0	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	1963	1068	436	0	pc/h

Volume ratio, VR 0.434

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1504	lc/h
Weaving lane changes, LCW	1669	lc/h
Non-weaving vehicle index, INW	104	
Non-weaving lane change, LCNW	0	lc/h
Total lane changes, LCALL	1669	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W 0.559

Average weaving speed, SW	40.7	mi/h
Average non-weaving speed, SNW	40.0	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.3	mi/h
Weaving segment density, D	21.5	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.627	
Weaving segment flow rate, v	3383	veh/h
Weaving segment capacity, cW	5398	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	7063	530	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2250	1750	c
		Maximum	Analyzed	
v/c ratio		1.00	0.627	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	Btw Remount on and off-ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2794	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	743	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1035	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1035	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #76
Agency/Co.:	Stantec
Date performed:	11/24/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound CD
Junction:	CD merge from Remount
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2794	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	566	vph
Length of first accel/decel lane	850	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	790	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	695	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2794	566	790	vph
Peak-hour factor, PHF	0.94	0.78	0.98	
Peak 15-min volume, v15	743	181	202	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3047	733	814	pcph

Estimation of V12 Merge Areas

L_{EQ} = 91.32 (Equation 13-6 or 13-7)

P_{FM} = 0.601 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1832 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3780	6750	No
v_3 or v_{av34}	1215 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1832 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2565	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 19.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, M_S = 0.329

Space mean speed in ramp influence area, S_R = 50.7 mph

Space mean speed in outer lanes, S_O = 52.4 mph

Space mean speed for all vehicles, S = 51.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	CD South of Remount Road
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3360	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	894	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1221	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1221	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	South of Remount on Mainline
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4731	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1258	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1315	pc/h/ln

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	1.9	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1315	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	4	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: PM Peak Period
Freeway/Dir of Travel: I-26 Eastbound CD
Junction: I-26 EB CD to I-26 EB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3360	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	415	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	566	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	4555	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3360	415	566	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	894	110	151	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3664	446	608	pcph

Estimation of V12 Diverge Areas

L_{EQ} = 5009.23 (Equation 13-12 or 13-13)

P_{FD} = 0.655 Using Equation 6

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2553 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3664	6750	No
$v_{FO} = v_F - v_R$	3218	6750	No
v_R	446	1900	No
v_3 or v_{av34}	1111 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2553 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2553	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 17.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.598	
Space mean speed in ramp influence area,	S_R = 47.2	mph
Space mean speed in outer lanes,	S_O = 59.9	mph
Space mean speed for all vehicles,	S = 50.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound CD
From/To:	CD off-ramp to I-526 EB & WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2945	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	783	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1070	pc/h/ln

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.50	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	1.9	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	1.8	mi/h
Free-flow speed, FFS	71.7	mi/h

LOS and Performance Measures

Flow rate, vp	1070	pc/h/ln
Free-flow speed, FFS	71.7	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	3	
Density, D	15.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound CD
Junction:	I-26 EB CD to I-526 EB & WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2945	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	1143	vph
Position of adjacent ramp	Upstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	450	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2945	1571	1143	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	783	418	304	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3211	1688	1228	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.602 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2605 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3211	6750	No
$v_{FO} = v_F - v_R$	1523	6750	No
v_R	1688	1900	No
v_3 or v_{av34}	606 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2605 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2605	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.710	
Space mean speed in ramp influence area,	S_R = 45.8	mph
Space mean speed in outer lanes,	S_O = 60.3	mph
Space mean speed for all vehicles,	S = 48.0	mph

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: PM Peak Period
Freeway/Dir of Travel: I-26 Eastbound
Junction: I-26 EB to I-526 EB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	4731	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	1571	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	415	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4731	1571	415	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	1258	418	110	v
Trucks and buses	9	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	0.00 %	0.00 %	0.00 %	
Length	0.00 mi	0.00 mi	0.00 mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	5259	1688	446	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3245 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5259	9400	No
$v_{FO} = v_F - v_R$	3571	9400	No
v_R	1688	1900	No
v_3 or v_{av34}	1007 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 3245 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3245	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 23.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.710

Space mean speed in ramp influence area, S_R = 48.7 mph

Space mean speed in outer lanes, S_0 = 71.3 mph

Space mean speed for all vehicles, S = 55.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3160	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	840	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	878	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	878	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	4	
Density, D	13.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	Ramp #72
Agency/Co.:	Stantec
Date performed:	11/24/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Junction:	Aviation + Remount to I-26 EB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	3160	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	25.0	mph
Volume on ramp	415	vph
Length of first accel/decel lane	470	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	1571	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	Off	
Distance to adjacent Ramp	800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3160	415	1571	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	840	110	418	v
Trucks and buses	9	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.957	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3513	446	1688	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.162 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 569 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3959	9400	No
v_3 or v_{av34}	1472 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1405 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1851	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 16.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.322	
Space mean speed in ramp influence area,	S_R = 57.6	mph
Space mean speed in outer lanes,	S_0 = 63.0	mph
Space mean speed for all vehicles,	S = 60.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	North of Aviation
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3575	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	951	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	994	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	994	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	4	
Density, D	15.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	South of Ramp #25
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1218	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	324	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	664	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	0.67	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	2.3	mi/h
Free-flow speed, FFS	73.1	mi/h

LOS and Performance Measures

Flow rate, vp	664	pc/h/ln
Free-flow speed, FFS	73.1	mi/h
Average passenger-car speed, S	75.0	mi/h
Number of lanes, N	2	
Density, D	8.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	04/13/2017
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-26 Eastbound
Weaving Location:	Between Ramps #25&58
Analysis Year:	2043 Future Conditions
Description:	171001609

Inputs

Segment Type	Freeway	
Weaving configuration	One-Sided	
Number of lanes, N	5	ln
Weaving segment length, LS	1550	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	3134	615	1018	139	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	834	164	271	37	
Trucks and buses	7	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.966	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	3451	661	1094	149	pc/h

Volume ratio, VR	0.328	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.0	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1755	lc/h
Weaving lane changes, LCW	2355	lc/h
Non-weaving vehicle index, INW	558	
Non-weaving lane change, LCNW	619	lc/h
Total lane changes, LCALL	2974	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.378	

Average weaving speed, SW	47.7	mi/h
Average non-weaving speed, SNW	42.2	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	43.9	mi/h
Weaving segment density, D	24.4	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.731	
Weaving segment flow rate, v	5174	veh/h
Weaving segment capacity, cW	7075	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	5883	1550	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1968	c
		Maximum	Analyzed	
v/c ratio		1.00	0.731	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/24/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-26 Eastbound
From/To:	South of Montague
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	4301	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1144	v
Trucks and buses	7	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.966	
Driver population factor, fp	1.00	
Flow rate, vp	1184	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1184	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	4	
Density, D	18.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.1.2 I-26 WB

4.1.4.1.2.1 AM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound
From/To:	North of I-526 (S of merge)
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2858	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	760	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	1059	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1059	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	3	
Density, D	16.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Westbound
Junction: I-526 EB on-ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	65.0	mph
Volume on freeway	2858	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-flow speed on ramp	45.0	mph
Volume on ramp	702	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2858	702		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	760	187		v
Trucks and buses	9	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.957	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3177	754	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.555 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1763 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3931	7050	No
v_3 or v_{av34}	1414 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1815 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2569	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 9.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	M_S = 0.147	
Space mean speed in ramp influence area,	S_R = 61.6	mph
Space mean speed in outer lanes,	S_O = 61.9	mph
Space mean speed for all vehicles,	S = 61.7	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound
From/To:	North of I-526 (N of merge)
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3560	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	947	v
Trucks and buses	9	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.957	
Driver population factor, fp	1.00	
Flow rate, vp	792	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	792	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	65.0	mi/h
Number of lanes, N	5	
Density, D	12.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	North of I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3513	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	934	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1277	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1277	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	23.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #51
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Junction:	Remount On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3513	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	702	vph
Length of first accel/decel lane	380	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	337	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1277	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3513		702		337		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	934		187		90		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3831	754	362	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.630 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2691 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3831	6750	No
$v_{FO} = v_F - v_R$	3077	6750	No
v_R	754	2100	No
v_3 or v_{av34}	1140 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		No	

If yes, v_{12A} = 2691 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2691	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 24.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.366

Space mean speed in ramp influence area, S_R = 50.2 mph

Space mean speed in outer lanes, S_O = 59.8 mph

Space mean speed for all vehicles, S = 52.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Remount on & off ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2811	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	748	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1533	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1533	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	27.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Weaving Location:	Between Remount & Aviation
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	915	ft
Freeway free-flow speed, FFS	55	mi/h
Minimum segment speed, SMIN	30	mi/h
Freeway maximum capacity, cIFL	2250	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	1959	337	852	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	521	90	227	0	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2136	362	915	0	pc/h

Volume ratio, VR	0.374	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1277	lc/h
Weaving lane changes, LCW	1458	lc/h
Non-weaving vehicle index, INW	293	
Non-weaving lane change, LCNW	358	lc/h
Total lane changes, LCALL	1816	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.388	

Average weaving speed, SW	48.0	mi/h
Average non-weaving speed, SNW	40.3	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	42.9	mi/h
Weaving segment density, D	26.5	pc/mi/ln
Level of service, LOS	C	
Weaving segment v/c ratio	0.621	
Weaving segment flow rate, v	3330	veh/h
Weaving segment capacity, cW	5359	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6393	915	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2250	1831	c
		Maximum	Analyzed	
v/c ratio		1.00	0.621	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Aviation ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2296	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	611	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1252	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1252	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	22.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Junction:	Aviation on-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	2296	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	230	vph
Length of first accel/decel lane	0	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	852	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	1543	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2296	230	852	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	611	61	227	v
Trucks and buses	5	2	0	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	1.000	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	2504	247	906	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.577 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 1446 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	2751	6750	No
v_3 or v_{av34}	1058 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1446 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1693	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 18.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.342	
Space mean speed in ramp influence area,	S_R = 50.6	mph
Space mean speed in outer lanes,	S_O = 53.0	mph
Space mean speed for all vehicles,	S = 51.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Aviation ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2526	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	672	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	918	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	918	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	16.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound
Junction:	CD on-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	3560	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-flow speed on ramp	45.0	mph
Volume on ramp	2526	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3560	2526		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	947	672		v
Trucks and buses	9	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.957	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3958	2714	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.209 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 827 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6672	9400	No
v_3 or v_{av34}	1565 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1583 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4297	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 22.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.383	
Space mean speed in ramp influence area,	S_R = 56.2	mph
Space mean speed in outer lanes,	S_O = 62.5	mph
Space mean speed for all vehicles,	S = 58.3	mph

4.1.4.1.2.2 PM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound
From/To:	North of I-526 (S of merge)
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6723	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1788	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1860	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1860	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	62.0	mi/h
Number of lanes, N	4	
Density, D	30.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Merge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 11/30/2015
Analysis time period: AM Peak Period
Freeway/Dir of Travel: I-26 Westbound
Junction: I-526 EB on-ramp
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	6723	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-flow speed on ramp	45.0	mph
Volume on ramp	237	vph
Length of first accel/decel lane	1000	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6723	237		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	1788	63		v
Trucks and buses	8	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.962	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	7438	255	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.209 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1555 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	7693	9400	No
v_3 or v_{av34}	2941 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 2975 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3230	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 14.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.195	
Space mean speed in ramp influence area,	S_R = 60.5	mph
Space mean speed in outer lanes,	S_0 = 58.8	mph
Space mean speed for all vehicles,	S = 59.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound
From/To:	North of I-526 (N of merge)
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	6960	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1851	v
Trucks and buses	8	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.962	
Driver population factor, fp	1.00	
Flow rate, vp	1540	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	65.0	mi/h

LOS and Performance Measures

Flow rate, vp	1540	pc/h/ln
Free-flow speed, FFS	65.0	mi/h
Average passenger-car speed, S	64.7	mi/h
Number of lanes, N	5	
Density, D	23.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	North of I-526
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	3169	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	843	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1152	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1152	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	20.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #51
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Junction:	Remount On-Ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3169	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	45.0	mph
Volume on ramp	463	vph
Length of first accel/decel lane	380	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	337	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	On	
Distance to adjacent ramp	1277	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	3169		463		337		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	843		123		90		v
Trucks and buses	5		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3456	497	362	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.651 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2423 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3456	6750	No
$v_{FO} = v_F - v_R$	2959	6750	No
v_R	497	2100	No
v_3 or v_{av34}	1033 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2423 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2423	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 21.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.343

Space mean speed in ramp influence area, S_R = 50.5 mph

Space mean speed in outer lanes, S_0 = 60.2 mph

Space mean speed for all vehicles, S = 53.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Remount on & off ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Flow Inputs and Adjustments

Volume, V	2706	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	720	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1475	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1475	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	26.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Weaving Location:	Between Remount & Aviation
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	915	ft
Freeway free-flow speed, FFS	55	mi/h
Minimum segment speed, SMIN	30	mi/h
Freeway maximum capacity, cIFL	2250	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	2232	1036	474	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	594	276	126	0	
Trucks and buses	5	2	2	2	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.976	0.990	0.990	0.990	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	2434	1113	509	0	pc/h

Volume ratio, VR	0.400	

Configuration Characteristics

Number of maneuver lanes, NWL	2	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	1	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	1622	lc/h
Weaving lane changes, LCW	1803	lc/h
Non-weaving vehicle index, INW	334	
Non-weaving lane change, LCNW	420	lc/h
Total lane changes, LCALL	2223	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.455

Average weaving speed, SW	47.2	mi/h
Average non-weaving speed, SNW	36.8	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	40.4	mi/h
Weaving segment density, D	33.5	pc/mi/ln
Level of service, LOS	D	
Weaving segment v/c ratio	0.747	
Weaving segment flow rate, v	3958	veh/h
Weaving segment capacity, cW	5295	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	6680	915	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2250	1809	c
		Maximum	Analyzed	
v/c ratio		1.00	0.747	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Aviation ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3268	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	869	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1782	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1782	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	32.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound CD
Junction:	Aviation on-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	3	
Free-flow speed on freeway	55.0	mph
Volume on freeway	3268	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	45.0	mph
Volume on ramp	1055	vph
Length of first accel/decel lane	0	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent Ramp	474	vph
Position of adjacent Ramp	Upstream	
Type of adjacent Ramp	On	
Distance to adjacent Ramp	1543	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3268	1055	474	vph
Peak-hour factor, PHF	0.94	0.94	0.94	
Peak 15-min volume, v15	869	281	126	v
Trucks and buses	5	2	2	%
Recreational vehicles	0	0	0	%
Terrain type:	Level	Level	Level	
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	

Heavy vehicle adjustment, fHV	0.976	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	3564	1134	509	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.577 Using Equation 1

$v_{12} = v_F (P_{FM})$ = 2058 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4698	6750	No
v_3 or v_{av34}	1506 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2058 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3192	4600	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 29.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.416	
Space mean speed in ramp influence area,	S_R = 49.6	mph
Space mean speed in outer lanes,	S_O = 51.4	mph
Space mean speed for all vehicles,	S = 50.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/30/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-26 Westbound CD
From/To:	Between Aviation ramps
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	4323	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	1150	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1571	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

LOS and Performance Measures

Flow rate, vp	1571	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	28.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	11/30/2015
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-26 Westbound
Junction:	CD on-ramp
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	4	
Free-flow speed on freeway	65.0	mph
Volume on freeway	6960	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-flow speed on ramp	45.0	mph
Volume on ramp	4323	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane	1500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6960	4323		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	1851	1150		v
Trucks and buses	8	2		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.962	0.990	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	7700	4645	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.209 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 1609 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	12345	9400	Yes
v_3 or v_{av34}	3045 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 3080 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	7725	4600	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 35.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	M_S = 8.747	
Space mean speed in ramp influence area,	S_R = -136.2	mph
Space mean speed in outer lanes,	S_O = 58.4	mph
Space mean speed for all vehicles,	S = 552.0	mph

4.1.4.2 CD Road – Rhett & Rivers

4.1.4.2.1 I-526 EB

4.1.4.2.1.1 AM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound CD
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2047	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	544	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1116	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1116	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	15.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Eastbound Mainline
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3235	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	860	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1764	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1764	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	66.3	mi/h
Number of lanes, N	2	
Density, D	26.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.2.1.2 PM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound CD
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	1732	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	461	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	944	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	944	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	13.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/16/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Eastbound Mainline
From/To:	Between Rivers and N Rhett
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3132	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	833	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1708	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	1.83	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.3	mi/h
Free-flow speed, FFS	70.1	mi/h

LOS and Performance Measures

Flow rate, vp	1708	pc/h/ln
Free-flow speed, FFS	70.1	mi/h
Average passenger-car speed, S	67.0	mi/h
Number of lanes, N	2	
Density, D	25.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.2.2 I-526 WB

4.1.4.2.2.1 AM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound CD
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2804	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	746	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1529	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1529	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	68.7	mi/h
Number of lanes, N	2	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	AM Peak Period
Freeway/Direction:	I-526 Westbound Mainline
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2000	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	532	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1090	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1090	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	2	
Density, D	15.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.2.2.2 PM Peak Hour

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound CD
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	2835	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	754	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	1546	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	1546	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	68.6	mi/h
Number of lanes, N	2	
Density, D	22.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency or Company:	Stantec
Date Performed:	11/17/2015
Analysis Time Period:	PM Peak Period
Freeway/Direction:	I-526 Westbound Mainline
From/To:	West of N Rhett Ave
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description: 171001609	

Flow Inputs and Adjustments

Volume, V	3707	veh/h
Peak-hour factor, PHF	0.94	
Peak 15-min volume, v15	986	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, fp	1.00	
Flow rate, vp	2021	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	6.0	ft
Total ramp density, TRD	2.00	ramps/mi
Number of lanes, N	2	
Free-flow speed:	Base	
FFS or BFFS	75.4	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.0	mi/h
TRD adjustment	5.8	mi/h
Free-flow speed, FFS	69.6	mi/h

LOS and Performance Measures

Flow rate, vp	2021	pc/h/ln
Free-flow speed, FFS	69.6	mi/h
Average passenger-car speed, S	62.2	mi/h
Number of lanes, N	2	
Density, D	32.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

4.1.4.3 Glenn McConnell

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	Ramp #4
Agency/Co.:	Stantec
Date performed:	11/19/2015
Analysis time period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	I-526 Off-Ramp to Paul Cantrel
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	7670	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	2883	vph
Length of first accel/decel lane	570	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	Yes	
Volume on adjacent ramp	887	vph
Position of adjacent ramp	Downstream	
Type of adjacent ramp	Off	
Distance to adjacent ramp	1800	ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp		
Volume, V (vph)	7670		2883		887		vph
Peak-hour factor, PHF	0.94		0.94		0.94		
Peak 15-min volume, v15	2040		767		236		v
Trucks and buses	7		2		2		%
Recreational vehicles	0		0		0		%
Terrain type:	Level		Level		Level		
Grade	0.00	%	0.00	%	0.00	%	
Length	0.00	mi	0.00	mi	0.00	mi	
Trucks and buses PCE, ET	1.5		1.5		1.5		
Recreational vehicle PCE, ER	1.2		1.2		1.2		

Heavy vehicle adjustment, fHV	0.966	0.990	0.990	
Driver population factor, fP	1.00	1.00	1.00	
Flow rate, vp	8445	3098	953	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.450 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 5504 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	8445	6900	Yes
$v_{FO} = v_F - v_R$	5347	6900	No
v_R	3098	4200	No
v_3 or v_{av34}	2941 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? Yes

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 5745 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5745	4400	Yes

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 38.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence F

Speed Estimation

Intermediate speed variable,	D_S = 0.512	
Space mean speed in ramp influence area,	S_R = 50.8	mph
Space mean speed in outer lanes,	S_0 = 59.2	mph
Space mean speed for all vehicles,	S = 53.2	mph

4.1.4.4 Rivers Avenue Partial vs. Full Access

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	
Agency/Co.:	Stantec
Date performed:	03/20/2017
Analysis time period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Junction:	Diverge from CD to I-26 EB/WB
Jurisdiction:	SCDOT
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2804	vph

Off Ramp Data

Side of freeway	Left	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	845	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2804	845		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	746	225		v
Trucks and buses	7	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %	%	
Length	0.00 mi	0.00 mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3087	912	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.641 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2306 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3087	6900	No
$v_{FO} = v_F - v_R$	2175	6900	No
v_R	912	1900	No
v_3 or v_{av34}	781 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2306 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2306	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 11.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.640

Space mean speed in ramp influence area, S_R = 48.5 mph

Space mean speed in outer lanes, S_O = 65.8 mph

Space mean speed for all vehicles, S = 51.4 mph

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	AM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #35, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	900	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	845	362	1959	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	225	96	521	0	
Trucks and buses	13	2	9	9	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.939	0.990	0.957	0.957	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	957	389	2178	0	pc/h
Volume ratio, VR		0.728			

Configuration Characteristics

Number of maneuver lanes, NWL	3	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	389	lc/h
Weaving lane changes, LCW	568	lc/h
Non-weaving vehicle index, INW	129	
Non-weaving lane change, LCNW	107	lc/h
Total lane changes, LCALL	675	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.180

Average weaving speed, SW	53.1	mi/h
Average non-weaving speed, SNW	51.6	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	52.7	mi/h
Weaving segment density, D	22.3	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.733	
Weaving segment flow rate, v	3309	veh/h
Weaving segment capacity, cW	4512	veh/h

Limitations on Weaving Segments

If limit reached, see note.

	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	9050	900	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1676	c
		Maximum	Analyzed	
v/c ratio		1.00	0.733	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

HCS 2010: Freeway Merge and Diverge Segments Release 6.50

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:
Agency/Co.: Stantec
Date performed: 03/20/2017
Analysis time period: PM Peak Period
Freeway/Dir of Travel: I-526 Westbound
Junction: Diverge from CD to I-26 EB/WB
Jurisdiction: SCDOT
Analysis Year: 2043 Future Year Conditions
Description: 171001609

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	3	
Free-flow speed on freeway	60.0	mph
Volume on freeway	2835	vph

Off Ramp Data

Side of freeway	Left	
Number of lanes in ramp	1	
Free-Flow speed on ramp	25.0	mph
Volume on ramp	603	vph
Length of first accel/decel lane	1500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2835	603		vph
Peak-hour factor, PHF	0.94	0.94		
Peak 15-min volume, v15	754	160		v
Trucks and buses	7	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.966	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3122	651	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.652 Using Equation 5

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2262 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3122	6900	No
$v_{FO} = v_F - v_R$	2471	6900	No
v_R	651	1900	No
v_3 or v_{av34}	860 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 No

If yes, v_{12A} = 2262 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2262	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 11.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.617	
Space mean speed in ramp influence area,	S_R = 48.9	mph
Space mean speed in outer lanes,	S_O = 65.8	mph
Space mean speed for all vehicles,	S = 52.1	mph

HCS 2010: Freeway Weaving Release 6.50

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	
Agency/Co.:	Stantec
Date Performed:	12/8/2015
Analysis Time Period:	PM Peak Period
Freeway/Dir of Travel:	I-526 Westbound
Weaving Location:	Ramps #29, 42, 43
Analysis Year:	2043 Future Year Conditions
Description:	171001609

Inputs

Segment Type	C-D Roadway/ Multilane Highways	
Weaving configuration	One-Sided	
Number of lanes, N	3	ln
Weaving segment length, LS	900	ft
Freeway free-flow speed, FFS	60	mi/h
Minimum segment speed, SMIN	15	mi/h
Freeway maximum capacity, cIFL	2300	pc/h/ln
Terrain type	Level	
Grade	0.00	%
Length	0.00	mi

Conversion to pc/h Under Base Conditions

	Volume Components				
	VFF	VRF	VFR	VRR	
Volume, V	603	258	2232	0	veh/h
Peak hour factor, PHF	0.94	0.94	0.94	0.94	
Peak 15-min volume, v15	160	69	594	0	
Trucks and buses	11	2	12	12	%
Recreational vehicles	0	0	0	0	%
Trucks and buses PCE, ET	1.5	1.5	1.5	1.5	
Recreational vehicle PCE, ER	1.2	1.2	1.2	1.2	
Heavy vehicle adjustment, fHV	0.948	0.990	0.943	0.943	
Driver population adjustment, fP	1.00	1.00	1.00	1.00	
Flow rate, v	677	277	2517	0	pc/h

Volume ratio, VR	0.805	

Configuration Characteristics

Number of maneuver lanes, NWL	3	ln
Interchange density, ID	1.5	int/mi
Minimum RF lane changes, LCRF	1	lc/pc
Minimum FR lane changes, LCFR	0	lc/pc
Minimum RR lane changes, LCRR		lc/pc
Minimum weaving lane changes, LCMIN	277	lc/h
Weaving lane changes, LCW	456	lc/h
Non-weaving vehicle index, INW	91	
Non-weaving lane change, LCNW	49	lc/h
Total lane changes, LCALL	505	lc/h

Weaving and Non-Weaving Speeds

Weaving intensity factor, W	0.143

Average weaving speed, SW	54.4	mi/h
Average non-weaving speed, SNW	52.5	mi/h

Weaving Segment Speed, Density, Level of Service and Capacity

Weaving segment speed, S	54.0	mi/h
Weaving segment density, D	21.4	pc/mi/ln
Level of service, LOS	B	
Weaving segment v/c ratio	0.798	
Weaving segment flow rate, v	3291	veh/h
Weaving segment capacity, cW	4121	veh/h

Limitations on Weaving Segments

If limit reached, see note.

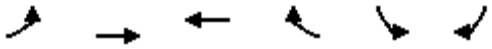
	Minimum	Maximum	Actual	Note
Weaving length (ft)	300	10037	900	a,b
		Maximum	Analyzed	
Density-based capacty, cIWL (pc/h/ln)		2300	1601	c
		Maximum	Analyzed	
v/c ratio		1.00	0.798	d

Notes:

a. In weaving segments shorter than 300 ft, weaving vehicles are assumed to make only necessary lane changes.
b. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments."
c. The density-based capacity exceeds the capacity of a basic freeway segment, under equivalent ideal conditions.
d. Volumes exceed the weaving segment capacity. The level of service is F.

4.2 SYNCHRO OUTPUT

4.2.1 Base Year



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	101	1750	1196	75	61	34
Future Volume (veh/h)	101	1750	1196	75	61	34
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1843	1900	1810	1792
Adj Flow Rate, veh/h	112	1944	1259	79	68	38
Adj No. of Lanes	1	2	3	0	1	1
Peak Hour Factor	0.90	0.90	0.95	0.95	0.90	0.90
Percent Heavy Veh, %	2	2	3	3	5	6
Cap, veh/h	352	2471	3379	212	136	120
Arrive On Green	0.70	0.70	0.70	0.70	0.08	0.08
Sat Flow, veh/h	407	3632	5005	304	1723	1524
Grp Volume(v), veh/h	112	1944	872	466	68	38
Grp Sat Flow(s),veh/h/ln	407	1770	1677	1789	1723	1524
Q Serve(g_s), s	10.1	23.9	6.9	6.9	2.5	1.5
Cycle Q Clear(g_c), s	17.0	23.9	6.9	6.9	2.5	1.5
Prop In Lane	1.00			0.17	1.00	1.00
Lane Grp Cap(c), veh/h	352	2471	2341	1249	136	120
V/C Ratio(X)	0.32	0.79	0.37	0.37	0.50	0.32
Avail Cap(c_a), veh/h	352	2471	2341	1249	212	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.5	6.6	4.0	4.0	28.7	28.3
Incr Delay (d2), s/veh	2.4	2.6	0.1	0.3	2.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.2	3.2	3.5	1.3	0.7
LnGrp Delay(d),s/veh	9.8	9.2	4.1	4.3	31.6	29.8
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		2056	1338		106	
Approach Delay, s/veh		9.2	4.2		30.9	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		52.9		12.1		52.9		
Change Period (Y+Rc), s		7.5		7.0		* 7.5		
Max Green Setting (Gmax), s		42.5		8.0		* 43		
Max Q Clear Time (g_c+I1), s		25.9		4.5		8.9		
Green Ext Time (p_c), s		16.3		0.1		33.0		

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	26	425	860	7	3	123
Future Vol, veh/h	26	425	860	7	3	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	95	95	90	90
Heavy Vehicles, %	4	7	2	0	33	2
Mvmt Flow	28	462	905	7	3	137

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	913	0	-	0	1427	909
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	4.14	-	-	-	7.43	6.22
Critical Hdwy Stg 1	-	-	-	-	6.43	-
Critical Hdwy Stg 2	-	-	-	-	6.43	-
Follow-up Hdwy	2.236	-	-	-	3.797	3.318
Pot Cap-1 Maneuver	738	-	-	-	96	333
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	738	-	-	-	92	333
Mov Cap-2 Maneuver	-	-	-	-	92	-
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	463	-

Approach	NB	SB	NE
HCM Control Delay, s	0.6	0	23.6
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NELn2	NBL	NBT	SBT	SBR
Capacity (veh/h)	92	333	738	-	-	-
HCM Lane V/C Ratio	0.036	0.41	0.038	-	-	-
HCM Control Delay (s)	45.6	23.1	10.1	0	-	-
HCM Lane LOS	E	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	1.9	0.1	-	-	-

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	412	59	104	875	4	1	1	3	101	1	38
Future Volume (veh/h)	0	412	59	104	875	4	1	1	3	101	1	38
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	0	453	65	109	921	4	1	1	3	112	1	42
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.91	0.91	0.95	0.95	0.92	0.92	0.92	0.92	0.90	0.92	0.90
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	995	143	561	1157	5	99	55	102	314	2	170
Arrive On Green	0.00	0.62	0.62	0.62	0.62	0.62	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	0	1594	229	880	1853	8	125	511	954	1604	14	1583
Grp Volume(v), veh/h	0	0	518	109	0	925	5	0	0	113	0	42
Grp Sat Flow(s),veh/h/ln	0	0	1822	880	0	1861	1590	0	0	1618	0	1583
Q Serve(g_s), s	0.0	0.0	7.5	3.7	0.0	18.7	0.0	0.0	0.0	0.0	0.0	1.2
Cycle Q Clear(g_c), s	0.0	0.0	7.5	11.3	0.0	18.7	3.2	0.0	0.0	3.1	0.0	1.2
Prop In Lane	0.00		0.13	1.00		0.00	0.20		0.60	0.99		1.00
Lane Grp Cap(c), veh/h	0	0	1138	561	0	1162	256	0	0	316	0	170
V/C Ratio(X)	0.00	0.00	0.46	0.19	0.00	0.80	0.02	0.00	0.00	0.36	0.00	0.25
Avail Cap(c_a), veh/h	0	0	1395	685	0	1425	652	0	0	669	0	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	5.0	7.9	0.0	7.1	20.1	0.0	0.0	21.4	0.0	20.6
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.2	0.0	2.6	0.0	0.0	0.0	0.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.8	0.9	0.0	10.1	0.1	0.0	0.0	1.5	0.0	0.6
LnGrp Delay(d),s/veh	0.0	0.0	5.2	8.1	0.0	9.7	20.1	0.0	0.0	22.1	0.0	21.3
LnGrp LOS			A	A		A	C			C		C
Approach Vol, veh/h		518			1034			5			155	
Approach Delay, s/veh		5.2			9.5			20.1			21.9	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.4		11.9		38.4		11.9
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5
Max Green Setting (Gmax), s		38.5		18.0		38.5		18.0
Max Q Clear Time (g_c+I1), s		9.5		5.2		20.7		5.1
Green Ext Time (p_c), s		14.3		0.5		10.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	9.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	2368	103	403	906	538	75	99	219	717	129	22
Future Volume (veh/h)	71	2368	103	403	906	538	75	99	219	717	129	22
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1881	1792	1863	1827	1881	1863	1881	1845	1900
Adj Flow Rate, veh/h	79	2631	114	448	1007	0	83	110	243	797	143	24
Adj No. of Lanes	1	3	1	2	3	1	1	1	1	2	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	2	1	6	2	4	1	2	1	2	2
Cap, veh/h	338	2048	726	526	2500	1092	104	255	454	621	392	66
Arrive On Green	0.04	0.40	0.40	0.15	0.51	0.00	0.06	0.14	0.14	0.18	0.25	0.25
Sat Flow, veh/h	1792	5136	1583	3476	4893	1583	1740	1881	1583	3476	1540	259
Grp Volume(v), veh/h	79	2631	114	448	1007	0	83	110	243	797	0	167
Grp Sat Flow(s),veh/h/ln	1792	1712	1583	1738	1631	1583	1740	1881	1583	1738	0	1799
Q Serve(g_s), s	3.6	55.8	5.9	17.6	17.7	0.0	6.6	7.5	18.1	25.0	0.0	10.7
Cycle Q Clear(g_c), s	3.6	55.8	5.9	17.6	17.7	0.0	6.6	7.5	18.1	25.0	0.0	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	338	2048	726	526	2500	1092	104	255	454	621	0	458
V/C Ratio(X)	0.23	1.28	0.16	0.85	0.40	0.00	0.80	0.43	0.53	1.28	0.00	0.36
Avail Cap(c_a), veh/h	472	2048	726	1390	2500	1092	186	255	454	621	0	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	42.1	22.1	57.9	21.1	0.0	65.0	55.5	42.0	57.5	0.0	42.9
Incr Delay (d2), s/veh	0.4	131.9	0.5	4.0	0.5	0.0	17.6	1.6	1.6	139.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	51.4	2.7	8.8	8.0	0.0	3.7	4.0	8.1	24.0	0.0	5.4
LnGrp Delay(d),s/veh	23.5	174.0	22.6	61.9	21.6	0.0	82.6	57.2	43.7	197.3	0.0	43.6
LnGrp LOS	C	F	C	E	C		F	E	D	F		D
Approach Vol, veh/h		2824			1455			436			964	
Approach Delay, s/veh		163.7			34.0			54.5			170.7	
Approach LOS		F			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	76.5	30.0	24.0	25.2	60.8	13.4	40.6
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	16.0	61.0	25.0	19.0	56.0	21.0	15.0	29.0
Max Q Clear Time (g_c+I1), s	5.6	19.7	27.0	20.1	19.6	57.8	8.6	12.7
Green Ext Time (p_c), s	0.1	40.2	0.0	0.0	1.6	0.0	0.1	3.1

Intersection Summary		
HCM 2010 Ctrl Delay		123.3
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	791	604	0	1763	0	0	0	0
Future Volume (veh/h)	0	0	0	0	791	604	0	1763	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1863	0	1863	0			
Adj Flow Rate, veh/h				0	879	0	0	1916	0			
Adj No. of Lanes				0	2	1	0	2	0			
Peak Hour Factor				0.90	0.90	0.90	0.92	0.92	0.92			
Percent Heavy Veh, %				0	1	2	0	2	0			
Cap, veh/h				0	1391	616	0	1858	0			
Arrive On Green				0.00	0.39	0.00	0.00	0.52	0.00			
Sat Flow, veh/h				0	3668	1583	0	3725	0			
Grp Volume(v), veh/h				0	879	0	0	1916	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1583	0	1770	0			
Q Serve(g_s), s				0.0	27.9	0.0	0.0	73.5	0.0			
Cycle Q Clear(g_c), s				0.0	27.9	0.0	0.0	73.5	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	1391	616	0	1858	0			
V/C Ratio(X)				0.00	0.63	0.00	0.00	1.03	0.00			
Avail Cap(c_a), veh/h				0	1391	616	0	1858	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	34.6	0.0	0.0	33.3	0.0			
Incr Delay (d2), s/veh				0.0	2.2	0.0	0.0	29.3	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	14.2	0.0	0.0	43.2	0.0			
LnGrp Delay(d),s/veh				0.0	36.8	0.0	0.0	62.6	0.0			
LnGrp LOS					D			F				
Approach Vol, veh/h					879			1916				
Approach Delay, s/veh					36.8			62.6				
Approach LOS					D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		60.0		80.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		54.5		73.5				
Max Q Clear Time (g_c+I1), s		29.9		75.5				
Green Ext Time (p_c), s		9.2		0.0				

Intersection Summary		
HCM 2010 Ctrl Delay		54.5
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	1192	413	20	769	46	174	120	10	10	140	452
Future Volume (veh/h)	275	1192	413	20	769	46	174	120	10	10	140	452
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1881	1900	1865	1900	1863	1849	1900	1900	1881	1881
Adj Flow Rate, veh/h	306	1324	459	22	854	51	193	133	11	11	156	502
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	1	0	2	2	2	3	3	0	1	1
Cap, veh/h	383	1984	897	132	1378	82	294	578	48	349	443	377
Arrive On Green	0.12	0.56	0.56	0.41	0.41	0.41	0.06	0.34	0.34	0.24	0.24	0.24
Sat Flow, veh/h	1774	3539	1599	270	3398	203	1774	1685	139	1264	1881	1599
Grp Volume(v), veh/h	306	1324	459	22	445	460	193	0	144	11	156	502
Grp Sat Flow(s),veh/h/ln	1774	1770	1599	270	1772	1829	1774	0	1824	1264	1881	1599
Q Serve(g_s), s	13.5	36.8	24.8	8.7	27.9	27.9	9.0	0.0	7.9	0.9	9.7	33.0
Cycle Q Clear(g_c), s	13.5	36.8	24.8	23.8	27.9	27.9	9.0	0.0	7.9	0.9	9.7	33.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	383	1984	897	132	719	742	294	0	625	349	443	377
V/C Ratio(X)	0.80	0.67	0.51	0.17	0.62	0.62	0.66	0.00	0.23	0.03	0.35	1.33
Avail Cap(c_a), veh/h	514	1984	897	132	719	742	294	0	625	349	443	377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	21.6	18.9	37.5	33.0	33.0	40.4	0.0	32.8	41.2	44.6	53.5
Incr Delay (d2), s/veh	6.4	1.2	1.0	2.7	4.0	3.9	5.9	0.0	0.3	0.1	0.8	166.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	18.2	11.1	0.7	14.4	14.8	2.9	0.0	4.0	0.3	5.1	32.0
LnGrp Delay(d),s/veh	31.0	22.7	19.9	40.2	37.0	36.9	46.3	0.0	33.1	41.3	45.4	220.0
LnGrp LOS	C	C	B	D	D	D	D		C	D	D	F
Approach Vol, veh/h		2089			927			337			669	
Approach Delay, s/veh		23.3			37.0			40.7			176.4	
Approach LOS		C			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6	7	8
Phs Duration (G+Y+Rc), s	21.7	63.3		55.0		85.0	15.0	40.0
Change Period (Y+Rc), s	5.5	6.5		7.0		6.5	6.0	7.0
Max Green Setting (Gmax), s	16.5	46.5		48.0		78.5	9.0	33.0
Max Q Clear Time (g_c+I1), s	15.5	29.9		9.9		38.8	11.0	35.0
Green Ext Time (p_c), s	0.7	15.9		8.0		34.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.4
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	1	57	3	387	200	387	0	0	24	23	10	5
Future Vol, veh/h	1	57	3	387	200	387	0	0	24	23	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	91	91	91	90	90	90	90	90	90
Heavy Vehicles, %	0	5	0	1	2	0	0	0	0	0	0	0
Mvmt Flow	1	63	3	425	220	425	0	0	27	26	11	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	645	0	0	67	0	0	1033	1563	33	1317	1352	323
Stage 1	-	-	-	-	-	-	67	67	-	1283	1283	-
Stage 2	-	-	-	-	-	-	966	1496	-	34	69	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.21	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	950	-	-	1540	-	-	189	113	1040	117	151	679
Stage 1	-	-	-	-	-	-	941	843	-	178	238	-
Stage 2	-	-	-	-	-	-	277	188	-	983	841	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	950	-	-	1540	-	-	108	61	1040	72	81	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	61	-	72	81	-
Stage 1	-	-	-	-	-	-	940	842	-	178	128	-
Stage 2	-	-	-	-	-	-	134	101	-	957	840	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.1	3.4	8.6	85
HCM LOS			A	F

Minor Lane/Major Mvmt	NELn1	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1
Capacity (veh/h)	1040	950	-	-	1540	-	-	84
HCM Lane V/C Ratio	0.026	0.001	-	-	0.276	-	-	0.503
HCM Control Delay (s)	8.6	8.8	0	-	8.2	0.4	-	85
HCM Lane LOS	A	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.1	0	-	-	1.1	-	-	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	78	26	208	484	0	0	0	0	494	0	490
Future Volume (veh/h)	0	78	26	208	484	0	0	0	0	494	0	490
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1840	1900	1727	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	87	29	231	538	0				549	0	544
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	10	1	0				1	0	1
Cap, veh/h	0	700	224	545	1602	0				645	0	576
Arrive On Green	0.00	0.27	0.27	0.08	0.45	0.00				0.36	0.00	0.36
Sat Flow, veh/h	0	2700	833	1645	3668	0				1792	0	1599
Grp Volume(v), veh/h	0	57	59	231	538	0				549	0	544
Grp Sat Flow(s),veh/h/ln	0	1748	1693	1645	1787	0				1792	0	1599
Q Serve(g_s), s	0.0	1.5	1.6	5.1	5.9	0.0				17.0	0.0	19.8
Cycle Q Clear(g_c), s	0.0	1.5	1.6	5.1	5.9	0.0				17.0	0.0	19.8
Prop In Lane	0.00		0.49	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	469	454	545	1602	0				645	0	576
V/C Ratio(X)	0.00	0.12	0.13	0.42	0.34	0.00				0.85	0.00	0.95
Avail Cap(c_a), veh/h	0	469	454	545	1602	0				645	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.6	16.6	13.7	10.7	0.0				17.7	0.0	18.6
Incr Delay (d2), s/veh	0.0	0.5	0.6	0.3	0.4	0.0				10.4	0.0	24.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.8	0.7	2.9	0.0				10.1	0.0	12.5
LnGrp Delay(d),s/veh	0.0	17.1	17.2	14.0	11.1	0.0				28.1	0.0	43.1
LnGrp LOS		B	B	B	B					C		D
Approach Vol, veh/h		116			769						1093	
Approach Delay, s/veh		17.2			12.0						35.6	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.8	22.2		27.0		33.0		
Change Period (Y+Rc), s	* 5.7	6.1		* 5.4		6.1		
Max Green Setting (Gmax), s	* 5.1	16.1		* 22		26.9		
Max Q Clear Time (g_c+I1), s	7.1	3.6		21.8		7.9		
Green Ext Time (p_c), s	0.0	6.3		0.0		8.3		

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (veh/h)	40	532	0	0	388	121	0	0	304	2	568
Future Volume (veh/h)	40	532	0	0	388	121	0	0	304	2	568
Number	5	2	12	1	6	16			3	3	18
Initial Q (Qb), veh	0	0	0	0	0	0			0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1863	0	0	1752	1900			1900	1900	1759
Adj Flow Rate, veh/h	44	591	0	0	431	134			338	338	631
Adj No. of Lanes	1	2	0	0	2	0			0	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			0.90	0.90	0.90
Percent Heavy Veh, %	5	2	0	0	8	8			8	8	8
Cap, veh/h	276	1416	0	0	670	206			759	759	637
Arrive On Green	0.04	0.40	0.00	0.00	0.27	0.27			0.43	0.43	0.43
Sat Flow, veh/h	1723	3632	0	0	2595	772			1782	1782	1495
Grp Volume(v), veh/h	44	591	0	0	285	280			340	340	631
Grp Sat Flow(s),veh/h/ln	1723	1770	0	0	1664	1615			1792	1792	1495
Q Serve(g_s), s	1.1	7.8	0.0	0.0	9.8	10.0			8.7	8.7	27.2
Cycle Q Clear(g_c), s	1.1	7.8	0.0	0.0	9.8	10.0			8.7	8.7	27.2
Prop In Lane	1.00		0.00	0.00		0.48			0.99	0.99	1.00
Lane Grp Cap(c), veh/h	276	1416	0	0	444	431			764	764	637
V/C Ratio(X)	0.16	0.42	0.00	0.00	0.64	0.65			0.45	0.45	0.99
Avail Cap(c_a), veh/h	339	1416	0	0	444	431			764	764	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.99	0.99			1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	14.0	0.0	0.0	21.1	21.1			13.2	13.2	18.5
Incr Delay (d2), s/veh	0.2	0.9	0.0	0.0	6.9	7.3			1.9	1.9	33.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.0	0.0	0.0	5.4	5.3			4.6	4.6	16.9
LnGrp Delay(d),s/veh	15.9	15.0	0.0	0.0	27.9	28.5			15.1	15.1	51.9
LnGrp LOS	B	B			C	C			B	B	D
Approach Vol, veh/h		635			565				971	971	
Approach Delay, s/veh		15.0			28.2				39.0	39.0	
Approach LOS		B			C				D	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		32.0			8.6	23.4		33.0
Change Period (Y+Rc), s		* 6			5.9	* 6		5.3
Max Green Setting (Gmax), s		* 26			5.1	* 15		27.7
Max Q Clear Time (g_c+I1), s		9.8			3.1	12.0		29.2
Green Ext Time (p_c), s		11.7			0.0	2.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	85	109	622	478	214	424
Future Volume (veh/h)	85	109	622	478	214	424
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1847	1900	1776	1845	1863	1847
Adj Flow Rate, veh/h	94	121	684	0	228	451
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.91	0.91	0.94	0.94
Percent Heavy Veh, %	7	4	7	3	2	7
Cap, veh/h	558	430	1436	667	514	2208
Arrive On Green	0.16	0.16	0.43	0.00	0.10	0.63
Sat Flow, veh/h	3412	1615	3463	1568	1774	3601
Grp Volume(v), veh/h	94	121	684	0	228	451
Grp Sat Flow(s),veh/h/ln	1706	1615	1687	1568	1774	1754
Q Serve(g_s), s	1.4	3.5	8.7	0.0	3.8	3.2
Cycle Q Clear(g_c), s	1.4	3.5	8.7	0.0	3.8	3.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	558	430	1436	667	514	2208
V/C Ratio(X)	0.17	0.28	0.48	0.00	0.44	0.20
Avail Cap(c_a), veh/h	1937	1083	1819	845	990	3547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	17.3	12.3	0.0	7.9	4.7
Incr Delay (d2), s/veh	0.1	0.3	0.9	0.0	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.6	4.2	0.0	1.8	1.6
LnGrp Delay(d),s/veh	21.5	17.5	13.2	0.0	8.4	4.8
LnGrp LOS	C	B	B		A	A
Approach Vol, veh/h	215		684			679
Approach Delay, s/veh	19.3		13.2			6.0
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.1	31.3				43.3		16.0
Change Period (Y+Rc), s	6.0	6.0				6.0		6.3
Max Green Setting (Gmax), s	22.0	32.0				60.0		33.7
Max Q Clear Time (g_c+I1), s	5.8	10.7				5.2		5.5
Green Ext Time (p_c), s	0.4	14.6				26.2		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1057	1319	4	8	528	138	13	29	31	55	6	713
Future Volume (veh/h)	1057	1319	4	8	528	138	13	29	31	55	6	713
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1845	1900	1749	1810	1937	1824	1781	1771	1900	1867	1845
Adj Flow Rate, veh/h	1174	1466	4	9	587	153	14	32	34	61	7	0
Adj No. of Lanes	2	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	3	13	5	2	0	0	3	0	0	3
Cap, veh/h	1222	2329	6	212	1052	504	96	168	181	205	19	189
Arrive On Green	0.35	0.65	0.65	0.01	0.31	0.31	0.12	0.12	0.12	0.12	0.12	0.00
Sat Flow, veh/h	3442	3586	10	1665	3438	1647	306	1398	1505	993	158	1568
Grp Volume(v), veh/h	1174	716	754	9	587	153	46	0	34	68	0	0
Grp Sat Flow(s),veh/h/ln	1721	1753	1843	1665	1719	1647	1704	0	1505	1151	0	1568
Q Serve(g_s), s	26.7	19.4	19.4	0.3	11.4	5.7	0.0	0.0	1.6	3.4	0.0	0.0
Cycle Q Clear(g_c), s	26.7	19.4	19.4	0.3	11.4	5.7	1.9	0.0	1.6	5.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.30		1.00	0.90		1.00
Lane Grp Cap(c), veh/h	1222	1138	1197	212	1052	504	264	0	181	224	0	189
V/C Ratio(X)	0.96	0.63	0.63	0.04	0.56	0.30	0.17	0.00	0.19	0.30	0.00	0.00
Avail Cap(c_a), veh/h	1222	1138	1197	297	1052	504	453	0	357	375	0	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.3	8.3	8.3	18.7	23.2	21.2	31.8	0.0	31.7	33.9	0.0	0.0
Incr Delay (d2), s/veh	17.7	2.6	2.5	0.1	2.1	1.5	0.2	0.0	0.4	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.6	10.0	10.5	0.1	5.7	2.8	0.9	0.0	0.7	1.5	0.0	0.0
LnGrp Delay(d),s/veh	43.0	10.9	10.8	18.8	25.3	22.8	32.0	0.0	32.0	34.5	0.0	0.0
LnGrp LOS	D	B	B	B	C	C	C		C	C		
Approach Vol, veh/h		2644			749			80			68	
Approach Delay, s/veh		25.1			24.7			32.0			34.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	57.7		15.8	34.0	30.2		15.8
Change Period (Y+Rc), s	5.6	* 5.7		* 6.2	5.6	* 5.7		* 6.2
Max Green Setting (Gmax), s	5.0	* 39		* 18	28.4	* 16		* 19
Max Q Clear Time (g_c+I1), s	2.3	21.4		7.3	28.7	13.4		3.9
Green Ext Time (p_c), s	0.0	16.3		0.4	0.0	2.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	8	1416	147	135	560	28	125	0	198	7	7	22
Future Volume (veh/h)	8	1416	147	135	560	28	125	0	198	7	7	22
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1830	1900	1863	1770	1900	1900	1863	1881	1900	1900	1900
Adj Flow Rate, veh/h	9	1573	163	150	622	31	139	0	220	8	8	24
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	13	4	4	2	5	5	0	0	1	0	0	0
Cap, veh/h	494	1879	193	227	2304	115	280	0	260	139	68	204
Arrive On Green	0.59	0.59	0.59	0.05	0.71	0.71	0.16	0.00	0.16	0.16	0.16	0.16
Sat Flow, veh/h	701	3185	327	1774	3261	162	1234	0	1599	1179	419	1258
Grp Volume(v), veh/h	9	851	885	150	321	332	139	0	220	8	0	32
Grp Sat Flow(s),veh/h/ln	701	1739	1773	1774	1682	1742	1234	0	1599	1179	0	1678
Q Serve(g_s), s	0.5	35.4	36.8	2.8	6.2	6.2	8.7	0.0	12.0	0.6	0.0	1.5
Cycle Q Clear(g_c), s	0.5	35.4	36.8	2.8	6.2	6.2	10.1	0.0	12.0	10.7	0.0	1.5
Prop In Lane	1.00		0.18	1.00		0.09	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	494	1026	1046	227	1188	1231	280	0	260	139	0	272
V/C Ratio(X)	0.02	0.83	0.85	0.66	0.27	0.27	0.50	0.00	0.85	0.06	0.00	0.12
Avail Cap(c_a), veh/h	494	1026	1046	257	1188	1231	335	0	323	186	0	339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.7	14.8	15.1	19.6	4.8	4.8	36.5	0.0	36.6	40.9	0.0	32.2
Incr Delay (d2), s/veh	0.0	5.6	6.1	4.6	0.4	0.4	1.0	0.0	14.7	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	18.4	19.5	2.6	3.0	3.1	3.4	0.0	6.4	0.2	0.0	0.7
LnGrp Delay(d),s/veh	7.7	20.4	21.2	24.2	5.2	5.2	37.5	0.0	51.3	41.0	0.0	32.3
LnGrp LOS	A	C	C	C	A	A	D		D	D		C
Approach Vol, veh/h		1745			803			359			40	
Approach Delay, s/veh		20.8			8.8			46.0			34.1	
Approach LOS		C			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.5	58.7		20.8		69.2		20.8
Change Period (Y+Rc), s	5.6	5.6		* 6.2		5.6		* 6.2
Max Green Setting (Gmax), s	6.4	48.0		* 18		60.0		* 18
Max Q Clear Time (g_c+I1), s	14.8	38.8		14.0		8.2		12.7
Green Ext Time (p_c), s	0.0	9.1		0.6		48.9		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1066	672	19	681	0	0	0	0	416	197	73
Future Volume (veh/h)	0	1066	672	19	681	0	0	0	0	416	197	73
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1776	1845	1496	1792	0				1792	1859	1508
Adj Flow Rate, veh/h	0	1184	747	21	748	0				340	389	0
Adj No. of Lanes	0	2	1	1	2	0				1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91				0.90	0.90	0.90
Percent Heavy Veh, %	0	7	3	27	6	0				6	0	26
Cap, veh/h	0	1795	834	174	2153	0				407	444	306
Arrive On Green	0.00	0.53	0.53	0.04	0.63	0.00				0.24	0.24	0.00
Sat Flow, veh/h	0	3463	1568	1425	3495	0				1707	1859	1282
Grp Volume(v), veh/h	0	1184	747	21	748	0				340	389	0
Grp Sat Flow(s),veh/h/ln	0	1687	1568	1425	1703	0				1707	1859	1282
Q Serve(g_s), s	0.0	25.3	42.6	0.6	10.3	0.0				18.9	20.1	0.0
Cycle Q Clear(g_c), s	0.0	25.3	42.6	0.6	10.3	0.0				18.9	20.1	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1795	834	174	2153	0				407	444	306
V/C Ratio(X)	0.00	0.66	0.90	0.12	0.35	0.00				0.83	0.88	0.00
Avail Cap(c_a), veh/h	0	1795	834	237	2153	0				580	632	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.90	0.90	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	16.9	20.9	12.8	8.7	0.0				36.2	36.6	0.0
Incr Delay (d2), s/veh	0.0	1.9	14.2	0.1	0.4	0.0				5.0	7.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.2	21.6	0.2	4.9	0.0				9.4	11.3	0.0
LnGrp Delay(d),s/veh	0.0	18.8	35.1	13.0	9.1	0.0				41.2	44.1	0.0
LnGrp LOS		B	D	B	A					D	D	
Approach Vol, veh/h		1931			769						729	
Approach Delay, s/veh		25.1			9.2						42.7	
Approach LOS		C			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.0	59.7		30.3		69.7		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	8.0	38.6		* 34		53.1		
Max Q Clear Time (g_c+I1), s	2.6	44.6		22.1		12.3		
Green Ext Time (p_c), s	0.0	0.0		1.7		39.2		

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	1336	0	0	436	304	264	120	15	0	0	0
Future Volume (veh/h)	146	1336	0	0	436	304	264	120	15	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1462	1810	0	0	1792	1733	1827	1871	1976			
Adj Flow Rate, veh/h	159	1452	0	0	484	0	213	245	0			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	30	5	0	0	6	14	4	0	0			
Cap, veh/h	186	2264	0	0	1582	685	304	327	294			
Arrive On Green	0.13	0.66	0.00	0.00	0.46	0.00	0.17	0.17	0.00			
Sat Flow, veh/h	1392	3529	0	0	3495	1473	1740	1871	1680			
Grp Volume(v), veh/h	159	1452	0	0	484	0	213	245	0			
Grp Sat Flow(s),veh/h/ln	1392	1719	0	0	1703	1473	1740	1871	1680			
Q Serve(g_s), s	8.4	18.7	0.0	0.0	6.7	0.0	8.6	9.3	0.0			
Cycle Q Clear(g_c), s	8.4	18.7	0.0	0.0	6.7	0.0	8.6	9.3	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	186	2264	0	0	1582	685	304	327	294			
V/C Ratio(X)	0.85	0.64	0.00	0.00	0.31	0.00	0.70	0.75	0.00			
Avail Cap(c_a), veh/h	213	2264	0	0	1582	685	603	649	582			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.69	0.69	0.00	0.00	0.92	0.00	0.86	0.86	0.00			
Uniform Delay (d), s/veh	31.8	7.6	0.0	0.0	12.5	0.0	29.1	29.4	0.0			
Incr Delay (d2), s/veh	18.1	1.0	0.0	0.0	0.1	0.0	2.5	3.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.2	9.0	0.0	0.0	3.1	0.0	4.4	5.1	0.0			
LnGrp Delay(d),s/veh	49.9	8.5	0.0	0.0	12.6	0.0	31.6	32.3	0.0			
LnGrp LOS	D	A			B		C	C				
Approach Vol, veh/h		1611			484			458				
Approach Delay, s/veh		12.6			12.6			32.0				
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		55.4			14.5	40.8		19.6
Change Period (Y+Rc), s		6.0			4.5	6.0		6.5
Max Green Setting (Gmax), s		36.5			11.5	20.5		26.0
Max Q Clear Time (g_c+I1), s		20.7			10.4	8.7		11.3
Green Ext Time (p_c), s		11.2			0.0	9.0		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	1184	84	101	654	14	32	42	160	21	13	54
Future Volume (veh/h)	83	1184	84	101	654	14	32	42	160	21	13	54
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1829	1900	1863	1743	1900	1900	1876	1863	1900	1756	1900
Adj Flow Rate, veh/h	92	1316	93	112	727	16	36	47	178	23	14	60
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	4	4	2	9	0	0	0	2	23	23	23
Cap, veh/h	420	1479	104	260	1501	732	181	206	398	103	69	168
Arrive On Green	0.06	0.45	0.45	0.07	0.45	0.45	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1691	3294	232	1774	3312	1615	553	1118	1583	189	375	914
Grp Volume(v), veh/h	92	693	716	112	727	16	83	0	178	97	0	0
Grp Sat Flow(s),veh/h/ln	1691	1738	1788	1774	1656	1615	1671	0	1583	1478	0	0
Q Serve(g_s), s	1.8	23.7	23.9	2.1	10.0	0.4	0.0	0.0	6.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	23.7	23.9	2.1	10.0	0.4	2.5	0.0	6.2	3.5	0.0	0.0
Prop In Lane	1.00		0.13	1.00		1.00	0.43		1.00	0.24		0.62
Lane Grp Cap(c), veh/h	420	780	803	260	1501	732	387	0	398	341	0	0
V/C Ratio(X)	0.22	0.89	0.89	0.43	0.48	0.02	0.21	0.00	0.45	0.28	0.00	0.00
Avail Cap(c_a), veh/h	468	780	803	278	1501	732	388	0	398	341	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.0	16.4	16.5	14.0	12.4	9.8	22.6	0.0	20.5	23.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	10.5	10.5	0.7	0.7	0.0	0.2	0.0	0.6	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	13.6	14.1	1.0	4.7	0.2	1.3	0.0	2.8	1.5	0.0	0.0
LnGrp Delay(d),s/veh	9.2	26.9	27.0	14.7	13.2	9.8	22.8	0.0	21.1	23.4	0.0	0.0
LnGrp LOS	A	C	C	B	B	A	C		C	C		
Approach Vol, veh/h		1501			855			261			97	
Approach Delay, s/veh		25.9			13.3			21.7			23.4	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	35.7		18.5	10.6	36.0		18.5
Change Period (Y+Rc), s	6.5	6.5		6.5	6.5	6.5		6.5
Max Green Setting (Gmax), s	5.3	28.5		12.0	5.9	27.6		12.0
Max Q Clear Time (g_c+I1), s	4.1	25.9		5.5	3.8	12.0		8.2
Green Ext Time (p_c), s	0.0	2.5		0.7	0.0	15.0		0.5

Intersection Summary			
HCM 2010 Ctrl Delay		21.4	
HCM 2010 LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	261	37	62	154	0	0	0	0	60	518	310
Future Volume (veh/h)	0	261	37	62	154	0	0	0	0	60	518	310
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1867	1900	1681	1881	0				1900	1858	1900
Adj Flow Rate, veh/h	0	290	41	69	171	0				67	576	344
Adj No. of Lanes	0	2	0	1	2	0				0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	13	1	0				0	3	0
Cap, veh/h	0	1527	214	491	1746	0				84	737	476
Arrive On Green	0.00	0.49	0.49	0.49	0.49	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	3220	438	943	3668	0				226	1977	1277
Grp Volume(v), veh/h	0	163	168	69	171	0				547	0	440
Grp Sat Flow(s),veh/h/ln	0	1774	1790	943	1787	0				1847	0	1633
Q Serve(g_s), s	0.0	4.7	4.8	4.0	2.3	0.0				23.8	0.0	20.8
Cycle Q Clear(g_c), s	0.0	4.7	4.8	8.8	2.3	0.0				23.8	0.0	20.8
Prop In Lane	0.00		0.24	1.00		0.00				0.12		0.78
Lane Grp Cap(c), veh/h	0	867	874	491	1746	0				688	0	609
V/C Ratio(X)	0.00	0.19	0.19	0.14	0.10	0.00				0.79	0.00	0.72
Avail Cap(c_a), veh/h	0	867	874	491	1746	0				1119	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.56	0.00	0.56
Uniform Delay (d), s/veh	0.0	13.0	13.0	15.5	12.4	0.0				25.2	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.6	0.1	0.0				1.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	2.4	1.1	1.2	0.0				12.2	0.0	9.4
LnGrp Delay(d),s/veh	0.0	13.4	13.5	16.1	12.5	0.0				26.4	0.0	25.2
LnGrp LOS		B	B	B	B					C		C
Approach Vol, veh/h		331			240						987	
Approach Delay, s/veh		13.5			13.5						25.8	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		50.0		40.0		50.0		
Change Period (Y+Rc), s		6.0		6.5		6.0		
Max Green Setting (Gmax), s		23.0		54.5		23.0		
Max Q Clear Time (g_c+I1), s		6.8		25.8		10.8		
Green Ext Time (p_c), s		3.7		7.8		3.2		

Intersection Summary		
HCM 2010 Ctrl Delay		21.3
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	152	0	0	190	8	26	222	82	0	0	0
Future Volume (veh/h)	169	152	0	0	190	8	26	222	82	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1813	1900	1900	1846	1900			
Adj Flow Rate, veh/h	188	169	0	0	211	9	29	247	91			
Adj No. of Lanes	1	2	0	0	2	0	0	2	0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	1	1	0	0	5	5	0	4	0			
Cap, veh/h	889	2546	0	0	2398	102	40	349	134			
Arrive On Green	1.00	1.00	0.00	0.00	0.71	0.71	0.15	0.15	0.15			
Sat Flow, veh/h	1168	3668	0	0	3458	143	270	2347	902			
Grp Volume(v), veh/h	188	169	0	0	107	113	197	0	170			
Grp Sat Flow(s),veh/h/ln	1168	1787	0	0	1722	1788	1832	0	1687			
Q Serve(g_s), s	0.5	0.0	0.0	0.0	1.7	1.7	9.2	0.0	8.6			
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.0	1.7	1.7	9.2	0.0	8.6			
Prop In Lane	1.00		0.00	0.00		0.08	0.15		0.53			
Lane Grp Cap(c), veh/h	889	2546	0	0	1227	1273	273	0	251			
V/C Ratio(X)	0.21	0.07	0.00	0.00	0.09	0.09	0.72	0.00	0.68			
Avail Cap(c_a), veh/h	889	2546	0	0	1227	1273	682	0	628			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.99	0.00	0.00	0.93	0.93	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	4.0	4.0	36.5	0.0	36.3			
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.0	3.6	0.0	3.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.8	0.9	4.9	0.0	4.2			
LnGrp Delay(d),s/veh	0.6	0.0	0.0	0.0	4.0	4.0	40.1	0.0	39.4			
LnGrp LOS	A	A			A	A	D		D			
Approach Vol, veh/h		357			220			367				
Approach Delay, s/veh		0.3			4.0			39.8				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		70.1				70.1		19.9
Change Period (Y+Rc), s		6.0				6.0		6.5
Max Green Setting (Gmax), s		44.0				44.0		33.5
Max Q Clear Time (g_c+I1), s		4.2				3.7		11.2
Green Ext Time (p_c), s		3.9				3.9		2.2

Intersection Summary		
HCM 2010 Ctrl Delay		16.5
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	723	295	86	399	31	174	84	83	67	101	111
Future Volume (veh/h)	170	723	295	86	399	31	174	84	83	67	101	111
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1822	1900	1776	1731	1900	1667	1810	1863	1810	1839	1900
Adj Flow Rate, veh/h	189	803	328	96	443	34	193	93	92	74	112	123
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	7	10	10	14	5	2	5	7	7
Cap, veh/h	461	881	359	228	1052	80	293	394	344	401	151	166
Arrive On Green	0.09	0.37	0.37	0.07	0.34	0.34	0.09	0.22	0.22	0.06	0.19	0.19
Sat Flow, veh/h	1740	2401	979	1691	3096	237	1587	1810	1583	1723	802	881
Grp Volume(v), veh/h	189	578	553	96	235	242	193	93	92	74	0	235
Grp Sat Flow(s),veh/h/ln	1740	1731	1649	1691	1644	1689	1587	1810	1583	1723	0	1683
Q Serve(g_s), s	5.4	24.9	25.0	2.8	8.6	8.7	7.1	3.3	3.8	2.6	0.0	10.3
Cycle Q Clear(g_c), s	5.4	24.9	25.0	2.8	8.6	8.7	7.1	3.3	3.8	2.6	0.0	10.3
Prop In Lane	1.00		0.59	1.00		0.14	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	461	635	605	228	559	574	293	394	344	401	0	317
V/C Ratio(X)	0.41	0.91	0.91	0.42	0.42	0.42	0.66	0.24	0.27	0.18	0.00	0.74
Avail Cap(c_a), veh/h	517	647	616	246	559	574	293	394	344	429	0	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	23.6	23.6	18.7	19.9	19.9	24.9	25.3	25.5	23.1	0.0	30.0
Incr Delay (d2), s/veh	0.6	16.9	17.9	1.2	0.5	0.5	5.3	0.3	0.4	0.2	0.0	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	14.9	14.4	1.4	4.0	4.1	3.8	1.7	1.7	1.3	0.0	5.5
LnGrp Delay(d),s/veh	15.3	40.5	41.5	19.9	20.4	20.4	30.2	25.6	25.9	23.3	0.0	38.8
LnGrp LOS	B	D	D	B	C	C	C	C	C	C		D
Approach Vol, veh/h		1320			573			378			309	
Approach Delay, s/veh		37.3			20.4			28.0			35.1	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	35.5	12.0	20.3	12.7	33.3	9.7	22.6
Change Period (Y+Rc), s	* 5.3	* 6.7	* 4.9	5.6	* 5.3	* 6.7	* 4.9	5.6
Max Green Setting (Gmax), s	* 6.1	* 29	* 7.1	15.0	* 9.9	* 27	* 6.1	16.0
Max Q Clear Time (g_c+I1), s	4.8	27.0	9.1	12.3	7.4	10.7	4.6	5.8
Green Ext Time (p_c), s	0.0	1.8	0.0	0.3	0.1	9.1	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	965	14	3	752	96	13	2	15	152	2	35
Future Volume (veh/h)	12	965	14	3	752	96	13	2	15	152	2	35
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1809	1900	1900	1784	1900	1900	1727	1900	1827	1712	1900
Adj Flow Rate, veh/h	13	1072	16	3	836	107	14	2	17	169	2	39
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	5	5	7	7	7	50	50	50	4	50	50
Cap, veh/h	379	1796	27	92	1532	196	204	56	140	443	13	261
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	604	3467	52	2	2956	377	401	301	746	1361	71	1394
Grp Volume(v), veh/h	13	531	557	505	0	441	33	0	0	169	0	41
Grp Sat Flow(s),veh/h/ln	604	1719	1800	1779	0	1556	1447	0	0	1361	0	1466
Q Serve(g_s), s	0.6	8.6	8.6	0.0	0.0	7.6	0.0	0.0	0.0	3.7	0.0	0.9
Cycle Q Clear(g_c), s	8.2	8.6	8.6	7.6	0.0	7.6	0.7	0.0	0.0	4.4	0.0	0.9
Prop In Lane	1.00		0.03	0.01		0.24	0.42		0.52	1.00		0.95
Lane Grp Cap(c), veh/h	379	890	932	1013	0	806	400	0	0	443	0	275
V/C Ratio(X)	0.03	0.60	0.60	0.50	0.00	0.55	0.08	0.00	0.00	0.38	0.00	0.15
Avail Cap(c_a), veh/h	435	1051	1101	1177	0	952	977	0	0	1010	0	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.2	6.7	6.7	6.4	0.0	6.4	13.4	0.0	0.0	14.8	0.0	13.5
Incr Delay (d2), s/veh	0.0	0.7	0.6	0.4	0.0	0.6	0.1	0.0	0.0	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.2	4.3	3.8	0.0	3.3	0.3	0.0	0.0	1.8	0.0	0.4
LnGrp Delay(d),s/veh	9.2	7.4	7.3	6.8	0.0	7.0	13.5	0.0	0.0	15.4	0.0	13.7
LnGrp LOS	A	A	A	A		A	B			B		B
Approach Vol, veh/h		1101			946			33			210	
Approach Delay, s/veh		7.4			6.9			13.5			15.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.8		13.0		26.8		13.0
Change Period (Y+Rc), s		6.2		5.5		6.2		5.5
Max Green Setting (Gmax), s		24.3		24.0		24.3		24.0
Max Q Clear Time (g_c+I1), s		10.6		6.4		9.6		2.7
Green Ext Time (p_c), s		10.0		0.8		10.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	540	577	111	654	0	0	0	0	252	0	197
Future Volume (veh/h)	0	540	577	111	654	0	0	0	0	252	0	197
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1776	1863	1881	1792	0				1827	0	1696
Adj Flow Rate, veh/h	0	568	0	123	727	0				280	0	0
Adj No. of Lanes	0	2	1	1	2	0				1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	7	2	1	6	0				4	0	12
Cap, veh/h	0	1471	690	158	2085	0				333	0	276
Arrive On Green	0.00	0.44	0.00	0.09	0.61	0.00				0.19	0.00	0.00
Sat Flow, veh/h	0	3463	1583	1792	3495	0				1740	0	1442
Grp Volume(v), veh/h	0	568	0	123	727	0				280	0	0
Grp Sat Flow(s),veh/h/ln	0	1687	1583	1792	1703	0				1740	0	1442
Q Serve(g_s), s	0.0	6.9	0.0	4.0	6.3	0.0				9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.9	0.0	4.0	6.3	0.0				9.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1471	690	158	2085	0				333	0	276
V/C Ratio(X)	0.00	0.39	0.00	0.78	0.35	0.00				0.84	0.00	0.00
Avail Cap(c_a), veh/h	0	1471	690	206	2085	0				420	0	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.83	0.00	0.87	0.87	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.5	0.0	26.8	5.7	0.0				23.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	11.7	0.4	0.0				11.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	0.0	2.5	3.0	0.0				5.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	12.1	0.0	38.5	6.1	0.0				35.2	0.0	0.0
LnGrp LOS		B		D	A					D		
Approach Vol, veh/h		568			850						280	
Approach Delay, s/veh		12.1			10.8						35.2	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.6	32.5		17.0		43.0		
Change Period (Y+Rc), s	* 5.3	* 6.3		5.5		* 6.3		
Max Green Setting (Gmax), s	* 6.3	* 22		14.5		* 34		
Max Q Clear Time (g_c+I1), s	10.0	8.9		11.3		8.3		
Green Ext Time (p_c), s	0.0	6.8		0.3		9.8		

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

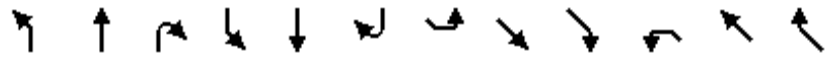
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	679	0	0	470	104	295	0	99	0	0	0
Future Volume (veh/h)	113	679	0	0	470	104	295	0	99	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1827	0	0	1813	1900	1810	1810	1900			
Adj Flow Rate, veh/h	126	754	0	0	522	116	328	0	0			
Adj No. of Lanes	1	2	0	0	2	0	2	0	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	14	4	0	0	5	5	5	2	0			
Cap, veh/h	155	2209	0	0	1240	274	451	0	212			
Arrive On Green	0.10	0.64	0.00	0.00	0.44	0.44	0.13	0.00	0.00			
Sat Flow, veh/h	1587	3563	0	0	2895	621	3447	0	1615			
Grp Volume(v), veh/h	126	754	0	0	320	318	328	0	0			
Grp Sat Flow(s),veh/h/ln	1587	1736	0	0	1722	1703	1723	0	1615			
Q Serve(g_s), s	4.3	5.6	0.0	0.0	7.0	7.1	5.0	0.0	0.0			
Cycle Q Clear(g_c), s	4.3	5.6	0.0	0.0	7.0	7.1	5.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.36	1.00		1.00			
Lane Grp Cap(c), veh/h	155	2209	0	0	761	753	451	0	212			
V/C Ratio(X)	0.81	0.34	0.00	0.00	0.42	0.42	0.73	0.00	0.00			
Avail Cap(c_a), veh/h	211	2209	0	0	761	753	551	0	258			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.85	0.85	0.00	0.00	0.80	0.80	1.00	0.00	0.00			
Uniform Delay (d), s/veh	24.3	4.6	0.0	0.0	10.5	10.5	23.0	0.0	0.0			
Incr Delay (d2), s/veh	13.4	0.4	0.0	0.0	0.3	0.3	3.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	2.7	0.0	0.0	3.3	3.3	2.6	0.0	0.0			
LnGrp Delay(d),s/veh	37.7	5.0	0.0	0.0	10.8	10.8	26.7	0.0	0.0			
LnGrp LOS	D	A			B	B	C					
Approach Vol, veh/h		880			638			328				
Approach Delay, s/veh		9.7			10.8			26.7				
Approach LOS		A			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		41.3		13.7	10.7	30.6		
Change Period (Y+Rc), s		* 6.3		6.5	* 5.3	* 6.3		
Max Green Setting (Gmax), s		* 33		8.8	* 7.3	* 21		
Max Q Clear Time (g_c+I1), s		7.6		7.0	6.3	9.1		
Green Ext Time (p_c), s		10.3		0.2	0.0	6.6		

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	258	514	6	2	174	20	35	2	391	9	1	8
Future Volume (veh/h)	258	514	6	2	174	20	35	2	391	9	1	8
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1845	1900	1900	1745	1810	1900	1855	1827	1900	1900	1900
Adj Flow Rate, veh/h	287	571	7	2	193	22	39	2	434	10	1	9
Adj No. of Lanes	1	1	1	0	1	1	0	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	3	0	9	9	5	50	50	4	0	0	0
Cap, veh/h	446	787	689	67	380	336	475	21	405	381	61	553
Arrive On Green	0.10	0.43	0.43	0.22	0.22	0.22	0.26	0.26	0.26	0.01	0.37	0.37
Sat Flow, veh/h	1723	1845	1615	4	1735	1538	1332	82	1553	1810	164	1476
Grp Volume(v), veh/h	287	571	7	195	0	22	41	0	434	10	0	10
Grp Sat Flow(s),veh/h/ln	1723	1845	1615	1739	0	1538	1413	0	1553	1810	0	1640
Q Serve(g_s), s	5.7	14.1	0.1	0.0	0.0	0.6	1.1	0.0	14.3	0.2	0.0	0.2
Cycle Q Clear(g_c), s	5.7	14.1	0.1	5.4	0.0	0.6	1.2	0.0	14.3	0.2	0.0	0.2
Prop In Lane	1.00		1.00	0.01		1.00	0.95		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	446	787	689	447	0	336	496	0	405	381	0	615
V/C Ratio(X)	0.64	0.73	0.01	0.44	0.00	0.07	0.08	0.00	1.07	0.03	0.00	0.02
Avail Cap(c_a), veh/h	446	1012	886	657	0	524	496	0	405	495	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	13.1	9.1	18.9	0.0	17.0	15.4	0.0	20.3	13.3	0.0	10.8
Incr Delay (d2), s/veh	3.1	1.9	0.0	0.7	0.0	0.1	0.1	0.0	65.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.6	0.1	2.7	0.0	0.3	0.5	0.0	13.4	0.1	0.0	0.1
LnGrp Delay(d),s/veh	18.6	15.0	9.1	19.5	0.0	17.1	15.5	0.0	85.6	13.4	0.0	10.8
LnGrp LOS	B	B	A	B		B	B		F	B		B
Approach Vol, veh/h		865			217			475			20	
Approach Delay, s/veh		16.1			19.3			79.6			12.1	
Approach LOS		B			B			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Phs Duration (G+Y+Rc), s		28.6	6.3	20.0	11.4	17.2		26.3
Change Period (Y+Rc), s		* 5.2	5.7	5.7	5.7	* 5.2		5.7
Max Green Setting (Gmax), s		* 30	4.0	14.3	5.7	* 19		24.0
Max Q Clear Time (g_c+I1), s		16.1	2.2	16.3	7.7	7.4		2.2
Green Ext Time (p_c), s		4.2	0.0	0.0	0.0	3.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	451	1598	8	21	670	63	1	59	50	90	65	237
Future Volume (veh/h)	451	1598	8	21	670	63	1	59	50	90	65	237
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1810	1792	1638	1900	1845	1863	1377	1696	1727
Adj Flow Rate, veh/h	501	1776	9	23	744	70	1	66	56	100	72	263
Adj No. of Lanes	2	1	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	0	5	6	16	0	3	2	38	12	10
Cap, veh/h	557	1353	1185	83	1991	814	112	184	158	110	170	387
Arrive On Green	0.16	0.73	0.73	0.02	0.58	0.58	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	3408	1845	1615	1723	3406	1392	1062	1845	1583	934	1696	1468
Grp Volume(v), veh/h	501	1776	9	23	744	70	1	66	56	100	72	263
Grp Sat Flow(s),veh/h/ln	1704	1845	1615	1723	1703	1392	1062	1845	1583	934	1696	1468
Q Serve(g_s), s	21.6	110.0	0.2	0.8	17.4	3.3	0.1	5.0	4.9	10.0	6.0	15.0
Cycle Q Clear(g_c), s	21.6	110.0	0.2	0.8	17.4	3.3	6.1	5.0	4.9	15.0	6.0	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	557	1353	1185	83	1991	814	112	184	158	110	170	387
V/C Ratio(X)	0.90	1.31	0.01	0.28	0.37	0.09	0.01	0.36	0.35	0.91	0.42	0.68
Avail Cap(c_a), veh/h	702	1353	1185	105	1991	814	112	184	158	110	170	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	20.0	5.4	37.5	16.6	13.6	66.3	63.0	63.0	71.9	63.4	49.6
Incr Delay (d2), s/veh	11.9	146.1	0.0	1.3	0.4	0.2	0.0	0.9	1.0	57.0	1.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	110.1	0.1	0.6	8.3	1.3	0.0	2.6	2.2	5.9	2.9	10.2
LnGrp Delay(d),s/veh	73.4	166.1	5.4	38.8	17.0	13.8	66.3	63.9	64.0	128.9	64.7	54.0
LnGrp LOS	E	F	A	D	B	B	E	E	E	F	E	D
Approach Vol, veh/h		2286			837			123			435	
Approach Delay, s/veh		145.1			17.3			63.9			73.0	
Approach LOS		F			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	117.4		22.2	32.7	95.1		22.2
Change Period (Y+Rc), s	7.3	* 7.4		* 7.2	8.2	* 7.4		* 7.2
Max Green Setting (Gmax), s	5.6	* 110		* 15	30.9	* 81		* 15
Max Q Clear Time (g_c+I1), s	12.8	112.0		17.0	23.6	19.4		8.1
Green Ext Time (p_c), s	0.0	0.0		0.0	0.9	61.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	104.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	22	1	173	0	571	96	294	280	0
Future Volume (veh/h)	0	0	0	22	1	173	0	571	96	294	280	0
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1900	1681	0	1810	1900	1759	1743	0
Adj Flow Rate, veh/h				24	1	192	0	634	107	327	311	0
Adj No. of Lanes				0	1	1	0	2	0	1	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				13	0	13	0	5	5	8	9	0
Cap, veh/h				249	10	205	0	1154	194	509	2125	0
Arrive On Green				0.14	0.14	0.14	0.00	0.39	0.39	0.14	0.64	0.00
Sat Flow, veh/h				1740	73	1429	0	3035	496	1675	3399	0
Grp Volume(v), veh/h				25	0	192	0	370	371	327	311	0
Grp Sat Flow(s),veh/h/ln				1813	0	1429	0	1719	1722	1675	1656	0
Q Serve(g_s), s				0.7	0.0	8.0	0.0	10.0	10.0	6.3	2.2	0.0
Cycle Q Clear(g_c), s				0.7	0.0	8.0	0.0	10.0	10.0	6.3	2.2	0.0
Prop In Lane				0.96		1.00	0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h				260	0	205	0	674	675	509	2125	0
V/C Ratio(X)				0.10	0.00	0.94	0.00	0.55	0.55	0.64	0.15	0.00
Avail Cap(c_a), veh/h				260	0	205	0	674	675	621	2125	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh				22.3	0.0	25.4	0.0	14.1	14.1	9.3	4.3	0.0
Incr Delay (d2), s/veh				0.1	0.0	44.9	0.0	3.2	3.2	0.7	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	0.0	5.7	0.0	5.3	5.3	2.9	1.0	0.0
LnGrp Delay(d),s/veh				22.4	0.0	70.3	0.0	17.3	17.4	10.0	4.4	0.0
LnGrp LOS				C		E		B	B	B	A	
Approach Vol, veh/h					217			741			638	
Approach Delay, s/veh					64.8			17.3			7.3	
Approach LOS					E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	30.0		15.0		45.0		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	12.5	19.5		* 8.6		38.5		
Max Q Clear Time (g_c+I1), s	9.3	12.0		10.0		4.2		
Green Ext Time (p_c), s	0.2	5.7		0.0		18.4		

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	419	0	0	531	13	43	162	489	0	0	0
Future Volume (veh/h)	174	419	0	0	531	13	43	162	489	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1810	0	0	1741	1900	1845	1826	1810			
Adj Flow Rate, veh/h	193	466	0	0	590	14	48	452	362			
Adj No. of Lanes	1	2	0	0	2	0	1	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	3	5	0	0	9	9	3	3	5			
Cap, veh/h	431	1798	0	0	1109	26	514	534	450			
Arrive On Green	0.10	0.52	0.00	0.00	0.34	0.34	0.29	0.29	0.29			
Sat Flow, veh/h	1757	3529	0	0	3389	78	1757	1826	1538			
Grp Volume(v), veh/h	193	466	0	0	295	309	48	452	362			
Grp Sat Flow(s),veh/h/ln	1757	1719	0	0	1654	1727	1757	1826	1538			
Q Serve(g_s), s	4.3	4.9	0.0	0.0	9.4	9.4	1.3	15.1	14.2			
Cycle Q Clear(g_c), s	4.3	4.9	0.0	0.0	9.4	9.4	1.3	15.1	14.2			
Prop In Lane	1.00		0.00	0.00		0.05	1.00		1.00			
Lane Grp Cap(c), veh/h	431	1798	0	0	555	580	514	534	450			
V/C Ratio(X)	0.45	0.26	0.00	0.00	0.53	0.53	0.09	0.85	0.81			
Avail Cap(c_a), veh/h	454	1798	0	0	555	580	514	534	450			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.79	0.79	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	11.9	8.6	0.0	0.0	17.5	17.5	16.7	21.6	21.3			
Incr Delay (d2), s/veh	0.8	0.3	0.0	0.0	1.0	0.9	0.4	15.3	14.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	2.3	0.0	0.0	4.4	4.6	0.7	9.8	7.7			
LnGrp Delay(d),s/veh	12.7	8.8	0.0	0.0	18.4	18.4	17.1	36.9	35.5			
LnGrp LOS	B	A			B	B	B	D	D			
Approach Vol, veh/h		659			604			862				
Approach Delay, s/veh		10.0			18.4			35.2				
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		40.0			12.2	27.8		25.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		34.0			7.0	21.0		19.0
Max Q Clear Time (g_c+I1), s		6.9			6.3	11.4		17.1
Green Ext Time (p_c), s		6.8			0.1	4.2		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	838	0	0	493	12	0	0	0	16	0	51
Future Volume (veh/h)	70	838	0	0	493	12	0	0	0	16	0	51
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1810	1900	1863	1746	1900	1900	1863	1900	1681	0	1863
Adj Flow Rate, veh/h	78	931	0	0	548	13	0	0	0	18	0	57
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	1	5	5	2	9	9	2	2	2	13	0	2
Cap, veh/h	141	2216	0	228	1404	33	0	6	0	37	0	0
Arrive On Green	0.08	0.64	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.02	0.00	0.00
Sat Flow, veh/h	1792	3529	0	599	3313	79	0	1765	0	1601	18	
Grp Volume(v), veh/h	78	931	0	0	274	287	0	0	0	18	24.8	
Grp Sat Flow(s),veh/h/ln	1792	1719	0	599	1659	1733	0	1863	0	1601	C	
Q Serve(g_s), s	1.3	4.2	0.0	0.0	3.6	3.6	0.0	0.0	0.0	0.4		
Cycle Q Clear(g_c), s	1.3	4.2	0.0	0.0	3.6	3.6	0.0	0.0	0.0	0.4		
Prop In Lane	1.00		0.00	1.00		0.05	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	141	2216	0	228	703	734	0	6	0	37		
V/C Ratio(X)	0.56	0.42	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.49		
Avail Cap(c_a), veh/h	425	3308	0	323	966	1009	0	1061	0	258		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	14.0	2.7	0.0	0.0	6.3	6.3	0.0	0.0	0.0	15.2		
Incr Delay (d2), s/veh	3.4	0.1	0.0	0.0	0.4	0.3	0.0	0.0	0.0	9.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.8	2.0	0.0	0.0	1.7	1.7	0.0	0.0	0.0	0.2		
LnGrp Delay(d),s/veh	17.4	2.9	0.0	0.0	6.6	6.6	0.0	0.0	0.0	24.8		
LnGrp LOS	B	A			A	A				C		
Approach Vol, veh/h		1009			561			0				
Approach Delay, s/veh		4.0			6.6			0.0				
Approach LOS		A			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6	7	8
Phs Duration (G+Y+Rc), s		26.4			7.0	19.4	5.2	0.0
Change Period (Y+Rc), s		6.0			4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s		30.4			7.5	18.4	5.1	18.0
Max Q Clear Time (g_c+I1), s		6.2			3.3	5.6	2.4	0.0
Green Ext Time (p_c), s		11.5			0.0	7.8	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		5.2
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	328	24	6	275	254	24	65	2	256	60	68
Future Volume (veh/h)	104	328	24	6	275	254	24	65	2	256	60	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1811	1900	1624	1853	1900	1900	1763	1900	1881	1863	1900
Adj Flow Rate, veh/h	116	364	27	7	306	282	27	72	2	284	67	76
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	5	5	17	4	4	0	8	8	1	2	0
Cap, veh/h	593	2218	164	542	933	834	261	567	16	562	317	275
Arrive On Green	0.09	0.68	0.68	0.53	0.53	0.53	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1774	3249	240	862	1760	1575	1265	3329	92	2587	1863	1615
Grp Volume(v), veh/h	116	192	199	7	306	282	27	36	38	284	67	76
Grp Sat Flow(s),veh/h/ln	1774	1720	1768	862	1760	1575	1265	1675	1747	1293	1863	1615
Q Serve(g_s), s	2.1	3.4	3.4	0.3	8.4	8.7	1.6	1.6	1.6	8.9	2.6	3.5
Cycle Q Clear(g_c), s	2.1	3.4	3.4	0.3	8.4	8.7	4.2	1.6	1.6	10.5	2.6	3.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	593	1174	1207	542	933	834	261	285	297	562	317	275
V/C Ratio(X)	0.20	0.16	0.16	0.01	0.33	0.34	0.10	0.13	0.13	0.51	0.21	0.28
Avail Cap(c_a), veh/h	614	1174	1207	542	933	834	462	552	575	974	614	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.91	0.91	0.91	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.6	4.8	4.8	9.5	11.4	11.4	32.2	29.9	29.9	34.3	30.3	30.7
Incr Delay (d2), s/veh	0.2	0.3	0.3	0.0	0.2	0.2	0.2	0.2	0.2	0.7	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.7	1.8	0.1	4.1	3.8	0.6	0.7	0.8	3.2	1.4	1.6
LnGrp Delay(d),s/veh	6.8	5.1	5.1	9.5	11.6	11.7	32.3	30.1	30.1	35.0	30.7	31.2
LnGrp LOS	A	A	A	A	B	B	C	C	C	D	C	C
Approach Vol, veh/h		507			595			101			427	
Approach Delay, s/veh		5.5			11.6			30.7			33.7	
Approach LOS		A			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		64.5		20.5	13.0	51.5		20.5
Change Period (Y+Rc), s		6.5		6.0	5.5	* 6.5		6.0
Max Green Setting (Gmax), s		44.5		28.0	8.5	* 31		28.0
Max Q Clear Time (g_c+I1), s		5.4		12.5	4.1	10.7		6.2
Green Ext Time (p_c), s		6.4		2.0	0.1	5.6		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	464	64	11	51	55	234	29	960	59	242	519	441
Future Volume (veh/h)	464	64	11	51	55	234	29	960	59	242	519	441
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1812	1900	1610	1712	1293	1900	1811	1900	1583	1827	1863
Adj Flow Rate, veh/h	516	71	12	57	61	260	32	1067	66	269	577	490
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	5	5	18	11	47	0	4	4	20	4	2
Cap, veh/h	268	470	79	479	494	317	252	1426	88	148	1504	686
Arrive On Green	0.08	0.31	0.31	0.06	0.29	0.29	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	3442	1511	255	1533	1712	1099	537	3291	204	421	3471	1583
Grp Volume(v), veh/h	516	0	83	57	61	260	32	557	576	269	577	490
Grp Sat Flow(s),veh/h/ln	1721	0	1767	1533	1712	1099	537	1720	1775	421	1736	1583
Q Serve(g_s), s	7.0	0.0	3.1	2.3	2.4	19.8	3.9	24.5	24.5	14.5	10.2	22.9
Cycle Q Clear(g_c), s	7.0	0.0	3.1	2.3	2.4	19.8	14.0	24.5	24.5	39.0	10.2	22.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	268	0	550	479	494	317	252	745	769	148	1504	686
V/C Ratio(X)	1.93	0.00	0.15	0.12	0.12	0.82	0.13	0.75	0.75	1.82	0.38	0.71
Avail Cap(c_a), veh/h	268	0	550	496	494	317	252	745	769	148	1504	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	22.4	20.1	23.6	29.8	22.1	21.4	21.4	41.7	17.3	20.9
Incr Delay (d2), s/veh	430.2	0.0	0.5	0.1	0.1	15.5	0.2	4.0	3.9	393.9	0.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.3	0.0	1.6	1.0	1.1	7.4	0.6	12.3	12.7	19.8	4.8	10.6
LnGrp Delay(d),s/veh	471.7	0.0	23.0	20.2	23.7	45.3	22.3	25.4	25.2	435.5	17.5	24.4
LnGrp LOS	F		C	C	C	D	C	C	C	F	B	C
Approach Vol, veh/h		599			378			1165			1336	
Approach Delay, s/veh		409.5			38.0			25.2			104.2	
Approach LOS		F			D			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	34.0		45.0	13.0	32.0		45.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	6.0	27.0		39.0	7.0	26.0		39.0
Max Q Clear Time (g_c+I1), s	14.3	5.1		41.0	9.0	21.8		26.5
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.7		10.9

Intersection Summary		
HCM 2010 Ctrl Delay	123.1	
HCM 2010 LOS	F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	69	1100	84	52	13	705	303	287	13	143	17
Future Volume (veh/h)	55	69	1100	84	52	13	705	303	287	13	143	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1778	1900	1845	1845	1881	1301	1759	1792
Adj Flow Rate, veh/h	68	76	0	87	171	28	775	348	0	20	164	0
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.81	0.91	0.93	0.57	0.60	0.47	0.91	0.87	0.83	0.65	0.87	0.50
Percent Heavy Veh, %	2	0	2	2	0	0	3	3	1	46	8	6
Cap, veh/h	259	329	274	298	518	83	1504	1600	730	364	967	441
Arrive On Green	0.17	0.17	0.00	0.17	0.17	0.17	0.20	0.46	0.00	0.03	0.29	0.00
Sat Flow, veh/h	1179	1900	1583	1318	2991	481	3408	3505	1599	1239	3343	1524
Grp Volume(v), veh/h	68	76	0	87	100	99	775	348	0	20	164	0
Grp Sat Flow(s),veh/h/ln	1179	1900	1583	1318	1778	1693	1704	1752	1599	1239	1671	1524
Q Serve(g_s), s	3.3	2.1	0.0	3.8	3.1	3.2	8.8	3.7	0.0	0.7	2.3	0.0
Cycle Q Clear(g_c), s	6.5	2.1	0.0	5.9	3.1	3.2	8.8	3.7	0.0	0.7	2.3	0.0
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	329	274	298	308	293	1504	1600	730	364	967	441
V/C Ratio(X)	0.26	0.23	0.00	0.29	0.33	0.34	0.52	0.22	0.00	0.05	0.17	0.00
Avail Cap(c_a), veh/h	1457	2260	1883	1638	2115	2014	1753	1600	730	463	967	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.5	22.2	0.0	24.7	22.5	22.6	9.4	10.2	0.0	14.5	16.5	0.0
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.5	0.6	0.7	0.3	0.3	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.2	0.0	1.4	1.6	1.5	4.0	1.9	0.0	0.2	1.1	0.0
LnGrp Delay(d),s/veh	26.0	22.5	0.0	25.2	23.2	23.3	9.7	10.5	0.0	14.6	16.9	0.0
LnGrp LOS	C	C		C	C	C	A	B		B	B	
Approach Vol, veh/h		144			286			1123			184	
Approach Delay, s/veh		24.2			23.8			10.0			16.7	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	35.4		17.8	19.4	25.0		17.8
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0
Max Green Setting (Gmax), s	7.0	28.0		74.0	17.0	18.0		74.0
Max Q Clear Time (g_c+I1), s	2.7	5.7		8.5	10.8	4.3		7.9
Green Ext Time (p_c), s	0.0	3.0		2.2	1.7	2.5		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1227	0	0	1223	179	0	0	0	167	0	167
Future Volume (veh/h)	120	1227	0	0	1223	179	0	0	0	167	0	167
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	0	1863	1845	1847	1900	1863	1900	1863	0	1792
Adj Flow Rate, veh/h	130	1334	0	0	1359	0	0	0	0	186	0	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	0	2	3	7	2	2	2	2	0	6
Cap, veh/h	107	2875	0	2	2479	1110	0	2	0	259	0	0
Arrive On Green	0.06	0.82	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Sat Flow, veh/h	1757	3597	0	1774	3505	1570	0	111765	0	3442	186	
Grp Volume(v), veh/h	130	1334	0	0	1359	0	0	0	0	186	55.7	
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1774	1752	1570	0	1863	0	1721	E	
Q Serve(g_s), s	7.0	12.7	0.0	0.0	21.3	0.0	0.0	0.0	0.0	6.1		
Cycle Q Clear(g_c), s	7.0	12.7	0.0	0.0	21.3	0.0	0.0	0.0	0.0	6.1		
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	107	2875	0	2	2479	1110	0	2	0	259		
V/C Ratio(X)	1.22	0.46	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.72		
Avail Cap(c_a), veh/h	107	2875	0	108	2479	1110	0	292	0	988		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.29	0.29	0.00	0.00	0.75	0.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	54.0	3.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	52.0		
Incr Delay (d2), s/veh	119.5	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	3.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.9	6.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	3.0		
LnGrp Delay(d),s/veh	173.5	3.2	0.0	0.0	8.2	0.0	0.0	0.0	0.0	55.7		
LnGrp LOS	F	A			A					E		
Approach Vol, veh/h		1464			1359			0				
Approach Delay, s/veh		18.3			8.2			0.0				
Approach LOS		B			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	100.3			13.0	87.3	14.7	0.0
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	33.0			7.0	31.5	33.0	18.0
Max Q Clear Time (g_c+I1), s	10.0	14.7			9.0	23.3	8.1	0.0
Green Ext Time (p_c), s	0.0	15.4			0.0	3.8	0.6	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	16.1	
HCM 2010 LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	976	418	178	740	0	0	0	0	148	180	662
Future Volume (veh/h)	0	976	418	178	740	0	0	0	0	148	180	662
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1863	0				1827	1749	1827
Adj Flow Rate, veh/h	0	1084	0	198	822	0				164	200	736
Adj No. of Lanes	0	2	1	1	2	0				1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	3	2	0				4	9	4
Cap, veh/h	0	1260	564	337	2007	0				447	450	799
Arrive On Green	0.00	0.36	0.00	0.11	0.57	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3597	1568	1757	3632	0				1740	1749	3106
Grp Volume(v), veh/h	0	1084	0	198	822	0				164	200	736
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1770	0				1740	1749	1553
Q Serve(g_s), s	0.0	20.1	0.0	4.4	9.2	0.0				5.4	6.7	16.2
Cycle Q Clear(g_c), s	0.0	20.1	0.0	4.4	9.2	0.0				5.4	6.7	16.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1260	564	337	2007	0				447	450	799
V/C Ratio(X)	0.00	0.86	0.00	0.59	0.41	0.00				0.37	0.44	0.92
Avail Cap(c_a), veh/h	0	1260	564	341	2007	0				447	450	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.87	0.00	0.86	0.86	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.8	0.0	14.7	8.5	0.0				21.3	21.8	25.3
Incr Delay (d2), s/veh	0.0	6.9	0.0	1.5	0.5	0.0				0.2	0.3	15.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	0.0	2.2	4.6	0.0				2.6	3.3	8.6
LnGrp Delay(d),s/veh	0.0	27.7	0.0	16.1	9.1	0.0				21.5	22.1	41.0
LnGrp LOS		C		B	A					C	C	D
Approach Vol, veh/h		1084			1020						1100	
Approach Delay, s/veh		27.7			10.4						34.7	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.5	31.5		24.0		46.0		
Change Period (Y+Rc), s	6.7	6.3		6.0		6.3		
Max Green Setting (Gmax), s	8.0	25.0		18.0		39.7		
Max Q Clear Time (g_c+I1), s	6.4	22.1		18.2		11.2		
Green Ext Time (p_c), s	0.0	2.3		0.0		12.8		

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	529	595	0	0	471	249	33	106	210	0	0	0
Future Volume (veh/h)	529	595	0	0	471	249	33	106	210	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1845	0	0	1810	1827	1743	1776	1881			
Adj Flow Rate, veh/h	581	654	0	0	523	0	37	118	233			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	4	3	0	0	5	4	9	7	1			
Cap, veh/h	612	2438	0	0	928	419	278	298	268			
Arrive On Green	0.35	0.70	0.00	0.00	0.27	0.00	0.17	0.17	0.17			
Sat Flow, veh/h	1740	3597	0	0	3529	1553	1660	1776	1599			
Grp Volume(v), veh/h	581	654	0	0	523	0	37	118	233			
Grp Sat Flow(s),veh/h/ln	1740	1752	0	0	1719	1553	1660	1776	1599			
Q Serve(g_s), s	29.3	6.3	0.0	0.0	11.8	0.0	1.7	5.3	12.8			
Cycle Q Clear(g_c), s	29.3	6.3	0.0	0.0	11.8	0.0	1.7	5.3	12.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	612	2438	0	0	928	419	278	298	268			
V/C Ratio(X)	0.95	0.27	0.00	0.00	0.56	0.00	0.13	0.40	0.87			
Avail Cap(c_a), veh/h	663	2438	0	0	928	419	332	355	320			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.57	0.57	0.00	0.00	0.91	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.4	5.1	0.0	0.0	28.3	0.0	31.9	33.4	36.5			
Incr Delay (d2), s/veh	14.9	0.2	0.0	0.0	2.3	0.0	0.1	0.3	17.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	16.6	3.0	0.0	0.0	5.9	0.0	0.8	2.6	6.9			
LnGrp Delay(d),s/veh	43.3	5.3	0.0	0.0	30.6	0.0	32.0	33.7	53.8			
LnGrp LOS	D	A			C		C	C	D			
Approach Vol, veh/h		1235			523			388				
Approach Delay, s/veh		23.2			30.6			45.6				
Approach LOS		C			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.9			38.3	30.6		21.1
Change Period (Y+Rc), s		6.3			* 6.7	6.3		6.0
Max Green Setting (Gmax), s		59.7			* 34	18.7		18.0
Max Q Clear Time (g_c+I1), s		8.3			31.3	13.8		14.8
Green Ext Time (p_c), s		5.4			0.4	2.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	408	9	8	421	112	8	1	3	62	6	291
Future Volume (veh/h)	388	408	9	8	421	112	8	1	3	62	6	291
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1810	1900	1900	1792	1863	1900	1900	1900	1863	1818	1845
Adj Flow Rate, veh/h	431	453	0	9	468	0	10	0	0	69	7	0
Adj No. of Lanes	2	2	1	1	2	1	2	0	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	5	0	0	6	2	0	0	0	2	17	3
Cap, veh/h	1730	573	269	1014	568	264	70	0	31	249	128	110
Arrive On Green	0.50	0.17	0.00	0.50	0.17	0.00	0.02	0.00	0.00	0.07	0.07	0.00
Sat Flow, veh/h	3476	3438	1615	1810	3406	1583	3619	0	1615	3548	1818	1568
Grp Volume(v), veh/h	431	453	0	9	468	0	10	0	0	69	7	0
Grp Sat Flow(s),veh/h/ln	1738	1719	1615	1810	1703	1583	1810	0	1615	1774	1818	1568
Q Serve(g_s), s	7.1	12.6	0.0	0.0	13.3	0.0	0.3	0.0	0.0	1.8	0.4	0.0
Cycle Q Clear(g_c), s	7.1	12.6	0.0	0.0	13.3	0.0	0.3	0.0	0.0	1.8	0.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1730	573	269	1014	568	264	70	0	31	249	128	110
V/C Ratio(X)	0.25	0.79	0.00	0.01	0.82	0.00	0.14	0.00	0.00	0.28	0.05	0.00
Avail Cap(c_a), veh/h	1730	763	359	1014	671	312	832	0	371	816	418	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.00	0.97	0.97	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.4	40.0	0.0	10.7	40.3	0.0	48.2	0.0	0.0	44.1	43.4	0.0
Incr Delay (d2), s/veh	0.1	10.1	0.0	0.0	7.6	0.0	0.9	0.0	0.0	0.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	6.8	0.0	0.1	6.8	0.0	0.1	0.0	0.0	0.9	0.2	0.0
LnGrp Delay(d),s/veh	14.5	50.1	0.0	10.7	47.8	0.0	49.1	0.0	0.0	44.7	43.6	0.0
LnGrp LOS	B	D		B	D		D			D	D	
Approach Vol, veh/h		884			477			10			76	
Approach Delay, s/veh		32.7			47.1			49.1			44.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	56.3	22.2		13.3	56.1	22.4		8.2
Change Period (Y+Rc), s	6.3	* 5.5		* 6.3	* 6.3	* 5.7		6.3
Max Green Setting (Gmax), s	38.0	* 22		* 23	* 9.7	* 20		23.0
Max Q Clear Time (g_c+I1), s	12.0	14.6		3.8	9.1	15.3		2.3
Green Ext Time (p_c), s	0.8	2.0		0.2	0.1	1.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑						↑↑↑	↱
Traffic Volume (veh/h)	0	0	0	0	148	0	0	0	0	0	1751	888
Future Volume (veh/h)	0	0	0	0	148	0	0	0	0	0	1751	888
Number				7	4	14				5	2	12
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				0	1810	0				0	1827	1863
Adj Flow Rate, veh/h				0	164	0				0	1946	0
Adj No. of Lanes				0	2	0				0	3	1
Peak Hour Factor				0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %				0	5	0				0	4	2
Cap, veh/h				0	377	0				0	3565	1132
Arrive On Green				0.00	0.11	0.00				0.00	0.71	0.00
Sat Flow, veh/h				0	3619	0				0	5152	1583
Grp Volume(v), veh/h				0	164	0				0	1946	0
Grp Sat Flow(s),veh/h/ln				0	1719	0				0	1663	1583
Q Serve(g_s), s				0.0	3.1	0.0				0.0	12.8	0.0
Cycle Q Clear(g_c), s				0.0	3.1	0.0				0.0	12.8	0.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	377	0				0	3565	1132
V/C Ratio(X)				0.00	0.44	0.00				0.00	0.55	0.00
Avail Cap(c_a), veh/h				0	933	0				0	3565	1132
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	29.1	0.0				0.0	4.7	0.0
Incr Delay (d2), s/veh				0.0	0.8	0.0				0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	1.5	0.0				0.0	6.0	0.0
LnGrp Delay(d),s/veh				0.0	29.9	0.0				0.0	5.3	0.0
LnGrp LOS					C						A	
Approach Vol, veh/h					164						1946	
Approach Delay, s/veh					29.9						5.3	
Approach LOS					C						A	

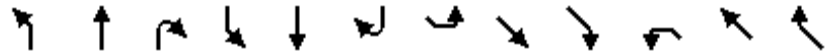
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		56.3		13.7				
Change Period (Y+Rc), s		6.3		6.0				
Max Green Setting (Gmax), s		38.7		19.0				
Max Q Clear Time (g_c+I1), s		14.8		5.1				
Green Ext Time (p_c), s		19.5		0.7				

Intersection Summary		
HCM 2010 Ctrl Delay		7.2
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	583	0	0	0	0	0	652	107	0	0	0
Future Volume (veh/h)	0	583	0	0	0	0	0	652	107	0	0	0
Number	3	8	18				1	6	16			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1776	0				0	1810	1329			
Adj Flow Rate, veh/h	0	648	0				0	724	0			
Adj No. of Lanes	0	2	0				0	3	1			
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90			
Percent Heavy Veh, %	0	7	0				0	5	43			
Cap, veh/h	0	791	0				0	2913	666			
Arrive On Green	0.00	0.23	0.00				0.00	0.59	0.00			
Sat Flow, veh/h	0	3551	0				0	5103	1129			
Grp Volume(v), veh/h	0	648	0				0	724	0			
Grp Sat Flow(s),veh/h/ln	0	1687	0				0	1647	1129			
Q Serve(g_s), s	0.0	12.7	0.0				0.0	4.9	0.0			
Cycle Q Clear(g_c), s	0.0	12.7	0.0				0.0	4.9	0.0			
Prop In Lane	0.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	0	791	0				0	2913	666			
V/C Ratio(X)	0.00	0.82	0.00				0.00	0.25	0.00			
Avail Cap(c_a), veh/h	0	916	0				0	2913	666			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00				0.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	25.4	0.0				0.0	6.9	0.0			
Incr Delay (d2), s/veh	0.0	5.2	0.0				0.0	0.2	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	6.5	0.0				0.0	2.3	0.0			
LnGrp Delay(d),s/veh	0.0	30.6	0.0				0.0	7.1	0.0			
LnGrp LOS		C						A				
Approach Vol, veh/h		648						724				
Approach Delay, s/veh		30.6						7.1				
Approach LOS		C						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		8
Phs Duration (G+Y+Rc), s						47.6		22.4
Change Period (Y+Rc), s						6.3		6.0
Max Green Setting (Gmax), s						38.7		19.0
Max Q Clear Time (g_c+I1), s						6.9		14.7
Green Ext Time (p_c), s						8.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	266	1420	0	0	891	199	0	0	0	394	0	290
Future Volume (veh/h)	266	1420	0	0	891	199	0	0	0	394	0	290
Number	3	8	18	7	4	14				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1484	1810	0	0	1776	1610				1810	0	1827
Adj Flow Rate, veh/h	292	1560	0	0	990	0				438	0	0
Adj No. of Lanes	2	3	0	0	3	1				2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	28	5	0	0	7	18				5	0	4
Cap, veh/h	371	3227	0	0	2124	600				624	0	290
Arrive On Green	0.14	0.65	0.00	0.00	0.44	0.00				0.19	0.00	0.00
Sat Flow, veh/h	2743	5103	0	0	5007	1369				3343	0	1553
Grp Volume(v), veh/h	292	1560	0	0	990	0				438	0	0
Grp Sat Flow(s),veh/h/ln	1371	1647	0	0	1616	1369				1672	0	1553
Q Serve(g_s), s	7.7	12.0	0.0	0.0	10.8	0.0				9.2	0.0	0.0
Cycle Q Clear(g_c), s	7.7	12.0	0.0	0.0	10.8	0.0				9.2	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	371	3227	0	0	2124	600				624	0	290
V/C Ratio(X)	0.79	0.48	0.00	0.00	0.47	0.00				0.70	0.00	0.00
Avail Cap(c_a), veh/h	512	3227	0	0	2124	600				624	0	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.80	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	31.4	6.6	0.0	0.0	14.9	0.0				28.5	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.5	0.0	0.0	0.6	0.0				6.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	5.5	0.0	0.0	4.9	0.0				4.8	0.0	0.0
LnGrp Delay(d),s/veh	36.9	7.1	0.0	0.0	15.5	0.0				35.0	0.0	0.0
LnGrp LOS	D	A			B					D		
Approach Vol, veh/h		1852			990						438	
Approach Delay, s/veh		11.8			15.5						35.0	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			16.1	38.9		20.0		55.0
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			14.0	29.0		14.0		49.0
Max Q Clear Time (g_c+I1), s			9.7	12.8		11.2		14.0
Green Ext Time (p_c), s			0.4	14.9		0.5		30.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	73	41	41	0	1161	404
Future Volume (veh/h)	73	41	41	0	1161	404
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1810	1863	0	1776	1845
Adj Flow Rate, veh/h	81	46	45	0	1290	449
Adj No. of Lanes	1	1	1	0	3	1
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90
Percent Heavy Veh, %	10	5	2	0	7	3
Cap, veh/h	218	204	132	0	2235	723
Arrive On Green	0.13	0.13	0.07	0.00	0.46	0.46
Sat Flow, veh/h	1645	1538	1774	45	5007	1568
Grp Volume(v), veh/h	81	46	45	23.5	1290	449
Grp Sat Flow(s),veh/h/ln	1645	1538	1774	C	1616	1568
Q Serve(g_s), s	2.2	1.3	1.2		9.8	10.8
Cycle Q Clear(g_c), s	2.2	1.3	1.2		9.8	10.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	218	204	132		2235	723
V/C Ratio(X)	0.37	0.23	0.34		0.58	0.62
Avail Cap(c_a), veh/h	263	246	284		2235	723
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	19.8	19.4	22.0		9.9	10.2
Incr Delay (d2), s/veh	1.0	0.6	1.5		1.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.6	0.6		4.5	5.4
LnGrp Delay(d),s/veh	20.8	19.9	23.5		11.0	14.2
LnGrp LOS	C	B	C		B	B
Approach Vol, veh/h	127				1739	
Approach Delay, s/veh	20.5				11.8	
Approach LOS	C				B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	9.1	28.9						12.0
Change Period (Y+Rc), s	5.4	5.8						5.4
Max Green Setting (Gmax), s	8.0	17.4						8.0
Max Q Clear Time (g_c+I1), s	3.2	12.8						4.2
Green Ext Time (p_c), s	0.0	3.9						0.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	32	181	114	8	16	452	1018	240	28	795	51
Future Volume (veh/h)	18	32	181	114	8	16	452	1018	240	28	795	51
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1900	1792	1462	1691	1900	1881	1810	1681	1776	1792	1863
Adj Flow Rate, veh/h	20	36	0	127	9	18	502	1131	267	31	883	0
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	0	6	30	25	25	1	5	13	7	6	2
Cap, veh/h	309	313	251	270	83	166	545	1717	714	58	1844	597
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.16	0.16	0.50	0.50	0.03	0.38	0.00
Sat Flow, veh/h	1326	1900	1524	1072	504	1009	3476	3438	1429	1691	4893	1583
Grp Volume(v), veh/h	20	36	0	127	0	27	502	1131	267	31	883	0
Grp Sat Flow(s),veh/h/ln	1326	1900	1524	1072	0	1513	1738	1719	1429	1691	1631	1583
Q Serve(g_s), s	0.8	1.0	0.0	7.4	0.0	1.0	9.3	15.9	7.5	1.2	8.9	0.0
Cycle Q Clear(g_c), s	1.8	1.0	0.0	8.5	0.0	1.0	9.3	15.9	7.5	1.2	8.9	0.0
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	313	251	270	0	249	545	1717	714	58	1844	597
V/C Ratio(X)	0.06	0.12	0.00	0.47	0.00	0.11	0.92	0.66	0.37	0.53	0.48	0.00
Avail Cap(c_a), veh/h	441	503	403	377	0	400	545	1717	714	135	1844	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.83	0.83	0.83	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	23.1	0.0	26.7	0.0	23.1	27.0	12.1	10.0	30.9	15.4	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	1.3	0.0	0.2	18.3	1.7	1.2	5.6	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.6	0.0	2.3	0.0	0.4	5.8	7.9	3.1	0.6	4.2	0.0
LnGrp Delay(d),s/veh	24.0	23.3	0.0	28.0	0.0	23.3	45.3	13.8	11.2	36.4	16.3	0.0
LnGrp LOS	C	C		C		C	D	B	B	D	B	
Approach Vol, veh/h		56			154			1900			914	
Approach Delay, s/veh		23.5			27.2			21.7			17.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	30.5		17.5	9.0	38.5		17.5
Change Period (Y+Rc), s	* 6.8	6.0		* 6.8	* 6.8	6.0		* 6.8
Max Green Setting (Gmax), s	* 10	18.0		* 17	* 5.2	23.0		* 17
Max Q Clear Time (g_c+I1), s	3.8	10.9		10.5	3.2	17.9		3.8
Green Ext Time (p_c), s	0.0	6.5		0.5	0.0	4.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	399	299	59	62	45	136	809	319	309	1456	66
Future Volume (veh/h)	128	399	299	59	62	45	136	809	319	309	1456	66
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1824	1900	1450	1497	1900	1827	1753	1900	1759	1831	1900
Adj Flow Rate, veh/h	142	443	332	66	69	50	151	899	354	343	1618	73
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	5	5	31	24	24	4	5	5	8	3	3
Cap, veh/h	412	519	387	139	431	286	250	819	321	288	1518	68
Arrive On Green	0.05	0.27	0.27	0.04	0.26	0.26	0.04	0.35	0.35	0.14	0.45	0.45
Sat Flow, veh/h	1660	1895	1413	1381	1640	1087	3375	2340	916	1675	3391	152
Grp Volume(v), veh/h	142	405	370	66	59	60	151	638	615	343	827	864
Grp Sat Flow(s),veh/h/ln	1660	1733	1575	1381	1422	1305	1688	1665	1591	1675	1739	1804
Q Serve(g_s), s	7.5	30.6	30.9	4.8	4.4	4.9	3.9	48.4	48.4	19.5	61.9	61.9
Cycle Q Clear(g_c), s	7.5	30.6	30.9	4.8	4.4	4.9	3.9	48.4	48.4	19.5	61.9	61.9
Prop In Lane	1.00		0.90	1.00		0.83	1.00		0.58	1.00		0.08
Lane Grp Cap(c), veh/h	412	474	431	139	374	343	250	583	557	288	778	807
V/C Ratio(X)	0.35	0.85	0.86	0.47	0.16	0.18	0.60	1.10	1.10	1.19	1.06	1.07
Avail Cap(c_a), veh/h	412	564	512	139	447	410	250	583	557	288	778	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	47.6	47.7	38.5	39.2	39.4	35.1	45.0	45.0	45.3	38.2	38.2
Incr Delay (d2), s/veh	0.4	11.1	12.5	1.9	0.2	0.3	3.6	66.1	69.9	114.7	50.0	52.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	16.1	15.0	1.9	1.8	1.8	1.9	32.9	32.0	20.2	40.4	42.5
LnGrp Delay(d),s/veh	36.4	58.7	60.2	40.4	39.5	39.7	38.7	111.1	114.9	160.0	88.2	90.5
LnGrp LOS	D	E	E	D	D	D	D	F	F	F	F	F
Approach Vol, veh/h		917			185			1404			2034	
Approach Delay, s/veh		55.9			39.9			105.0			101.3	
Approach LOS		E			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	68.4	14.0	43.5	26.0	54.9	12.5	45.0
Change Period (Y+Rc), s	6.5	6.5	6.5	7.1	6.5	* 6.5	6.5	7.1
Max Green Setting (Gmax), s	6.0	61.4	7.5	43.5	19.5	* 48	6.0	45.0
Max Q Clear Time (g_c+I1), s	6.9	63.9	9.5	6.9	21.5	50.4	6.8	32.9
Green Ext Time (p_c), s	0.0	0.0	0.0	7.8	0.0	0.0	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	90.8
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	604	315	125	660	1280	534
Future Volume (veh/h)	604	315	125	660	1280	534
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1782	1900	1810	1792	1845	1810
Adj Flow Rate, veh/h	671	0	139	733	1422	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	0	5	6	3	5
Cap, veh/h	790	376	247	2148	1743	765
Arrive On Green	0.23	0.00	0.06	0.63	0.50	0.00
Sat Flow, veh/h	3395	1615	1723	3495	3597	1538
Grp Volume(v), veh/h	671	0	139	733	1422	0
Grp Sat Flow(s),veh/h/ln	1697	1615	1723	1703	1752	1538
Q Serve(g_s), s	17.0	0.0	3.3	9.1	30.9	0.0
Cycle Q Clear(g_c), s	17.0	0.0	3.3	9.1	30.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	790	376	247	2148	1743	765
V/C Ratio(X)	0.85	0.00	0.56	0.34	0.82	0.00
Avail Cap(c_a), veh/h	981	467	253	2148	1743	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.93	0.93	1.00	0.00
Uniform Delay (d), s/veh	33.0	0.0	17.8	7.8	19.1	0.0
Incr Delay (d2), s/veh	6.3	0.0	2.1	0.4	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	1.9	4.4	15.9	0.0
LnGrp Delay(d),s/veh	39.3	0.0	19.9	8.2	23.5	0.0
LnGrp LOS	D		B	A	C	
Approach Vol, veh/h	671			872	1422	
Approach Delay, s/veh	39.3			10.1	23.5	
Approach LOS	D			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.0	51.0				63.1		26.9
Change Period (Y+Rc), s	6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	6.1	39.4				51.7		26.0
Max Q Clear Time (g_c+I1), s	5.3	32.9				11.1		19.0
Green Ext Time (p_c), s	0.0	5.8				26.9		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	338	32	268	447	718	877
Future Volume (veh/h)	338	32	268	447	718	877
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1756	1900	1863	1827	1881	1827
Adj Flow Rate, veh/h	376	0	298	497	772	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.93	0.93
Percent Heavy Veh, %	9	0	2	4	1	4
Cap, veh/h	547	264	488	2192	2257	981
Arrive On Green	0.16	0.00	0.63	0.63	0.63	0.00
Sat Flow, veh/h	3344	1615	695	3563	3668	1553
Grp Volume(v), veh/h	376	0	298	497	772	0
Grp Sat Flow(s),veh/h/ln	1672	1615	695	1736	1787	1553
Q Serve(g_s), s	6.4	0.0	21.2	3.7	6.1	0.0
Cycle Q Clear(g_c), s	6.4	0.0	27.3	3.7	6.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	547	264	488	2192	2257	981
V/C Ratio(X)	0.69	0.00	0.61	0.23	0.34	0.00
Avail Cap(c_a), veh/h	780	377	488	2192	2257	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.97	0.97	0.26	0.00
Uniform Delay (d), s/veh	23.6	0.0	11.6	4.8	5.2	0.0
Incr Delay (d2), s/veh	4.2	0.0	2.2	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	4.3	1.7	3.0	0.0
LnGrp Delay(d),s/veh	27.8	0.0	13.8	4.8	5.3	0.0
LnGrp LOS	C		B	A	A	
Approach Vol, veh/h	376			795	772	
Approach Delay, s/veh	27.8			8.2	5.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		44.2				44.2		15.8
Change Period (Y+Rc), s		6.3				6.3		6.0
Max Green Setting (Gmax), s		33.7				33.7		14.0
Max Q Clear Time (g_c+I1), s		8.1				29.3		8.4
Green Ext Time (p_c), s		16.9				3.8		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	5	21	3	3	35	9	554	3	30	642	78
Future Volume (veh/h)	126	5	21	3	3	35	9	554	3	30	642	78
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1884	1900	1900	1900	1900	1900	1827	1900	1900	1881	1900
Adj Flow Rate, veh/h	140	6	23	3	3	39	10	616	3	33	713	87
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	4	4	0	1	1
Cap, veh/h	254	7	28	54	26	200	546	2600	13	646	2354	287
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1230	53	202	38	185	1448	690	3543	17	817	3208	391
Grp Volume(v), veh/h	169	0	0	45	0	0	10	302	317	33	397	403
Grp Sat Flow(s),veh/h/ln	1485	0	0	1671	0	0	690	1736	1824	817	1787	1812
Q Serve(g_s), s	6.6	0.0	0.0	0.0	0.0	0.0	0.4	4.4	4.4	1.1	5.9	5.9
Cycle Q Clear(g_c), s	8.5	0.0	0.0	1.9	0.0	0.0	6.3	4.4	4.4	5.4	5.9	5.9
Prop In Lane	0.83		0.14	0.07		0.87	1.00		0.01	1.00		0.22
Lane Grp Cap(c), veh/h	289	0	0	280	0	0	546	1274	1339	646	1312	1330
V/C Ratio(X)	0.58	0.00	0.00	0.16	0.00	0.00	0.02	0.24	0.24	0.05	0.30	0.30
Avail Cap(c_a), veh/h	330	0	0	326	0	0	546	1274	1339	646	1312	1330
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	32.5	0.0	0.0	29.8	0.0	0.0	4.6	3.3	3.3	4.2	3.6	3.6
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	0.9	0.0	0.0	0.1	2.1	2.2	0.3	3.1	3.1
LnGrp Delay(d),s/veh	35.3	0.0	0.0	30.2	0.0	0.0	4.7	3.5	3.5	4.4	4.1	4.1
LnGrp LOS	D			C			A	A	A	A	A	A
Approach Vol, veh/h		169			45			629			833	
Approach Delay, s/veh		35.3			30.2			3.5			4.1	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.2		15.8		62.2		15.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		55.0		13.0		55.0		13.0
Max Q Clear Time (g_c+I1), s		7.9		3.9		8.3		10.5
Green Ext Time (p_c), s		17.3		1.0		17.3		0.3

Intersection Summary		
HCM 2010 Ctrl Delay		7.7
HCM 2010 LOS		A

HCM 2010 Computation does not support turning movement with Shared and Exclusive lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1657	1146	163	1398	0	0	0	0	239	0	860
Future Volume (veh/h)	0	1657	1146	163	1398	0	0	0	0	239	0	860
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1776	1827	1810	0				1827	1827	1810
Adj Flow Rate, veh/h	0	1841	0	181	1553	0				266	0	956
Adj No. of Lanes	0	4	1	2	4	0				2	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	7	4	5	0				4	2	5
Cap, veh/h	0	3214	764	195	3802	0				1032	0	912
Arrive On Green	0.00	0.51	0.00	0.12	1.00	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	6604	1509	3375	6478	0				3480	0	3076
Grp Volume(v), veh/h	0	1841	0	181	1553	0				266	0	956
Grp Sat Flow(s),veh/h/ln	0	1586	1509	1688	1556	0				1740	0	1538
Q Serve(g_s), s	0.0	28.2	0.0	7.4	0.0	0.0				8.2	0.0	41.5
Cycle Q Clear(g_c), s	0.0	28.2	0.0	7.4	0.0	0.0				8.2	0.0	41.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3214	764	195	3802	0				1032	0	912
V/C Ratio(X)	0.00	0.57	0.00	0.93	0.41	0.00				0.26	0.00	1.05
Avail Cap(c_a), veh/h	0	3214	764	195	3802	0				1032	0	912
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.00	0.77	0.77	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.0	0.0	61.6	0.0	0.0				37.5	0.0	49.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	36.8	0.3	0.0				0.0	0.0	43.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.3	0.0	4.5	0.1	0.0				3.9	0.0	23.1
LnGrp Delay(d),s/veh	0.0	24.1	0.0	98.4	0.3	0.0				37.6	0.0	92.5
LnGrp LOS		C		F	A					D		F
Approach Vol, veh/h		1841			1734						1222	
Approach Delay, s/veh		24.1			10.5						80.6	
Approach LOS		C			B						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		92.0			14.6	77.4		48.0
Change Period (Y+Rc), s		6.5			6.5	6.5		6.5
Max Green Setting (Gmax), s		85.5			8.1	70.9		41.5
Max Q Clear Time (g_c+I1), s		2.0			9.4	30.2		43.5
Green Ext Time (p_c), s		63.9			0.0	35.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Computation does not support turning movement with Shared and Exclusive lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	67	478	69	43	20	249	428	49	30	2124	282
Future Volume (veh/h)	198	67	478	69	43	20	249	428	49	30	2124	282
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1845	1827	1871	1900	1792	1810	1900	1776	1881	1863
Adj Flow Rate, veh/h	220	74	531	77	48	22	277	476	54	33	2360	313
Adj No. of Lanes	2	1	1	1	2	0	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	5	3	4	0	0	6	5	0	7	1	2
Cap, veh/h	245	534	462	122	707	304	254	2002	654	180	1969	723
Arrive On Green	0.07	0.29	0.29	0.07	0.29	0.29	0.08	0.41	0.41	0.05	0.38	0.38
Sat Flow, veh/h	3343	1810	1568	1740	2422	1041	3312	4940	1615	3281	5136	1583
Grp Volume(v), veh/h	220	74	531	77	34	36	277	476	54	33	2360	313
Grp Sat Flow(s),veh/h/ln	1672	1810	1568	1740	1777	1687	1656	1647	1615	1640	1712	1583
Q Serve(g_s), s	9.8	4.5	44.2	6.5	2.1	2.3	11.5	9.5	3.1	1.4	57.5	20.1
Cycle Q Clear(g_c), s	9.8	4.5	44.2	6.5	2.1	2.3	11.5	9.5	3.1	1.4	57.5	20.1
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	534	462	122	519	493	254	2002	654	180	1969	723
V/C Ratio(X)	0.90	0.14	1.15	0.63	0.07	0.07	1.09	0.24	0.08	0.18	1.20	0.43
Avail Cap(c_a), veh/h	245	534	462	129	519	493	254	2002	654	241	1969	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.9	38.9	52.9	67.8	38.3	38.4	69.3	29.4	27.5	67.7	46.3	27.6
Incr Delay (d2), s/veh	31.5	0.5	89.2	7.7	0.2	0.3	82.9	0.1	0.1	0.6	94.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	2.3	30.6	3.4	1.1	1.1	8.2	4.3	1.4	0.7	44.4	8.8
LnGrp Delay(d),s/veh	100.5	39.4	142.1	75.6	38.6	38.7	152.2	29.4	27.5	68.3	140.9	28.0
LnGrp LOS	F	D	F	E	D	D	F	C	C	E	F	C
Approach Vol, veh/h		825			147			807			2706	
Approach Delay, s/veh		121.8			58.0			71.4			127.0	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	50.5	14.7	67.3	17.1	50.9	18.0	64.0
Change Period (Y+Rc), s	6.5	* 6.7	6.5	6.5	6.5	* 6.7	6.5	6.5
Max Green Setting (Gmax), s	11.0	* 44	11.0	58.0	11.1	* 44	11.5	57.5
Max Q Clear Time (g_c+I1), s	11.5	4.3	3.4	11.5	8.5	46.2	13.5	59.5
Green Ext Time (p_c), s	0.0	4.9	0.0	37.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	113.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	71	0	0	0	53	0	896	27	0	0	0
Future Volume (veh/h)	0	71	0	0	0	53	0	896	27	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1712	0	0	0	1712	0	1827	1900			
Adj Flow Rate, veh/h	0	79	0	0	0	58	0	996	30			
Adj No. of Lanes	0	1	0	0	0	1	0	3	0			
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90			
Percent Heavy Veh, %	11	11	0	0	0	11	0	4	0			
Cap, veh/h	0	208	0	0	0	0	0	0	0			
Arrive On Green	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Sat Flow, veh/h	0	1712	0		0			0				
Grp Volume(v), veh/h	0	79	0		0.0			0.0				
Grp Sat Flow(s),veh/h/ln	0	1712	0									
Q Serve(g_s), s	0.0	0.3	0.0									
Cycle Q Clear(g_c), s	0.0	0.3	0.0									
Prop In Lane	0.00		0.00									
Lane Grp Cap(c), veh/h	0	208	0									
V/C Ratio(X)	0.00	0.38	0.00									
Avail Cap(c_a), veh/h	0	4280	0									
HCM Platoon Ratio	1.00	1.00	1.00									
Upstream Filter(I)	0.00	1.00	0.00									
Uniform Delay (d), s/veh	0.0	3.0	0.0									
Incr Delay (d2), s/veh	0.0	1.1	0.0									
Initial Q Delay(d3),s/veh	0.0	0.0	0.0									
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0									
LnGrp Delay(d),s/veh	0.0	4.1	0.0									
LnGrp LOS		A										
Approach Vol, veh/h		79										
Approach Delay, s/veh		4.1										
Approach LOS		A										

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		7.4						
Change Period (Y+Rc), s		6.5						
Max Green Setting (Gmax), s		18.5						
Max Q Clear Time (g_c+I1), s		2.3						
Green Ext Time (p_c), s		0.2						

Intersection Summary	
HCM 2010 Ctrl Delay	4.1
HCM 2010 LOS	A

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	104	340	146	132	167	61
Future Volume (veh/h)	104	340	146	132	167	61
Number	1	6	2	12	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1776	1759	1792	1863	1845
Adj Flow Rate, veh/h	116	378	162	147	186	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	7	8	6	2	3
Cap, veh/h	535	624	619	536	325	288
Arrive On Green	0.35	0.35	0.35	0.35	0.18	0.00
Sat Flow, veh/h	1036	1776	1759	1524	1774	1568
Grp Volume(v), veh/h	116	378	162	147	186	0
Grp Sat Flow(s),veh/h/ln	1036	1776	1759	1524	1774	1568
Q Serve(g_s), s	2.7	5.3	2.0	2.1	2.9	0.0
Cycle Q Clear(g_c), s	4.7	5.3	2.0	2.1	2.9	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	535	624	619	536	325	288
V/C Ratio(X)	0.22	0.61	0.26	0.27	0.57	0.00
Avail Cap(c_a), veh/h	790	1061	1052	911	1060	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.6	8.0	7.0	7.0	11.2	0.0
Incr Delay (d2), s/veh	0.2	0.9	0.2	0.3	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.7	1.0	0.9	1.5	0.0
LnGrp Delay(d),s/veh	8.8	9.0	7.2	7.3	12.8	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h		494	309		186	
Approach Delay, s/veh		9.0	7.2		12.8	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		17.6				17.6		12.5
Change Period (Y+Rc), s		7.0				7.0		7.0
Max Green Setting (Gmax), s		18.0				18.0		18.0
Max Q Clear Time (g_c+I1), s		4.1				7.3		4.9
Green Ext Time (p_c), s		3.8				3.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	320	0	0	346	298	0	0	0	506	0	79
Future Volume (veh/h)	40	320	0	0	346	298	0	0	0	506	0	79
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1759	1900	1900	1827	1863	1863	1863	1900	1759	1759	1827
Adj Flow Rate, veh/h	44	356	0	0	384	0	0	0	0	562	0	88
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	2	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	4	8	8	0	4	2	2	2	2	8	0	4
Cap, veh/h	557	1998	0	557	1504	686	3	3	0	677	0	314
Arrive On Green	0.06	0.60	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Sat Flow, veh/h	1740	3431	0	1810	3471	1583	1774	1863	0	3351	0	1553
Grp Volume(v), veh/h	44	356	0	0	384	0	0	0	0	562	0	88
Grp Sat Flow(s),veh/h/ln	1740	1671	0	1810	1736	1583	1774	1863	0	1675	0	1553
Q Serve(g_s), s	0.9	3.4	0.0	0.0	4.9	0.0	0.0	0.0	0.0	11.3	0.0	3.4
Cycle Q Clear(g_c), s	0.9	3.4	0.0	0.0	4.9	0.0	0.0	0.0	0.0	11.3	0.0	3.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	557	1998	0	557	1504	686	3	3	0	677	0	314
V/C Ratio(X)	0.08	0.18	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.83	0.00	0.28
Avail Cap(c_a), veh/h	631	1998	0	735	1504	686	177	186	0	790	0	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	6.3	0.0	0.0	12.6	0.0	0.0	0.0	0.0	26.8	0.0	23.6
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	6.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.6	0.0	0.0	2.4	0.0	0.0	0.0	0.0	5.8	0.0	1.5
LnGrp Delay(d),s/veh	8.7	6.5	0.0	0.0	12.8	0.0	0.0	0.0	0.0	33.3	0.0	24.1
LnGrp LOS	A	A			B					C		C
Approach Vol, veh/h		400			384			0			650	
Approach Delay, s/veh		6.8			12.8			0.0			32.1	
Approach LOS		A			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	49.4		0.0	11.5	37.8		20.6
Change Period (Y+Rc), s	6.5	7.5		6.0	7.5	* 7.5		6.5
Max Green Setting (Gmax), s	7.0	13.0		7.0	7.0	* 13		16.5
Max Q Clear Time (g_c+I1), s	0.0	5.4		0.0	2.9	6.9		13.3
Green Ext Time (p_c), s	0.0	3.4		0.0	0.0	1.5		0.9

Intersection Summary		
HCM 2010 Ctrl Delay		19.8
HCM 2010 LOS		B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	784	0	0	520	210	124	1	423	0	0	0
Future Volume (veh/h)	42	784	0	0	520	210	124	1	423	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1727	1792	1900	1900	1845	1667	1900	1863	1810			
Adj Flow Rate, veh/h	46	852	0	0	578	0	138	1	0			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	10	6	6	3	3	14	5	0	5			
Cap, veh/h	611	2605	0	0	2261	914	179	1	156			
Arrive On Green	0.05	0.76	0.00	0.00	0.65	0.00	0.10	0.10	0.00			
Sat Flow, veh/h	1645	3495	0	0	3597	1417	1762	13	1538			
Grp Volume(v), veh/h	46	852	0	0	578	0	139	0	0			
Grp Sat Flow(s),veh/h/ln	1645	1703	0	0	1752	1417	1775	0	1538			
Q Serve(g_s), s	0.7	7.1	0.0	0.0	6.3	0.0	6.9	0.0	0.0			
Cycle Q Clear(g_c), s	0.7	7.1	0.0	0.0	6.3	0.0	6.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	611	2605	0	0	2261	914	180	0	156			
V/C Ratio(X)	0.08	0.33	0.00	0.00	0.26	0.00	0.77	0.00	0.00			
Avail Cap(c_a), veh/h	688	2605	0	0	2261	914	493	0	427			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	4.0	3.3	0.0	0.0	6.8	0.0	39.4	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.0	6.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	3.3	0.0	0.0	3.1	0.0	3.7	0.0	0.0			
LnGrp Delay(d),s/veh	4.1	3.6	0.0	0.0	6.8	0.0	46.2	0.0	0.0			
LnGrp LOS	A	A			A		D					
Approach Vol, veh/h		898			578			139				
Approach Delay, s/veh		3.7			6.8			46.2				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		74.8			10.8	64.1		15.2
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		53.0			9.0	38.0		25.0
Max Q Clear Time (g_c+I1), s		9.1			2.7	8.3		8.9
Green Ext Time (p_c), s		18.2			0.0	15.2		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		8.4
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	682	401	521	523	215	72	495	203	322	1500	135
Future Volume (veh/h)	124	682	401	521	523	215	72	495	203	322	1500	135
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1777	1863	1863	1827	1845	1681	1827	1827	1845	1827	1863
Adj Flow Rate, veh/h	138	758	446	649	483	239	80	550	0	358	1667	150
Adj No. of Lanes	1	2	1	2	1	1	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	7	2	2	5	3	13	4	4	3	4	2
Cap, veh/h	200	400	178	798	411	353	272	1116	347	383	1241	394
Arrive On Green	0.11	0.11	0.11	0.22	0.22	0.22	0.09	0.22	0.00	0.11	0.25	0.25
Sat Flow, veh/h	1774	3554	1583	3548	1827	1568	3107	4988	1553	3408	4988	1583
Grp Volume(v), veh/h	138	758	446	649	483	239	80	550	0	358	1667	150
Grp Sat Flow(s),veh/h/ln	1774	1777	1583	1774	1827	1568	1553	1663	1553	1704	1663	1583
Q Serve(g_s), s	6.0	9.0	9.0	13.9	18.0	11.2	1.9	7.7	0.0	8.3	19.9	6.3
Cycle Q Clear(g_c), s	6.0	9.0	9.0	13.9	18.0	11.2	1.9	7.7	0.0	8.3	19.9	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	400	178	798	411	353	272	1116	347	383	1241	394
V/C Ratio(X)	0.69	1.90	2.50	0.81	1.18	0.68	0.29	0.49	0.00	0.93	1.34	0.38
Avail Cap(c_a), veh/h	200	400	178	798	411	353	272	1116	347	383	1241	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	35.5	35.5	29.4	31.0	28.3	34.2	27.1	0.0	35.2	30.1	24.9
Incr Delay (d2), s/veh	7.8	410.4	689.8	6.7	101.6	5.7	0.6	1.6	0.0	29.7	160.1	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	27.2	38.0	7.5	20.6	5.3	0.8	3.7	0.0	5.5	27.5	3.1
LnGrp Delay(d),s/veh	42.0	445.9	725.3	36.1	132.6	34.1	34.8	28.6	0.0	64.9	190.2	27.7
LnGrp LOS	D	F	F	D	F	C	C	C		E	F	C
Approach Vol, veh/h		1342			1371			630			2175	
Approach Delay, s/veh		497.2			69.7			29.4			158.4	
Approach LOS		F			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	26.5		26.0	16.0	24.5		17.0
Change Period (Y+Rc), s	7.0	* 6.5		8.0	7.0	6.5		8.0
Max Green Setting (Gmax), s	7.0	* 17		18.0	9.0	14.5		9.0
Max Q Clear Time (g_c+I1), s	13.9	21.9		20.0	10.3	9.7		11.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	204.0	
HCM 2010 LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	1	3	0	198	7	165	100	244	2	6	100	97
Future Volume (veh/h)	1	3	0	198	7	165	100	244	2	6	100	97
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1523	1900	1900	1764	1810	1827	1827	1900	1900	1845	1776
Adj Flow Rate, veh/h	1	3	0	220	8	0	111	271	2	7	111	108
Adj No. of Lanes	0	2	0	0	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	33	33	33	0	0	5	4	4	4	0	3	7
Cap, veh/h	212	484	0	425	10	322	548	880	6	401	402	329
Arrive On Green	0.21	0.21	0.00	0.21	0.21	0.00	0.12	0.49	0.49	0.22	0.22	0.22
Sat Flow, veh/h	473	2376	0	1291	47	1538	1740	1812	13	1124	1845	1509
Grp Volume(v), veh/h	2	2	0	228	0	0	111	0	273	7	111	108
Grp Sat Flow(s),veh/h/ln	1463	1317	0	1338	0	1538	1740	0	1825	1124	1845	1509
Q Serve(g_s), s	0.0	0.0	0.0	7.4	0.0	0.0	2.0	0.0	4.2	0.2	2.3	2.8
Cycle Q Clear(g_c), s	0.1	0.0	0.0	7.5	0.0	0.0	2.0	0.0	4.2	0.2	2.3	2.8
Prop In Lane	0.44		0.00	0.96		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	419	276	0	435	0	322	548	0	886	401	402	329
V/C Ratio(X)	0.01	0.01	0.00	0.52	0.00	0.00	0.20	0.00	0.31	0.02	0.28	0.33
Avail Cap(c_a), veh/h	662	516	0	680	0	603	612	0	1510	744	964	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	14.4	0.0	17.3	0.0	0.0	9.8	0.0	7.1	14.1	15.0	15.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.0	0.2	0.0	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.9	0.0	2.1	0.1	1.2	1.2
LnGrp Delay(d),s/veh	14.4	14.4	0.0	18.3	0.0	0.0	9.9	0.0	7.3	14.2	15.3	15.7
LnGrp LOS	B	B		B			A		A	B	B	B
Approach Vol, veh/h		4			228			384			226	
Approach Delay, s/veh		14.4			18.3			8.1			15.5	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	12.3	17.0		16.6		29.3		16.6
Change Period (Y+Rc), s	7.0	7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s	7.0	24.0		18.0		38.0		18.0
Max Q Clear Time (g_c+I1), s	4.0	4.8		2.1		6.2		9.5
Green Ext Time (p_c), s	0.1	2.5		1.0		2.8		0.7

Intersection Summary		
HCM 2010 Ctrl Delay	12.9	
HCM 2010 LOS	B	

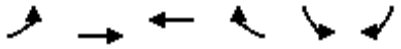
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	232	19	89	506	231	2	11	11	168	25	49
Future Volume (veh/h)	37	232	19	89	506	231	2	11	11	168	25	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1677	1900	1881	1814	1900	1900	1900	1727	1667	1900	1827
Adj Flow Rate, veh/h	41	258	21	99	562	257	2	12	12	187	28	54
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	8	14	14	1	6	6	0	0	10	14	0	4
Cap, veh/h	464	1430	116	683	1151	525	67	71	55	223	267	296
Arrive On Green	0.05	0.48	0.48	0.14	1.00	1.00	0.04	0.04	0.04	0.14	0.14	0.14
Sat Flow, veh/h	1675	2986	241	1792	2301	1050	1810	1900	1468	1587	1900	1553
Grp Volume(v), veh/h	41	137	142	99	421	398	2	12	12	187	28	54
Grp Sat Flow(s),veh/h/ln	1675	1593	1634	1792	1723	1629	1810	1900	1468	1587	1900	1553
Q Serve(g_s), s	1.1	4.4	4.5	2.3	0.0	0.0	0.1	0.6	0.7	10.3	1.2	2.6
Cycle Q Clear(g_c), s	1.1	4.4	4.5	2.3	0.0	0.0	0.1	0.6	0.7	10.3	1.2	2.6
Prop In Lane	1.00		0.15	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	763	782	683	862	815	67	71	55	223	267	296
V/C Ratio(X)	0.09	0.18	0.18	0.15	0.49	0.49	0.03	0.17	0.22	0.84	0.10	0.18
Avail Cap(c_a), veh/h	511	763	782	694	862	815	462	486	375	291	348	362
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	13.4	13.4	9.0	0.0	0.0	41.8	42.0	42.1	37.7	33.7	30.6
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.1	0.5	0.5	0.2	1.1	2.0	15.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.0	2.1	1.1	0.1	0.1	0.1	0.3	0.3	5.5	0.6	1.1
LnGrp Delay(d),s/veh	10.3	13.9	13.9	9.1	0.5	0.5	41.9	43.1	44.1	52.9	33.9	30.9
LnGrp LOS	B	B	B	A	A	A	D	D	D	D	C	C
Approach Vol, veh/h		320			918			26			269	
Approach Delay, s/veh		13.4			1.4			43.5			46.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	49.6		18.6	10.5	51.5		9.3
Change Period (Y+Rc), s	6.0	6.5		6.0	6.0	6.5		6.0
Max Green Setting (Gmax), s	7.0	19.0		16.5	7.0	19.0		23.0
Max Q Clear Time (g_c+I1), s	4.3	6.5		12.3	3.1	2.0		2.7
Green Ext Time (p_c), s	0.0	6.7		0.3	0.0	8.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Notes

User approved changes to right turn type.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	186	461	288	176	365
Future Volume (veh/h)	0	186	461	288	176	365
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1727	1845	1900	1845	1810
Adj Flow Rate, veh/h	0	207	512	0	196	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	10	3	3	3	5
Cap, veh/h	0	2569	2743	0	286	129
Arrive On Green	0.00	1.00	0.78	0.00	0.08	0.00
Sat Flow, veh/h	0	3455	3689	0	3408	1538
Grp Volume(v), veh/h	0	207	512	0	196	0
Grp Sat Flow(s),veh/h/ln	0	1641	1752	0	1704	1538
Q Serve(g_s), s	0.0	0.0	3.3	0.0	5.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.3	0.0	5.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2569	2743	0	286	129
V/C Ratio(X)	0.00	0.08	0.19	0.00	0.69	0.00
Avail Cap(c_a), veh/h	0	2569	2743	0	985	444
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.95	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	2.5	0.0	40.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.0	2.5	0.0
LnGrp Delay(d),s/veh	0.0	0.0	2.6	0.0	43.0	0.0
LnGrp LOS		A	A		D	
Approach Vol, veh/h		207	512		196	
Approach Delay, s/veh		0.0	2.6		43.0	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		76.4		13.6		76.4		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		12.0		26.0		34.0		
Max Q Clear Time (g_c+I1), s		2.0		7.0		5.3		
Green Ext Time (p_c), s		4.0		0.6		6.7		

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	278	84	0	456	293	370
Future Volume (veh/h)	278	84	0	456	293	370
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1610	0	1827	1827	1845
Adj Flow Rate, veh/h	309	0	0	507	326	0
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	18	0	4	4	3
Cap, veh/h	2016	810	0	2055	499	232
Arrive On Green	0.59	0.00	0.00	0.59	0.15	0.00
Sat Flow, veh/h	3495	1369	0	3654	3375	1568
Grp Volume(v), veh/h	309	0	0	507	326	0
Grp Sat Flow(s),veh/h/ln	1703	1369	0	1736	1688	1568
Q Serve(g_s), s	2.0	0.0	0.0	3.5	4.6	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0	3.5	4.6	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2016	810	0	2055	499	232
V/C Ratio(X)	0.15	0.00	0.00	0.25	0.65	0.00
Avail Cap(c_a), veh/h	2016	810	0	2055	1316	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.86	1.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	0.0	4.9	20.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.6	2.2	0.0
LnGrp Delay(d),s/veh	4.7	0.0	0.0	4.9	21.5	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	309			507	326	
Approach Delay, s/veh	4.7			4.9	21.5	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		36.1				36.1		13.9
Change Period (Y+Rc), s		6.5				6.5		6.5
Max Green Setting (Gmax), s		17.5				17.5		19.5
Max Q Clear Time (g_c+I1), s		4.0				5.5		6.6
Green Ext Time (p_c), s		5.5				5.1		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

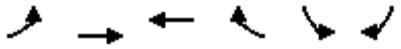
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	407	241	77	533	2081	471
Future Volume (veh/h)	407	241	77	533	2081	471
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1810	1845	1810	1863	1827
Adj Flow Rate, veh/h	452	268	86	592	2312	523
Adj No. of Lanes	2	1	2	3	4	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	5	3	5	2	4
Cap, veh/h	664	297	277	5561	6098	1478
Arrive On Green	0.19	0.19	0.08	1.00	0.95	0.95
Sat Flow, veh/h	3442	1538	3408	5103	6669	1553
Grp Volume(v), veh/h	452	268	86	592	2312	523
Grp Sat Flow(s),veh/h/ln	1721	1538	1704	1647	1602	1553
Q Serve(g_s), s	8.5	11.9	1.7	0.0	1.9	1.7
Cycle Q Clear(g_c), s	8.5	11.9	1.7	0.0	1.9	1.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	664	297	277	5561	6098	1478
V/C Ratio(X)	0.68	0.90	0.31	0.11	0.38	0.35
Avail Cap(c_a), veh/h	664	297	341	5561	6098	1478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	27.6	30.3	0.0	0.1	0.1
Incr Delay (d2), s/veh	2.5	26.7	0.6	0.0	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	7.2	0.8	0.0	0.7	0.9
LnGrp Delay(d),s/veh	28.8	54.3	30.9	0.0	0.3	0.8
LnGrp LOS	C	D	C	A	A	A
Approach Vol, veh/h	720			678	2835	
Approach Delay, s/veh	38.3			4.0	0.4	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.2	76.8				89.0		22.5
Change Period (Y+Rc), s	6.5	* 9				9.0		9.0
Max Green Setting (Gmax), s	7.6	* 28				38.5		13.5
Max Q Clear Time (g_c+I1), s	13.7	3.9				2.0		13.9
Green Ext Time (p_c), s	0.1	21.3				31.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.4
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2548	643	0	404	26
Future Volume (veh/h)	0	2548	643	0	404	26
Number	1	6	2	12	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1845	0	1863	1652
Adj Flow Rate, veh/h	0	2682	699	0	434	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.92	0.92	0.93	0.93
Percent Heavy Veh, %	0	4	3	0	2	15
Cap, veh/h	0	2589	2614	0	506	206
Arrive On Green	0.00	0.75	0.75	0.00	0.15	0.00
Sat Flow, veh/h	0	3654	3689	0	3442	1404
Grp Volume(v), veh/h	0	2682	699	0	434	0
Grp Sat Flow(s),veh/h/ln	0	1736	1752	0	1721	1404
Q Serve(g_s), s	0.0	104.4	8.9	0.0	17.2	0.0
Cycle Q Clear(g_c), s	0.0	104.4	8.9	0.0	17.2	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2589	2614	0	506	206
V/C Ratio(X)	0.00	1.04	0.27	0.00	0.86	0.00
Avail Cap(c_a), veh/h	0	2589	2614	0	811	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	17.8	5.6	0.0	58.3	0.0
Incr Delay (d2), s/veh	0.0	27.8	0.3	0.0	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	59.3	4.4	0.0	8.6	0.0
LnGrp Delay(d),s/veh	0.0	45.6	5.9	0.0	63.6	0.0
LnGrp LOS		F	A		E	
Approach Vol, veh/h		2682	699		434	
Approach Delay, s/veh		45.6	5.9		63.6	
Approach LOS		D	A		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		112.4		27.6		112.4		
Change Period (Y+Rc), s		8.0		7.0		8.0		
Max Green Setting (Gmax), s		92.0		33.0		92.0		
Max Q Clear Time (g_c+I1), s		10.9		19.2		106.4		
Green Ext Time (p_c), s		76.9		1.3		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	527	2438	10	25	519	9	2	5	1	3	5	820
Future Volume (veh/h)	527	2438	10	25	519	9	2	5	1	3	5	820
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1825	1900	1827	1863	1900	1900	1652	1900	1900	1900	1696
Adj Flow Rate, veh/h	579	2679	11	28	577	10	2	6	1	3	5	0
Adj No. of Lanes	2	3	0	1	2	0	0	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	11	4	4	4	2	2	20	20	0	0	0	12
Cap, veh/h	1246	3821	16	134	2505	43	54	125	150	178	176	134
Arrive On Green	0.06	0.75	0.75	0.02	0.70	0.70	0.09	0.09	0.09	0.09	0.09	0.00
Sat Flow, veh/h	3163	5122	21	1740	3561	62	233	1344	1615	1431	1900	1442
Grp Volume(v), veh/h	579	1736	954	28	287	300	8	0	1	3	5	0
Grp Sat Flow(s),veh/h/ln	1581	1661	1821	1740	1770	1852	1576	0	1615	1431	1900	1442
Q Serve(g_s), s	7.1	38.9	39.1	0.6	8.0	8.0	0.0	0.0	0.1	0.3	0.3	0.0
Cycle Q Clear(g_c), s	7.1	38.9	39.1	0.6	8.0	8.0	0.6	0.0	0.1	0.9	0.3	0.0
Prop In Lane	1.00		0.01	1.00		0.03	0.25		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1246	2478	1359	134	1245	1303	179	0	150	178	176	134
V/C Ratio(X)	0.46	0.70	0.70	0.21	0.23	0.23	0.04	0.00	0.01	0.02	0.03	0.00
Avail Cap(c_a), veh/h	1246	2478	1359	519	1245	1303	179	0	150	178	176	134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	9.5	9.5	10.8	7.3	7.3	57.9	0.0	57.6	58.3	57.8	0.0
Incr Delay (d2), s/veh	0.2	1.0	1.8	1.6	0.4	0.4	0.5	0.0	0.1	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	17.9	20.0	0.4	4.1	4.2	0.3	0.0	0.0	0.1	0.2	0.0
LnGrp Delay(d),s/veh	5.1	10.4	11.3	12.4	7.8	7.8	58.4	0.0	57.7	58.5	58.1	0.0
LnGrp LOS	A	B	B	B	A	A	E		E	E	E	
Approach Vol, veh/h		3269			615			9			8	
Approach Delay, s/veh		9.7			8.0			58.3			58.2	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	110.9		20.0	15.0	105.0		20.0
Change Period (Y+Rc), s	6.4	6.5		7.0	6.5	6.5		7.0
Max Green Setting (Gmax), s	33.6	73.5		13.0	8.5	98.5		13.0
Max Q Clear Time (g_c+I1), s	2.6	41.1		2.9	9.1	10.0		2.6
Green Ext Time (p_c), s	0.1	31.1		0.0	0.0	79.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	536	5	4	323	0	0	0	0	397	421	505
Future Volume (veh/h)	0	536	5	4	323	0	0	0	0	397	421	505
Number	1	6	16	5	2	12				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1793	1900	1863	1863	0				1863	1849	1610
Adj Flow Rate, veh/h	0	596	6	4	359	0				290	633	537
Adj No. of Lanes	0	2	0	1	2	0				1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.94	0.94	0.94
Percent Heavy Veh, %	0	6	6	2	2	0				2	3	18
Cap, veh/h	0	1141	11	299	1168	0				710	1479	547
Arrive On Green	0.00	0.33	0.33	0.33	0.33	0.00				0.40	0.40	0.40
Sat Flow, veh/h	0	3546	35	814	3632	0				1774	3698	1369
Grp Volume(v), veh/h	0	294	308	4	359	0				290	633	537
Grp Sat Flow(s),veh/h/ln	0	1704	1787	814	1770	0				1774	1849	1369
Q Serve(g_s), s	0.0	7.0	7.0	0.2	3.8	0.0				5.9	6.2	19.4
Cycle Q Clear(g_c), s	0.0	7.0	7.0	7.2	3.8	0.0				5.9	6.2	19.4
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	562	590	299	1168	0				710	1479	547
V/C Ratio(X)	0.00	0.52	0.52	0.01	0.31	0.00				0.41	0.43	0.98
Avail Cap(c_a), veh/h	0	562	590	299	1168	0				710	1479	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	13.6	13.6	16.5	12.5	0.0				10.8	10.9	14.8
Incr Delay (d2), s/veh	0.0	1.2	1.1	0.1	0.7	0.0				0.5	0.3	33.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.4	3.6	0.1	2.0	0.0				2.9	3.1	12.3
LnGrp Delay(d),s/veh	0.0	14.7	14.7	16.6	13.2	0.0				11.3	11.1	48.3
LnGrp LOS		B	B	B	B					B	B	D
Approach Vol, veh/h		602			363						1460	
Approach Delay, s/veh		14.7			13.2						24.9	
Approach LOS		B			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		24.0		26.0		24.0		
Change Period (Y+Rc), s		7.5		6.0		7.5		
Max Green Setting (Gmax), s		16.5		20.0		16.5		
Max Q Clear Time (g_c+I1), s		9.2		21.4		9.0		
Green Ext Time (p_c), s		4.0		0.0		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	14	51	5	28	119	104	758	71	55	497	26
Future Volume (veh/h)	6	14	51	5	28	119	104	758	71	55	497	26
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1570	1863	1583	1836	1900	1863	1831	1900	1900	1747	1900
Adj Flow Rate, veh/h	7	16	57	6	31	132	109	798	75	58	523	27
Adj No. of Lanes	1	1	1	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	21	2	20	14	14	2	4	4	0	9	9
Cap, veh/h	82	194	249	180	38	161	658	3227	302	497	3170	163
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.69	0.69	0.02	0.68	0.68
Sat Flow, veh/h	1242	1570	1583	1123	306	1301	1774	4653	435	1810	4646	238
Grp Volume(v), veh/h	7	16	57	6	0	163	109	571	302	58	357	193
Grp Sat Flow(s),veh/h/ln	1242	1570	1583	1123	0	1607	1774	1667	1755	1810	1590	1705
Q Serve(g_s), s	0.8	1.3	4.4	0.7	0.0	13.9	2.6	8.9	8.9	1.4	5.6	5.7
Cycle Q Clear(g_c), s	14.6	1.3	4.4	1.9	0.0	13.9	2.6	8.9	8.9	1.4	5.6	5.7
Prop In Lane	1.00		1.00	1.00		0.81	1.00		0.25	1.00		0.14
Lane Grp Cap(c), veh/h	82	194	249	180	0	199	658	2312	1217	497	2169	1163
V/C Ratio(X)	0.09	0.08	0.23	0.03	0.00	0.82	0.17	0.25	0.25	0.12	0.16	0.17
Avail Cap(c_a), veh/h	119	241	296	214	0	247	783	2312	1217	645	2169	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.9	54.3	51.6	55.2	0.0	59.8	6.2	7.9	7.9	6.5	8.0	8.0
Incr Delay (d2), s/veh	0.6	0.3	0.7	0.1	0.0	17.9	0.1	0.1	0.2	0.1	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.6	2.0	0.2	0.0	7.1	1.3	4.1	4.3	0.7	2.5	2.8
LnGrp Delay(d),s/veh	67.6	54.6	52.3	55.3	0.0	77.7	6.3	8.0	8.1	6.6	8.1	8.3
LnGrp LOS	E	D	D	E		E	A	A	A	A	A	A
Approach Vol, veh/h		80			169			982			608	
Approach Delay, s/veh		54.1			76.9			7.9			8.0	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.2	103.0		25.8	9.6	104.6		25.8
Change Period (Y+Rc), s	6.5	7.5		8.5	6.5	7.5		8.5
Max Green Setting (Gmax), s	14.5	81.5		21.5	14.5	81.5		21.5
Max Q Clear Time (g_c+I1), s	16.6	7.7		15.9	3.4	10.9		16.6
Green Ext Time (p_c), s	0.1	23.6		0.8	0.0	23.4		0.7

Intersection Summary		
HCM 2010 Ctrl Delay	16.3	
HCM 2010 LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	751	54	36	534	153	29	70	32	199	105	59
Future Volume (veh/h)	43	751	54	36	534	153	29	70	32	199	105	59
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1799	1900	1900	1759	1900	1900	1887	1900	1845	1833	1863
Adj Flow Rate, veh/h	48	834	60	40	593	0	32	78	36	169	190	66
Adj No. of Lanes	1	3	0	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	6	6	0	8	0	0	1	1	3	4	2
Cap, veh/h	364	1393	100	285	1404	472	271	183	85	240	251	216
Arrive On Green	0.05	0.30	0.30	0.04	0.29	0.00	0.15	0.15	0.15	0.14	0.14	0.14
Sat Flow, veh/h	1810	4679	335	1810	4803	1615	1810	1223	564	1757	1833	1583
Grp Volume(v), veh/h	48	583	311	40	593	0	32	0	114	169	190	66
Grp Sat Flow(s),veh/h/ln	1810	1637	1740	1810	1601	1615	1810	0	1787	1757	1833	1583
Q Serve(g_s), s	1.1	9.1	9.2	0.9	6.0	0.0	0.9	0.0	3.5	5.5	6.0	2.3
Cycle Q Clear(g_c), s	1.1	9.1	9.2	0.9	6.0	0.0	0.9	0.0	3.5	5.5	6.0	2.3
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	364	975	518	285	1404	472	271	0	268	240	251	216
V/C Ratio(X)	0.13	0.60	0.60	0.14	0.42	0.00	0.12	0.00	0.43	0.70	0.76	0.30
Avail Cap(c_a), veh/h	432	975	518	362	1404	472	271	0	268	264	275	237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	18.0	18.0	14.3	17.1	0.0	22.1	0.0	23.2	24.7	24.9	23.3
Incr Delay (d2), s/veh	0.2	2.7	5.1	0.2	0.2	0.0	0.9	0.0	4.9	7.4	10.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.5	5.1	0.5	2.7	0.0	0.5	0.0	2.1	3.2	3.7	1.0
LnGrp Delay(d),s/veh	14.0	20.7	23.1	14.6	17.3	0.0	22.9	0.0	28.0	32.1	35.5	24.1
LnGrp LOS	B	C	C	B	B		C		C	C	D	C
Approach Vol, veh/h		942			633			146			425	
Approach Delay, s/veh		21.1			17.2			26.9			32.4	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	23.9		15.0	7.3	23.5		14.2
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0
Max Green Setting (Gmax), s	5.0	14.5		9.0	5.0	14.5		9.0
Max Q Clear Time (g_c+I1), s	2.9	11.2		5.5	3.1	8.0		8.0
Green Ext Time (p_c), s	0.0	2.4		0.2	0.0	4.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1755	2	2	1165	98	5	1	0	119	0	29
Future Volume (veh/h)	21	1755	2	2	1165	98	5	1	0	119	0	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1848	1900	1900	1900	1900	1900	1855	1900
Adj Flow Rate, veh/h	23	1929	2	2	1280	108	6	1	0	132	0	32
Adj No. of Lanes	1	2	0	0	2	0	1	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	3	3	3	0	0	0	0	0	0
Cap, veh/h	294	2788	3	26	2464	207	250	250	0	198	0	37
Arrive On Green	0.77	0.77	0.77	0.77	0.77	0.77	0.13	0.13	0.00	0.13	0.00	0.13
Sat Flow, veh/h	396	3628	4	1	3206	269	1399	1900	0	1151	0	279
Grp Volume(v), veh/h	23	941	990	735	0	655	6	1	0	164	0	0
Grp Sat Flow(s),veh/h/ln	396	1770	1862	1842	0	1634	1399	1900	0	1430	0	0
Q Serve(g_s), s	3.3	36.8	36.8	0.0	0.0	21.7	0.0	0.1	0.0	15.7	0.0	0.0
Cycle Q Clear(g_c), s	25.0	36.8	36.8	21.4	0.0	21.7	0.5	0.1	0.0	15.8	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.16	1.00		0.00	0.80		0.20
Lane Grp Cap(c), veh/h	294	1360	1431	1441	0	1255	250	250	0	235	0	0
V/C Ratio(X)	0.08	0.69	0.69	0.51	0.00	0.52	0.02	0.00	0.00	0.70	0.00	0.00
Avail Cap(c_a), veh/h	294	1360	1431	1441	0	1255	376	421	0	364	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.1	8.0	8.0	6.2	0.0	6.3	53.0	52.8	0.0	59.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	2.9	2.8	0.4	0.0	0.5	0.0	0.0	0.0	3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	18.9	19.8	11.0	0.0	9.8	0.2	0.0	0.0	6.5	0.0	0.0
LnGrp Delay(d),s/veh	11.6	10.9	10.8	6.7	0.0	6.8	53.0	52.8	0.0	63.4	0.0	0.0
LnGrp LOS	B	B	B	A		A	D	D		E		
Approach Vol, veh/h		1954			1390			7			164	
Approach Delay, s/veh		10.9			6.7			53.0			63.4	
Approach LOS		B			A			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		114.6		25.4		114.6		25.4
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s		95.0		31.0		95.0		31.0
Max Q Clear Time (g_c+I1), s		38.8		17.8		23.7		2.5
Green Ext Time (p_c), s		53.0		0.7		66.3		1.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	2277	36	110	1234	146	81	55	36	151	73	31
Future Volume (veh/h)	23	2277	36	110	1234	146	81	55	36	151	73	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1809	1900	1792	1699	1900	1810	1856	1900	1881	1893	1845
Adj Flow Rate, veh/h	24	2397	38	116	1299	154	90	61	40	123	140	34
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	4	5	5	6	13	13	5	0	0	1	0	3
Cap, veh/h	279	2778	44	208	2467	292	147	124	82	174	225	186
Arrive On Green	0.03	0.55	0.55	0.06	0.59	0.59	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1740	5007	79	1707	4205	498	1171	1048	687	1301	1893	1568
Grp Volume(v), veh/h	24	1574	861	116	955	498	90	0	101	123	140	34
Grp Sat Flow(s),veh/h/ln	1740	1646	1795	1707	1546	1611	1171	0	1735	1301	1893	1568
Q Serve(g_s), s	0.5	32.6	32.9	2.3	14.8	14.8	3.9	0.0	4.4	5.1	5.6	1.6
Cycle Q Clear(g_c), s	0.5	32.6	32.9	2.3	14.8	14.8	9.5	0.0	4.4	9.5	5.6	1.6
Prop In Lane	1.00		0.04	1.00		0.31	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	279	1826	996	208	1814	945	147	0	206	174	225	186
V/C Ratio(X)	0.09	0.86	0.86	0.56	0.53	0.53	0.61	0.00	0.49	0.71	0.62	0.18
Avail Cap(c_a), veh/h	342	1831	998	216	1814	945	147	0	206	174	225	186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	15.2	15.2	17.8	9.9	9.9	38.8	0.0	33.0	38.3	33.5	31.8
Incr Delay (d2), s/veh	0.1	5.6	9.9	2.9	1.1	2.1	7.4	0.0	1.8	12.5	5.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	16.1	18.8	1.6	6.5	7.0	2.3	0.0	2.2	3.3	3.3	0.7
LnGrp Delay(d),s/veh	8.3	20.8	25.2	20.7	11.0	12.0	46.2	0.0	34.8	50.7	38.8	32.2
LnGrp LOS	A	C	C	C	B	B	D		C	D	D	C
Approach Vol, veh/h		2459			1569			191			297	
Approach Delay, s/veh		22.2			12.0			40.1			43.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.6	51.9		16.5	9.1	54.4		16.5
Change Period (Y+Rc), s	7.0	7.5		* 7	7.0	7.5		7.0
Max Green Setting (Gmax), s	5.0	44.5		* 9.5	5.0	44.5		9.0
Max Q Clear Time (g_c+I1), s	4.3	34.9		11.5	2.5	16.8		11.5
Green Ext Time (p_c), s	0.0	9.4		0.0	0.0	26.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		20.8
HCM 2010 LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	2526	99	16	811	156	0	0	16	0	0	105
Future Vol, veh/h	156	2526	99	16	811	156	0	0	16	0	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	345	-	0	250	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	1	3	0	0	10	1	2	2	31	2	2	2
Mvmt Flow	164	2659	104	18	901	173	0	0	18	0	0	117

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	901	0	-	2659	0	0	-	-	1329	-	-	451
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.32	-	-	5.3	-	-	-	-	7.72	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.11	-	-	3.1	-	-	-	-	4.21	-	-	3.92
Pot Cap-1 Maneuver	440	-	0	59	-	0	0	0	97	0	0	475
Stage 1	-	-	0	-	-	0	0	0	-	0	0	-
Stage 2	-	-	0	-	-	0	0	0	-	0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	440	-	-	59	-	-	-	-	97	-	-	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	1.7	50.3	15
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	97	440	-	59	-	475
HCM Lane V/C Ratio	0.183	0.373	-	0.301	-	0.246
HCM Control Delay (s)	50.3	18	-	90.4	-	15
HCM Lane LOS	F	C	-	F	-	C
HCM 95th %tile Q(veh)	0.6	1.7	-	1.1	-	1

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	210	343	82	150	27
Future Vol, veh/h	12	210	343	82	150	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	228	373	89	163	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	373	0	-	0	513	373
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	4.13	-	-	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	1184	-	-	-	506	672
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	873	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1184	-	-	-	499	672
Mov Cap-2 Maneuver	-	-	-	-	499	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1184	-	-	-	519
HCM Lane V/C Ratio	0.011	-	-	-	0.371
HCM Control Delay (s)	8.1	0	-	-	16
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1705	16	90	1993	325	59	43	11	292	64	100
Future Volume (veh/h)	44	1705	16	90	1993	325	59	43	11	292	64	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1828	1900	1863	1850	1900	1900	1900	1900	1881	1875	1863
Adj Flow Rate, veh/h	49	1894	18	99	2190	357	66	48	12	375	0	111
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	2	0	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	4	2	3	3	0	0	0	1	2	2
Cap, veh/h	135	3156	30	206	2743	434	302	282	71	548	0	304
Arrive On Green	0.03	0.62	0.62	0.03	0.62	0.62	0.19	0.19	0.19	0.19	0.00	0.19
Sat Flow, veh/h	1810	5097	48	1774	4397	696	1302	1468	367	2701	0	1583
Grp Volume(v), veh/h	49	1236	676	99	1662	885	66	0	60	375	0	111
Grp Sat Flow(s),veh/h/ln	1810	1663	1819	1774	1683	1727	1302	0	1835	1350	0	1583
Q Serve(g_s), s	1.4	31.5	31.5	2.9	51.4	55.4	6.0	0.0	3.8	18.8	0.0	8.5
Cycle Q Clear(g_c), s	1.4	31.5	31.5	2.9	51.4	55.4	6.0	0.0	3.8	22.7	0.0	8.5
Prop In Lane	1.00		0.03	1.00		0.40	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	135	2060	1126	206	2100	1077	302	0	353	548	0	304
V/C Ratio(X)	0.36	0.60	0.60	0.48	0.79	0.82	0.22	0.00	0.17	0.68	0.00	0.36
Avail Cap(c_a), veh/h	248	2060	1126	308	2100	1077	451	0	564	868	0	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	16.1	16.2	15.0	19.6	20.3	48.1	0.0	47.2	56.7	0.0	49.1
Incr Delay (d2), s/veh	1.6	1.3	2.4	1.7	3.1	7.1	0.4	0.0	0.2	1.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	14.8	16.5	1.6	24.7	28.4	2.2	0.0	2.0	7.1	0.0	3.8
LnGrp Delay(d),s/veh	27.8	17.5	18.5	16.8	22.7	27.4	48.5	0.0	47.4	58.2	0.0	49.8
LnGrp LOS	C	B	B	B	C	C	D		D	E		D
Approach Vol, veh/h		1961			2646			126			486	
Approach Delay, s/veh		18.1			24.1			48.0			56.3	
Approach LOS		B			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	94.2		33.9	11.3	94.8		33.9
Change Period (Y+Rc), s	7.0	7.5		* 7	7.0	7.5		7.0
Max Green Setting (Gmax), s	13.0	62.5		* 44	13.0	62.5		43.0
Max Q Clear Time (g_c+I1), s	4.9	33.5		24.7	3.4	57.4		8.0
Green Ext Time (p_c), s	0.1	28.2		2.2	0.0	5.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

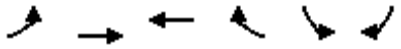
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	386	1691	26	16	1371	19	22	5	13	20	31	1532
Future Volume (veh/h)	386	1691	26	16	1371	19	22	5	13	20	31	1532
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1828	1900	1792	1880	1900	1900	1900	1900	1900	1900	1845
Adj Flow Rate, veh/h	429	1879	29	18	1523	21	24	6	14	21	33	0
Adj No. of Lanes	2	3	0	1	2	0	0	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	1	4	4	6	1	1	0	0	0	0	0	3
Cap, veh/h	567	3584	55	197	2410	33	180	40	208	192	244	202
Arrive On Green	0.05	0.71	0.71	0.01	0.67	0.67	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	3476	5063	78	1707	3608	50	1039	313	1615	1414	1900	1568
Grp Volume(v), veh/h	429	1234	674	18	753	791	30	0	14	21	33	0
Grp Sat Flow(s),veh/h/ln	1738	1663	1814	1707	1786	1871	1352	0	1615	1414	1900	1568
Q Serve(g_s), s	5.3	24.1	24.2	0.5	33.9	34.0	1.9	0.0	1.1	1.9	2.2	0.0
Cycle Q Clear(g_c), s	5.3	24.1	24.2	0.5	33.9	34.0	4.1	0.0	1.1	6.0	2.2	0.0
Prop In Lane	1.00		0.04	1.00		0.03	0.80		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	567	2355	1284	197	1193	1250	220	0	208	192	244	202
V/C Ratio(X)	0.76	0.52	0.52	0.09	0.63	0.63	0.14	0.00	0.07	0.11	0.14	0.00
Avail Cap(c_a), veh/h	592	2355	1284	521	1193	1250	220	0	208	192	244	202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	9.5	9.5	8.5	13.4	13.4	55.3	0.0	53.6	57.6	54.1	0.0
Incr Delay (d2), s/veh	5.1	0.3	0.5	0.4	2.5	2.4	1.3	0.0	0.6	1.1	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.1	12.2	0.2	17.4	18.2	1.1	0.0	0.5	0.8	1.2	0.0
LnGrp Delay(d),s/veh	23.6	9.8	10.0	8.9	15.9	15.8	56.5	0.0	54.2	58.8	55.2	0.0
LnGrp LOS	C	A	B	A	B	B	E		D	E	E	
Approach Vol, veh/h		2337			1562			44			54	
Approach Delay, s/veh		12.4			15.8			55.8			56.6	
Approach LOS		B			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	105.6		25.0	14.0	100.0		25.0
Change Period (Y+Rc), s	6.4	6.5		7.0	6.5	6.5		7.0
Max Green Setting (Gmax), s	28.6	73.5		18.0	8.5	93.5		18.0
Max Q Clear Time (g_c+I1), s	2.5	26.2		8.0	7.3	36.0		6.1
Green Ext Time (p_c), s	0.1	44.8		0.2	0.2	53.8		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		14.8
HCM 2010 LOS		B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2047	1275	0	727	302
Future Volume (veh/h)	0	2047	1275	0	727	302
Number	1	6	2	12	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h	0	2274	1417	0	808	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2265	2265	0	870	400
Arrive On Green	0.00	0.64	0.64	0.00	0.25	0.00
Sat Flow, veh/h	0	3725	3725	0	3442	1583
Grp Volume(v), veh/h	0	2274	1417	0	808	0
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1721	1583
Q Serve(g_s), s	0.0	89.6	33.7	0.0	32.1	0.0
Cycle Q Clear(g_c), s	0.0	89.6	33.7	0.0	32.1	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2265	2265	0	870	400
V/C Ratio(X)	0.00	1.00	0.63	0.00	0.93	0.00
Avail Cap(c_a), veh/h	0	2265	2265	0	934	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	25.2	15.1	0.0	51.1	0.0
Incr Delay (d2), s/veh	0.0	19.9	1.3	0.0	14.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	49.7	16.7	0.0	17.0	0.0
LnGrp Delay(d),s/veh	0.0	45.1	16.5	0.0	65.6	0.0
LnGrp LOS		F	B		E	
Approach Vol, veh/h		2274	1417		808	
Approach Delay, s/veh		45.1	16.5		65.6	
Approach LOS		D	B		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		97.6		42.4		97.6		
Change Period (Y+Rc), s		8.0		7.0		8.0		
Max Green Setting (Gmax), s		87.0		38.0		87.0		
Max Q Clear Time (g_c+I1), s		35.7		34.1		91.6		
Green Ext Time (p_c), s		49.4		1.3		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	405	5	46	694	0	0	0	0	530	978	889
Future Volume (veh/h)	0	405	5	46	694	0	0	0	0	530	978	889
Number	1	6	16	5	2	12				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1857	1900	1863	1881	0				1881	1881	1810
Adj Flow Rate, veh/h	0	450	6	51	771	0				559	1129	988
Adj No. of Lanes	0	2	0	1	2	0				1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	2	1	0				1	1	5
Cap, veh/h	0	804	11	157	806	0				1215	2551	1043
Arrive On Green	0.00	0.23	0.23	0.23	0.23	0.00				0.68	0.68	0.68
Sat Flow, veh/h	0	3659	48	931	3668	0				1792	3762	1538
Grp Volume(v), veh/h	0	223	233	51	771	0				559	1129	988
Grp Sat Flow(s),veh/h/ln	0	1764	1849	931	1787	0				1792	1881	1538
Q Serve(g_s), s	0.0	15.7	15.7	7.2	29.8	0.0				20.4	19.3	80.9
Cycle Q Clear(g_c), s	0.0	15.7	15.7	22.9	29.8	0.0				20.4	19.3	80.9
Prop In Lane	0.00		0.03	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	398	417	157	806	0				1215	2551	1043
V/C Ratio(X)	0.00	0.56	0.56	0.32	0.96	0.00				0.46	0.44	0.95
Avail Cap(c_a), veh/h	0	398	417	157	806	0				1229	2580	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	48.1	48.1	58.2	53.5	0.0				10.5	10.4	20.3
Incr Delay (d2), s/veh	0.0	2.2	2.1	5.4	22.8	0.0				0.4	0.2	16.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.9	8.3	2.1	17.3	0.0				10.2	10.1	38.8
LnGrp Delay(d),s/veh	0.0	50.3	50.2	63.6	76.3	0.0				10.9	10.5	36.9
LnGrp LOS		D	D	E	E					B	B	D
Approach Vol, veh/h		456			822						2676	
Approach Delay, s/veh		50.2			75.5						20.4	
Approach LOS		D			E						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		39.1		100.9		39.1		
Change Period (Y+Rc), s		7.5		6.0		7.5		
Max Green Setting (Gmax), s		30.5		96.0		30.5		
Max Q Clear Time (g_c+I1), s		31.8		82.9		17.7		
Green Ext Time (p_c), s		0.0		12.0		7.8		

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

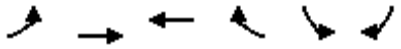
Notes

User approved volume balancing among the lanes for turning movement.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	39	68	233	27	65	91	159	695	81	110	1048	48
Future Volume (veh/h)	39	68	233	27	65	91	159	695	81	110	1048	48
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1881	1900	1843	1900	1863	1881	1900	1881	1882	1900
Adj Flow Rate, veh/h	43	76	259	29	70	98	177	772	90	122	1164	53
Adj No. of Lanes	1	1	1	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	3	1	0	6	6	2	1	1	1	1	1
Cap, veh/h	159	330	373	204	125	175	370	2893	335	475	3054	139
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.62	0.62	0.04	0.61	0.61
Sat Flow, veh/h	1237	1845	1599	1062	696	975	1774	4669	541	1792	5038	229
Grp Volume(v), veh/h	43	76	259	29	0	168	177	565	297	122	791	426
Grp Sat Flow(s),veh/h/ln	1237	1845	1599	1062	0	1671	1774	1712	1786	1792	1713	1842
Q Serve(g_s), s	4.6	4.9	20.8	3.4	0.0	12.8	5.3	10.5	10.6	3.6	16.6	16.6
Cycle Q Clear(g_c), s	17.4	4.9	20.8	8.3	0.0	12.8	5.3	10.5	10.6	3.6	16.6	16.6
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.30	1.00		0.12
Lane Grp Cap(c), veh/h	159	330	373	204	0	299	370	2122	1107	475	2076	1116
V/C Ratio(X)	0.27	0.23	0.69	0.14	0.00	0.56	0.48	0.27	0.27	0.26	0.38	0.38
Avail Cap(c_a), veh/h	207	402	435	245	0	364	623	2122	1107	588	2076	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.4	49.2	49.1	52.8	0.0	52.5	10.6	12.1	12.1	9.7	14.1	14.1
Incr Delay (d2), s/veh	1.3	0.5	4.7	0.4	0.0	2.3	0.7	0.1	0.2	0.2	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.6	9.6	1.0	0.0	6.1	2.6	5.0	5.3	1.8	8.0	8.7
LnGrp Delay(d),s/veh	61.7	49.7	53.8	53.2	0.0	54.8	11.3	12.2	12.4	9.9	14.6	15.1
LnGrp LOS	E	D	D	D		D	B	B	B	A	B	B
Approach Vol, veh/h		378			197			1039			1339	
Approach Delay, s/veh		53.9			54.6			12.1			14.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.1	92.4		33.6	12.2	94.3		33.6
Change Period (Y+Rc), s	6.5	7.5		8.5	6.5	7.5		8.5
Max Green Setting (Gmax), s	27.5	59.5		30.5	14.5	72.5		30.5
Max Q Clear Time (g_c+I1), s	17.3	18.6		14.8	5.6	12.6		22.8
Green Ext Time (p_c), s	0.3	29.7		3.5	0.1	38.5		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	82	2092	1735	87	138	107
Future Volume (veh/h)	82	2092	1735	87	138	107
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	1881	1900	1863	1881
Adj Flow Rate, veh/h	91	2324	1907	96	153	119
Adj No. of Lanes	1	2	3	0	1	1
Peak Hour Factor	0.90	0.90	0.91	0.91	0.90	0.90
Percent Heavy Veh, %	3	1	1	1	2	1
Cap, veh/h	194	2849	3992	201	176	159
Arrive On Green	0.80	0.80	0.80	0.80	0.10	0.10
Sat Flow, veh/h	212	3668	5178	252	1774	1599
Grp Volume(v), veh/h	91	2324	1302	701	153	119
Grp Sat Flow(s),veh/h/ln	212	1787	1712	1837	1774	1599
Q Serve(g_s), s	34.6	52.8	17.4	17.5	11.9	10.1
Cycle Q Clear(g_c), s	52.2	52.8	17.4	17.5	11.9	10.1
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	194	2849	2729	1464	176	159
V/C Ratio(X)	0.47	0.82	0.48	0.48	0.87	0.75
Avail Cap(c_a), veh/h	194	2849	2739	1469	177	160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	8.2	4.7	4.7	62.1	61.3
Incr Delay (d2), s/veh	8.0	2.7	0.2	0.3	33.6	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	26.6	8.2	8.9	7.5	5.3
LnGrp Delay(d),s/veh	21.2	10.9	4.8	5.0	95.8	78.9
LnGrp LOS	C	B	A	A	F	E
Approach Vol, veh/h		2415	2003		272	
Approach Delay, s/veh		11.3	4.9		88.4	
Approach LOS		B	A		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		119.1		20.9		119.1		
Change Period (Y+Rc), s		7.5		7.0		* 7.5		
Max Green Setting (Gmax), s		111.5		14.0		* 1.1E2		
Max Q Clear Time (g_c+I1), s		54.8		13.9		19.5		
Green Ext Time (p_c), s		56.3		0.0		91.5		

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	598	70	49	890	362	85	148	45	293	175	163
Future Volume (veh/h)	85	598	70	49	890	362	85	148	45	293	175	163
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1883	1900	1900	1881	1863	1900	1886	1900	1881	1881	1863
Adj Flow Rate, veh/h	94	664	78	53	967	0	94	164	50	252	277	175
Adj No. of Lanes	1	3	0	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	1	2	0	1	1	1	1	2
Cap, veh/h	322	2189	255	385	2357	727	297	228	70	314	329	277
Arrive On Green	0.04	0.47	0.47	0.03	0.46	0.00	0.16	0.16	0.16	0.18	0.18	0.18
Sat Flow, veh/h	1810	4671	544	1810	5136	1583	1810	1388	423	1792	1881	1583
Grp Volume(v), veh/h	94	486	256	53	967	0	94	0	214	252	277	175
Grp Sat Flow(s),veh/h/ln	1810	1714	1787	1810	1712	1583	1810	0	1811	1792	1881	1583
Q Serve(g_s), s	3.8	12.3	12.5	2.2	17.6	0.0	6.4	0.0	15.7	18.9	19.9	14.4
Cycle Q Clear(g_c), s	3.8	12.3	12.5	2.2	17.6	0.0	6.4	0.0	15.7	18.9	19.9	14.4
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	322	1607	838	385	2357	727	297	0	298	314	329	277
V/C Ratio(X)	0.29	0.30	0.31	0.14	0.41	0.00	0.32	0.00	0.72	0.80	0.84	0.63
Avail Cap(c_a), veh/h	358	1607	838	451	2357	727	297	0	298	448	470	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	23.0	23.1	19.2	25.2	0.0	51.6	0.0	55.4	55.4	55.9	53.6
Incr Delay (d2), s/veh	0.5	0.5	0.9	0.2	0.1	0.0	2.8	0.0	14.0	6.8	9.1	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	5.9	6.3	1.1	8.4	0.0	3.4	0.0	9.0	10.0	11.2	6.5
LnGrp Delay(d),s/veh	20.3	23.5	24.0	19.4	25.4	0.0	54.3	0.0	69.4	62.3	65.0	55.9
LnGrp LOS	C	C	C	B	C		D		E	E	E	E
Approach Vol, veh/h		836			1020			308			704	
Approach Delay, s/veh		23.3			25.0			64.8			61.8	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	71.6		29.0	10.2	70.3		30.5
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0
Max Green Setting (Gmax), s	9.5	50.0		23.0	8.5	51.0		35.0
Max Q Clear Time (g_c+I1), s	14.2	14.5		17.7	5.8	19.6		21.9
Green Ext Time (p_c), s	0.0	14.2		0.7	0.0	13.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1348	6	4	1933	103	3	2	2	162	3	68
Future Volume (veh/h)	23	1348	6	4	1933	103	3	2	2	162	3	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1871	1900
Adj Flow Rate, veh/h	26	1498	7	4	2035	108	3	2	2	180	3	76
Adj No. of Lanes	1	2	0	0	2	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	100	2584	12	27	2392	126	305	167	167	237	3	82
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	190	3648	17	1	3376	177	1341	873	873	1008	17	426
Grp Volume(v), veh/h	26	734	771	1124	0	1023	3	0	4	259	0	0
Grp Sat Flow(s),veh/h/ln	190	1787	1878	1875	0	1681	1341	0	1746	1450	0	0
Q Serve(g_s), s	16.5	28.4	28.5	0.0	0.0	63.5	0.0	0.0	0.3	24.4	0.0	0.0
Cycle Q Clear(g_c), s	80.0	28.4	28.5	60.6	0.0	63.5	0.3	0.0	0.3	24.6	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.11	1.00		0.50	0.69		0.29
Lane Grp Cap(c), veh/h	100	1266	1330	1354	0	1190	305	0	335	322	0	0
V/C Ratio(X)	0.26	0.58	0.58	0.83	0.00	0.86	0.01	0.00	0.01	0.81	0.00	0.00
Avail Cap(c_a), veh/h	100	1266	1330	1354	0	1190	316	0	349	334	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.0	10.1	10.1	14.8	0.0	15.2	45.8	0.0	45.8	55.8	0.0	0.0
Incr Delay (d2), s/veh	6.2	1.9	1.8	4.7	0.0	6.7	0.0	0.0	0.0	13.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	14.5	15.3	33.0	0.0	31.2	0.1	0.0	0.1	11.0	0.0	0.0
LnGrp Delay(d),s/veh	51.3	12.0	12.0	19.5	0.0	21.9	45.9	0.0	45.9	68.9	0.0	0.0
LnGrp LOS	D	B	B	B		C	D		D	E		
Approach Vol, veh/h		1531			2147			7			259	
Approach Delay, s/veh		12.7			20.7			45.9			68.9	
Approach LOS		B			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		106.2		33.8		106.2		33.8
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s		98.0		28.0		98.0		28.0
Max Q Clear Time (g_c+I1), s		82.0		26.6		65.5		2.3
Green Ext Time (p_c), s		15.8		0.2		32.0		1.6

Intersection Summary		
HCM 2010 Ctrl Delay		20.8
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	3.1

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	119	795	687	7	5	189
Future Vol, veh/h	119	795	687	7	5	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	90	90	95	95
Heavy Vehicles, %	1	1	2	0	0	0
Mvmt Flow	127	846	763	8	5	199

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	771	0	-	0	1866	767
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	1099	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	848	-	-	-	81	405
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	322	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	848	-	-	-	58	405
Mov Cap-2 Maneuver	-	-	-	-	58	-
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	231	-

Approach	NB	SB	NE
HCM Control Delay, s	1.3	0	23.5
HCM LOS			C

Minor Lane/Major Mvmt	NELn1	NELn2	NBL	NBT	SBT	SBR
Capacity (veh/h)	58	405	848	-	-	-
HCM Lane V/C Ratio	0.091	0.491	0.149	-	-	-
HCM Control Delay (s)	73.2	22.2	10	0	-	-
HCM Lane LOS	F	C	A	A	-	-
HCM 95th %tile Q(veh)	0.3	2.6	0.5	-	-	-

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	794	86	83	791	2	0	1	2	11	1	120
Future Volume (veh/h)	0	794	86	83	791	2	0	1	2	11	1	120
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1881	1900	1900	1863	1900	1900	1424	1900
Adj Flow Rate, veh/h	0	863	93	90	860	2	0	1	2	12	1	130
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	1	1	2	2	2	2	2	0
Cap, veh/h	0	1084	117	295	1230	3	0	58	115	225	13	167
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.66	0.00	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	0	1653	178	596	1876	4	0	556	1111	984	123	1615
Grp Volume(v), veh/h	0	0	956	90	0	862	0	0	3	13	0	130
Grp Sat Flow(s),veh/h/ln	0	0	1831	596	0	1880	0	0	1667	1107	0	1615
Q Serve(g_s), s	0.0	0.0	21.1	7.2	0.0	16.4	0.0	0.0	0.1	0.4	0.0	4.4
Cycle Q Clear(g_c), s	0.0	0.0	21.1	28.3	0.0	16.4	0.0	0.0	0.1	0.6	0.0	4.4
Prop In Lane	0.00		0.10	1.00		0.00	0.00		0.67	0.92		1.00
Lane Grp Cap(c), veh/h	0	0	1201	295	0	1233	0	0	173	238	0	167
V/C Ratio(X)	0.00	0.00	0.80	0.30	0.00	0.70	0.00	0.00	0.02	0.05	0.00	0.78
Avail Cap(c_a), veh/h	0	0	1240	308	0	1273	0	0	252	291	0	245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	7.0	17.1	0.0	6.1	0.0	0.0	22.6	22.8	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.6	0.0	1.7	0.0	0.0	0.0	0.1	0.0	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	11.6	1.2	0.0	8.7	0.0	0.0	0.0	0.2	0.0	2.4
LnGrp Delay(d),s/veh	0.0	0.0	10.6	17.7	0.0	7.8	0.0	0.0	22.6	22.9	0.0	33.6
LnGrp LOS			B	B		A			C	C		C
Approach Vol, veh/h		956			952			3			143	
Approach Delay, s/veh		10.6			8.7			22.6			32.6	
Approach LOS		B			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		43.8		12.3		43.8		12.3
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5
Max Green Setting (Gmax), s		38.0		8.5		38.0		8.5
Max Q Clear Time (g_c+I1), s		23.1		2.1		30.3		6.4
Green Ext Time (p_c), s		11.5		0.2		6.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1015	77	214	2351	891	254	205	356	632	131	121
Future Volume (veh/h)	144	1015	77	214	2351	891	254	205	356	632	131	121
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1900	1881	1881	1881	1881	1900	1881	1863	1881	1900
Adj Flow Rate, veh/h	160	1128	86	238	2612	0	282	228	396	702	146	134
Adj No. of Lanes	1	3	1	2	3	1	1	1	1	2	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	3	0	1	1	1	1	0	1	2	1	1
Cap, veh/h	184	2374	934	273	2445	990	192	326	400	492	187	172
Arrive On Green	0.07	0.47	0.47	0.08	0.48	0.00	0.11	0.17	0.17	0.14	0.21	0.21
Sat Flow, veh/h	1792	5036	1615	3476	5136	1599	1792	1900	1599	3442	905	830
Grp Volume(v), veh/h	160	1128	86	238	2612	0	282	228	396	702	0	280
Grp Sat Flow(s),veh/h/ln	1792	1679	1615	1738	1712	1599	1792	1900	1599	1721	0	1735
Q Serve(g_s), s	8.3	21.4	3.3	9.5	66.7	0.0	15.0	15.8	24.0	20.0	0.0	21.4
Cycle Q Clear(g_c), s	8.3	21.4	3.3	9.5	66.7	0.0	15.0	15.8	24.0	20.0	0.0	21.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	184	2374	934	273	2445	990	192	326	400	492	0	359
V/C Ratio(X)	0.87	0.48	0.09	0.87	1.07	0.00	1.47	0.70	0.99	1.43	0.00	0.78
Avail Cap(c_a), veh/h	205	2374	934	273	2445	990	192	326	400	492	0	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.1	25.2	13.1	63.8	36.7	0.0	62.5	54.6	52.3	60.0	0.0	52.5
Incr Delay (d2), s/veh	28.9	0.7	0.2	24.9	39.6	0.0	237.2	7.2	42.4	204.0	0.0	11.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	10.1	1.5	5.5	40.4	0.0	20.1	8.9	20.0	23.4	0.0	11.4
LnGrp Delay(d),s/veh	71.0	25.9	13.3	88.7	76.3	0.0	299.7	61.8	94.8	264.0	0.0	63.5
LnGrp LOS	E	C	B	F	F		F	E	F	F		E
Approach Vol, veh/h		1374			2850			906			982	
Approach Delay, s/veh		30.3			77.3			150.3			206.9	
Approach LOS		C			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	71.7	25.0	29.0	15.0	71.0	20.0	34.0
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.3	65.0	20.0	24.0	11.0	66.0	15.0	29.0
Max Q Clear Time (g_c+I1), s	10.3	68.7	22.0	26.0	11.5	23.4	17.0	23.4
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	41.6	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	98.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1497	692	0	977	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1497	692	0	977	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1845	0	1810	0			
Adj Flow Rate, veh/h				0	1627	0	0	1086	0			
Adj No. of Lanes				0	2	1	0	2	0			
Peak Hour Factor				0.92	0.92	0.92	0.90	0.90	0.90			
Percent Heavy Veh, %				0	1	3	0	5	0			
Cap, veh/h				0	2030	890	0	1191	0			
Arrive On Green				0.00	0.57	0.00	0.00	0.35	0.00			
Sat Flow, veh/h				0	3668	1568	0	3619	0			
Grp Volume(v), veh/h				0	1627	0	0	1086	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1568	0	1719	0			
Q Serve(g_s), s				0.0	50.5	0.0	0.0	42.2	0.0			
Cycle Q Clear(g_c), s				0.0	50.5	0.0	0.0	42.2	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	2030	890	0	1191	0			
V/C Ratio(X)				0.00	0.80	0.00	0.00	0.91	0.00			
Avail Cap(c_a), veh/h				0	2030	890	0	1191	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	24.0	0.0	0.0	43.7	0.0			
Incr Delay (d2), s/veh				0.0	3.5	0.0	0.0	12.0	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	25.8	0.0	0.0	22.0	0.0			
LnGrp Delay(d),s/veh				0.0	27.4	0.0	0.0	55.7	0.0			
LnGrp LOS					C			E				
Approach Vol, veh/h					1627			1086				
Approach Delay, s/veh					27.4			55.7				
Approach LOS					C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		85.0		55.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		79.5		48.5				
Max Q Clear Time (g_c+I1), s		52.5		44.2				
Green Ext Time (p_c), s		19.3		2.7				

Intersection Summary		
HCM 2010 Ctrl Delay		38.8
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	766	550	37	1311	11	381	176	28	35	242	497
Future Volume (veh/h)	217	766	550	37	1311	11	381	176	28	35	242	497
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1881	1881	1900	1881	1900	1881	1884	1900	1845	1881	1845
Adj Flow Rate, veh/h	241	851	611	41	1457	12	401	185	29	38	263	540
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	2	1	1	0	1	1	1	1	1	3	1	3
Cap, veh/h	219	1871	837	186	1417	12	338	615	96	301	414	345
Arrive On Green	0.10	0.52	0.52	0.39	0.39	0.39	0.13	0.39	0.39	0.22	0.22	0.22
Sat Flow, veh/h	1774	3574	1599	369	3633	30	1792	1590	249	1151	1881	1568
Grp Volume(v), veh/h	241	851	611	41	716	753	401	0	214	38	263	540
Grp Sat Flow(s),veh/h/ln	1774	1787	1599	369	1787	1876	1792	0	1840	1151	1881	1568
Q Serve(g_s), s	14.5	22.3	44.2	11.7	58.5	58.5	19.0	0.0	12.1	4.0	19.0	33.0
Cycle Q Clear(g_c), s	14.5	22.3	44.2	14.1	58.5	58.5	19.0	0.0	12.1	4.0	19.0	33.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	219	1871	837	186	697	732	338	0	711	301	414	345
V/C Ratio(X)	1.10	0.45	0.73	0.22	1.03	1.03	1.18	0.00	0.30	0.13	0.64	1.57
Avail Cap(c_a), veh/h	219	1871	837	186	697	732	338	0	711	301	414	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	22.4	27.6	33.0	45.8	45.8	43.9	0.0	31.9	47.2	53.0	58.5
Incr Delay (d2), s/veh	89.4	0.4	4.0	2.7	41.4	40.8	109.1	0.0	0.4	0.3	4.0	268.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	11.1	20.4	1.3	36.9	38.6	10.3	0.0	6.2	1.3	10.3	40.0
LnGrp Delay(d),s/veh	139.2	22.7	31.6	35.7	87.1	86.5	152.9	0.0	32.3	47.5	57.1	326.7
LnGrp LOS	F	C	C	D	F	F	F		C	D	E	F
Approach Vol, veh/h		1703			1510			615			841	
Approach Delay, s/veh		42.4			85.4			111.0			229.7	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6	7	8
Phs Duration (G+Y+Rc), s	20.0	65.0		65.0		85.0	25.0	40.0
Change Period (Y+Rc), s	5.5	6.5		7.0		6.5	6.0	7.0
Max Green Setting (Gmax), s	14.5	58.5		58.0		78.5	19.0	33.0
Max Q Clear Time (g_c+I1), s	16.5	60.5		14.1		46.2	21.0	35.0
Green Ext Time (p_c), s	0.0	0.0		11.9		30.9	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	99.1	
HCM 2010 LOS	F	

Intersection	
Int Delay, s/veh	29.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	227	0	37	52	82	2	17	316	297	5	9
Future Vol, veh/h	10	227	0	37	52	82	2	17	316	297	5	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	3	0	0	9	4	0	0	1	1	0	11
Mvmt Flow	11	252	0	41	58	91	2	19	351	330	6	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	149	0	0	252	0	0	388	505	126	344	460	74
Stage 1	-	-	-	-	-	-	274	274	-	186	186	-
Stage 2	-	-	-	-	-	-	114	231	-	158	274	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.92	7.52	6.5	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.52	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.52	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.31	3.51	4	3.41
Pot Cap-1 Maneuver	1445	-	-	1325	-	-	550	473	904	588	501	944
Stage 1	-	-	-	-	-	-	714	687	-	801	750	-
Stage 2	-	-	-	-	-	-	884	717	-	831	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1445	-	-	1325	-	-	522	453	904	337	480	944
Mov Cap-2 Maneuver	-	-	-	-	-	-	522	453	-	337	480	-
Stage 1	-	-	-	-	-	-	708	681	-	794	725	-
Stage 2	-	-	-	-	-	-	838	693	-	490	681	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.3	1.7	12.4	84.4
HCM LOS			B	F

Minor Lane/Major Mvmt	NELn1	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1
Capacity (veh/h)	857	1445	-	-	1325	-	-	345
HCM Lane V/C Ratio	0.434	0.008	-	-	0.031	-	-	1.002
HCM Control Delay (s)	12.4	7.5	0	-	7.8	0.1	-	84.4
HCM Lane LOS	B	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.2	0	-	-	0.1	-	-	11.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	536	304	490	120	0	0	0	0	102	55	51
Future Volume (veh/h)	0	536	304	490	120	0	0	0	0	102	55	51
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1876	1900	1845	1810	0				1900	1816	1863
Adj Flow Rate, veh/h	0	596	338	516	126	0				113	61	57
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	3	5	0				2	2	2
Cap, veh/h	0	1107	628	559	2522	0				155	84	215
Arrive On Green	0.00	0.50	0.50	0.16	0.73	0.00				0.14	0.14	0.14
Sat Flow, veh/h	0	2288	1244	1757	3529	0				1143	617	1583
Grp Volume(v), veh/h	0	484	450	516	126	0				174	0	57
Grp Sat Flow(s),veh/h/ln	0	1782	1656	1757	1719	0				1759	0	1583
Q Serve(g_s), s	0.0	16.3	16.3	11.4	0.9	0.0				8.3	0.0	2.8
Cycle Q Clear(g_c), s	0.0	16.3	16.3	11.4	0.9	0.0				8.3	0.0	2.8
Prop In Lane	0.00		0.75	1.00		0.00				0.65		1.00
Lane Grp Cap(c), veh/h	0	899	836	559	2522	0				239	0	215
V/C Ratio(X)	0.00	0.54	0.54	0.92	0.05	0.00				0.73	0.00	0.26
Avail Cap(c_a), veh/h	0	899	836	836	2522	0				352	0	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.51	0.51	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.8	14.8	13.1	3.2	0.0				36.5	0.0	34.1
Incr Delay (d2), s/veh	0.0	2.3	2.5	6.0	0.0	0.0				3.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	8.0	7.5	0.4	0.0				4.3	0.0	1.3
LnGrp Delay(d),s/veh	0.0	17.1	17.3	19.1	3.3	0.0				39.6	0.0	34.6
LnGrp LOS		B	B	B	A					D		C
Approach Vol, veh/h		934			642						231	
Approach Delay, s/veh		17.2			16.0						38.4	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.1	50.5		17.4		70.6		
Change Period (Y+Rc), s	* 5.7	6.1		* 5.4		6.1		
Max Green Setting (Gmax), s	* 28	24.9		* 18		58.9		
Max Q Clear Time (g_c+I1), s	13.4	18.3		10.3		2.9		
Green Ext Time (p_c), s	1.1	5.3		0.5		24.6		

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL2	NEL	NER
Lane Configurations											
Traffic Volume (veh/h)	358	280	0	0	572	498	0	0	38	0	264
Future Volume (veh/h)	358	280	0	0	572	498	0	0	38	0	264
Number	5	2	12	1	6	16			3	3	18
Initial Q (Qb), veh	0	0	0	0	0	0			0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1827	0	0	1861	1900			1900	1900	1638
Adj Flow Rate, veh/h	398	311	0	0	636	553			42	42	293
Adj No. of Lanes	1	2	0	0	2	0			0	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			0.90	0.90	0.90
Percent Heavy Veh, %	2	4	0	0	3	3			16	16	16
Cap, veh/h	445	2367	0	0	807	697			318	318	264
Arrive On Green	0.05	0.23	0.00	0.00	0.45	0.45			0.19	0.19	0.19
Sat Flow, veh/h	1774	3563	0	0	1894	1555			1675	1675	1392
Grp Volume(v), veh/h	398	311	0	0	624	565			42	42	293
Grp Sat Flow(s),veh/h/ln	1774	1736	0	0	1768	1587			1675	1675	1392
Q Serve(g_s), s	12.2	6.3	0.0	0.0	26.5	26.8			1.8	1.8	16.7
Cycle Q Clear(g_c), s	12.2	6.3	0.0	0.0	26.5	26.8			1.8	1.8	16.7
Prop In Lane	1.00		0.00	0.00		0.98			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	445	2367	0	0	793	711			318	318	264
V/C Ratio(X)	0.90	0.13	0.00	0.00	0.79	0.79			0.13	0.13	1.11
Avail Cap(c_a), veh/h	554	2367	0	0	793	711			318	318	264
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.00	0.00	0.87	0.87			1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	13.3	0.0	0.0	20.7	20.8			29.6	29.6	35.7
Incr Delay (d2), s/veh	9.8	0.1	0.0	0.0	6.9	7.8			0.9	0.9	87.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	3.1	0.0	0.0	14.4	13.2			0.9	0.9	12.8
LnGrp Delay(d),s/veh	34.9	13.4	0.0	0.0	27.6	28.6			30.5	30.5	123.4
LnGrp LOS	C	B			C	C			C	C	F
Approach Vol, veh/h		709			1189				335	335	
Approach Delay, s/veh		25.5			28.1				111.8	111.8	
Approach LOS		C			C				F	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		66.0			20.6	45.4		22.0
Change Period (Y+Rc), s		* 6			5.9	* 6		5.3
Max Green Setting (Gmax), s		* 60			20.1	* 34		16.7
Max Q Clear Time (g_c+I1), s		8.3			14.2	28.8		18.7
Green Ext Time (p_c), s		36.2			0.5	4.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	487	263	473	71	79	583
Future Volume (veh/h)	487	263	473	71	79	583
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1956	1937	1712	1727	1881	1918
Adj Flow Rate, veh/h	541	292	526	0	88	648
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	11	10	1	3
Cap, veh/h	791	478	1084	489	455	1920
Arrive On Green	0.22	0.22	0.33	0.00	0.07	0.53
Sat Flow, veh/h	3615	1647	3338	1468	1792	3741
Grp Volume(v), veh/h	541	292	526	0	88	648
Grp Sat Flow(s),veh/h/ln	1807	1647	1626	1468	1792	1823
Q Serve(g_s), s	6.8	7.5	6.3	0.0	1.4	5.0
Cycle Q Clear(g_c), s	6.8	7.5	6.3	0.0	1.4	5.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	791	478	1084	489	455	1920
V/C Ratio(X)	0.68	0.61	0.49	0.00	0.19	0.34
Avail Cap(c_a), veh/h	994	570	2384	1076	546	1920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.0	13.0	0.0	8.7	6.7
Incr Delay (d2), s/veh	1.3	1.3	0.4	0.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.6	2.8	0.0	0.7	2.6
LnGrp Delay(d),s/veh	18.9	16.3	13.4	0.0	8.9	6.8
LnGrp LOS	B	B	B		A	A
Approach Vol, veh/h	833		526			736
Approach Delay, s/veh	18.0		13.4			7.1
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.5	22.4				31.9		17.2
Change Period (Y+Rc), s	6.0	6.0				* 6		6.5
Max Green Setting (Gmax), s	6.0	36.0				* 24		13.5
Max Q Clear Time (g_c+I1), s	3.4	8.3				7.0		9.5
Green Ext Time (p_c), s	0.0	8.0				8.0		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	555	1112	13	32	1155	92	8	16	26	93	26	1152
Future Volume (veh/h)	555	1112	13	32	1155	92	8	16	26	93	26	1152
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1825	1900	1976	1827	1918	1824	1754	1754	1900	1871	1845
Adj Flow Rate, veh/h	617	1236	14	36	1283	102	9	18	29	103	29	0
Adj No. of Lanes	2	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	4	4	0	4	3	6	6	4	0	0	3
Cap, veh/h	739	2083	24	337	1429	671	111	175	195	218	41	205
Arrive On Green	0.22	0.59	0.59	0.04	0.41	0.41	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	3408	3511	40	1882	3471	1631	360	1338	1491	1011	311	1568
Grp Volume(v), veh/h	617	610	640	36	1283	102	27	0	29	132	0	0
Grp Sat Flow(s),veh/h/ln	1704	1734	1818	1882	1736	1631	1698	0	1491	1322	0	1568
Q Serve(g_s), s	13.0	16.5	16.5	0.8	25.8	2.9	0.0	0.0	1.3	6.4	0.0	0.0
Cycle Q Clear(g_c), s	13.0	16.5	16.5	0.8	25.8	2.9	1.0	0.0	1.3	7.5	0.0	0.0
Prop In Lane	1.00		0.02	1.00		1.00	0.33		1.00	0.78		1.00
Lane Grp Cap(c), veh/h	739	1029	1078	337	1429	671	286	0	195	259	0	205
V/C Ratio(X)	0.83	0.59	0.59	0.11	0.90	0.15	0.09	0.00	0.15	0.51	0.00	0.00
Avail Cap(c_a), veh/h	1111	1029	1078	633	1429	671	802	0	685	336	0	289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.0	9.5	9.6	11.7	20.5	13.8	28.7	0.0	28.8	31.9	0.0	0.0
Incr Delay (d2), s/veh	3.0	2.5	2.4	0.1	9.2	0.5	0.1	0.0	0.3	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	8.5	8.9	0.4	14.1	1.4	0.5	0.0	0.6	2.8	0.0	0.0
LnGrp Delay(d),s/veh	31.0	12.1	12.0	11.8	29.8	14.3	28.8	0.0	29.2	33.4	0.0	0.0
LnGrp LOS	C	B	B	B	C	B	C		C	C		
Approach Vol, veh/h		1867			1421			56			132	
Approach Delay, s/veh		18.3			28.2			29.0			33.4	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	50.6		16.0	21.8	37.0		16.0
Change Period (Y+Rc), s	5.6	* 6.2		* 6.2	5.6	* 6.2		* 6.2
Max Green Setting (Gmax), s	14.4	* 44		* 14	24.4	* 14		* 34
Max Q Clear Time (g_c+I1), s	12.8	18.5		9.5	15.0	27.8		3.3
Green Ext Time (p_c), s	0.0	21.4		0.3	1.3	0.0		1.0

Intersection Summary		
HCM 2010 Ctrl Delay	23.1	
HCM 2010 LOS	C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	1258	37	79	1485	8	39	0	87	37	0	34
Future Volume (veh/h)	4	1258	37	79	1485	8	39	0	87	37	0	34
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1826	1900	1881	1859	1900	1900	1845	1863	1667	1743	1900
Adj Flow Rate, veh/h	4	1353	40	88	1650	9	43	0	97	41	0	38
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	4	1	2	2	0	0	2	14	0	0
Cap, veh/h	248	2220	66	330	2725	15	200	0	178	148	0	166
Arrive On Green	0.64	0.64	0.64	0.05	0.76	0.76	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	305	3442	102	1792	3602	20	1070	0	1583	1157	0	1482
Grp Volume(v), veh/h	4	681	712	88	809	850	43	0	97	41	0	38
Grp Sat Flow(s),veh/h/ln	305	1735	1808	1792	1766	1856	1070	0	1583	1157	0	1482
Q Serve(g_s), s	0.5	20.7	20.7	1.3	18.5	18.5	2.7	0.0	5.2	3.1	0.0	2.1
Cycle Q Clear(g_c), s	9.0	20.7	20.7	1.3	18.5	18.5	4.8	0.0	5.2	7.9	0.0	2.1
Prop In Lane	1.00		0.06	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1119	1166	330	1336	1404	200	0	178	148	0	166
V/C Ratio(X)	0.02	0.61	0.61	0.27	0.61	0.61	0.21	0.00	0.55	0.28	0.00	0.23
Avail Cap(c_a), veh/h	248	1119	1166	528	1336	1404	406	0	419	324	0	392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.2	9.3	9.4	7.5	4.9	4.9	38.6	0.0	37.8	41.3	0.0	36.4
Incr Delay (d2), s/veh	0.1	1.9	1.8	0.4	1.7	1.6	1.9	0.0	9.1	3.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	10.4	10.9	0.7	9.4	9.8	1.1	0.0	2.7	1.1	0.0	1.0
LnGrp Delay(d),s/veh	9.3	11.2	11.2	7.9	6.6	6.5	40.5	0.0	46.9	44.9	0.0	38.9
LnGrp LOS	A	B	B	A	A	A	D		D	D		D
Approach Vol, veh/h		1397			1747			140			79	
Approach Delay, s/veh		11.2			6.6			44.9			42.0	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	63.6		16.3		73.7		16.3
Change Period (Y+Rc), s	5.6	5.6		* 6.2		5.6		* 6.2
Max Green Setting (Gmax), s	14.4	34.4		* 24		54.4		* 24
Max Q Clear Time (g_c+I1), s	13.3	22.7		7.2		20.5		9.9
Green Ext Time (p_c), s	0.1	11.6		2.0		29.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	740	551	39	1468	0	0	0	0	257	141	50
Future Volume (veh/h)	0	740	551	39	1468	0	0	0	0	257	141	50
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1810	1845	1810	1863	0				1792	1853	1696
Adj Flow Rate, veh/h	0	779	580	43	1631	0				222	247	0
Adj No. of Lanes	0	2	1	1	2	0				1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	5	3	5	2	0				6	1	12
Cap, veh/h	0	1932	881	349	2452	0				280	304	236
Arrive On Green	0.00	0.56	0.56	0.06	0.69	0.00				0.16	0.16	0.00
Sat Flow, veh/h	0	3529	1568	1723	3632	0				1707	1853	1442
Grp Volume(v), veh/h	0	779	580	43	1631	0				222	247	0
Grp Sat Flow(s),veh/h/ln	0	1719	1568	1723	1770	0				1707	1853	1442
Q Serve(g_s), s	0.0	11.5	23.1	0.8	23.6	0.0				11.2	11.6	0.0
Cycle Q Clear(g_c), s	0.0	11.5	23.1	0.8	23.6	0.0				11.2	11.6	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1932	881	349	2452	0				280	304	236
V/C Ratio(X)	0.00	0.40	0.66	0.12	0.67	0.00				0.79	0.81	0.00
Avail Cap(c_a), veh/h	0	1932	881	401	2452	0				645	700	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.55	0.55	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	11.2	13.7	7.0	7.9	0.0				36.2	36.3	0.0
Incr Delay (d2), s/veh	0.0	0.6	3.8	0.0	0.8	0.0				1.9	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.6	10.9	0.4	11.6	0.0				5.5	6.1	0.0
LnGrp Delay(d),s/veh	0.0	11.8	17.5	7.1	8.7	0.0				38.1	38.3	0.0
LnGrp LOS		B	B	A	A					D	D	
Approach Vol, veh/h		1359			1674						469	
Approach Delay, s/veh		14.2			8.6						38.2	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.8	57.1		21.1		68.9		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	8.0	28.6		* 34		43.1		
Max Q Clear Time (g_c+I1), s	2.8	25.1		13.6		25.6		
Green Ext Time (p_c), s	0.0	3.5		1.2		17.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	904	0	0	1023	519	484	267	18	0	0	0
Future Volume (veh/h)	93	904	0	0	1023	519	484	267	18	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1727	1810	0	0	1881	1956	1845	1870	1864			
Adj Flow Rate, veh/h	98	952	0	0	1137	0	418	466	0			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	10	5	0	0	1	1	3	1	6			
Cap, veh/h	125	1996	0	0	1626	756	493	525	444			
Arrive On Green	0.05	0.39	0.00	0.00	0.45	0.00	0.09	0.09	0.00			
Sat Flow, veh/h	1645	3529	0	0	3668	1663	1757	1870	1585			
Grp Volume(v), veh/h	98	952	0	0	1137	0	418	466	0			
Grp Sat Flow(s),veh/h/ln	1645	1719	0	0	1787	1663	1757	1870	1585			
Q Serve(g_s), s	5.3	18.7	0.0	0.0	22.9	0.0	21.1	22.2	0.0			
Cycle Q Clear(g_c), s	5.3	18.7	0.0	0.0	22.9	0.0	21.1	22.2	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	125	1996	0	0	1626	756	493	525	444			
V/C Ratio(X)	0.79	0.48	0.00	0.00	0.70	0.00	0.85	0.89	0.00			
Avail Cap(c_a), veh/h	358	1996	0	0	1626	756	517	551	467			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.88	0.88	0.00	0.00	0.73	0.00	0.72	0.72	0.00			
Uniform Delay (d), s/veh	42.0	17.2	0.0	0.0	19.6	0.0	38.9	39.4	0.0			
Incr Delay (d2), s/veh	9.3	0.7	0.0	0.0	1.0	0.0	9.1	12.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	9.1	0.0	0.0	11.4	0.0	11.5	13.2	0.0			
LnGrp Delay(d),s/veh	51.3	18.0	0.0	0.0	20.6	0.0	48.1	51.5	0.0			
LnGrp LOS	D	B			C		D	D				
Approach Vol, veh/h		1050			1137			884				
Approach Delay, s/veh		21.1			20.6			49.9				
Approach LOS		C			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		58.3			11.3	46.9		31.7
Change Period (Y+Rc), s		6.0			4.5	6.0		6.5
Max Green Setting (Gmax), s		51.0			19.6	26.9		26.5
Max Q Clear Time (g_c+I1), s		20.7			7.3	24.9		24.2
Green Ext Time (p_c), s		18.5			0.2	1.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	867	39	119	1403	5	74	5	166	26	28	65
Future Volume (veh/h)	16	867	39	119	1403	5	74	5	166	26	28	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1811	1900	1863	1863	1900	1900	1882	1827	1900	1863	1900
Adj Flow Rate, veh/h	18	963	43	132	1559	6	82	6	184	29	31	72
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	13	5	5	2	2	0	0	0	4	0	0	0
Cap, veh/h	221	2024	90	434	2268	1035	165	10	294	53	38	53
Arrive On Green	0.02	0.60	0.60	0.06	0.64	0.64	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1601	3355	150	1774	3539	1615	711	75	1553	48	297	414
Grp Volume(v), veh/h	18	494	512	132	1559	6	88	0	184	132	0	0
Grp Sat Flow(s),veh/h/ln	1601	1720	1785	1774	1770	1615	786	0	1553	759	0	0
Q Serve(g_s), s	0.4	15.0	15.0	2.5	26.6	0.1	0.0	0.0	10.2	1.7	0.0	0.0
Cycle Q Clear(g_c), s	0.4	15.0	15.0	2.5	26.6	0.1	10.3	0.0	10.2	12.0	0.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	0.93		1.00	0.22		0.55
Lane Grp Cap(c), veh/h	221	1038	1076	434	2268	1035	174	0	294	144	0	0
V/C Ratio(X)	0.08	0.48	0.48	0.30	0.69	0.01	0.50	0.00	0.63	0.92	0.00	0.00
Avail Cap(c_a), veh/h	285	1038	1076	484	2268	1035	174	0	294	144	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	10.4	10.4	7.3	10.8	6.1	40.2	0.0	35.0	41.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.4	1.3	0.0	0.1	0.0	1.8	0.0	3.7	51.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	7.5	7.8	1.2	12.8	0.1	2.3	0.0	4.7	5.5	0.0	0.0
LnGrp Delay(d),s/veh	9.7	11.8	11.7	7.3	11.0	6.1	41.9	0.0	38.7	92.8	0.0	0.0
LnGrp LOS	A	B	B	A	B	A	D		D	F		
Approach Vol, veh/h		1024			1697			272			132	
Approach Delay, s/veh		11.7			10.7			39.8			92.8	
Approach LOS		B			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	63.2		18.5	8.7	66.8		18.5
Change Period (Y+Rc), s	6.5	6.5		6.5	6.5	6.5		6.5
Max Green Setting (Gmax), s	8.5	51.5		12.0	6.0	56.5		12.0
Max Q Clear Time (g_c+I1), s	14.5	17.0		14.0	2.4	28.6		12.3
Green Ext Time (p_c), s	0.1	33.5		0.0	0.0	27.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		17.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	484	38	67	157	0	0	0	0	40	547	144
Future Volume (veh/h)	0	484	38	67	157	0	0	0	0	40	547	144
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1883	1900	1845	1863	0				1900	1850	1900
Adj Flow Rate, veh/h	0	538	42	74	174	0				44	608	160
Adj No. of Lanes	0	2	0	1	2	0				0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	3	2	0				0	3	0
Cap, veh/h	0	1842	143	460	1938	0				58	827	231
Arrive On Green	0.00	0.55	0.55	0.55	0.55	0.00				0.10	0.10	0.10
Sat Flow, veh/h	0	3457	262	823	3632	0				185	2639	737
Grp Volume(v), veh/h	0	286	294	74	174	0				438	0	374
Grp Sat Flow(s),veh/h/ln	0	1788	1836	823	1770	0				1841	0	1720
Q Serve(g_s), s	0.0	7.7	7.8	4.8	2.1	0.0				20.9	0.0	18.9
Cycle Q Clear(g_c), s	0.0	7.7	7.8	12.6	2.1	0.0				20.9	0.0	18.9
Prop In Lane	0.00		0.14	1.00		0.00				0.10		0.43
Lane Grp Cap(c), veh/h	0	980	1006	460	1938	0				577	0	539
V/C Ratio(X)	0.00	0.29	0.29	0.16	0.09	0.00				0.76	0.00	0.69
Avail Cap(c_a), veh/h	0	980	1006	460	1938	0				890	0	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.78	0.00	0.78
Uniform Delay (d), s/veh	0.0	11.0	11.0	14.3	9.7	0.0				37.1	0.0	36.2
Incr Delay (d2), s/veh	0.0	0.8	0.7	0.7	0.1	0.0				1.7	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	4.1	1.2	1.0	0.0				10.9	0.0	9.2
LnGrp Delay(d),s/veh	0.0	11.7	11.7	15.1	9.8	0.0				38.7	0.0	37.4
LnGrp LOS		B	B	B	A					D		D
Approach Vol, veh/h		580			248						812	
Approach Delay, s/veh		11.7			11.4						38.1	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		55.3		34.7		55.3		
Change Period (Y+Rc), s		6.0		6.5		6.0		
Max Green Setting (Gmax), s		34.0		43.5		34.0		
Max Q Clear Time (g_c+I1), s		9.8		22.9		14.6		
Green Ext Time (p_c), s		6.6		5.3		6.0		

Intersection Summary		
HCM 2010 Ctrl Delay		24.7
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	174	0	0	174	12	50	407	71	0	0	0
Future Volume (veh/h)	350	174	0	0	174	12	50	407	71	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1863	0	0	1865	1900	1900	1844	1900			
Adj Flow Rate, veh/h	389	193	0	0	193	13	56	452	79			
Adj No. of Lanes	1	2	0	0	2	0	0	2	0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	1	2	0	0	2	2	0	3	0			
Cap, veh/h	819	2289	0	0	2180	146	70	590	108			
Arrive On Green	1.00	1.00	0.00	0.00	0.65	0.65	0.21	0.21	0.21			
Sat Flow, veh/h	1183	3632	0	0	3465	226	328	2750	505			
Grp Volume(v), veh/h	389	193	0	0	101	105	312	0	275			
Grp Sat Flow(s),veh/h/ln	1183	1770	0	0	1772	1825	1828	0	1755			
Q Serve(g_s), s	2.0	0.0	0.0	0.0	1.9	1.9	14.6	0.0	13.1			
Cycle Q Clear(g_c), s	4.0	0.0	0.0	0.0	1.9	1.9	14.6	0.0	13.1			
Prop In Lane	1.00		0.00	0.00		0.12	0.18		0.29			
Lane Grp Cap(c), veh/h	819	2289	0	0	1146	1180	392	0	376			
V/C Ratio(X)	0.47	0.08	0.00	0.00	0.09	0.09	0.80	0.00	0.73			
Avail Cap(c_a), veh/h	819	2289	0	0	1146	1180	558	0	536			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	0.89	0.89	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.1	0.0	0.0	0.0	6.0	6.0	33.5	0.0	32.9			
Incr Delay (d2), s/veh	1.9	0.1	0.0	0.0	0.0	0.0	5.3	0.0	3.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.0	0.9	1.0	7.9	0.0	6.6			
LnGrp Delay(d),s/veh	2.0	0.1	0.0	0.0	6.0	6.0	38.8	0.0	35.9			
LnGrp LOS	A	A			A	A	D		D			
Approach Vol, veh/h		582			206			587				
Approach Delay, s/veh		1.3			6.0			37.4				
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		64.2				64.2		25.8
Change Period (Y+Rc), s		6.0				6.0		6.5
Max Green Setting (Gmax), s		50.0				50.0		27.5
Max Q Clear Time (g_c+I1), s		6.0				3.9		16.6
Green Ext Time (p_c), s		5.3				5.3		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	632	200	95	777	66	453	165	153	121	71	127
Future Volume (veh/h)	133	632	200	95	777	66	453	165	153	121	71	127
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1814	1900	1810	1866	1900	1863	1881	1863	1863	1861	1900
Adj Flow Rate, veh/h	148	702	222	106	863	73	503	183	170	134	79	141
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	5	2	2	2	1	2	2	4	4
Cap, veh/h	294	904	286	277	1133	96	342	391	329	360	117	209
Arrive On Green	0.08	0.35	0.35	0.07	0.34	0.34	0.09	0.21	0.21	0.08	0.19	0.19
Sat Flow, veh/h	1740	2579	815	1723	3309	280	1774	1881	1583	1774	600	1072
Grp Volume(v), veh/h	148	469	455	106	462	474	503	183	170	134	0	220
Grp Sat Flow(s),veh/h/ln	1740	1724	1670	1723	1772	1816	1774	1881	1583	1774	0	1672
Q Serve(g_s), s	4.1	18.7	18.7	3.0	17.9	17.9	7.1	6.6	7.3	4.6	0.0	9.4
Cycle Q Clear(g_c), s	4.1	18.7	18.7	3.0	17.9	17.9	7.1	6.6	7.3	4.6	0.0	9.4
Prop In Lane	1.00		0.49	1.00		0.15	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	294	604	586	277	607	622	342	391	329	360	0	326
V/C Ratio(X)	0.50	0.78	0.78	0.38	0.76	0.76	1.47	0.47	0.52	0.37	0.00	0.67
Avail Cap(c_a), veh/h	382	656	636	293	610	625	342	391	329	360	0	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.9	22.3	22.3	16.7	22.5	22.5	28.9	26.7	27.0	22.2	0.0	28.7
Incr Delay (d2), s/veh	1.3	5.4	5.6	0.9	5.6	5.5	228.0	0.9	1.4	0.6	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.8	9.5	1.5	9.7	9.9	21.6	3.5	3.3	2.3	0.0	4.8
LnGrp Delay(d),s/veh	18.2	27.7	27.9	17.6	28.1	28.0	256.9	27.6	28.4	22.8	0.0	34.1
LnGrp LOS	B	C	C	B	C	C	F	C	C	C		C
Approach Vol, veh/h		1072			1042			856			354	
Approach Delay, s/veh		26.5			27.0			162.5			29.8	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	33.7	12.0	20.6	11.3	33.1	11.0	21.6
Change Period (Y+Rc), s	* 5.3	* 6.7	* 4.9	5.6	* 5.3	* 6.7	* 4.9	5.6
Max Green Setting (Gmax), s	* 6.1	* 29	* 7.1	15.0	* 9.9	* 27	* 6.1	16.0
Max Q Clear Time (g_c+I1), s	6.1	20.7	9.1	11.4	6.1	19.9	6.6	9.3
Green Ext Time (p_c), s	0.0	6.3	0.0	1.0	0.1	5.1	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	62.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	971	24	11	1083	142	18	9	34	150	7	30
Future Volume (veh/h)	30	971	24	11	1083	142	18	9	34	150	7	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1880	1900	1900	1816	1900	1900	1812	1900	1881	1798	1900
Adj Flow Rate, veh/h	33	1079	27	12	1203	158	20	10	38	167	8	33
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	5	5	5	11	11	11	1	29	29
Cap, veh/h	284	2191	55	77	1835	239	131	67	135	368	47	196
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	406	3561	89	8	2983	388	255	435	874	1365	307	1267
Grp Volume(v), veh/h	33	541	565	728	0	645	68	0	0	167	0	41
Grp Sat Flow(s),veh/h/ln	406	1786	1864	1795	0	1584	1564	0	0	1365	0	1575
Q Serve(g_s), s	2.9	8.5	8.5	0.0	0.0	13.4	0.0	0.0	0.0	3.5	0.0	1.1
Cycle Q Clear(g_c), s	16.3	8.5	8.5	13.1	0.0	13.4	1.8	0.0	0.0	5.3	0.0	1.1
Prop In Lane	1.00		0.05	0.02		0.24	0.29		0.56	1.00		0.80
Lane Grp Cap(c), veh/h	284	1099	1147	1176	0	975	333	0	0	368	0	243
V/C Ratio(X)	0.12	0.49	0.49	0.62	0.00	0.66	0.20	0.00	0.00	0.45	0.00	0.17
Avail Cap(c_a), veh/h	305	1189	1241	1264	0	1055	382	0	0	413	0	295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	5.4	5.4	6.3	0.0	6.3	18.9	0.0	0.0	20.2	0.0	18.6
Incr Delay (d2), s/veh	0.2	0.3	0.3	0.8	0.0	1.4	0.3	0.0	0.0	0.9	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.2	4.3	6.7	0.0	6.1	0.9	0.0	0.0	2.3	0.0	0.5
LnGrp Delay(d),s/veh	11.8	5.7	5.7	7.1	0.0	7.7	19.2	0.0	0.0	21.1	0.0	19.0
LnGrp LOS	B	A	A	A		A	B			C		B
Approach Vol, veh/h		1139			1373			68			208	
Approach Delay, s/veh		5.9			7.4			19.2			20.7	
Approach LOS		A			A			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.4		13.3		37.4		13.3
Change Period (Y+Rc), s		6.2		5.5		6.2		5.5
Max Green Setting (Gmax), s		33.8		9.5		33.8		9.5
Max Q Clear Time (g_c+I1), s		18.3		7.3		15.4		3.8
Green Ext Time (p_c), s		12.9		0.2		14.9		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	732	423	126	1004	0	0	0	0	157	0	232
Future Volume (veh/h)	0	732	423	126	1004	0	0	0	0	157	0	232
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1810	1881	1881	1827	0				1845	0	1597
Adj Flow Rate, veh/h	0	813	0	133	1057	0				174	0	0
Adj No. of Lanes	0	2	1	1	2	0				1	0	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95				0.90	0.90	0.90
Percent Heavy Veh, %	0	5	1	1	4	0				3	0	19
Cap, veh/h	0	1929	897	160	2503	0				214	0	165
Arrive On Green	0.00	0.56	0.00	0.09	0.72	0.00				0.12	0.00	0.00
Sat Flow, veh/h	0	3529	1599	1792	3563	0				1757	0	1357
Grp Volume(v), veh/h	0	813	0	133	1057	0				174	0	0
Grp Sat Flow(s),veh/h/ln	0	1719	1599	1792	1736	0				1757	0	1357
Q Serve(g_s), s	0.0	10.2	0.0	5.5	9.2	0.0				7.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.2	0.0	5.5	9.2	0.0				7.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1929	897	160	2503	0				214	0	165
V/C Ratio(X)	0.00	0.42	0.00	0.83	0.42	0.00				0.81	0.00	0.00
Avail Cap(c_a), veh/h	0	1929	897	160	2503	0				293	0	226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.82	0.00	0.61	0.61	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.5	0.0	33.6	4.2	0.0				32.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	19.7	0.3	0.0				11.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	0.0	3.6	4.4	0.0				4.2	0.0	0.0
LnGrp Delay(d),s/veh	0.0	10.0	0.0	53.3	4.5	0.0				43.8	0.0	0.0
LnGrp LOS		B		D	A					D		
Approach Vol, veh/h		813			1190						174	
Approach Delay, s/veh		10.0			10.0						43.8	
Approach LOS		B			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	48.4		14.6		60.4		
Change Period (Y+Rc), s	* 5.3	* 6.3		5.5		* 6.3		
Max Green Setting (Gmax), s	* 6.7	* 39		12.5		* 51		
Max Q Clear Time (g_c+I1), s	11.5	12.2		9.2		11.2		
Green Ext Time (p_c), s	0.0	15.5		0.1		19.2		

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	686	2	0	746	228	384	1	113	0	0	0
Future Volume (veh/h)	201	686	2	0	746	228	384	1	113	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1810	1881	1900	0	1849	1900	1845	1845	1863			
Adj Flow Rate, veh/h	223	762	2	0	811	248	428	0	0			
Adj No. of Lanes	1	2	0	0	2	0	2	0	1			
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90			
Percent Heavy Veh, %	5	1	1	0	3	3	3	0	2			
Cap, veh/h	154	2497	7	0	1386	424	515	0	232			
Arrive On Green	0.18	1.00	1.00	0.00	0.52	0.52	0.15	0.00	0.00			
Sat Flow, veh/h	1723	3657	10	0	2744	811	3514	0	1583			
Grp Volume(v), veh/h	223	372	392	0	537	522	428	0	0			
Grp Sat Flow(s),veh/h/ln	1723	1787	1880	0	1756	1706	1757	0	1583			
Q Serve(g_s), s	6.7	0.0	0.0	0.0	15.8	15.8	8.9	0.0	0.0			
Cycle Q Clear(g_c), s	6.7	0.0	0.0	0.0	15.8	15.8	8.9	0.0	0.0			
Prop In Lane	1.00		0.01	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	154	1220	1283	0	918	892	515	0	232			
V/C Ratio(X)	1.45	0.31	0.31	0.00	0.58	0.59	0.83	0.00	0.00			
Avail Cap(c_a), veh/h	154	1220	1283	0	918	892	539	0	243			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.85	0.85	0.85	0.00	0.55	0.55	1.00	0.00	0.00			
Uniform Delay (d), s/veh	30.8	0.0	0.0	0.0	12.3	12.3	31.1	0.0	0.0			
Incr Delay (d2), s/veh	230.0	0.6	0.5	0.0	0.5	0.6	10.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	13.0	0.2	0.2	0.0	7.7	7.5	5.0	0.0	0.0			
LnGrp Delay(d),s/veh	260.8	0.6	0.5	0.0	12.8	12.9	41.3	0.0	0.0			
LnGrp LOS	F	A	A		B	B	D					
Approach Vol, veh/h		987			1059			428				
Approach Delay, s/veh		59.3			12.8			41.3				
Approach LOS		E			B			D				

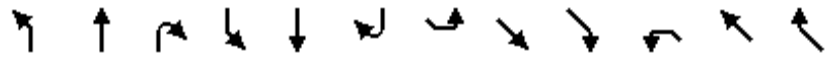
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		57.5		17.5	12.0	45.5		
Change Period (Y+Rc), s		* 6.3		6.5	* 5.3	* 6.3		
Max Green Setting (Gmax), s		* 51		11.5	* 6.7	* 39		
Max Q Clear Time (g_c+I1), s		2.0		10.9	8.7	17.8		
Green Ext Time (p_c), s		17.9		0.1	0.0	12.1		

Intersection Summary	
HCM 2010 Ctrl Delay	36.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	366	429	6	1	537	44	37	2	424	13	7	10
Future Volume (veh/h)	366	429	6	1	537	44	37	2	424	13	7	10
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1827	1900	1900	1860	1863	1900	1806	1863	1900	1794	1900
Adj Flow Rate, veh/h	407	477	7	1	597	49	41	2	471	14	8	11
Adj No. of Lanes	1	1	1	0	1	1	0	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	4	0	2	2	2	50	50	2	0	14	14
Cap, veh/h	360	1012	895	51	640	545	356	15	317	288	201	276
Arrive On Green	0.13	0.55	0.55	0.34	0.34	0.34	0.20	0.20	0.20	0.01	0.29	0.29
Sat Flow, veh/h	1792	1827	1615	0	1859	1583	1290	75	1583	1810	685	942
Grp Volume(v), veh/h	407	477	7	598	0	49	43	0	471	14	0	19
Grp Sat Flow(s),veh/h/ln	1792	1827	1615	1859	0	1583	1365	0	1583	1810	0	1628
Q Serve(g_s), s	9.3	11.3	0.1	0.9	0.0	1.5	1.7	0.0	14.3	0.4	0.0	0.6
Cycle Q Clear(g_c), s	9.3	11.3	0.1	22.2	0.0	1.5	1.8	0.0	14.3	0.4	0.0	0.6
Prop In Lane	1.00		1.00	0.00		1.00	0.95		1.00	1.00		0.58
Lane Grp Cap(c), veh/h	360	1012	895	691	0	545	371	0	317	288	0	478
V/C Ratio(X)	1.13	0.47	0.01	0.87	0.00	0.09	0.12	0.00	1.49	0.05	0.00	0.04
Avail Cap(c_a), veh/h	360	1017	899	695	0	549	371	0	317	499	0	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	9.6	7.1	22.6	0.0	15.9	23.6	0.0	28.6	20.8	0.0	18.1
Incr Delay (d2), s/veh	87.4	0.3	0.0	11.1	0.0	0.1	0.1	0.0	235.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	5.7	0.1	13.4	0.0	0.7	0.7	0.0	27.0	0.2	0.0	0.3
LnGrp Delay(d),s/veh	104.2	10.0	7.1	33.7	0.0	15.9	23.7	0.0	263.9	20.9	0.0	18.1
LnGrp LOS	F	A	A	C		B	C		F	C		B
Approach Vol, veh/h		891			647			514			33	
Approach Delay, s/veh		53.0			32.4			243.8			19.3	
Approach LOS		D			C			F			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Phs Duration (G+Y+Rc), s		44.8	6.7	20.0	15.0	29.8		26.7
Change Period (Y+Rc), s		* 5.2	5.7	5.7	5.7	* 5.2		5.7
Max Green Setting (Gmax), s		* 40	9.3	14.3	9.3	* 25		29.3
Max Q Clear Time (g_c+I1), s		13.3	2.4	16.3	11.3	24.2		2.6
Green Ext Time (p_c), s		8.0	0.0	0.0	0.0	0.4		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	93.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	354	1170	9	39	1403	76	12	52	41	80	60	532
Future Volume (veh/h)	354	1170	9	39	1403	76	12	52	41	80	60	532
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1845	1900	1900	1881	1827	1900	1900	1810	1681	1545	1845
Adj Flow Rate, veh/h	393	1300	10	43	1559	84	13	58	46	89	67	591
Adj No. of Lanes	2	1	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	3	0	0	1	4	0	0	5	13	23	3
Cap, veh/h	447	1037	908	112	1621	704	214	446	361	301	362	575
Arrive On Green	0.13	0.56	0.56	0.03	0.45	0.45	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	3375	1845	1615	1810	3574	1553	788	1900	1538	1160	1545	1568
Grp Volume(v), veh/h	393	1300	10	43	1559	84	13	58	46	89	67	591
Grp Sat Flow(s),veh/h/ln	1688	1845	1615	1810	1787	1553	788	1900	1538	1160	1545	1568
Q Serve(g_s), s	14.5	71.4	0.3	1.6	53.7	4.0	1.7	3.1	3.0	8.3	4.4	29.8
Cycle Q Clear(g_c), s	14.5	71.4	0.3	1.6	53.7	4.0	6.1	3.1	3.0	11.4	4.4	29.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	447	1037	908	112	1621	704	214	446	361	301	362	575
V/C Ratio(X)	0.88	1.25	0.01	0.38	0.96	0.12	0.06	0.13	0.13	0.30	0.18	1.03
Avail Cap(c_a), veh/h	500	1037	908	865	1621	704	214	446	361	301	362	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	27.8	12.2	30.4	33.6	20.0	41.3	38.4	38.3	42.9	38.9	40.2
Incr Delay (d2), s/veh	14.9	122.1	0.0	1.6	14.8	0.3	0.1	0.1	0.1	0.4	0.2	44.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	71.2	0.2	0.8	29.7	1.8	0.4	1.6	1.3	2.7	1.9	27.3
LnGrp Delay(d),s/veh	69.0	149.9	12.3	31.9	48.4	20.3	41.4	38.5	38.5	43.3	39.1	84.8
LnGrp LOS	E	F	B	C	D	C	D	D	D	D	D	F
Approach Vol, veh/h		1703			1686			117			747	
Approach Delay, s/veh		130.4			46.6			38.8			75.8	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.2	78.8		37.0	25.0	65.0		37.0
Change Period (Y+Rc), s	7.3	* 7.4		* 7.2	8.2	* 7.4		* 7.2
Max Green Setting (Gmax), s	6.7	* 19		* 30	18.8	* 19		* 30
Max Q Clear Time (g_c+I1), s	13.6	73.4		31.8	16.5	55.7		8.1
Green Ext Time (p_c), s	0.1	0.0		0.0	0.3	0.0		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	85.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	46	6	293	0	592	32	326	512	0
Future Volume (veh/h)	0	0	0	46	6	293	0	592	32	326	512	0
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1835	1696	0	1825	1900	1827	1845	0
Adj Flow Rate, veh/h				51	7	326	0	637	34	362	569	0
Adj No. of Lanes				0	1	1	0	2	0	1	2	0
Peak Hour Factor				0.90	0.90	0.90	0.93	0.93	0.93	0.90	0.90	0.90
Percent Heavy Veh, %				12	0	12	0	4	4	4	3	0
Cap, veh/h				330	45	308	0	1339	71	536	2178	0
Arrive On Green				0.21	0.21	0.21	0.00	0.40	0.40	0.14	0.62	0.00
Sat Flow, veh/h				1546	212	1442	0	3440	179	1740	3597	0
Grp Volume(v), veh/h				58	0	326	0	330	341	362	569	0
Grp Sat Flow(s),veh/h/ln				1758	0	1442	0	1734	1794	1740	1752	0
Q Serve(g_s), s				2.0	0.0	16.0	0.0	10.6	10.6	8.5	5.5	0.0
Cycle Q Clear(g_c), s				2.0	0.0	16.0	0.0	10.6	10.6	8.5	5.5	0.0
Prop In Lane				0.88		1.00	0.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h				375	0	308	0	693	717	536	2178	0
V/C Ratio(X)				0.15	0.00	1.06	0.00	0.48	0.48	0.68	0.26	0.00
Avail Cap(c_a), veh/h				375	0	308	0	693	717	568	2178	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	1.00	0.68	0.68	0.00
Uniform Delay (d), s/veh				24.0	0.0	29.5	0.0	16.7	16.7	10.9	6.4	0.0
Incr Delay (d2), s/veh				0.1	0.0	68.0	0.0	2.3	2.3	1.6	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.0	0.0	12.1	0.0	5.5	5.7	4.2	2.7	0.0
LnGrp Delay(d),s/veh				24.1	0.0	97.5	0.0	19.0	18.9	12.5	6.6	0.0
LnGrp LOS				C		F		B	B	B	A	
Approach Vol, veh/h					384			671			931	
Approach Delay, s/veh					86.4			19.0			8.9	
Approach LOS					F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	16.6	36.4		22.0		53.0		
Change Period (Y+Rc), s	6.0	* 6.4		6.0		6.4		
Max Green Setting (Gmax), s	12.0	* 29		16.0		46.6		
Max Q Clear Time (g_c+I1), s	10.5	12.6		18.0		7.5		
Green Ext Time (p_c), s	0.1	12.4		0.0		23.4		

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	437	0	0	758	37	80	317	495	0	0	0
Future Volume (veh/h)	201	437	0	0	758	37	80	317	495	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1810	1827	0	0	1847	1900	1900	1885	1845			
Adj Flow Rate, veh/h	223	486	0	0	842	41	89	500	451			
Adj No. of Lanes	1	2	0	0	2	0	1	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	5	4	0	0	3	3	0	0	3			
Cap, veh/h	425	2175	0	0	1539	75	386	402	334			
Arrive On Green	0.09	0.63	0.00	0.00	0.45	0.45	0.21	0.21	0.21			
Sat Flow, veh/h	1723	3563	0	0	3499	166	1810	1885	1568			
Grp Volume(v), veh/h	223	486	0	0	434	449	89	500	451			
Grp Sat Flow(s),veh/h/ln	1723	1736	0	0	1755	1818	1810	1885	1568			
Q Serve(g_s), s	4.8	4.6	0.0	0.0	13.5	13.5	3.1	16.0	16.0			
Cycle Q Clear(g_c), s	4.8	4.6	0.0	0.0	13.5	13.5	3.1	16.0	16.0			
Prop In Lane	1.00		0.00	0.00		0.09	1.00		1.00			
Lane Grp Cap(c), veh/h	425	2175	0	0	793	821	386	402	334			
V/C Ratio(X)	0.52	0.22	0.00	0.00	0.55	0.55	0.23	1.24	1.35			
Avail Cap(c_a), veh/h	537	2175	0	0	793	821	386	402	334			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	10.4	6.1	0.0	0.0	15.0	15.0	24.4	29.5	29.5			
Incr Delay (d2), s/veh	1.3	0.2	0.0	0.0	0.8	0.8	1.4	128.9	175.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	2.2	0.0	0.0	6.7	6.9	1.7	22.7	23.2			
LnGrp Delay(d),s/veh	11.7	6.3	0.0	0.0	15.8	15.7	25.8	158.4	204.8			
LnGrp LOS	B	A			B	B	C	F	F			
Approach Vol, veh/h		709			883			1040				
Approach Delay, s/veh		8.0			15.7			167.2				
Approach LOS		A			B			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		53.0			13.1	39.9		22.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		47.0			12.0	29.0		16.0
Max Q Clear Time (g_c+I1), s		6.6			6.8	15.5		18.0
Green Ext Time (p_c), s		10.3			0.4	6.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	783	0	0	668	26	0	0	0	47	0	127
Future Volume (veh/h)	149	783	0	0	668	26	0	0	0	47	0	127
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1900	1861	1900	1900	1863	1900	1827	0	1863
Adj Flow Rate, veh/h	166	870	0	0	742	29	0	0	0	52	0	141
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	4	0	2	2	2	2	2	4	0	2
Cap, veh/h	214	2292	0	195	1459	57	0	5	0	97	0	0
Arrive On Green	0.12	0.66	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.06	0.00	0.00
Sat Flow, veh/h	1810	3563	0	647	3470	136	0	1111765	0	1740	52	
Grp Volume(v), veh/h	166	870	0	0	378	393	0	0	0	52	21.5	
Grp Sat Flow(s),veh/h/ln	1810	1736	0	647	1768	1837	0	1863	0	1740	C	
Q Serve(g_s), s	3.3	4.2	0.0	0.0	5.8	5.8	0.0	0.0	0.0	1.1		
Cycle Q Clear(g_c), s	3.3	4.2	0.0	0.0	5.8	5.8	0.0	0.0	0.0	1.1		
Prop In Lane	1.00		0.00	1.00		0.07	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	214	2292	0	195	744	773	0	5	0	97		
V/C Ratio(X)	0.78	0.38	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.53		
Avail Cap(c_a), veh/h	318	2851	0	262	927	963	0	906	0	235		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	15.8	2.8	0.0	0.0	7.9	7.9	0.0	0.0	0.0	17.0		
Incr Delay (d2), s/veh	6.8	0.1	0.0	0.0	0.5	0.5	0.0	0.0	0.0	4.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.0	2.0	0.0	0.0	2.9	3.1	0.0	0.0	0.0	0.6		
LnGrp Delay(d),s/veh	22.7	3.0	0.0	0.0	8.4	8.4	0.0	0.0	0.0	21.5		
LnGrp LOS	C	A			A	A				C		
Approach Vol, veh/h		1036			771			0				
Approach Delay, s/veh		6.1			8.4			0.0				
Approach LOS		A			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6	7	8
Phs Duration (G+Y+Rc), s		30.4			8.9	21.6	6.6	0.0
Change Period (Y+Rc), s		6.0			4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s		30.4			6.5	19.4	5.0	18.0
Max Q Clear Time (g_c+I1), s		6.2			5.3	7.8	3.1	0.0
Green Ext Time (p_c), s		12.6			0.1	7.7	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		7.5
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	398	101	38	477	474	71	133	23	439	123	139
Future Volume (veh/h)	143	398	101	38	477	474	71	133	23	439	123	139
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1810	1863	1900	1900	1900	1900	1881	1827	1863
Adj Flow Rate, veh/h	159	442	112	42	530	527	79	148	26	488	137	154
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	5	3	3	0	0	0	1	4	2
Cap, veh/h	372	1840	463	495	888	794	243	650	112	563	386	334
Arrive On Green	0.09	0.65	0.65	0.50	0.50	0.50	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1792	2831	712	827	1770	1583	1105	3081	531	2362	1827	1583
Grp Volume(v), veh/h	159	278	276	42	530	527	79	85	89	488	137	154
Grp Sat Flow(s),veh/h/ln	1792	1787	1756	827	1770	1583	1105	1805	1806	1181	1827	1583
Q Serve(g_s), s	3.4	5.8	5.9	2.4	19.2	22.4	5.9	3.5	3.7	15.3	5.8	7.6
Cycle Q Clear(g_c), s	3.4	5.8	5.9	2.4	19.2	22.4	11.7	3.5	3.7	19.0	5.8	7.6
Prop In Lane	1.00		0.41	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	372	1162	1141	495	888	794	243	381	381	563	386	334
V/C Ratio(X)	0.43	0.24	0.24	0.08	0.60	0.66	0.33	0.22	0.23	0.87	0.36	0.46
Avail Cap(c_a), veh/h	405	1162	1141	495	888	794	353	562	562	563	386	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.72	0.72	0.72	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	6.5	6.5	11.8	16.0	16.8	35.2	29.4	29.4	38.7	30.3	31.0
Incr Delay (d2), s/veh	0.8	0.5	0.5	0.1	1.1	1.8	0.6	0.2	0.2	13.5	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.0	3.0	0.6	9.5	10.1	1.8	1.8	1.8	7.1	3.0	3.4
LnGrp Delay(d),s/veh	12.9	7.0	7.0	11.9	17.0	18.6	35.8	29.6	29.7	52.2	30.8	32.0
LnGrp LOS	B	A	A	B	B	B	D	C	C	D	C	C
Approach Vol, veh/h		713			1099			253			779	
Approach Delay, s/veh		8.3			17.6			31.6			44.4	
Approach LOS		A			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		65.0		25.0	13.3	51.7		25.0
Change Period (Y+Rc), s		6.5		6.0	5.5	* 6.5		6.0
Max Green Setting (Gmax), s		49.5		19.0	9.5	* 29		28.0
Max Q Clear Time (g_c+I1), s		7.9		21.0	5.4	24.4		13.7
Green Ext Time (p_c), s		23.1		0.0	0.1	4.0		4.4

Intersection Summary		
HCM 2010 Ctrl Delay		23.9
HCM 2010 LOS		C

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	731	81	64	56	70	238	92	699	31	118	861	730
Future Volume (veh/h)	731	81	64	56	70	238	92	699	31	118	861	730
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1823	1900	1610	1743	1759	1863	1833	1900	1367	1863	1845
Adj Flow Rate, veh/h	812	90	71	62	78	264	102	777	34	131	957	811
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	6	6	18	9	8	2	2	2	39	2	3
Cap, veh/h	270	294	232	417	504	432	140	1473	64	210	1534	679
Arrive On Green	0.08	0.31	0.31	0.06	0.29	0.29	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	3476	945	746	1533	1743	1495	269	3399	149	492	3539	1568
Grp Volume(v), veh/h	812	0	161	62	78	264	102	398	413	131	957	811
Grp Sat Flow(s),veh/h/ln	1738	0	1691	1533	1743	1495	269	1741	1806	492	1770	1568
Q Serve(g_s), s	7.0	0.0	6.5	2.5	3.0	13.7	20.1	15.1	15.1	23.9	18.9	39.0
Cycle Q Clear(g_c), s	7.0	0.0	6.5	2.5	3.0	13.7	39.0	15.1	15.1	39.0	18.9	39.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	526	417	504	432	140	754	783	210	1534	679
V/C Ratio(X)	3.00	0.00	0.31	0.15	0.15	0.61	0.73	0.53	0.53	0.62	0.62	1.19
Avail Cap(c_a), veh/h	270	0	526	434	504	432	140	754	783	210	1534	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.00	0.85	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	23.6	20.3	23.8	27.6	39.1	18.7	18.7	33.1	19.8	25.5
Incr Delay (d2), s/veh	910.1	0.0	1.3	0.2	0.1	2.5	16.5	0.7	0.6	5.6	0.8	101.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	37.5	0.0	3.2	1.1	1.4	5.9	3.2	7.3	7.6	3.6	9.3	35.9
LnGrp Delay(d),s/veh	951.6	0.0	24.9	20.4	24.0	30.2	55.6	19.4	19.4	38.7	20.6	126.7
LnGrp LOS	F		C	C	C	C	E	B	B	D	C	F
Approach Vol, veh/h		973			404			913			1899	
Approach Delay, s/veh		798.3			27.5			23.4			67.2	
Approach LOS		F			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	34.0		45.0	13.0	32.0		45.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	6.0	27.0		39.0	7.0	26.0		39.0
Max Q Clear Time (g_c+I1), s	14.5	8.5		41.0	9.0	15.7		41.0
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	1.6		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	223.6	
HCM 2010 LOS	F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	9	608	289	133	25	1053	437	49	23	580	85
Future Volume (veh/h)	46	9	608	289	133	25	1053	437	49	23	580	85
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1845	1881	1858	1900	1845	1827	1863	1557	1863	1900
Adj Flow Rate, veh/h	51	10	0	326	141	28	1170	486	0	26	644	0
Adj No. of Lanes	1	1	1	2	1	0	2	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	3	1	1	1	3	4	2	22	2	0
Cap, veh/h	209	344	284	683	273	54	1342	1779	811	335	867	396
Arrive On Green	0.18	0.18	0.00	0.18	0.18	0.18	0.31	0.51	0.00	0.04	0.25	0.00
Sat Flow, veh/h	1211	1900	1568	2826	1506	299	3408	3471	1583	1483	3539	1615
Grp Volume(v), veh/h	51	10	0	326	0	169	1170	486	0	26	644	0
Grp Sat Flow(s),veh/h/ln	1211	1900	1568	1413	0	1805	1704	1736	1583	1483	1770	1615
Q Serve(g_s), s	3.1	0.3	0.0	8.4	0.0	6.6	18.0	6.2	0.0	1.0	13.2	0.0
Cycle Q Clear(g_c), s	9.7	0.3	0.0	8.8	0.0	6.6	18.0	6.2	0.0	1.0	13.2	0.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	344	284	683	0	327	1342	1779	811	335	867	396
V/C Ratio(X)	0.24	0.03	0.00	0.48	0.00	0.52	0.87	0.27	0.00	0.08	0.74	0.00
Avail Cap(c_a), veh/h	653	1042	860	2441	0	1450	1734	2788	1272	712	1038	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	26.4	0.0	30.0	0.0	29.0	14.0	10.8	0.0	20.5	27.3	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.5	0.0	1.3	4.2	0.1	0.0	0.1	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.2	0.0	3.3	0.0	3.4	12.3	3.0	0.0	0.4	6.7	0.0
LnGrp Delay(d),s/veh	34.0	26.5	0.0	30.6	0.0	30.3	18.2	10.9	0.0	20.6	29.7	0.0
LnGrp LOS	C	C		C		C	B	B		C	C	
Approach Vol, veh/h		61			495			1656			670	
Approach Delay, s/veh		32.8			30.5			16.0			29.3	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	47.2		21.2	31.0	26.2		21.2
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0
Max Green Setting (Gmax), s	23.0	63.0		43.0	33.0	23.0		63.0
Max Q Clear Time (g_c+I1), s	13.0	8.2		11.7	20.0	15.2		10.8
Green Ext Time (p_c), s	0.0	8.8		2.5	4.0	4.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	1341	0	0	1486	439	0	0	0	167	0	163
Future Volume (veh/h)	233	1341	0	0	1486	439	0	0	0	167	0	163
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	0	1900	1845	1900	1900	1863	1900	1863	0	1827
Adj Flow Rate, veh/h	259	1490	0	0	1651	0	0	0	0	186	0	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	3	1	0	0	3	4	2	2	2	2	0	4
Cap, veh/h	107	2932	0	2	2479	1142	0	2	0	259	0	0
Arrive On Green	0.06	0.82	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Sat Flow, veh/h	1757	3668	0	1810	3505	1615	0	1111765	0	3442	186	
Grp Volume(v), veh/h	259	1490	0	0	1651	0	0	0	0	186	55.7	
Grp Sat Flow(s),veh/h/ln	1757	1787	0	1810	1752	1615	0	1863	0	1721	E	
Q Serve(g_s), s	7.0	14.8	0.0	0.0	30.0	0.0	0.0	0.0	0.0	6.1		
Cycle Q Clear(g_c), s	7.0	14.8	0.0	0.0	30.0	0.0	0.0	0.0	0.0	6.1		
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	107	2932	0	2	2479	1142	0	2	0	259		
V/C Ratio(X)	2.42	0.51	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.72		
Avail Cap(c_a), veh/h	107	2932	0	110	2479	1142	0	292	0	988		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.41	0.41	0.00	0.00	0.62	0.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	54.0	3.2	0.0	0.0	9.3	0.0	0.0	0.0	0.0	52.0		
Incr Delay (d2), s/veh	651.4	0.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0	3.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	22.7	7.1	0.0	0.0	14.4	0.0	0.0	0.0	0.0	3.0		
LnGrp Delay(d),s/veh	705.4	3.4	0.0	0.0	9.7	0.0	0.0	0.0	0.0	55.7		
LnGrp LOS	F	A			A					E		
Approach Vol, veh/h		1749			1651			0				
Approach Delay, s/veh		107.4			9.7			0.0				
Approach LOS		F			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	100.3			13.0	87.3	14.7	0.0
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	33.0			7.0	31.5	33.0	18.0
Max Q Clear Time (g_c+I1), s	0.0	16.8			9.0	32.0	8.1	0.0
Green Ext Time (p_c), s	0.0	14.9			0.0	0.0	0.6	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	59.7	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1105	403	279	1208	0	0	0	0	297	227	717
Future Volume (veh/h)	0	1105	403	279	1208	0	0	0	0	297	227	717
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1863	1881	1845	0				1863	1803	1810
Adj Flow Rate, veh/h	0	1228	0	310	1342	0				291	307	797
Adj No. of Lanes	0	2	1	1	2	0				1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	2	1	3	0				2	6	5
Cap, veh/h	0	1937	858	362	2414	0				375	381	650
Arrive On Green	0.00	0.54	0.00	0.09	0.69	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3668	1583	1792	3597	0				1774	1803	3076
Grp Volume(v), veh/h	0	1228	0	310	1342	0				291	307	797
Grp Sat Flow(s),veh/h/ln	0	1787	1583	1792	1752	0				1774	1803	1538
Q Serve(g_s), s	0.0	29.5	0.0	9.0	23.8	0.0				19.0	19.9	26.0
Cycle Q Clear(g_c), s	0.0	29.5	0.0	9.0	23.8	0.0				19.0	19.9	26.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1937	858	362	2414	0				375	381	650
V/C Ratio(X)	0.00	0.63	0.00	0.86	0.56	0.00				0.78	0.81	1.23
Avail Cap(c_a), veh/h	0	1937	858	390	2414	0				375	381	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.84	0.00	0.62	0.62	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.7	0.0	20.0	9.7	0.0				45.8	46.1	48.5
Incr Delay (d2), s/veh	0.0	1.3	0.0	11.3	0.2	0.0				10.4	12.5	114.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.9	0.0	7.0	11.4	0.0				10.4	11.2	21.4
LnGrp Delay(d),s/veh	0.0	21.0	0.0	31.2	9.9	0.0				56.2	58.6	163.3
LnGrp LOS		C		C	A					E	E	F
Approach Vol, veh/h		1228			1652						1395	
Approach Delay, s/veh		21.0			13.9						117.9	
Approach LOS		C			B						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.0	73.0		32.0		91.0		
Change Period (Y+Rc), s	6.7	6.3		6.0		6.3		
Max Green Setting (Gmax), s	13.3	53.7		26.0		84.7		
Max Q Clear Time (g_c+I1), s	11.0	31.5		28.0		25.8		
Green Ext Time (p_c), s	0.3	20.0		0.0		46.0		

Intersection Summary	
HCM 2010 Ctrl Delay	49.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	671	731	0	0	817	501	94	166	295	0	0	0
Future Volume (veh/h)	671	731	0	0	817	501	94	166	295	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1881	1810	1845	1881			
Adj Flow Rate, veh/h	706	769	0	0	908	0	104	184	328			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	2	2	0	0	2	1	5	3	1			
Cap, veh/h	342	2422	0	0	1552	701	363	388	337			
Arrive On Green	0.19	0.68	0.00	0.00	0.44	0.00	0.21	0.21	0.21			
Sat Flow, veh/h	1774	3632	0	0	3632	1599	1723	1845	1599			
Grp Volume(v), veh/h	706	769	0	0	908	0	104	184	328			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1599	1723	1845	1599			
Q Serve(g_s), s	22.0	10.0	0.0	0.0	22.1	0.0	5.8	10.0	23.2			
Cycle Q Clear(g_c), s	22.0	10.0	0.0	0.0	22.1	0.0	5.8	10.0	23.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	342	2422	0	0	1552	701	363	388	337			
V/C Ratio(X)	2.06	0.32	0.00	0.00	0.58	0.00	0.29	0.47	0.97			
Avail Cap(c_a), veh/h	342	2422	0	0	1552	701	363	388	337			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.58	0.58	0.00	0.00	0.52	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	46.0	7.3	0.0	0.0	24.2	0.0	37.8	39.5	44.7			
Incr Delay (d2), s/veh	483.8	0.2	0.0	0.0	0.2	0.0	0.2	0.3	41.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	56.8	4.9	0.0	0.0	10.8	0.0	2.8	5.1	14.1			
LnGrp Delay(d),s/veh	529.8	7.5	0.0	0.0	24.4	0.0	38.0	39.8	86.5			
LnGrp LOS	F	A			C		D	D	F			
Approach Vol, veh/h		1475			908			616				
Approach Delay, s/veh		257.5			24.4			64.4				
Approach LOS		F			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		84.0			28.0	56.0		30.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		78.0			22.0	44.0		24.0
Max Q Clear Time (g_c+I1), s		12.0			24.0	24.1		25.2
Green Ext Time (p_c), s		9.1			0.0	7.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	147.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	438	37	17	561	163	8	8	15	183	12	749
Future Volume (veh/h)	551	438	37	17	561	163	8	8	15	183	12	749
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1900	1900	1863	1845	1900	1900	1900	1881	1883	1863
Adj Flow Rate, veh/h	612	487	0	19	623	0	9	9	0	203	13	0
Adj No. of Lanes	2	2	1	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	0	0	2	3	0	0	0	1	0	2
Cap, veh/h	604	2265	1034	579	1744	773	56	58	50	283	149	125
Arrive On Green	0.17	0.64	0.00	0.03	0.49	0.00	0.03	0.03	0.00	0.08	0.08	0.00
Sat Flow, veh/h	3476	3539	1615	1810	3539	1568	1810	1900	1615	3583	1883	1583
Grp Volume(v), veh/h	612	487	0	19	623	0	9	9	0	203	13	0
Grp Sat Flow(s),veh/h/ln	1738	1770	1615	1810	1770	1568	1810	1900	1615	1792	1883	1583
Q Serve(g_s), s	19.1	6.3	0.0	0.6	11.9	0.0	0.5	0.5	0.0	6.1	0.7	0.0
Cycle Q Clear(g_c), s	19.1	6.3	0.0	0.6	11.9	0.0	0.5	0.5	0.0	6.1	0.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	604	2265	1034	579	1744	773	56	58	50	283	149	125
V/C Ratio(X)	1.01	0.22	0.00	0.03	0.36	0.00	0.16	0.15	0.00	0.72	0.09	0.00
Avail Cap(c_a), veh/h	604	2265	1034	652	1744	773	378	397	338	759	399	335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.00	0.79	0.79	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.5	8.3	0.0	12.5	17.2	0.0	51.9	51.9	0.0	49.4	47.0	0.0
Incr Delay (d2), s/veh	38.5	0.2	0.0	0.0	0.1	0.0	1.3	1.2	0.0	3.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	3.1	0.0	0.3	5.8	0.0	0.3	0.3	0.0	3.1	0.4	0.0
LnGrp Delay(d),s/veh	83.9	8.5	0.0	12.6	17.3	0.0	53.3	53.1	0.0	52.8	47.2	0.0
LnGrp LOS	F	A		B	B		D	D		D	D	
Approach Vol, veh/h		1099			642			18			216	
Approach Delay, s/veh		50.5			17.2			53.2			52.5	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	76.1		9.7	25.4	59.9		15.0
Change Period (Y+Rc), s	* 5.7	* 5.7		* 6.3	* 6.3	* 5.7		6.3
Max Green Setting (Gmax), s	* 8	* 32		* 23	* 19	* 20		23.3
Max Q Clear Time (g_c+I1), s	2.6	8.3		2.5	21.1	13.9		8.1
Green Ext Time (p_c), s	0.0	9.8		0.0	0.0	3.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	227	0	0	0	0	0	1041	296
Future Volume (veh/h)	0	0	0	0	227	0	0	0	0	0	1041	296
Number				7	4	14				5	2	12
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				0	1881	0				0	1863	1845
Adj Flow Rate, veh/h				0	244	0				0	1132	0
Adj No. of Lanes				0	2	0				0	3	1
Peak Hour Factor				0.93	0.93	0.93				0.92	0.92	0.92
Percent Heavy Veh, %				0	1	0				0	2	3
Cap, veh/h				0	365	0				0	3870	1193
Arrive On Green				0.00	0.10	0.00				0.00	0.76	0.00
Sat Flow, veh/h				0	3762	0				0	5253	1568
Grp Volume(v), veh/h				0	244	0				0	1132	0
Grp Sat Flow(s),veh/h/ln				0	1787	0				0	1695	1568
Q Serve(g_s), s				0.0	5.9	0.0				0.0	6.2	0.0
Cycle Q Clear(g_c), s				0.0	5.9	0.0				0.0	6.2	0.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	365	0				0	3870	1193
V/C Ratio(X)				0.00	0.67	0.00				0.00	0.29	0.00
Avail Cap(c_a), veh/h				0	953	0				0	3870	1193
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	38.9	0.0				0.0	3.3	0.0
Incr Delay (d2), s/veh				0.0	2.1	0.0				0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	3.0	0.0				0.0	2.9	0.0
LnGrp Delay(d),s/veh				0.0	41.0	0.0				0.0	3.5	0.0
LnGrp LOS					D						A	
Approach Vol, veh/h					244						1132	
Approach Delay, s/veh					41.0						3.5	
Approach LOS					D						A	

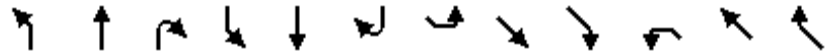
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		74.8		15.2				
Change Period (Y+Rc), s		6.3		6.0				
Max Green Setting (Gmax), s		53.7		24.0				
Max Q Clear Time (g_c+I1), s		8.2		7.9				
Green Ext Time (p_c), s		15.6		1.3				

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	293	0	0	0	0	0	1494	173	0	0	0
Future Volume (veh/h)	0	293	0	0	0	0	0	1494	173	0	0	0
Number	3	8	18				1	6	16			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	0				0	1863	1792			
Adj Flow Rate, veh/h	0	308	0				0	1660	0			
Adj No. of Lanes	0	2	0				0	3	1			
Peak Hour Factor	0.95	0.95	0.95				0.90	0.90	0.90			
Percent Heavy Veh, %	0	2	0				0	2	6			
Cap, veh/h	0	438	0				0	3760	1127			
Arrive On Green	0.00	0.12	0.00				0.00	0.74	0.00			
Sat Flow, veh/h	0	3725	0				0	5253	1524			
Grp Volume(v), veh/h	0	308	0				0	1660	0			
Grp Sat Flow(s),veh/h/ln	0	1770	0				0	1695	1524			
Q Serve(g_s), s	0.0	7.5	0.0				0.0	11.4	0.0			
Cycle Q Clear(g_c), s	0.0	7.5	0.0				0.0	11.4	0.0			
Prop In Lane	0.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	0	438	0				0	3760	1127			
V/C Ratio(X)	0.00	0.70	0.00				0.00	0.44	0.00			
Avail Cap(c_a), veh/h	0	944	0				0	3760	1127			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00				0.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	37.8	0.0				0.0	4.5	0.0			
Incr Delay (d2), s/veh	0.0	2.1	0.0				0.0	0.4	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	3.8	0.0				0.0	5.4	0.0			
LnGrp Delay(d),s/veh	0.0	39.9	0.0				0.0	4.9	0.0			
LnGrp LOS		D						A				
Approach Vol, veh/h		308						1660				
Approach Delay, s/veh		39.9						4.9				
Approach LOS		D						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		8
Phs Duration (G+Y+Rc), s						72.9		17.1
Change Period (Y+Rc), s						6.3		6.0
Max Green Setting (Gmax), s						53.7		24.0
Max Q Clear Time (g_c+I1), s						13.4		9.5
Green Ext Time (p_c), s						24.6		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	470	1285	0	0	1250	210	0	0	0	511	0	216
Future Volume (veh/h)	470	1285	0	0	1250	210	0	0	0	511	0	216
Number	3	8	18	7	4	14				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1827	0	0	1827	1712				1845	0	1810
Adj Flow Rate, veh/h	511	1397	0	0	1389	0				568	0	0
Adj No. of Lanes	2	3	0	0	3	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	4	0	0	4	11				3	0	5
Cap, veh/h	598	3259	0	0	1985	579				636	0	287
Arrive On Green	0.18	0.65	0.00	0.00	0.40	0.00				0.19	0.00	0.00
Sat Flow, veh/h	3408	5152	0	0	5152	1455				3408	0	1538
Grp Volume(v), veh/h	511	1397	0	0	1389	0				568	0	0
Grp Sat Flow(s),veh/h/ln	1704	1663	0	0	1663	1455				1704	0	1538
Q Serve(g_s), s	10.9	10.1	0.0	0.0	17.4	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	10.9	10.1	0.0	0.0	17.4	0.0				12.2	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	598	3259	0	0	1985	579				636	0	287
V/C Ratio(X)	0.85	0.43	0.00	0.00	0.70	0.00				0.89	0.00	0.00
Avail Cap(c_a), veh/h	636	3259	0	0	1985	579				636	0	287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.70	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	30.0	6.3	0.0	0.0	18.8	0.0				29.8	0.0	0.0
Incr Delay (d2), s/veh	10.5	0.4	0.0	0.0	1.5	0.0				17.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	4.7	0.0	0.0	8.2	0.0				7.2	0.0	0.0
LnGrp Delay(d),s/veh	40.5	6.7	0.0	0.0	20.3	0.0				47.1	0.0	0.0
LnGrp LOS	D	A			C					D		
Approach Vol, veh/h		1908			1389						568	
Approach Delay, s/veh		15.7			20.3						47.1	
Approach LOS		B			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			19.2	35.8		20.0		55.0
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			14.0	29.0		14.0		49.0
Max Q Clear Time (g_c+I1), s			12.9	19.4		14.2		12.1
Green Ext Time (p_c), s			0.3	9.2		0.0		33.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	273	69	72	0	877	155
Future Volume (veh/h)	273	69	72	0	877	155
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1863	0	1810	1845
Adj Flow Rate, veh/h	303	77	78	0	923	163
Adj No. of Lanes	1	1	1	0	3	1
Peak Hour Factor	0.90	0.90	0.92	0.92	0.95	0.95
Percent Heavy Veh, %	1	3	2	0	5	3
Cap, veh/h	356	311	146	0	2527	802
Arrive On Green	0.20	0.20	0.08	0.00	0.51	0.51
Sat Flow, veh/h	1792	1568	1774	78	5103	1568
Grp Volume(v), veh/h	303	77	78	38.2	923	163
Grp Sat Flow(s),veh/h/ln	1792	1568	1774	D	1647	1568
Q Serve(g_s), s	13.1	3.3	3.4		9.0	4.5
Cycle Q Clear(g_c), s	13.1	3.3	3.4		9.0	4.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	356	311	146		2527	802
V/C Ratio(X)	0.85	0.25	0.53		0.37	0.20
Avail Cap(c_a), veh/h	551	482	235		2527	802
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	30.9	27.0	35.2		11.7	10.6
Incr Delay (d2), s/veh	7.7	0.4	3.0		0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	1.5	1.8		4.1	2.1
LnGrp Delay(d),s/veh	38.6	27.4	38.2		12.1	11.2
LnGrp LOS	D	C	D		B	B
Approach Vol, veh/h	380				1086	
Approach Delay, s/veh	36.3				12.0	
Approach LOS	D				B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	12.0	46.7						21.3
Change Period (Y+Rc), s	5.4	5.8						5.4
Max Green Setting (Gmax), s	11.6	28.2						24.6
Max Q Clear Time (g_c+I1), s	15.1	11.0						15.1
Green Ext Time (p_c), s	0.1	8.1						0.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	13	493	166	22	33	240	1184	77	12	801	31
Future Volume (veh/h)	65	13	493	166	22	33	240	1184	77	12	801	31
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1545	1881	1597	1659	1900	1845	1863	1407	1638	1845	1900
Adj Flow Rate, veh/h	72	14	0	184	24	37	267	1316	86	13	890	0
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	23	1	19	23	23	3	2	35	16	3	0
Cap, veh/h	316	303	314	327	116	178	361	1800	608	30	2124	681
Arrive On Green	0.20	0.20	0.00	0.20	0.20	0.20	0.11	0.51	0.51	0.02	0.42	0.00
Sat Flow, veh/h	1323	1545	1599	1195	590	909	3408	3539	1196	1560	5036	1615
Grp Volume(v), veh/h	72	14	0	184	0	61	267	1316	86	13	890	0
Grp Sat Flow(s),veh/h/ln	1323	1545	1599	1195	0	1499	1704	1770	1196	1560	1679	1615
Q Serve(g_s), s	3.4	0.5	0.0	10.5	0.0	2.4	5.4	20.7	2.7	0.6	8.8	0.0
Cycle Q Clear(g_c), s	5.8	0.5	0.0	11.0	0.0	2.4	5.4	20.7	2.7	0.6	8.8	0.0
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	303	314	327	0	294	361	1800	608	30	2124	681
V/C Ratio(X)	0.23	0.05	0.00	0.56	0.00	0.21	0.74	0.73	0.14	0.44	0.42	0.00
Avail Cap(c_a), veh/h	489	505	522	483	0	490	442	1800	608	132	2124	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.89	0.89	0.89	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.4	23.1	0.0	27.6	0.0	23.9	30.8	13.6	9.2	34.4	14.4	0.0
Incr Delay (d2), s/veh	0.4	0.1	0.0	1.5	0.0	0.3	4.6	2.4	0.4	7.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	0.0	3.6	0.0	1.0	2.8	10.5	1.0	0.3	4.2	0.0
LnGrp Delay(d),s/veh	26.7	23.2	0.0	29.1	0.0	24.3	35.4	16.0	9.7	41.7	15.0	0.0
LnGrp LOS	C	C		C		C	D	B	A	D	B	
Approach Vol, veh/h		86			245			1669			903	
Approach Delay, s/veh		26.1			27.9			18.8			15.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	35.9		20.7	8.2	42.1		20.7
Change Period (Y+Rc), s	6.8	6.0		* 6.8	* 6.8	6.0		* 6.8
Max Green Setting (Gmax), s	9.3	18.0		* 23	* 6	22.0		* 23
Max Q Clear Time (g_c+I1), s	7.4	10.8		13.0	2.6	22.7		7.8
Green Ext Time (p_c), s	0.2	6.7		1.0	0.0	0.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	90	220	294	330	449	202	1297	47	55	734	122
Future Volume (veh/h)	150	90	220	294	330	449	202	1297	47	55	734	122
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1818	1900	1743	1783	1900	1881	1777	1900	1450	1812	1900
Adj Flow Rate, veh/h	167	100	244	327	367	499	224	1441	52	61	816	136
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	13	13	9	6	6	1	5	5	31	3	3
Cap, veh/h	174	493	441	323	483	432	498	1465	53	94	1257	209
Arrive On Green	0.08	0.29	0.29	0.08	0.29	0.29	0.05	0.44	0.44	0.04	0.43	0.43
Sat Flow, veh/h	1630	1727	1546	1660	1694	1515	3476	3324	120	1381	2954	492
Grp Volume(v), veh/h	167	100	244	327	367	499	224	731	762	61	475	477
Grp Sat Flow(s),veh/h/ln	1630	1727	1546	1660	1694	1515	1738	1688	1756	1381	1721	1725
Q Serve(g_s), s	12.7	7.4	22.5	13.5	33.2	47.9	6.1	71.6	72.0	4.2	36.8	36.8
Cycle Q Clear(g_c), s	12.7	7.4	22.5	13.5	33.2	47.9	6.1	71.6	72.0	4.2	36.8	36.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		0.29
Lane Grp Cap(c), veh/h	174	493	441	323	483	432	498	744	774	94	732	734
V/C Ratio(X)	0.96	0.20	0.55	1.01	0.76	1.15	0.45	0.98	0.99	0.65	0.65	0.65
Avail Cap(c_a), veh/h	174	493	441	323	483	432	706	744	774	198	754	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	45.5	50.9	55.6	54.7	60.0	29.7	46.3	46.4	40.7	38.3	38.3
Incr Delay (d2), s/veh	56.2	0.2	1.7	53.6	7.1	92.7	0.5	28.4	28.6	5.4	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	3.6	9.8	15.5	16.5	31.1	2.9	39.1	41.1	1.7	17.8	17.9
LnGrp Delay(d),s/veh	104.0	45.8	52.6	109.3	61.8	152.7	30.1	74.7	75.0	46.1	40.3	40.3
LnGrp LOS	F	D	D	F	E	F	C	E	E	D	D	D
Approach Vol, veh/h		511			1193			1717			1013	
Approach Delay, s/veh		68.1			112.8			69.0			40.7	
Approach LOS		E			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	77.9	20.0	55.0	12.4	80.5	20.0	55.0
Change Period (Y+Rc), s	6.5	6.5	6.5	7.1	6.5	* 6.5	6.5	7.1
Max Green Setting (Gmax), s	8.5	73.5	13.5	47.9	18.5	* 74	13.5	47.9
Max Q Clear Time (g_c+I1), s	9.1	38.8	14.7	49.9	6.2	74.0	15.5	24.5
Green Ext Time (p_c), s	0.4	26.1	0.0	0.0	0.1	0.0	0.0	9.9

Intersection Summary		
HCM 2010 Ctrl Delay		74.2
HCM 2010 LOS		E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

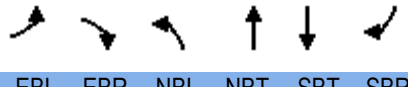
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	810	175	62	967	715	492
Future Volume (veh/h)	810	175	62	967	715	492
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1760	1900	1863	1827	1810	1827
Adj Flow Rate, veh/h	900	0	69	1074	761	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.94	0.94
Percent Heavy Veh, %	9	0	2	4	5	4
Cap, veh/h	996	480	410	2203	1953	882
Arrive On Green	0.30	0.00	0.03	0.63	0.57	0.00
Sat Flow, veh/h	3353	1615	1774	3563	3529	1553
Grp Volume(v), veh/h	900	0	69	1074	761	0
Grp Sat Flow(s),veh/h/ln	1676	1615	1774	1736	1719	1553
Q Serve(g_s), s	46.4	0.0	2.8	29.5	22.1	0.0
Cycle Q Clear(g_c), s	46.4	0.0	2.8	29.5	22.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	996	480	410	2203	1953	882
V/C Ratio(X)	0.90	0.00	0.17	0.49	0.39	0.00
Avail Cap(c_a), veh/h	1565	754	518	2203	1953	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.87	0.87	1.00	0.00
Uniform Delay (d), s/veh	60.8	0.0	15.9	17.4	21.6	0.0
Incr Delay (d2), s/veh	5.6	0.0	0.1	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	0.0	1.4	14.2	10.6	0.0
LnGrp Delay(d),s/veh	66.4	0.0	16.1	18.1	22.2	0.0
LnGrp LOS	E		B	B	C	
Approach Vol, veh/h	900			1143	761	
Approach Delay, s/veh	66.4			17.9	22.2	
Approach LOS	E			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.0	108.5				120.6		59.4
Change Period (Y+Rc), s	6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	17.8	60.7				83.7		84.0
Max Q Clear Time (g_c+I1), s	4.8	24.1				31.5		48.4
Green Ext Time (p_c), s	0.1	20.6				24.5		5.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	427	66	124	602	551	339
Future Volume (veh/h)	427	66	124	602	551	339
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1802	1900	1900	1863	1863	1712
Adj Flow Rate, veh/h	474	0	138	669	612	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	0	0	2	2	11
Cap, veh/h	703	331	518	1943	1943	799
Arrive On Green	0.20	0.00	0.55	0.55	0.55	0.00
Sat Flow, veh/h	3431	1615	823	3632	3632	1455
Grp Volume(v), veh/h	474	0	138	669	612	0
Grp Sat Flow(s),veh/h/ln	1716	1615	823	1770	1770	1455
Q Serve(g_s), s	6.4	0.0	5.5	5.3	4.7	0.0
Cycle Q Clear(g_c), s	6.4	0.0	10.2	5.3	4.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	703	331	518	1943	1943	799
V/C Ratio(X)	0.67	0.00	0.27	0.34	0.31	0.00
Avail Cap(c_a), veh/h	961	452	518	1943	1943	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.98	0.98	0.87	0.00
Uniform Delay (d), s/veh	18.3	0.0	8.9	6.3	6.1	0.0
Incr Delay (d2), s/veh	3.1	0.0	0.3	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	1.3	2.5	2.4	0.0
LnGrp Delay(d),s/veh	21.4	0.0	9.2	6.4	6.5	0.0
LnGrp LOS	C		A	A	A	
Approach Vol, veh/h	474			807	612	
Approach Delay, s/veh	21.4			6.9	6.5	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		33.8				33.8		16.2
Change Period (Y+Rc), s		6.3				6.3		6.0
Max Green Setting (Gmax), s		23.7				23.7		14.0
Max Q Clear Time (g_c+I1), s		6.7				12.2		8.4
Green Ext Time (p_c), s		10.9				8.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	16	20	4	8	59	36	601	6	45	463	109
Future Volume (veh/h)	66	16	20	4	8	59	36	601	6	45	463	109
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1882	1900	1900	1900	1900	1900	1842	1900	1863	1881	1900
Adj Flow Rate, veh/h	73	18	22	4	9	66	40	668	7	50	514	121
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	3	3	2	1	1
Cap, veh/h	171	31	30	52	23	134	677	2752	29	643	2230	523
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	989	319	316	37	238	1396	805	3548	37	761	2876	674
Grp Volume(v), veh/h	113	0	0	79	0	0	40	329	346	50	319	316
Grp Sat Flow(s),veh/h/ln	1624	0	0	1670	0	0	805	1750	1836	761	1787	1762
Q Serve(g_s), s	1.4	0.0	0.0	0.0	0.0	0.0	1.1	4.1	4.1	1.5	3.8	3.8
Cycle Q Clear(g_c), s	5.0	0.0	0.0	3.5	0.0	0.0	4.9	4.1	4.1	5.6	3.8	3.8
Prop In Lane	0.65		0.19	0.05		0.84	1.00		0.02	1.00		0.38
Lane Grp Cap(c), veh/h	232	0	0	209	0	0	677	1357	1424	643	1386	1367
V/C Ratio(X)	0.49	0.00	0.00	0.38	0.00	0.00	0.06	0.24	0.24	0.08	0.23	0.23
Avail Cap(c_a), veh/h	334	0	0	324	0	0	677	1357	1424	643	1386	1367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	34.0	0.0	0.0	33.4	0.0	0.0	3.1	2.4	2.4	3.2	2.4	2.4
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.6	0.0	0.0	0.1	0.1	0.1	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	1.7	0.0	0.0	0.3	2.0	2.1	0.4	2.0	2.0
LnGrp Delay(d),s/veh	36.2	0.0	0.0	35.0	0.0	0.0	3.1	2.6	2.5	3.4	2.8	2.8
LnGrp LOS	D			D			A	A	A	A	A	A
Approach Vol, veh/h		113			79			715			685	
Approach Delay, s/veh		36.2			35.0			2.6			2.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.5		12.5		65.5		12.5
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		55.0		13.0		55.0		13.0
Max Q Clear Time (g_c+I1), s		7.6		5.5		6.9		7.0
Green Ext Time (p_c), s		16.3		0.8		16.4		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		6.7
HCM 2010 LOS		A

HCM 2010 Computation does not support turning movement with Shared and Exclusive lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1838	811	297	2347	0	0	0	0	314	0	676
Future Volume (veh/h)	0	1838	811	297	2347	0	0	0	0	314	0	676
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1792	1881	1845	0				1863	1863	1759
Adj Flow Rate, veh/h	0	1935	0	316	2497	0				349	0	751
Adj No. of Lanes	0	4	1	2	4	0				2	0	2
Peak Hour Factor	0.95	0.95	0.95	0.94	0.94	0.94				0.90	0.90	0.90
Percent Heavy Veh, %	0	4	6	1	3	0				2	0	8
Cap, veh/h	0	3128	758	361	4093	0				952	0	802
Arrive On Green	0.00	1.00	0.00	0.21	1.00	0.00				0.27	0.00	0.27
Sat Flow, veh/h	0	6540	1524	3476	6604	0				3548	0	2991
Grp Volume(v), veh/h	0	1935	0	316	2497	0				349	0	751
Grp Sat Flow(s),veh/h/ln	0	1571	1524	1738	1586	0				1774	0	1495
Q Serve(g_s), s	0.0	0.5	0.0	13.2	0.0	0.0				12.0	0.0	36.8
Cycle Q Clear(g_c), s	0.0	0.5	0.0	13.2	0.0	0.0				12.0	0.0	36.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3128	758	361	4093	0				952	0	802
V/C Ratio(X)	0.00	0.62	0.00	0.87	0.61	0.00				0.37	0.00	0.94
Avail Cap(c_a), veh/h	0	3128	758	545	4093	0				1029	0	867
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.00	0.40	0.40	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.2	0.0	58.5	0.0	0.0				44.5	0.0	53.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.0	0.3	0.0				0.1	0.0	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	6.5	0.1	0.0				5.9	0.0	17.0
LnGrp Delay(d),s/veh	0.0	0.3	0.0	61.5	0.3	0.0				44.6	0.0	69.5
LnGrp LOS		A		E	A					D		E
Approach Vol, veh/h		1935			2813						1100	
Approach Delay, s/veh		0.3			7.2						61.6	
Approach LOS		A			A						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		103.3			22.1	81.2		46.7
Change Period (Y+Rc), s		6.5			6.5	6.5		6.5
Max Green Setting (Gmax), s		93.5			23.5	63.5		43.5
Max Q Clear Time (g_c+I1), s		2.0			15.2	2.5		38.8
Green Ext Time (p_c), s		85.8			0.4	58.4		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Computation does not support turning movement with Shared and Exclusive lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	462	175	415	177	209	100	537	1643	260	133	889	367
Future Volume (veh/h)	462	175	415	177	209	100	537	1643	260	133	889	367
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	1881	1900	1881	1900	1863	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	513	194	461	197	232	111	565	1729	274	148	988	408
Adj No. of Lanes	2	1	1	1	2	0	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	3	1	1	0	1	1	2	1	1	1	2	2
Cap, veh/h	511	572	486	220	654	303	590	1678	523	254	1163	600
Arrive On Green	0.15	0.30	0.30	0.12	0.28	0.28	0.17	0.33	0.33	0.07	0.23	0.23
Sat Flow, veh/h	3408	1881	1599	1810	2375	1099	3442	5136	1599	3476	5085	1583
Grp Volume(v), veh/h	513	194	461	197	173	170	565	1729	274	148	988	408
Grp Sat Flow(s),veh/h/ln	1704	1881	1599	1810	1787	1687	1721	1712	1599	1738	1695	1583
Q Serve(g_s), s	22.5	12.0	42.3	16.1	11.6	12.2	24.4	49.0	20.9	6.2	27.9	32.4
Cycle Q Clear(g_c), s	22.5	12.0	42.3	16.1	11.6	12.2	24.4	49.0	20.9	6.2	27.9	32.4
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	511	572	486	220	492	465	590	1678	523	254	1163	600
V/C Ratio(X)	1.00	0.34	0.95	0.90	0.35	0.37	0.96	1.03	0.52	0.58	0.85	0.68
Avail Cap(c_a), veh/h	511	572	486	255	492	465	590	1678	523	255	1163	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	40.5	51.1	65.0	43.6	43.8	61.6	50.5	41.0	67.3	55.4	39.0
Incr Delay (d2), s/veh	40.7	1.6	29.9	27.6	2.0	2.2	26.8	30.1	1.0	3.7	6.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	6.5	22.7	9.7	6.0	6.0	13.8	27.8	9.3	3.1	13.7	14.7
LnGrp Delay(d),s/veh	104.4	42.1	80.9	92.6	45.6	46.0	88.4	80.6	42.0	71.0	61.5	42.1
LnGrp LOS	F	D	F	F	D	D	F	F	D	E	E	D
Approach Vol, veh/h		1168			540			2568			1544	
Approach Delay, s/veh		84.8			62.9			78.2			57.3	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	48.0	17.5	55.5	24.7	52.3	32.2	40.8
Change Period (Y+Rc), s	6.5	* 6.7	6.5	6.5	6.5	* 6.7	6.5	6.5
Max Green Setting (Gmax), s	22.5	* 41	11.0	49.0	21.1	* 43	25.7	34.3
Max Q Clear Time (g_c+I1), s	24.5	14.2	8.2	51.0	18.1	44.3	26.4	34.4
Green Ext Time (p_c), s	0.0	8.1	0.1	0.0	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	72.5
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	51	0	0	0	125	0	2118	11	0	0	0
Future Volume (veh/h)	1	51	0	0	0	125	0	2118	11	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1828	0	0	0	1863	0	1845	1900			
Adj Flow Rate, veh/h	1	55	0	0	0	139	0	2277	12			
Adj No. of Lanes	0	1	0	0	0	1	0	3	0			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	0	2	0	3	0			
Cap, veh/h	517	157	0	0	0	0	0	0	0			
Arrive On Green	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Sat Flow, veh/h	32	1780	0		0			0				
Grp Volume(v), veh/h	56	0	0		0.0			0.0				
Grp Sat Flow(s),veh/h/ln	1812	0	0									
Q Serve(g_s), s	0.2	0.0	0.0									
Cycle Q Clear(g_c), s	0.2	0.0	0.0									
Prop In Lane	0.02		0.00									
Lane Grp Cap(c), veh/h	674	0	0									
V/C Ratio(X)	0.08	0.00	0.00									
Avail Cap(c_a), veh/h	5216	0	0									
HCM Platoon Ratio	1.00	1.00	1.00									
Upstream Filter(I)	1.00	0.00	0.00									
Uniform Delay (d), s/veh	3.1	0.0	0.0									
Incr Delay (d2), s/veh	0.1	0.0	0.0									
Initial Q Delay(d3),s/veh	0.0	0.0	0.0									
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0									
LnGrp Delay(d),s/veh	3.1	0.0	0.0									
LnGrp LOS	A											
Approach Vol, veh/h		56										
Approach Delay, s/veh		3.1										
Approach LOS		A										

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		7.1						
Change Period (Y+Rc), s		6.5						
Max Green Setting (Gmax), s		18.5						
Max Q Clear Time (g_c+I1), s		2.2						
Green Ext Time (p_c), s		0.1						

Intersection Summary	
HCM 2010 Ctrl Delay	3.1
HCM 2010 LOS	A

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	68	150	472	347	110	93
Future Volume (veh/h)	68	150	472	347	110	93
Number	1	6	2	12	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1827	1827	1845	1827	1776
Adj Flow Rate, veh/h	76	167	524	386	122	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	4	4	3	4	7
Cap, veh/h	345	843	843	723	242	210
Arrive On Green	0.46	0.46	0.46	0.46	0.14	0.00
Sat Flow, veh/h	571	1827	1827	1568	1740	1509
Grp Volume(v), veh/h	76	167	524	386	122	0
Grp Sat Flow(s),veh/h/ln	571	1827	1827	1568	1740	1509
Q Serve(g_s), s	4.1	1.9	7.6	6.2	2.3	0.0
Cycle Q Clear(g_c), s	11.6	1.9	7.6	6.2	2.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	345	843	843	723	242	210
V/C Ratio(X)	0.22	0.20	0.62	0.53	0.50	0.00
Avail Cap(c_a), veh/h	375	939	939	806	894	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.5	5.6	7.1	6.7	14.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	1.1	0.6	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	4.0	2.7	1.2	0.0
LnGrp Delay(d),s/veh	11.8	5.7	8.2	7.4	15.6	0.0
LnGrp LOS	B	A	A	A	B	
Approach Vol, veh/h		243	910		122	
Approach Delay, s/veh		7.6	7.8		15.6	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		23.2				23.2		11.9
Change Period (Y+Rc), s		7.0				7.0		7.0
Max Green Setting (Gmax), s		18.0				18.0		18.0
Max Q Clear Time (g_c+I1), s		9.6				13.6		4.3
Green Ext Time (p_c), s		4.2				2.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	485	0	0	300	290	0	0	0	280	0	32
Future Volume (veh/h)	129	485	0	0	300	290	0	0	0	280	0	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1743	1743	1863
Adj Flow Rate, veh/h	140	527	0	0	326	0	0	0	0	295	0	35
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.90	0.92	0.90	0.92	0.92	0.92	0.95	0.95	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	9	0	2
Cap, veh/h	796	2449	0	662	2449	1096	3	3	0	406	0	194
Arrive On Green	0.69	0.69	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1050	3632	0	1774	3539	1583	1774	1863	0	3320	0	1583
Grp Volume(v), veh/h	140	527	0	0	326	0	0	0	0	295	0	35
Grp Sat Flow(s),veh/h/ln	1050	1770	0	1774	1770	1583	1774	1863	0	1660	0	1583
Q Serve(g_s), s	3.7	3.8	0.0	0.0	2.2	0.0	0.0	0.0	0.0	6.0	0.0	1.4
Cycle Q Clear(g_c), s	5.8	3.8	0.0	0.0	2.2	0.0	0.0	0.0	0.0	6.0	0.0	1.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	796	2449	0	662	2449	1096	3	3	0	406	0	194
V/C Ratio(X)	0.18	0.22	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.73	0.00	0.18
Avail Cap(c_a), veh/h	796	2449	0	837	2449	1096	177	186	0	640	0	305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	3.9	0.0	0.0	3.7	0.0	0.0	0.0	0.0	29.6	0.0	27.6
Incr Delay (d2), s/veh	0.5	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	0.0	0.0	1.1	0.0	0.0	0.0	0.0	2.9	0.0	0.6
LnGrp Delay(d),s/veh	5.1	4.1	0.0	0.0	3.8	0.0	0.0	0.0	0.0	32.1	0.0	28.0
LnGrp LOS	A	A			A					C		C
Approach Vol, veh/h		667			326			0			330	
Approach Delay, s/veh		4.3			3.8			0.0			31.6	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	54.9		15.1		54.9		10.0
Change Period (Y+Rc), s	6.5	* 6.5		6.5		6.5		6.0
Max Green Setting (Gmax), s	7.0	* 19		13.5		30.5		7.0
Max Q Clear Time (g_c+I1), s	10.0	7.8		8.0		4.2		0.0
Green Ext Time (p_c), s	0.0	5.0		0.6		7.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	543	0	0	529	503	61	0	300	0	0	0
Future Volume (veh/h)	222	543	0	0	529	503	61	0	300	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1776	1900	1900	1845	1776	1900	1759	1863			
Adj Flow Rate, veh/h	241	590	0	0	588	0	68	0	0			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	3	7	7	3	3	7	2	0	2			
Cap, veh/h	765	2857	0	0	2588	1115	89	0	84			
Arrive On Green	0.06	0.85	0.00	0.00	1.00	0.00	0.05	0.00	0.00			
Sat Flow, veh/h	1757	3463	0	0	3597	1509	1675	0	1583			
Grp Volume(v), veh/h	241	590	0	0	588	0	68	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1687	0	0	1752	1509	1675	0	1583			
Q Serve(g_s), s	3.6	3.9	0.0	0.0	0.0	0.0	4.8	0.0	0.0			
Cycle Q Clear(g_c), s	3.6	3.9	0.0	0.0	0.0	0.0	4.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	765	2857	0	0	2588	1115	89	0	84			
V/C Ratio(X)	0.31	0.21	0.00	0.00	0.23	0.00	0.76	0.00	0.00			
Avail Cap(c_a), veh/h	795	2857	0	0	2588	1115	558	0	528			
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.4	1.7	0.0	0.0	0.0	0.0	56.1	0.0	0.0			
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	0.0	0.0	12.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	1.9	0.0	0.0	0.0	0.0	2.5	0.0	0.0			
LnGrp Delay(d),s/veh	2.7	1.9	0.0	0.0	0.0	0.0	68.6	0.0	0.0			
LnGrp LOS	A	A			A		E					
Approach Vol, veh/h		831			588			68				
Approach Delay, s/veh		2.1			0.0			68.6				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		107.6			13.0	94.6		12.4
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		68.0			9.0	53.0		40.0
Max Q Clear Time (g_c+I1), s		5.9			5.6	2.0		6.8
Green Ext Time (p_c), s		14.8			0.2	14.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

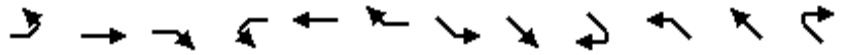
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	501	187	212	499	263	257	1480	506	333	900	276
Future Volume (veh/h)	155	501	187	212	499	263	257	1480	506	333	900	276
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1812	1827	1845	1785	1810	1827	1863	1881	1863	1863	1881
Adj Flow Rate, veh/h	172	557	208	236	554	292	286	1644	0	370	1000	307
Adj No. of Lanes	1	2	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	5	4	3	7	5	4	2	1	2	2	1
Cap, veh/h	226	453	194	264	536	231	281	2115	665	315	2157	678
Arrive On Green	0.25	0.25	0.25	0.15	0.15	0.15	0.08	0.42	0.00	0.09	0.42	0.42
Sat Flow, veh/h	1810	3624	1553	1757	3570	1538	3375	5085	1599	3442	5085	1599
Grp Volume(v), veh/h	172	557	208	236	554	292	286	1644	0	370	1000	307
Grp Sat Flow(s),veh/h/ln	1810	1812	1553	1757	1785	1538	1688	1695	1599	1721	1695	1599
Q Serve(g_s), s	10.6	15.0	15.0	15.8	18.0	18.0	10.0	33.5	0.0	11.0	16.9	16.4
Cycle Q Clear(g_c), s	10.6	15.0	15.0	15.8	18.0	18.0	10.0	33.5	0.0	11.0	16.9	16.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	453	194	264	536	231	281	2115	665	315	2157	678
V/C Ratio(X)	0.76	1.23	1.07	0.90	1.03	1.27	1.02	0.78	0.00	1.17	0.46	0.45
Avail Cap(c_a), veh/h	226	453	194	264	536	231	281	2115	665	315	2157	678
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.0	45.0	50.1	51.0	51.0	55.0	30.3	0.0	54.5	24.8	24.6
Incr Delay (d2), s/veh	12.8	119.9	81.8	30.4	48.1	149.3	58.0	2.9	0.0	106.1	0.7	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	15.0	10.8	9.9	12.4	17.2	6.9	16.2	0.0	9.9	8.0	7.7
LnGrp Delay(d),s/veh	56.1	164.9	126.8	80.5	99.1	200.3	113.1	33.1	0.0	160.6	25.5	26.8
LnGrp LOS	E	F	F	F	F	F	F	C		F	C	C
Approach Vol, veh/h		937			1082			1930			1677	
Approach Delay, s/veh		136.5			122.3			45.0			55.5	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	57.5		26.0	18.0	56.5		23.0
Change Period (Y+Rc), s	7.0	* 6.5		8.0	7.0	6.5		8.0
Max Green Setting (Gmax), s	10.0	* 48		18.0	11.0	46.5		15.0
Max Q Clear Time (g_c+I1), s	12.0	18.9		20.0	13.0	35.5		17.0
Green Ext Time (p_c), s	0.0	24.9		0.0	0.0	10.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	78.3
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	3	20	7	87	2	89	172	117	3	1	248	309
Future Volume (veh/h)	3	20	7	87	2	89	172	117	3	1	248	309
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1761	1712	1863	1846	1900	1900	1810	1827
Adj Flow Rate, veh/h	3	22	8	97	2	0	191	130	3	1	276	343
Adj No. of Lanes	0	2	0	0	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	50	50	11	2	3	3	0	5	4
Cap, veh/h	102	297	100	288	3	174	539	1067	25	553	575	494
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.00	0.13	0.59	0.59	0.32	0.32	0.32
Sat Flow, veh/h	131	2484	834	1188	25	1455	1774	1797	41	1277	1810	1553
Grp Volume(v), veh/h	18	0	15	99	0	0	191	0	133	1	276	343
Grp Sat Flow(s),veh/h/ln	1867	0	1582	1213	0	1455	1774	0	1839	1277	1810	1553
Q Serve(g_s), s	0.0	0.0	0.4	3.6	0.0	0.0	3.0	0.0	1.5	0.0	6.0	9.4
Cycle Q Clear(g_c), s	0.4	0.0	0.4	4.0	0.0	0.0	3.0	0.0	1.5	0.0	6.0	9.4
Prop In Lane	0.17		0.53	0.98		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	309	0	189	291	0	174	539	0	1092	553	575	494
V/C Ratio(X)	0.06	0.00	0.08	0.34	0.00	0.00	0.35	0.00	0.12	0.00	0.48	0.69
Avail Cap(c_a), veh/h	943	0	745	750	0	685	1139	0	3124	2317	3075	2639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	19.1	20.9	0.0	0.0	7.9	0.0	4.3	11.4	13.4	14.6
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.7	0.0	0.0	0.4	0.0	0.0	0.0	0.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	1.3	0.0	0.0	1.5	0.0	0.8	0.0	3.1	4.2
LnGrp Delay(d),s/veh	19.2	0.0	19.3	21.6	0.0	0.0	8.3	0.0	4.4	11.4	14.0	16.3
LnGrp LOS	B		B	C			A		A	B	B	B
Approach Vol, veh/h		33			99			324			620	
Approach Delay, s/veh		19.2			21.6			6.7			15.3	
Approach LOS		B			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.5	22.5		12.8		36.0		12.8
Change Period (Y+Rc), s	7.0	7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s	23.0	83.0		23.0		83.0		23.0
Max Q Clear Time (g_c+I1), s	5.0	11.4		2.4		3.5		6.0
Green Ext Time (p_c), s	0.5	4.1		0.6		4.1		0.5

Intersection Summary		
HCM 2010 Ctrl Delay		13.4
HCM 2010 LOS		B

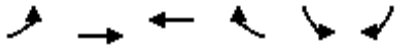
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	599	11	18	162	93	18	17	112	223	6	26
Future Volume (veh/h)	43	599	11	18	162	93	18	17	112	223	6	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1863	1900	1900	1677	1900	1900	1900	1900	1759	1900	1827
Adj Flow Rate, veh/h	48	666	12	20	180	103	20	19	124	248	7	29
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	12	2	2	0	10	10	0	0	0	8	0	4
Cap, veh/h	566	1798	32	414	970	530	172	180	153	280	318	332
Arrive On Green	0.05	0.51	0.51	0.03	0.49	0.49	0.09	0.09	0.09	0.17	0.17	0.17
Sat Flow, veh/h	1616	3558	64	1810	1992	1087	1810	1900	1615	1675	1900	1553
Grp Volume(v), veh/h	48	331	347	20	142	141	20	19	124	248	7	29
Grp Sat Flow(s),veh/h/ln	1616	1770	1852	1810	1593	1485	1810	1900	1615	1675	1900	1553
Q Serve(g_s), s	1.7	13.7	13.7	0.6	6.0	6.4	1.2	1.1	9.0	17.4	0.4	1.8
Cycle Q Clear(g_c), s	1.7	13.7	13.7	0.6	6.0	6.4	1.2	1.1	9.0	17.4	0.4	1.8
Prop In Lane	1.00		0.03	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	566	895	936	414	776	724	172	180	153	280	318	332
V/C Ratio(X)	0.08	0.37	0.37	0.05	0.18	0.19	0.12	0.11	0.81	0.89	0.02	0.09
Avail Cap(c_a), veh/h	585	895	936	468	776	724	377	396	336	461	523	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	18.1	18.1	14.8	17.3	17.4	49.7	49.7	53.2	48.8	41.8	37.8
Incr Delay (d2), s/veh	0.1	1.1	1.0	0.0	0.2	0.2	0.3	0.3	9.7	11.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.9	7.2	0.3	2.7	2.7	0.6	0.6	4.4	8.9	0.2	0.8
LnGrp Delay(d),s/veh	13.7	19.1	19.1	14.8	17.5	17.6	50.0	49.9	62.9	60.1	41.8	37.9
LnGrp LOS	B	B	B	B	B	B	D	D	E	E	D	D
Approach Vol, veh/h		726			303			163			284	
Approach Delay, s/veh		18.8			17.4			59.8			57.4	
Approach LOS		B			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	67.1		26.1	11.6	65.0		17.4
Change Period (Y+Rc), s	6.0	6.5		6.0	6.0	6.5		6.0
Max Green Setting (Gmax), s	7.0	30.5		33.0	7.0	30.5		25.0
Max Q Clear Time (g_c+I1), s	2.6	15.7		19.4	3.7	8.4		11.0
Green Ext Time (p_c), s	0.0	6.4		0.7	0.0	7.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	30.4
HCM 2010 LOS	C

Notes

User approved changes to right turn type.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	627	186	425	98	87
Future Volume (veh/h)	0	627	186	425	98	87
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1696	1881	1810	1696
Adj Flow Rate, veh/h	0	697	207	0	109	0
Adj No. of Lanes	0	2	2	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	3	12	1	5	12
Cap, veh/h	0	2378	2187	1085	345	149
Arrive On Green	0.00	0.68	0.68	0.00	0.10	0.00
Sat Flow, veh/h	0	3689	3308	1599	3343	1442
Grp Volume(v), veh/h	0	697	207	0	109	0
Grp Sat Flow(s),veh/h/ln	0	1752	1612	1599	1672	1442
Q Serve(g_s), s	0.0	4.4	1.2	0.0	1.7	0.0
Cycle Q Clear(g_c), s	0.0	4.4	1.2	0.0	1.7	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2378	2187	1085	345	149
V/C Ratio(X)	0.00	0.29	0.09	0.00	0.32	0.00
Avail Cap(c_a), veh/h	0	2378	2187	1085	426	184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.97	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	3.5	3.0	0.0	22.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	0.5	0.0	0.8	0.0
LnGrp Delay(d),s/veh	0.0	3.6	3.1	0.0	23.4	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		697	207		109	
Approach Delay, s/veh		3.6	3.1		23.4	
Approach LOS		A	A		C	

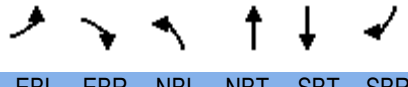
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.3		11.7		43.3		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		14.0		7.0		16.0		
Max Q Clear Time (g_c+I1), s		6.4		3.7		3.2		
Green Ext Time (p_c), s		4.1		0.1		5.9		

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	289	436	0	518	93	264
Future Volume (veh/h)	289	436	0	518	93	264
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1863	0	1863	1557	1863
Adj Flow Rate, veh/h	321	0	0	576	98	0
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.95	0.95
Percent Heavy Veh, %	5	2	0	2	22	2
Cap, veh/h	2186	1007	0	2251	300	165
Arrive On Green	0.64	0.00	0.00	0.64	0.10	0.00
Sat Flow, veh/h	3529	1583	0	3725	2877	1583
Grp Volume(v), veh/h	321	0	0	576	98	0
Grp Sat Flow(s),veh/h/ln	1719	1583	0	1770	1439	1583
Q Serve(g_s), s	1.9	0.0	0.0	3.5	1.6	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	3.5	1.6	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2186	1007	0	2251	300	165
V/C Ratio(X)	0.15	0.00	0.00	0.26	0.33	0.00
Avail Cap(c_a), veh/h	2186	1007	0	2251	1042	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.00	0.00	0.73	1.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	4.0	20.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	1.7	0.7	0.0
LnGrp Delay(d),s/veh	3.8	0.0	0.0	4.0	21.4	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	321			576	98	
Approach Delay, s/veh	3.8			4.0	21.4	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.3				38.3		11.7
Change Period (Y+Rc), s		6.5				6.5		6.5
Max Green Setting (Gmax), s		18.9				18.9		18.1
Max Q Clear Time (g_c+I1), s		3.9				5.5		3.6
Green Ext Time (p_c), s		6.4				6.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	446	107	224	1505	1096	666
Future Volume (veh/h)	446	107	224	1505	1096	666
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1792	1863	1863	1845	1863
Adj Flow Rate, veh/h	496	119	249	1672	1218	740
Adj No. of Lanes	2	1	2	3	4	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	6	2	2	3	2
Cap, veh/h	589	266	323	3435	3347	835
Arrive On Green	0.17	0.17	0.09	0.68	0.53	0.53
Sat Flow, veh/h	3375	1524	3442	5253	6604	1583
Grp Volume(v), veh/h	496	119	249	1672	1218	740
Grp Sat Flow(s),veh/h/ln	1688	1524	1721	1695	1586	1583
Q Serve(g_s), s	17.1	8.4	8.5	19.1	13.5	49.8
Cycle Q Clear(g_c), s	17.1	8.4	8.5	19.1	13.5	49.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	589	266	323	3435	3347	835
V/C Ratio(X)	0.84	0.45	0.77	0.49	0.36	0.89
Avail Cap(c_a), veh/h	928	419	1018	3435	3347	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	44.4	53.1	9.4	16.6	25.2
Incr Delay (d2), s/veh	3.9	1.1	3.9	0.5	0.3	13.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	3.6	4.2	9.0	6.0	24.7
LnGrp Delay(d),s/veh	51.9	45.5	57.0	9.9	16.9	38.5
LnGrp LOS	D	D	E	A	B	D
Approach Vol, veh/h	615			1921	1958	
Approach Delay, s/veh	50.6			16.0	25.0	
Approach LOS	D			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	17.8	72.3				90.1		29.9
Change Period (Y+Rc), s	6.5	* 9				9.0		9.0
Max Green Setting (Gmax), s	35.5	* 30				69.0		33.0
Max Q Clear Time (g_c+I1), s	10.5	51.8				21.1		19.1
Green Ext Time (p_c), s	0.8	0.0				39.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	48.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	1166	54	33	2609	38	0	0	66	0	0	251
Future Vol, veh/h	40	1166	54	33	2609	38	0	0	66	0	0	251
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	345	-	0	250	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	95	95	95	90	90	90	90	90	90
Heavy Vehicles, %	3	1	0	0	1	0	2	2	0	2	2	3
Mvmt Flow	43	1254	58	35	2746	40	0	0	73	0	0	279

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2746	0	-	1254	0	0	-	-	627	-	-	1373
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.3	-	-	-	-	7.1	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	3.1	-	-	-	-	3.9	-	-	3.93
Pot Cap-1 Maneuver	51	-	0	300	-	0	0	0	369	0	0	~ 115
Stage 1	-	-	0	-	-	0	0	0	-	0	0	-
Stage 2	-	-	0	-	-	0	0	0	-	0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	51	-	-	300	-	-	-	-	369	-	-	~ 115
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.9	0.2	17.2	$ 727.1
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	369	51	-	300	-	115
HCM Lane V/C Ratio	0.199	0.843	-	0.116	-	2.425
HCM Control Delay (s)	17.2	207.8	-	18.6	-	$ 727.1
HCM Lane LOS	C	F	-	C	-	F
HCM 95th %tile Q(veh)	0.7	3.5	-	0.4	-	24.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	358	268	64	256	27
Future Vol, veh/h	12	358	268	64	256	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	-	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	389	291	70	278	29

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	221	0
Stage 1	-	-	0	-
Stage 2	-	-	221	-
Critical Hdwy	4.14	-	7.54	6.94
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.54	-
Follow-up Hdwy	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	716	-
Stage 1	-	-	-	-
Stage 2	-	-	761	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	716	-
Mov Cap-2 Maneuver	-	-	716	-
Stage 1	-	-	-	-
Stage 2	-	-	761	-

Approach	EB	SB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

4.2.2 Design Year No Build

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	3039	46	141	1580	187	104	70	46	193	93	40
Future Volume (veh/h)	29	3039	46	141	1580	187	104	70	46	193	93	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1809	1900	1792	1699	1900	1810	1856	1900	1881	1893	1845
Adj Flow Rate, veh/h	31	3199	48	148	1663	197	116	78	51	157	179	44
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	4	5	5	6	13	13	5	0	0	1	0	3
Cap, veh/h	237	3707	55	167	3275	387	114	158	103	150	285	236
Arrive On Green	0.02	0.74	0.74	0.06	0.78	0.78	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1740	5013	75	1707	4206	497	1120	1049	686	1269	1893	1568
Grp Volume(v), veh/h	31	2096	1151	148	1221	639	116	0	129	157	179	44
Grp Sat Flow(s),veh/h/ln	1740	1646	1796	1707	1546	1611	1120	0	1735	1269	1893	1568
Q Serve(g_s), s	0.7	73.0	74.5	8.0	23.1	23.3	9.9	0.0	10.9	13.2	14.2	3.9
Cycle Q Clear(g_c), s	0.7	73.0	74.5	8.0	23.1	23.3	24.1	0.0	10.9	24.1	14.2	3.9
Prop In Lane	1.00		0.04	1.00		0.31	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	237	2435	1328	167	2408	1255	114	0	261	150	285	236
V/C Ratio(X)	0.13	0.86	0.87	0.88	0.51	0.51	1.01	0.00	0.49	1.05	0.63	0.19
Avail Cap(c_a), veh/h	251	2435	1328	167	2408	1255	114	0	261	150	285	236
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	14.9	15.1	57.7	6.5	6.5	77.0	0.0	62.4	75.4	63.7	59.4
Incr Delay (d2), s/veh	0.2	4.3	7.8	38.6	0.8	1.5	88.0	0.0	1.4	87.5	4.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	34.0	39.3	8.2	10.1	10.8	7.8	0.0	5.3	10.2	7.8	1.7
LnGrp Delay(d),s/veh	5.9	19.2	23.0	96.3	7.2	8.0	165.1	0.0	63.8	163.0	68.1	59.8
LnGrp LOS	A	B	C	F	A	A	F		E	F	E	E
Approach Vol, veh/h		3278			2008			245			380	
Approach Delay, s/veh		20.4			14.0			111.8			106.3	
Approach LOS		C			B			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	126.1		31.1	10.7	132.4		31.1
Change Period (Y+Rc), s	7.0	7.5		* 7	7.0	7.5		7.0
Max Green Setting (Gmax), s	10.0	104.9		* 24	5.0	109.9		23.6
Max Q Clear Time (g_c+I1), s	10.0	76.5		26.1	2.7	25.3		26.1
Green Ext Time (p_c), s	0.0	28.2		0.0	0.0	82.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

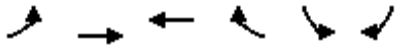
Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	674	3232	13	32	664	12	3	6	1	4	6	1502
Future Volume (veh/h)	674	3232	13	32	664	12	3	6	1	4	6	1502
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1825	1900	1827	1863	1900	1900	1667	1900	1900	1900	1696
Adj Flow Rate, veh/h	741	3552	14	36	738	13	3	7	1	4	6	0
Adj No. of Lanes	2	3	0	1	2	0	0	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	11	4	4	4	2	2	20	20	0	0	0	12
Cap, veh/h	808	2365	9	83	1086	19	170	376	545	522	641	487
Arrive On Green	0.18	0.46	0.46	0.02	0.31	0.31	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	3163	5123	20	1740	3560	63	416	1115	1615	1430	1900	1442
Grp Volume(v), veh/h	741	2301	1265	36	367	384	10	0	1	4	6	0
Grp Sat Flow(s),veh/h/ln	1581	1661	1822	1740	1770	1852	1531	0	1615	1430	1900	1442
Q Serve(g_s), s	24.7	73.9	73.9	2.3	29.1	29.1	0.0	0.0	0.1	0.3	0.3	0.0
Cycle Q Clear(g_c), s	24.7	73.9	73.9	2.3	29.1	29.1	0.6	0.0	0.1	0.9	0.3	0.0
Prop In Lane	1.00		0.01	1.00		0.03	0.30		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	808	1534	841	83	540	565	546	0	545	522	641	487
V/C Ratio(X)	0.92	1.50	1.50	0.44	0.68	0.68	0.02	0.00	0.00	0.01	0.01	0.00
Avail Cap(c_a), veh/h	981	1534	841	182	540	565	546	0	545	522	641	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	43.1	43.1	44.5	48.7	48.8	35.3	0.0	35.1	35.6	35.2	0.0
Incr Delay (d2), s/veh	11.2	228.8	232.9	7.6	6.8	6.5	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	82.6	91.5	1.8	15.3	16.0	0.3	0.0	0.0	0.1	0.2	0.0
LnGrp Delay(d),s/veh	43.9	271.9	275.9	52.0	55.5	55.2	35.4	0.0	35.1	35.7	35.3	0.0
LnGrp LOS	D	F	F	D	E	E	D		D	D	D	
Approach Vol, veh/h		4307			787			11			10	
Approach Delay, s/veh		233.8			55.2			35.4			35.4	
Approach LOS		F			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	80.4		61.0	34.9	55.3		61.0
Change Period (Y+Rc), s	6.4	6.5		7.0	6.5	6.5		7.0
Max Green Setting (Gmax), s	12.6	73.5		54.0	37.2	48.8		54.0
Max Q Clear Time (g_c+I1), s	4.3	75.9		2.9	26.7	31.1		2.6
Green Ext Time (p_c), s	0.1	0.0		0.1	1.7	17.7		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	205.5
HCM 2010 LOS	F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3239	810	0	749	39
Future Volume (veh/h)	0	3239	810	0	749	39
Number	1	6	2	12	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1845	0	1863	1652
Adj Flow Rate, veh/h	0	3409	880	0	805	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.92	0.92	0.93	0.93
Percent Heavy Veh, %	0	4	3	0	2	15
Cap, veh/h	0	2538	2563	0	602	246
Arrive On Green	0.00	0.73	0.73	0.00	0.17	0.00
Sat Flow, veh/h	0	3654	3689	0	3442	1404
Grp Volume(v), veh/h	0	3409	880	0	805	0
Grp Sat Flow(s),veh/h/ln	0	1736	1752	0	1721	1404
Q Serve(g_s), s	0.0	117.0	14.4	0.0	28.0	0.0
Cycle Q Clear(g_c), s	0.0	117.0	14.4	0.0	28.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2538	2563	0	602	246
V/C Ratio(X)	0.00	1.34	0.34	0.00	1.34	0.00
Avail Cap(c_a), veh/h	0	2538	2563	0	602	246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.5	7.7	0.0	66.0	0.0
Incr Delay (d2), s/veh	0.0	157.1	0.4	0.0	162.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	110.7	7.1	0.0	26.9	0.0
LnGrp Delay(d),s/veh	0.0	178.6	8.1	0.0	228.5	0.0
LnGrp LOS		F	A		F	
Approach Vol, veh/h		3409	880		805	
Approach Delay, s/veh		178.6	8.1		228.5	
Approach LOS		F	A		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		125.0		35.0		125.0		
Change Period (Y+Rc), s		8.0		7.0		8.0		
Max Green Setting (Gmax), s		117.0		28.0		117.0		
Max Q Clear Time (g_c+I1), s		16.4		30.0		119.0		
Green Ext Time (p_c), s		100.0		0.0		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	157.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	686	6	5	413	0	0	0	0	566	777	1099
Future Volume (veh/h)	0	686	6	5	413	0	0	0	0	566	777	1099
Number	1	6	16	5	2	12				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1793	1900	1863	1863	0				1863	1847	1610
Adj Flow Rate, veh/h	0	762	7	6	459	0				476	1003	1169
Adj No. of Lanes	0	2	0	1	2	0				1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.94	0.94	0.94
Percent Heavy Veh, %	0	6	6	2	2	0				2	3	18
Cap, veh/h	0	724	7	45	741	0				1253	2609	967
Arrive On Green	0.00	0.21	0.21	0.21	0.21	0.00				0.71	0.71	0.71
Sat Flow, veh/h	0	3549	32	697	3632	0				1774	3694	1369
Grp Volume(v), veh/h	0	375	394	6	459	0				476	1003	1169
Grp Sat Flow(s),veh/h/ln	0	1704	1788	697	1770	0				1774	1847	1369
Q Serve(g_s), s	0.0	33.5	33.5	0.0	18.9	0.0				17.2	17.5	113.0
Cycle Q Clear(g_c), s	0.0	33.5	33.5	33.5	18.9	0.0				17.2	17.5	113.0
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	357	374	45	741	0				1253	2609	967
V/C Ratio(X)	0.00	1.05	1.05	0.13	0.62	0.00				0.38	0.38	1.21
Avail Cap(c_a), veh/h	0	357	374	45	741	0				1253	2609	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	63.2	63.3	80.0	57.5	0.0				9.4	9.5	23.5
Incr Delay (d2), s/veh	0.0	61.9	60.8	6.1	3.9	0.0				0.3	0.1	104.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.9	22.9	0.3	9.6	0.0				8.4	9.0	70.1
LnGrp Delay(d),s/veh	0.0	125.2	124.1	86.1	61.3	0.0				9.7	9.6	127.5
LnGrp LOS		F	F	F	E					A	A	F
Approach Vol, veh/h		769			465						2648	
Approach Delay, s/veh		124.6			61.6						61.7	
Approach LOS		F			E						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		41.0		119.0		41.0		
Change Period (Y+Rc), s		7.5		6.0		7.5		
Max Green Setting (Gmax), s		33.5		113.0		33.5		
Max Q Clear Time (g_c+I1), s		35.5		115.0		35.5		
Green Ext Time (p_c), s		0.0		0.0		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	74.1
HCM 2010 LOS	E

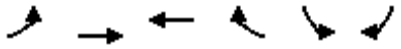
Notes

User approved volume balancing among the lanes for turning movement.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	8	18	65	6	36	152	133	1028	91	70	727	33
Future Volume (veh/h)	8	18	65	6	36	152	133	1028	91	70	727	33
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1570	1863	1583	1836	1900	1863	1831	1900	1900	1747	1900
Adj Flow Rate, veh/h	9	20	72	7	40	169	140	1082	96	74	765	35
Adj No. of Lanes	1	1	1	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	21	2	20	14	14	2	4	4	0	9	9
Cap, veh/h	87	252	317	210	49	209	516	3149	279	369	3082	141
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.67	0.67	0.03	0.66	0.66
Sat Flow, veh/h	1191	1570	1583	1104	308	1299	1774	4676	414	1810	4675	213
Grp Volume(v), veh/h	9	20	72	7	0	209	140	771	407	74	519	281
Grp Sat Flow(s),veh/h/ln	1191	1570	1583	1104	0	1607	1774	1666	1758	1810	1589	1709
Q Serve(g_s), s	1.2	1.7	6.1	0.9	0.0	20.1	4.1	15.7	15.8	2.2	10.7	10.7
Cycle Q Clear(g_c), s	21.3	1.7	6.1	2.6	0.0	20.1	4.1	15.7	15.8	2.2	10.7	10.7
Prop In Lane	1.00		1.00	1.00		0.81	1.00		0.24	1.00		0.12
Lane Grp Cap(c), veh/h	87	252	317	210	0	258	516	2244	1184	369	2096	1127
V/C Ratio(X)	0.10	0.08	0.23	0.03	0.00	0.81	0.27	0.34	0.34	0.20	0.25	0.25
Avail Cap(c_a), veh/h	234	447	513	347	0	457	706	2244	1184	510	2096	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.1	57.1	53.6	58.2	0.0	64.8	8.3	11.1	11.1	9.0	11.1	11.1
Incr Delay (d2), s/veh	0.7	0.2	0.5	0.1	0.0	8.3	0.2	0.2	0.3	0.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	2.7	0.3	0.0	9.5	2.0	7.2	7.7	1.1	4.8	5.2
LnGrp Delay(d),s/veh	75.8	57.3	54.1	58.3	0.0	73.1	8.5	11.3	11.4	9.2	11.4	11.6
LnGrp LOS	E	E	D	E		E	A	B	B	A	B	B
Approach Vol, veh/h		101			216			1318			874	
Approach Delay, s/veh		56.7			72.7			11.0			11.3	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.8	113.0		34.2	10.6	115.2		34.2
Change Period (Y+Rc), s	6.5	7.5		8.5	6.5	7.5		8.5
Max Green Setting (Gmax), s	23.5	68.5		45.5	16.5	75.5		45.5
Max Q Clear Time (g_c+I1), s	16.1	12.7		22.1	4.2	17.8		23.3
Green Ext Time (p_c), s	0.2	34.8		2.5	0.1	35.5		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	129	2249	1639	96	78	44
Future Volume (veh/h)	129	2249	1639	96	78	44
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1843	1900	1810	1792
Adj Flow Rate, veh/h	143	2499	1725	101	87	49
Adj No. of Lanes	1	2	3	0	1	1
Peak Hour Factor	0.90	0.90	0.95	0.95	0.90	0.90
Percent Heavy Veh, %	2	2	3	3	5	6
Cap, veh/h	241	3019	4148	243	97	86
Arrive On Green	0.85	0.85	0.85	0.85	0.06	0.06
Sat Flow, veh/h	254	3632	5028	284	1723	1524
Grp Volume(v), veh/h	143	2499	1189	637	87	49
Grp Sat Flow(s),veh/h/ln	254	1770	1677	1793	1723	1524
Q Serve(g_s), s	46.9	56.5	12.9	12.9	8.0	5.0
Cycle Q Clear(g_c), s	59.8	56.5	12.9	12.9	8.0	5.0
Prop In Lane	1.00			0.16	1.00	1.00
Lane Grp Cap(c), veh/h	241	3019	2861	1529	97	86
V/C Ratio(X)	0.59	0.83	0.42	0.42	0.90	0.57
Avail Cap(c_a), veh/h	241	3019	2872	1535	97	86
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.5	5.9	2.7	2.7	75.0	73.6
Incr Delay (d2), s/veh	10.3	2.8	0.1	0.3	59.5	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	27.9	5.8	6.3	5.4	2.3
LnGrp Delay(d),s/veh	19.8	8.6	2.8	2.9	134.6	82.4
LnGrp LOS	B	A	A	A	F	F
Approach Vol, veh/h		2642	1826		136	
Approach Delay, s/veh		9.2	2.9		115.8	
Approach LOS		A	A		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		144.0		16.0		144.0		
Change Period (Y+Rc), s		7.5		7.0		* 7.5		
Max Green Setting (Gmax), s		136.5		9.0		* 1.4E2		
Max Q Clear Time (g_c+I1), s		61.8		10.0		14.9		
Green Ext Time (p_c), s		74.2		0.0		120.8		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	961	69	46	686	196	37	90	41	255	134	76
Future Volume (veh/h)	55	961	69	46	686	196	37	90	41	255	134	76
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1799	1900	1900	1759	1900	1900	1887	1900	1845	1833	1863
Adj Flow Rate, veh/h	61	1068	77	51	762	0	41	100	46	216	243	84
Adj No. of Lanes	1	3	0	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	6	6	0	8	0	0	1	1	3	4	2
Cap, veh/h	398	2401	173	280	2460	827	294	199	92	273	285	246
Arrive On Green	0.03	0.51	0.51	0.03	0.51	0.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1810	4678	337	1810	4803	1615	1810	1224	563	1757	1833	1583
Grp Volume(v), veh/h	61	747	398	51	762	0	41	0	146	216	243	84
Grp Sat Flow(s),veh/h/ln	1810	1637	1740	1810	1601	1615	1810	0	1788	1757	1833	1583
Q Serve(g_s), s	2.6	23.0	23.1	2.1	14.7	0.0	3.1	0.0	11.9	18.9	20.7	7.6
Cycle Q Clear(g_c), s	2.6	23.0	23.1	2.1	14.7	0.0	3.1	0.0	11.9	18.9	20.7	7.6
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	398	1681	893	280	2460	827	294	0	290	273	285	246
V/C Ratio(X)	0.15	0.44	0.45	0.18	0.31	0.00	0.14	0.00	0.50	0.79	0.85	0.34
Avail Cap(c_a), veh/h	430	1681	893	325	2460	827	294	0	290	450	470	406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	24.5	24.6	19.2	22.6	0.0	57.4	0.0	61.1	65.1	65.8	60.3
Incr Delay (d2), s/veh	0.2	0.9	1.6	0.3	0.1	0.0	1.0	0.0	6.1	5.1	8.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	10.6	11.4	1.1	6.5	0.0	1.6	0.0	6.4	9.6	11.1	3.4
LnGrp Delay(d),s/veh	18.3	25.4	26.2	19.5	22.7	0.0	58.4	0.0	67.2	70.2	73.7	61.1
LnGrp LOS	B	C	C	B	C		E		E	E	E	E
Approach Vol, veh/h		1206			813			187			543	
Approach Delay, s/veh		25.3			22.5			65.3			70.3	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	88.1		32.0	9.2	88.0		30.9
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0
Max Green Setting (Gmax), s	8.5	62.0		26.0	7.5	63.0		41.0
Max Q Clear Time (g_c+I1), s	4.1	25.1		13.9	4.6	16.7		22.7
Green Ext Time (p_c), s	0.0	16.8		0.7	0.0	18.3		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	2246	3	3	1552	125	6	1	0	152	0	37
Future Volume (veh/h)	27	2246	3	3	1552	125	6	1	0	152	0	37
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1847	1900	1900	1900	1900	1900	1855	1900
Adj Flow Rate, veh/h	30	2468	3	3	1705	137	7	1	0	169	0	41
Adj No. of Lanes	1	2	0	0	2	0	1	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	3	3	3	0	0	0	0	0	0
Cap, veh/h	166	2743	3	23	2429	193	282	297	0	221	0	44
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.16	0.16	0.00	0.16	0.00	0.16
Sat Flow, veh/h	255	3627	4	1	3212	256	1388	1900	0	1152	0	279
Grp Volume(v), veh/h	30	1204	1267	968	0	877	7	1	0	210	0	0
Grp Sat Flow(s),veh/h/ln	255	1770	1862	1833	0	1636	1388	1900	0	1431	0	0
Q Serve(g_s), s	11.2	83.0	83.1	0.0	0.0	45.1	0.0	0.1	0.0	23.1	0.0	0.0
Cycle Q Clear(g_c), s	56.3	83.0	83.1	42.9	0.0	45.1	0.6	0.1	0.0	23.2	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.16	1.00		0.00	0.80		0.20
Lane Grp Cap(c), veh/h	166	1338	1408	1409	0	1237	282	297	0	264	0	0
V/C Ratio(X)	0.18	0.90	0.90	0.69	0.00	0.71	0.02	0.00	0.00	0.79	0.00	0.00
Avail Cap(c_a), veh/h	166	1338	1408	1409	0	1237	282	297	0	264	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.0	14.9	14.9	10.0	0.0	10.2	57.2	57.0	0.0	66.8	0.0	0.0
Incr Delay (d2), s/veh	2.4	9.9	9.5	1.6	0.0	2.1	0.0	0.0	0.0	15.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	43.5	45.6	22.1	0.0	20.7	0.3	0.0	0.0	10.3	0.0	0.0
LnGrp Delay(d),s/veh	27.4	24.7	24.4	11.6	0.0	12.3	57.3	57.0	0.0	82.1	0.0	0.0
LnGrp LOS	C	C	C	B		B	E	E		F		
Approach Vol, veh/h		2501			1845			8			210	
Approach Delay, s/veh		24.6			11.9			57.2			82.1	
Approach LOS		C			B			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		128.0		32.0		128.0		32.0
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s		121.0		25.0		121.0		25.0
Max Q Clear Time (g_c+I1), s		85.1		25.2		47.1		2.6
Green Ext Time (p_c), s		35.8		0.0		73.5		1.2

Intersection Summary		
HCM 2010 Ctrl Delay		22.2
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	22.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	265	4310	168	25	1281	246	0	0	27	0	0	179
Future Vol, veh/h	265	4310	168	25	1281	246	0	0	27	0	0	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	345	-	0	250	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	1	3	0	0	10	1	2	2	31	2	2	2
Mvmt Flow	279	4537	177	28	1423	273	0	0	30	0	0	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1423	0	-	4537	0	0	-	-	2268	-	-	712
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.32	-	-	5.3	-	-	-	-	7.72	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.11	-	-	3.1	-	-	-	-	4.21	-	-	3.92
Pot Cap-1 Maneuver	~ 246	-	0	~ 6	-	0	0	0	~ 19	0	0	322
Stage 1	-	-	0	-	-	0	0	0	-	0	0	-
Stage 2	-	-	0	-	-	0	0	0	-	0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	~ 246	-	-	~ 6	-	-	-	-	~ 19	-	-	322
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.2	53.7	$ 714.1	32.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	19	~ 246	-	~ 6	-	322
HCM Lane V/C Ratio	1.579	1.134	-	4.63	-	0.618
HCM Control Delay (s)	$ 714.1	141.3	-	$ 2806.2	-	32.7
HCM Lane LOS	F	F	-	F	-	D
HCM 95th %tile Q(veh)	4.1	12.5	-	4.9	-	3.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.7

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	33	544	1101	9	4	165
Future Vol, veh/h	33	544	1101	9	4	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	95	95	90	90
Heavy Vehicles, %	4	7	2	0	33	2
Mvmt Flow	36	591	1159	9	4	183

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1168	0	-	0	1827	1164
Stage 1	-	-	-	-	1164	-
Stage 2	-	-	-	-	663	-
Critical Hdwy	4.14	-	-	-	6.73	6.22
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	2.236	-	-	-	3.797	3.318
Pot Cap-1 Maneuver	591	-	-	-	70	237
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	459	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	591	-	-	-	64	237
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	417	-

Approach	NB	SB	NE
HCM Control Delay, s	0.7	0	58.2
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NELn2	NBL	NBT	SBT	SBR
Capacity (veh/h)	64	237	591	-	-	-
HCM Lane V/C Ratio	0.069	0.774	0.061	-	-	-
HCM Control Delay (s)	65.4	58	11.5	0	-	-
HCM Lane LOS	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0.2	5.6	0.2	-	-	-

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	527	76	133	1128	5	1	1	4	129	1	49
Future Volume (veh/h)	0	527	76	133	1128	5	1	1	4	129	1	49
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	0	579	84	140	1187	5	1	1	4	143	1	54
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.91	0.91	0.95	0.95	0.92	0.92	0.92	0.92	0.90	0.92	0.90
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1034	150	426	1205	5	47	50	100	183	1	317
Arrive On Green	0.00	0.65	0.65	0.65	0.65	0.65	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	0	1591	231	769	1854	8	0	249	498	518	4	1583
Grp Volume(v), veh/h	0	0	663	140	0	1192	6	0	0	144	0	54
Grp Sat Flow(s),veh/h/ln	0	0	1822	769	0	1861	746	0	0	522	0	1583
Q Serve(g_s), s	0.0	0.0	18.0	11.0	0.0	56.1	0.0	0.0	0.0	0.0	0.0	2.5
Cycle Q Clear(g_c), s	0.0	0.0	18.0	29.0	0.0	56.1	18.0	0.0	0.0	18.0	0.0	2.5
Prop In Lane	0.00		0.13	1.00		0.00	0.17		0.67	0.99		1.00
Lane Grp Cap(c), veh/h	0	0	1184	426	0	1210	196	0	0	184	0	317
V/C Ratio(X)	0.00	0.00	0.56	0.33	0.00	0.99	0.03	0.00	0.00	0.78	0.00	0.17
Avail Cap(c_a), veh/h	0	0	1185	426	0	1210	196	0	0	184	0	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	8.7	16.7	0.0	15.3	29.4	0.0	0.0	38.5	0.0	29.8
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.4	0.0	22.3	0.1	0.0	0.0	19.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.0	2.4	0.0	35.6	0.1	0.0	0.0	4.5	0.0	1.1
LnGrp Delay(d),s/veh	0.0	0.0	9.3	17.1	0.0	37.6	29.5	0.0	0.0	57.8	0.0	30.1
LnGrp LOS			A	B		D	C			E		C
Approach Vol, veh/h		663			1332			6			198	
Approach Delay, s/veh		9.3			35.5			29.5			50.2	
Approach LOS		A			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.5		24.5		65.5		24.5
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5
Max Green Setting (Gmax), s		58.5		18.0		58.5		18.0
Max Q Clear Time (g_c+I1), s		20.0		20.0		58.1		20.0
Green Ext Time (p_c), s		25.2		0.0		0.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	4114	132	516	1428	689	96	127	286	945	165	28
Future Volume (veh/h)	91	4114	132	516	1428	689	96	127	286	945	165	28
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1863	1881	1792	1863	1827	1881	1863	1881	1844	1900
Adj Flow Rate, veh/h	101	4571	147	573	1587	0	107	141	318	1050	183	31
Adj No. of Lanes	1	3	1	2	3	1	1	1	1	2	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	2	1	6	2	4	1	2	1	2	2
Cap, veh/h	209	2837	988	346	3029	1269	125	104	245	634	255	43
Arrive On Green	0.04	0.55	0.55	0.10	0.62	0.00	0.07	0.06	0.06	0.18	0.17	0.17
Sat Flow, veh/h	1792	5136	1583	3476	4893	1583	1740	1881	1583	3476	1538	261
Grp Volume(v), veh/h	101	4571	147	573	1587	0	107	141	318	1050	0	214
Grp Sat Flow(s),veh/h/ln	1792	1712	1583	1738	1631	1583	1740	1881	1583	1738	0	1798
Q Serve(g_s), s	5.0	100.0	3.6	18.0	33.1	0.0	11.0	10.0	8.2	33.0	0.0	20.4
Cycle Q Clear(g_c), s	5.0	100.0	3.6	18.0	33.1	0.0	11.0	10.0	8.2	33.0	0.0	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	209	2837	988	346	3029	1269	125	104	245	634	0	298
V/C Ratio(X)	0.48	1.61	0.15	1.66	0.52	0.00	0.86	1.36	1.30	1.66	0.00	0.72
Avail Cap(c_a), veh/h	239	2837	988	346	3029	1269	135	104	245	634	0	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.1	40.5	5.3	81.5	19.4	0.0	83.1	85.5	42.4	74.0	0.0	71.5
Incr Delay (d2), s/veh	1.7	276.6	0.1	308.6	0.2	0.0	38.7	210.7	160.9	302.6	0.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	119.7	1.6	23.5	14.9	0.0	6.7	11.3	14.5	42.5	0.0	10.9
LnGrp Delay(d),s/veh	26.8	317.1	5.4	390.1	19.7	0.0	121.8	296.2	203.3	376.6	0.0	80.2
LnGrp LOS	C	F	A	F	B		F	F	F	F		F
Approach Vol, veh/h		4819			2160			566			1264	
Approach Delay, s/veh		301.5			117.9			211.0			326.4	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	117.0	38.0	15.0	23.0	105.0	18.0	35.0
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	5.0	* 5	5.0	5.0
Max Green Setting (Gmax), s	10.0	108.0	33.0	10.0	18.0	* 1E2	14.0	29.0
Max Q Clear Time (g_c+I1), s	7.0	35.1	35.0	12.0	20.0	102.0	13.0	22.4
Green Ext Time (p_c), s	0.1	34.2	0.0	0.0	0.0	0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	254.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1102	947	0	2686	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1102	947	0	2686	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1863	0	1863	0			
Adj Flow Rate, veh/h				0	1160	0	0	2827	0			
Adj No. of Lanes				0	2	1	0	2	0			
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %				0	1	2	0	2	0			
Cap, veh/h				0	1519	673	0	1799	0			
Arrive On Green				0.00	0.43	0.00	0.00	0.51	0.00			
Sat Flow, veh/h				0	3668	1583	0	3725	0			
Grp Volume(v), veh/h				0	1160	0	0	2827	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1583	0	1770	0			
Q Serve(g_s), s				0.0	49.7	0.0	0.0	91.5	0.0			
Cycle Q Clear(g_c), s				0.0	49.7	0.0	0.0	91.5	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	1519	673	0	1799	0			
V/C Ratio(X)				0.00	0.76	0.00	0.00	1.57	0.00			
Avail Cap(c_a), veh/h				0	1519	673	0	1799	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	44.1	0.0	0.0	44.2	0.0			
Incr Delay (d2), s/veh				0.0	3.7	0.0	0.0	259.8	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	25.3	0.0	0.0	109.4	0.0			
LnGrp Delay(d),s/veh				0.0	47.8	0.0	0.0	304.1	0.0			
LnGrp LOS					D			F				
Approach Vol, veh/h					1160			2827				
Approach Delay, s/veh					47.8			304.1				
Approach LOS					D			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		82.0		98.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		76.5		91.5				
Max Q Clear Time (g_c+I1), s		51.7		93.5				
Green Ext Time (p_c), s		12.8		0.0				

Intersection Summary		
HCM 2010 Ctrl Delay		229.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	462	1932	672	27	1252	62	199	161	13	13	188	572
Future Volume (veh/h)	462	1932	672	27	1252	62	199	161	13	13	188	572
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1881	1900	1864	1900	1863	1849	1900	1900	1881	1881
Adj Flow Rate, veh/h	513	2147	747	30	1391	69	221	179	14	14	209	636
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	1	0	2	2	2	3	3	0	1	1
Cap, veh/h	459	2369	1070	54	1384	69	168	433	34	243	334	284
Arrive On Green	0.24	0.67	0.67	0.40	0.40	0.40	0.04	0.26	0.26	0.18	0.18	0.18
Sat Flow, veh/h	1774	3539	1599	90	3436	170	1774	1693	132	1209	1881	1599
Grp Volume(v), veh/h	513	2147	747	30	716	744	221	0	193	14	209	636
Grp Sat Flow(s),veh/h/ln	1774	1770	1599	90	1771	1834	1774	0	1825	1209	1881	1599
Q Serve(g_s), s	42.5	91.8	52.2	28.7	72.5	72.5	8.0	0.0	15.8	1.8	18.5	32.0
Cycle Q Clear(g_c), s	42.5	91.8	52.2	72.5	72.5	72.5	8.0	0.0	15.8	3.6	18.5	32.0
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	459	2369	1070	54	713	739	168	0	466	243	334	284
V/C Ratio(X)	1.12	0.91	0.70	0.55	1.00	1.01	1.32	0.00	0.41	0.06	0.62	2.24
Avail Cap(c_a), veh/h	459	2369	1070	54	713	739	168	0	466	243	334	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	25.0	18.5	83.1	53.7	53.8	70.2	0.0	55.8	63.1	68.4	74.0
Incr Delay (d2), s/veh	78.3	5.8	2.6	19.3	34.5	34.9	179.2	0.0	1.0	0.2	4.6	568.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	32.8	46.3	23.7	1.8	42.3	43.9	8.3	0.0	8.1	0.6	10.1	59.0
LnGrp Delay(d),s/veh	139.7	30.8	21.0	102.5	88.2	88.7	249.4	0.0	56.8	63.3	73.1	642.0
LnGrp LOS	F	C	C	F	F	F	F		E	E	E	F
Approach Vol, veh/h		3407			1490			414			859	
Approach Delay, s/veh		45.1			88.7			159.6			494.2	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6	7	8
Phs Duration (G+Y+Rc), s	48.0	79.0		53.0		127.0	14.0	39.0
Change Period (Y+Rc), s	5.5	6.5		7.0		6.5	6.0	7.0
Max Green Setting (Gmax), s	42.5	72.5		46.0		120.5	8.0	32.0
Max Q Clear Time (g_c+I1), s	44.5	74.5		17.8		93.8	10.0	34.0
Green Ext Time (p_c), s	0.0	0.0		10.3		26.7	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	125.8	
HCM 2010 LOS	F	

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	94	4	626	324	626	0	0	39	37	16	8
Future Vol, veh/h	1	94	4	626	324	626	0	0	39	37	16	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	91	91	91	90	90	90	90	90	90
Heavy Vehicles, %	0	5	0	1	2	0	0	0	0	0	0	0
Mvmt Flow	1	104	4	688	356	688	0	0	43	41	18	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1044	0	0	109	0	0	1672	2529	54	2130	2187	522
Stage 1	-	-	-	-	-	-	109	109	-	2076	2076	-
Stage 2	-	-	-	-	-	-	1563	2420	-	54	111	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.21	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	674	-	-	1487	-	-	64	28	1008	~ 29	46	505
Stage 1	-	-	-	-	-	-	890	809	-	56	97	-
Stage 2	-	-	-	-	-	-	119	64	-	958	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	674	-	-	1487	-	-	-	0	1008	-	0	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-	-	0	-
Stage 1	-	-	-	-	-	-	888	807	-	56	0	-
Stage 2	-	-	-	-	-	-	-	0	-	915	805	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.1	4		
HCM LOS			-	-

Minor Lane/Major Mvmt	NELn1	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1
Capacity (veh/h)	-	674	-	-	1487	-	-	-
HCM Lane V/C Ratio	-	0.002	-	-	0.463	-	-	-
HCM Control Delay (s)	-	10.3	0	-	9.5	1	-	-
HCM Lane LOS	-	B	A	-	A	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-	2.5	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	128	42	317	781	0	0	0	0	804	0	795
Future Volume (veh/h)	0	128	42	317	781	0	0	0	0	804	0	795
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1840	1900	1727	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	141	46	352	868	0				874	0	864
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90				0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	10	1	0				1	0	1
Cap, veh/h	0	404	127	410	1234	0				986	0	880
Arrive On Green	0.00	0.15	0.15	0.05	0.11	0.00				0.55	0.00	0.55
Sat Flow, veh/h	0	2710	825	1645	3668	0				1792	0	1599
Grp Volume(v), veh/h	0	92	95	352	868	0				874	0	864
Grp Sat Flow(s),veh/h/ln	0	1748	1695	1645	1787	0				1792	0	1599
Q Serve(g_s), s	0.0	5.2	5.5	15.3	25.7	0.0				47.1	0.0	58.2
Cycle Q Clear(g_c), s	0.0	5.2	5.5	15.3	25.7	0.0				47.1	0.0	58.2
Prop In Lane	0.00		0.49	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	270	262	410	1234	0				986	0	880
V/C Ratio(X)	0.00	0.34	0.36	0.86	0.70	0.00				0.89	0.00	0.98
Avail Cap(c_a), veh/h	0	270	262	410	1234	0				987	0	881
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	41.5	41.7	38.9	43.3	0.0				21.7	0.0	24.2
Incr Delay (d2), s/veh	0.0	3.4	3.8	1.8	0.3	0.0				9.7	0.0	25.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	2.9	4.0	12.8	0.0				25.7	0.0	31.8
LnGrp Delay(d),s/veh	0.0	45.0	45.5	40.7	43.6	0.0				31.4	0.0	50.1
LnGrp LOS		D	D	D	D					C		D
Approach Vol, veh/h		187			1220						1738	
Approach Delay, s/veh		45.2			42.7						40.7	
Approach LOS		D			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	21.0	23.1		65.9		44.1		
Change Period (Y+Rc), s	* 5.7	6.1		* 5.4		6.1		
Max Green Setting (Gmax), s	* 15	16.9		* 61		37.9		
Max Q Clear Time (g_c+I1), s	17.3	7.5		60.2		27.7		
Green Ext Time (p_c), s	0.0	7.2		0.3		7.7		

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	871	0	0	655	197	443	3	827	0	0	0
Future Volume (veh/h)	61	871	0	0	655	197	443	3	827	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1810	1863	0	0	1752	1900	1900	1881	1759			
Adj Flow Rate, veh/h	68	968	0	0	728	219	492	3	919			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	5	2	0	0	8	8	8	0	8			
Cap, veh/h	134	1300	0	0	691	208	944	6	793			
Arrive On Green	0.01	0.12	0.00	0.00	0.27	0.27	0.53	0.53	0.53			
Sat Flow, veh/h	1723	3632	0	0	2611	759	1781	11	1495			
Grp Volume(v), veh/h	68	968	0	0	480	467	495	0	919			
Grp Sat Flow(s),veh/h/ln	1723	1770	0	0	1664	1618	1792	0	1495			
Q Serve(g_s), s	3.0	29.1	0.0	0.0	30.1	30.1	19.7	0.0	58.3			
Cycle Q Clear(g_c), s	3.0	29.1	0.0	0.0	30.1	30.1	19.7	0.0	58.3			
Prop In Lane	1.00		0.00	0.00		0.47	0.99		1.00			
Lane Grp Cap(c), veh/h	134	1300	0	0	455	443	950	0	793			
V/C Ratio(X)	0.51	0.74	0.00	0.00	1.05	1.05	0.52	0.00	1.16			
Avail Cap(c_a), veh/h	145	1300	0	0	455	443	950	0	793			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.00	0.00	0.97	0.97	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.1	43.4	0.0	0.0	39.9	39.9	16.8	0.0	25.8			
Incr Delay (d2), s/veh	2.1	3.7	0.0	0.0	56.5	57.1	2.0	0.0	85.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	14.9	0.0	0.0	20.9	20.4	10.3	0.0	42.6			
LnGrp Delay(d),s/veh	33.2	47.1	0.0	0.0	96.4	97.0	18.8	0.0	111.5			
LnGrp LOS	C	D			F	F	B		F			
Approach Vol, veh/h		1036			947			1414				
Approach Delay, s/veh		46.2			96.7			79.1				
Approach LOS		D			F			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		46.4			10.3	36.1		63.6
Change Period (Y+Rc), s		* 6			5.9	* 6		5.3
Max Green Setting (Gmax), s		* 40			5.1	* 29		58.3
Max Q Clear Time (g_c+I1), s		31.1			5.0	32.1		60.3
Green Ext Time (p_c), s		8.9			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	126	159	999	699	312	726
Future Volume (veh/h)	126	159	999	699	312	726
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1847	1900	1776	1845	1863	1847
Adj Flow Rate, veh/h	140	177	1074	0	332	772
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.93	0.90	0.94	0.94
Percent Heavy Veh, %	7	4	7	3	2	7
Cap, veh/h	515	449	1501	698	431	2325
Arrive On Green	0.15	0.15	0.44	0.00	0.13	0.66
Sat Flow, veh/h	3412	1615	3463	1568	1774	3601
Grp Volume(v), veh/h	140	177	1074	0	332	772
Grp Sat Flow(s),veh/h/ln	1706	1615	1687	1568	1774	1754
Q Serve(g_s), s	2.4	5.9	17.1	0.0	6.0	6.3
Cycle Q Clear(g_c), s	2.4	5.9	17.1	0.0	6.0	6.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	515	449	1501	698	431	2325
V/C Ratio(X)	0.27	0.39	0.72	0.00	0.77	0.33
Avail Cap(c_a), veh/h	708	540	1533	712	556	2604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	19.3	14.9	0.0	12.1	4.8
Incr Delay (d2), s/veh	0.2	0.4	2.6	0.0	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.6	8.4	0.0	3.4	3.1
LnGrp Delay(d),s/veh	25.0	19.8	17.5	0.0	16.4	5.1
LnGrp LOS	C	B	B		B	A
Approach Vol, veh/h	317		1074			1104
Approach Delay, s/veh	22.1		17.5			8.5
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	14.4	35.4				49.8		16.3
Change Period (Y+Rc), s	6.0	6.0				6.0		6.3
Max Green Setting (Gmax), s	13.0	30.0				49.0		13.7
Max Q Clear Time (g_c+I1), s	8.0	19.1				8.3		7.9
Green Ext Time (p_c), s	0.3	10.3				34.6		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1142	1880	5	12	824	177	17	37	40	24	3	471
Future Volume (veh/h)	1142	1880	5	12	824	177	17	37	40	24	3	471
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1845	1900	1749	1810	1937	1824	1779	1771	1900	1867	1845
Adj Flow Rate, veh/h	1202	1979	5	13	916	197	19	41	44	26	3	0
Adj No. of Lanes	2	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	3	3	13	5	2	0	0	3	0	0	3
Cap, veh/h	1307	2313	6	372	1499	718	58	90	102	87	8	106
Arrive On Green	0.38	0.64	0.64	0.17	0.44	0.44	0.07	0.07	0.07	0.07	0.07	0.00
Sat Flow, veh/h	3442	3587	9	1665	3438	1647	390	1333	1505	622	114	1568
Grp Volume(v), veh/h	1202	967	1017	13	916	197	60	0	44	29	0	0
Grp Sat Flow(s),veh/h/ln	1721	1753	1843	1665	1719	1647	1723	0	1505	736	0	1568
Q Serve(g_s), s	49.9	65.5	65.6	0.0	30.7	11.5	0.0	0.0	4.2	2.8	0.0	0.0
Cycle Q Clear(g_c), s	49.9	65.5	65.6	0.0	30.7	11.5	4.9	0.0	4.2	7.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.32		1.00	0.90		1.00
Lane Grp Cap(c), veh/h	1307	1130	1189	372	1499	718	148	0	102	95	0	106
V/C Ratio(X)	0.92	0.86	0.86	0.03	0.61	0.27	0.41	0.00	0.43	0.30	0.00	0.00
Avail Cap(c_a), veh/h	1340	1150	1209	372	1499	718	323	0	265	236	0	270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.3	21.1	21.1	32.3	32.5	27.1	67.5	0.0	67.2	70.7	0.0	0.0
Incr Delay (d2), s/veh	11.5	8.3	8.0	0.0	1.7	0.9	1.3	0.0	2.2	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.8	34.0	35.7	0.4	14.9	5.4	2.5	0.0	1.8	1.2	0.0	0.0
LnGrp Delay(d),s/veh	55.8	29.4	29.1	32.3	34.2	28.0	68.8	0.0	69.3	72.0	0.0	0.0
LnGrp LOS	E	C	C	C	C	C	E		E	E		
Approach Vol, veh/h		3186			1126			104			29	
Approach Delay, s/veh		39.3			33.1			69.0			72.0	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	31.3	102.3		16.3	62.6	71.1		16.3
Change Period (Y+Rc), s	5.7	* 5.6		* 6.2	5.6	* 5.7		* 6.2
Max Green Setting (Gmax), s	8.4	* 98		* 26	58.4	* 48		* 26
Max Q Clear Time (g_c+I1), s	12.0	67.6		9.8	51.9	32.7		6.9
Green Ext Time (p_c), s	2.9	29.1		0.4	5.0	4.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	2005	188	173	867	36	160	0	253	9	9	28
Future Volume (veh/h)	10	2005	188	173	867	36	160	0	253	9	9	28
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1830	1900	1863	1776	1900	1900	1863	1881	1900	1900	1900
Adj Flow Rate, veh/h	11	2228	209	192	963	40	178	0	281	10	10	31
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	13	4	4	2	5	5	0	0	1	0	0	0
Cap, veh/h	385	2146	198	199	2607	108	198	0	211	48	54	167
Arrive On Green	0.67	0.67	0.67	0.09	0.79	0.79	0.13	0.00	0.13	0.13	0.13	0.13
Sat Flow, veh/h	505	3219	297	1774	3303	137	1136	0	1599	1116	409	1267
Grp Volume(v), veh/h	11	1187	1250	192	492	511	178	0	281	10	0	41
Grp Sat Flow(s),veh/h/ln	505	1738	1777	1774	1688	1752	1136	0	1599	1116	0	1676
Q Serve(g_s), s	1.1	100.0	100.0	12.1	13.0	13.0	16.5	0.0	19.8	0.0	0.0	3.3
Cycle Q Clear(g_c), s	1.1	100.0	100.0	12.1	13.0	13.0	19.8	0.0	19.8	19.8	0.0	3.3
Prop In Lane	1.00		0.17	1.00		0.08	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	385	1159	1185	199	1332	1383	198	0	211	48	0	221
V/C Ratio(X)	0.03	1.02	1.05	0.96	0.37	0.37	0.90	0.00	1.33	0.21	0.00	0.19
Avail Cap(c_a), veh/h	385	1159	1185	199	1332	1383	198	0	211	48	0	221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.5	25.0	25.0	58.0	4.7	4.7	68.0	0.0	65.1	75.0	0.0	57.9
Incr Delay (d2), s/veh	0.1	27.4	36.9	52.8	0.6	0.6	37.1	0.0	177.8	1.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	56.1	60.9	10.9	6.2	6.5	9.4	0.0	19.2	0.4	0.0	1.5
LnGrp Delay(d),s/veh	8.6	52.4	61.9	110.8	5.3	5.3	105.1	0.0	242.9	76.6	0.0	58.2
LnGrp LOS	A	F	F	F	A	A	F		F	E		E
Approach Vol, veh/h		2448			1195			459			51	
Approach Delay, s/veh		57.1			22.3			189.5			61.8	
Approach LOS		E			C			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	18.4	105.6		26.0		124.0		26.0
Change Period (Y+Rc), s	5.6	5.6		* 6.2		5.6		* 6.2
Max Green Setting (Gmax), s	12.8	100.0		* 20		118.4		* 20
Max Q Clear Time (g_c+I1), s	14.1	102.0		21.8		15.0		21.8
Green Ext Time (p_c), s	0.0	0.0		0.0		102.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	61.7
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1466	1051	24	887	0	0	0	0	539	254	93
Future Volume (veh/h)	0	1466	1051	24	887	0	0	0	0	539	254	93
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1776	1845	1496	1792	0				1792	1858	1508
Adj Flow Rate, veh/h	0	1576	1130	26	975	0				436	498	0
Adj No. of Lanes	0	2	1	1	2	0				1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	7	3	27	6	0				6	0	26
Cap, veh/h	0	1585	737	131	1962	0				504	548	378
Arrive On Green	0.00	0.47	0.47	0.04	0.58	0.00				0.29	0.29	0.00
Sat Flow, veh/h	0	3463	1568	1425	3495	0				1707	1858	1282
Grp Volume(v), veh/h	0	1576	1130	26	975	0				436	498	0
Grp Sat Flow(s),veh/h/ln	0	1687	1568	1425	1703	0				1707	1858	1282
Q Serve(g_s), s	0.0	46.5	47.0	0.9	17.0	0.0				24.2	25.8	0.0
Cycle Q Clear(g_c), s	0.0	46.5	47.0	0.9	17.0	0.0				24.2	25.8	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1585	737	131	1962	0				504	548	378
V/C Ratio(X)	0.00	0.99	1.53	0.20	0.50	0.00				0.87	0.91	0.00
Avail Cap(c_a), veh/h	0	1585	737	186	1962	0				580	632	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.75	0.75	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.4	26.5	23.2	12.6	0.0				33.4	33.9	0.0
Incr Delay (d2), s/veh	0.0	21.3	247.1	0.2	0.7	0.0				10.6	14.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	26.1	70.8	0.4	8.2	0.0				12.9	15.5	0.0
LnGrp Delay(d),s/veh	0.0	47.6	273.6	23.4	13.3	0.0				44.0	48.6	0.0
LnGrp LOS		D	F	C	B					D	D	
Approach Vol, veh/h		2706			1001						934	
Approach Delay, s/veh		142.0			13.5						46.5	
Approach LOS		F			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	10.6	53.5		35.9		64.1		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	8.0	38.6		* 34		53.1		
Max Q Clear Time (g_c+I1), s	2.9	49.0		27.8		19.0		
Green Ext Time (p_c), s	0.0	0.0		1.7		34.0		

Intersection Summary	
HCM 2010 Ctrl Delay	95.1
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	314	1691	0	0	547	424	364	171	19	0	0	0
Future Volume (veh/h)	314	1691	0	0	547	424	364	171	19	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1462	1810	0	0	1792	1733	1827	1872	1976			
Adj Flow Rate, veh/h	341	1838	0	0	588	0	297	340	0			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90			
Percent Heavy Veh, %	30	5	0	0	6	14	4	0	0			
Cap, veh/h	545	2264	0	0	706	305	377	405	364			
Arrive On Green	0.78	1.00	0.00	0.00	0.21	0.00	0.07	0.07	0.00			
Sat Flow, veh/h	1392	3529	0	0	3495	1473	1740	1872	1680			
Grp Volume(v), veh/h	341	1838	0	0	588	0	297	340	0			
Grp Sat Flow(s),veh/h/ln	1392	1719	0	0	1703	1473	1740	1872	1680			
Q Serve(g_s), s	10.4	0.0	0.0	0.0	16.5	0.0	16.8	17.9	0.0			
Cycle Q Clear(g_c), s	10.4	0.0	0.0	0.0	16.5	0.0	16.8	17.9	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	545	2264	0	0	706	305	377	405	364			
V/C Ratio(X)	0.63	0.81	0.00	0.00	0.83	0.00	0.79	0.84	0.00			
Avail Cap(c_a), veh/h	545	2264	0	0	885	383	461	496	445			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.30	0.30	0.00	0.00	0.89	0.00	0.79	0.79	0.00			
Uniform Delay (d), s/veh	7.8	0.0	0.0	0.0	38.0	0.0	44.2	44.7	0.0			
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.0	5.1	0.0	5.9	8.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	0.3	0.0	0.0	8.3	0.0	8.7	10.3	0.0			
LnGrp Delay(d),s/veh	8.4	1.0	0.0	0.0	43.0	0.0	50.1	53.1	0.0			
LnGrp LOS	A	A			D		D	D				
Approach Vol, veh/h		2179			588			637				
Approach Delay, s/veh		2.2			43.0			51.7				
Approach LOS		A			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		71.9			45.1	26.7		28.1
Change Period (Y+Rc), s		6.0			6.0	* 6		6.5
Max Green Setting (Gmax), s		61.0			30.5	* 26		26.5
Max Q Clear Time (g_c+I1), s		2.0			12.4	18.5		19.9
Green Ext Time (p_c), s		28.3			13.5	2.2		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	1497	107	129	858	18	42	54	170	27	17	71
Future Volume (veh/h)	106	1497	107	129	858	18	42	54	170	27	17	71
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1829	1900	1863	1743	1900	1900	1875	1863	1900	1755	1900
Adj Flow Rate, veh/h	112	1576	113	137	913	19	47	60	189	30	19	79
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.94	0.94	0.94	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	4	4	2	9	0	0	0	2	23	23	23
Cap, veh/h	433	2077	148	342	2094	1021	107	113	275	61	34	81
Arrive On Green	0.10	1.00	1.00	0.05	0.63	0.63	0.04	0.04	0.04	0.13	0.13	0.13
Sat Flow, veh/h	1691	3291	234	1774	3312	1615	440	906	1583	133	269	648
Grp Volume(v), veh/h	112	827	862	137	913	19	107	0	189	128	0	0
Grp Sat Flow(s),veh/h/ln	1691	1738	1788	1774	1656	1615	1346	0	1583	1049	0	0
Q Serve(g_s), s	2.3	0.0	0.0	2.7	14.0	0.4	0.0	0.0	11.2	4.9	0.0	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	2.7	14.0	0.4	7.4	0.0	11.2	12.2	0.0	0.0
Prop In Lane	1.00		0.13	1.00		1.00	0.44		1.00	0.23		0.62
Lane Grp Cap(c), veh/h	433	1097	1128	342	2094	1021	220	0	275	176	0	0
V/C Ratio(X)	0.26	0.75	0.76	0.40	0.44	0.02	0.49	0.00	0.69	0.73	0.00	0.00
Avail Cap(c_a), veh/h	474	1097	1128	427	2094	1021	220	0	275	176	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	0.48	0.71	0.71	0.71	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	5.5	9.3	6.8	45.1	0.0	42.5	43.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	2.4	2.4	0.4	0.4	0.0	1.2	0.0	6.5	13.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.7	0.8	1.3	6.4	0.2	3.0	0.0	5.4	4.2	0.0	0.0
LnGrp Delay(d),s/veh	6.5	2.4	2.4	5.9	9.7	6.9	46.4	0.0	49.0	57.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	E		
Approach Vol, veh/h		1801			1069			296			128	
Approach Delay, s/veh		2.6			9.2			48.0			57.1	
Approach LOS		A			A			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	69.6		19.0	11.3	69.7		19.0
Change Period (Y+Rc), s	6.5	6.5		6.5	6.5	6.5		6.5
Max Green Setting (Gmax), s	9.7	58.3		12.5	7.2	60.8		12.5
Max Q Clear Time (g_c+I1), s	14.7	2.0		14.2	4.3	16.0		13.2
Green Ext Time (p_c), s	0.1	54.3		0.0	0.0	42.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	338	47	79	198	0	0	0	0	77	836	416
Future Volume (veh/h)	0	338	47	79	198	0	0	0	0	77	836	416
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1867	1900	1681	1881	0				1900	1857	1900
Adj Flow Rate, veh/h	0	376	52	86	215	0				86	929	462
Adj No. of Lanes	0	2	0	1	2	0				0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	13	1	0				0	3	0
Cap, veh/h	0	1069	147	288	1219	0				106	1159	606
Arrive On Green	0.00	0.34	0.34	0.34	0.34	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3228	430	863	3668	0				198	2170	1136
Grp Volume(v), veh/h	0	212	216	86	215	0				803	0	674
Grp Sat Flow(s),veh/h/ln	0	1774	1791	863	1787	0				1847	0	1657
Q Serve(g_s), s	0.0	8.9	9.1	8.3	4.2	0.0				41.8	0.0	38.7
Cycle Q Clear(g_c), s	0.0	8.9	9.1	17.4	4.2	0.0				41.8	0.0	38.7
Prop In Lane	0.00		0.24	1.00		0.00				0.11		0.69
Lane Grp Cap(c), veh/h	0	605	611	288	1219	0				986	0	885
V/C Ratio(X)	0.00	0.35	0.35	0.30	0.18	0.00				0.81	0.00	0.76
Avail Cap(c_a), veh/h	0	605	611	288	1219	0				1099	0	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.09	0.00	0.09
Uniform Delay (d), s/veh	0.0	24.7	24.7	31.2	23.1	0.0				36.4	0.0	35.1
Incr Delay (d2), s/veh	0.0	1.6	1.6	2.6	0.3	0.0				0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.6	4.7	2.2	2.1	0.0				21.6	0.0	17.9
LnGrp Delay(d),s/veh	0.0	26.2	26.3	33.8	23.4	0.0				36.8	0.0	35.4
LnGrp LOS		C	C	C	C					D		D
Approach Vol, veh/h		428			301						1477	
Approach Delay, s/veh		26.3			26.4						36.2	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		40.1		59.9		40.1		
Change Period (Y+Rc), s		6.0		6.5		6.0		
Max Green Setting (Gmax), s		28.0		59.5		28.0		
Max Q Clear Time (g_c+I1), s		11.1		43.8		19.4		
Green Ext Time (p_c), s		4.9		9.6		3.3		

Intersection Summary		
HCM 2010 Ctrl Delay		32.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	195	0	0	243	10	34	324	70	0	0	0
Future Volume (veh/h)	220	195	0	0	243	10	34	324	70	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1813	1900	1900	1841	1900			
Adj Flow Rate, veh/h	244	217	0	0	259	11	38	360	78			
Adj No. of Lanes	1	2	0	0	2	0	0	2	0			
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.90	0.90	0.90			
Percent Heavy Veh, %	1	1	0	0	5	5	0	4	0			
Cap, veh/h	820	2487	0	0	2344	99	49	480	109			
Arrive On Green	0.47	0.47	0.00	0.00	0.70	0.70	0.18	0.18	0.18			
Sat Flow, veh/h	1116	3668	0	0	3458	143	274	2679	609			
Grp Volume(v), veh/h	244	217	0	0	132	138	254	0	222			
Grp Sat Flow(s),veh/h/ln	1116	1787	0	0	1722	1788	1828	0	1734			
Q Serve(g_s), s	14.1	3.4	0.0	0.0	2.5	2.5	13.2	0.0	12.1			
Cycle Q Clear(g_c), s	16.7	3.4	0.0	0.0	2.5	2.5	13.2	0.0	12.1			
Prop In Lane	1.00		0.00	0.00		0.08	0.15		0.35			
Lane Grp Cap(c), veh/h	820	2487	0	0	1199	1244	327	0	311			
V/C Ratio(X)	0.30	0.09	0.00	0.00	0.11	0.11	0.78	0.00	0.72			
Avail Cap(c_a), veh/h	820	2487	0	0	1199	1244	594	0	563			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.94	0.94	0.00	0.00	0.77	0.77	1.00	0.00	1.00			
Uniform Delay (d), s/veh	13.4	9.0	0.0	0.0	5.0	5.0	39.1	0.0	38.6			
Incr Delay (d2), s/veh	0.9	0.1	0.0	0.0	0.0	0.0	4.0	0.0	3.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.5	1.7	0.0	0.0	1.2	1.2	7.1	0.0	6.1			
LnGrp Delay(d),s/veh	14.3	9.1	0.0	0.0	5.0	5.0	43.1	0.0	41.7			
LnGrp LOS	B	A			A	A	D		D			
Approach Vol, veh/h		461			270			476				
Approach Delay, s/veh		11.8			5.0			42.4				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		75.6				75.6		24.4
Change Period (Y+Rc), s		6.0				6.0		6.5
Max Green Setting (Gmax), s		55.0				55.0		32.5
Max Q Clear Time (g_c+I1), s		18.7				4.5		15.2
Green Ext Time (p_c), s		5.1				5.3		2.7

Intersection Summary		
HCM 2010 Ctrl Delay		22.4
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	837	378	110	511	40	223	108	106	86	129	142
Future Volume (veh/h)	219	837	378	110	511	40	223	108	106	86	129	142
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1821	1900	1776	1731	1900	1667	1810	1863	1810	1839	1900
Adj Flow Rate, veh/h	235	900	406	120	555	43	248	120	118	96	143	158
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	7	10	10	14	5	2	5	7	7
Cap, veh/h	430	903	404	189	1060	82	284	425	372	372	135	149
Arrive On Green	0.11	0.39	0.39	0.06	0.34	0.34	0.13	0.24	0.24	0.06	0.17	0.17
Sat Flow, veh/h	1740	2327	1041	1691	3093	239	1587	1810	1583	1723	800	883
Grp Volume(v), veh/h	235	667	639	120	294	304	248	120	118	96	0	301
Grp Sat Flow(s),veh/h/ln	1740	1730	1638	1691	1644	1688	1587	1810	1583	1723	0	1683
Q Serve(g_s), s	7.5	34.4	34.8	4.1	12.9	12.9	11.3	4.9	5.5	4.1	0.0	15.1
Cycle Q Clear(g_c), s	7.5	34.4	34.8	4.1	12.9	12.9	11.3	4.9	5.5	4.1	0.0	15.1
Prop In Lane	1.00		0.64	1.00		0.14	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	430	672	636	189	563	579	284	425	372	372	0	283
V/C Ratio(X)	0.55	0.99	1.01	0.64	0.52	0.52	0.87	0.28	0.32	0.26	0.00	1.06
Avail Cap(c_a), veh/h	534	672	636	195	563	579	284	425	372	386	0	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	27.3	27.4	22.2	23.6	23.6	26.3	28.1	28.3	28.1	0.0	37.3
Incr Delay (d2), s/veh	1.1	32.9	36.9	6.3	0.9	0.9	24.5	0.4	0.5	0.4	0.0	70.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	22.4	22.1	2.2	5.9	6.1	6.8	2.5	2.5	2.0	0.0	12.5
LnGrp Delay(d),s/veh	17.6	60.2	64.4	28.6	24.5	24.5	50.8	28.4	28.8	28.5	0.0	108.0
LnGrp LOS	B	E	F	C	C	C	D	C	C	C		F
Approach Vol, veh/h		1541			718			486			397	
Approach Delay, s/veh		55.5			25.2			39.9			88.8	
Approach LOS		E			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	41.5	16.4	20.7	15.1	37.4	10.4	26.7
Change Period (Y+Rc), s	* 5.3	* 6.7	* 4.9	5.6	* 5.3	* 6.7	* 4.9	5.6
Max Green Setting (Gmax), s	* 6.1	* 35	* 12	15.1	* 15	* 27	* 6.2	20.4
Max Q Clear Time (g_c+I1), s	16.1	36.8	13.3	17.1	9.5	14.9	6.1	7.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.3	8.5	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	50.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	1236	18	4	961	123	17	3	19	195	3	45
Future Volume (veh/h)	15	1236	18	4	961	123	17	3	19	195	3	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1809	1900	1900	1784	1900	1900	1720	1900	1827	1707	1900
Adj Flow Rate, veh/h	16	1301	19	4	1068	137	19	3	21	217	3	50
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	5	5	7	7	7	50	50	50	4	50	50
Cap, veh/h	284	1824	27	83	1554	199	212	58	145	455	17	288
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	471	3468	51	2	2954	377	451	278	696	1355	83	1380
Grp Volume(v), veh/h	16	645	675	644	0	565	43	0	0	217	0	53
Grp Sat Flow(s),veh/h/ln	471	1719	1800	1777	0	1557	1424	0	0	1355	0	1463
Q Serve(g_s), s	1.2	12.6	12.6	0.0	0.0	11.9	0.0	0.0	0.0	5.4	0.0	1.3
Cycle Q Clear(g_c), s	13.1	12.6	12.6	11.8	0.0	11.9	1.0	0.0	0.0	6.3	0.0	1.3
Prop In Lane	1.00		0.03	0.01		0.24	0.44		0.49	1.00		0.94
Lane Grp Cap(c), veh/h	284	904	947	1017	0	819	415	0	0	455	0	306
V/C Ratio(X)	0.06	0.71	0.71	0.63	0.00	0.69	0.10	0.00	0.00	0.48	0.00	0.17
Avail Cap(c_a), veh/h	295	946	991	1059	0	857	874	0	0	908	0	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	7.9	7.9	7.8	0.0	7.8	14.2	0.0	0.0	16.2	0.0	14.3
Incr Delay (d2), s/veh	0.1	2.4	2.3	1.2	0.0	2.2	0.1	0.0	0.0	0.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.5	6.8	6.1	0.0	5.5	0.4	0.0	0.0	2.6	0.0	0.6
LnGrp Delay(d),s/veh	12.7	10.4	10.3	8.9	0.0	10.0	14.3	0.0	0.0	17.0	0.0	14.6
LnGrp LOS	B	B	B	A		B	B			B		B
Approach Vol, veh/h		1336			1209			43			270	
Approach Delay, s/veh		10.3			9.4			14.3			16.5	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.4		14.7		29.4		14.7
Change Period (Y+Rc), s		6.2		5.5		6.2		5.5
Max Green Setting (Gmax), s		24.3		24.0		24.3		24.0
Max Q Clear Time (g_c+I1), s		15.1		8.3		13.9		3.0
Green Ext Time (p_c), s		8.1		1.1		9.1		1.2

Intersection Summary		
HCM 2010 Ctrl Delay		10.6
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	711	739	142	836	0	0	0	0	323	0	252
Future Volume (veh/h)	0	711	739	142	836	0	0	0	0	323	0	252
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1776	1863	1881	1792	0				1827	0	1696
Adj Flow Rate, veh/h	0	741	0	158	929	0				359	0	0
Adj No. of Lanes	0	2	1	1	2	0				1	0	1
Peak Hour Factor	0.96	0.96	0.96	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	7	2	1	6	0				4	0	12
Cap, veh/h	0	925	434	530	2179	0				398	0	330
Arrive On Green	0.00	0.27	0.00	0.30	0.64	0.00				0.23	0.00	0.00
Sat Flow, veh/h	0	3463	1583	1792	3495	0				1740	0	1442
Grp Volume(v), veh/h	0	741	0	158	929	0				359	0	0
Grp Sat Flow(s),veh/h/ln	0	1687	1583	1792	1703	0				1740	0	1442
Q Serve(g_s), s	0.0	18.4	0.0	6.1	12.2	0.0				18.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.4	0.0	6.1	12.2	0.0				18.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	925	434	530	2179	0				398	0	330
V/C Ratio(X)	0.00	0.80	0.00	0.30	0.43	0.00				0.90	0.00	0.00
Avail Cap(c_a), veh/h	0	1301	610	530	2179	0				493	0	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.59	0.00	0.81	0.81	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.4	0.0	24.5	8.0	0.0				33.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.3	0.5	0.0				17.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.1	0.0	3.1	5.8	0.0				10.6	0.0	0.0
LnGrp Delay(d),s/veh	0.0	34.8	0.0	24.7	8.5	0.0				50.8	0.0	0.0
LnGrp LOS		C		C	A					D		
Approach Vol, veh/h		741			1087						359	
Approach Delay, s/veh		34.8			10.9						50.8	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.9	31.0		26.1		63.9		
Change Period (Y+Rc), s	* 6.3	* 6.3		5.5		* 6.3		
Max Green Setting (Gmax), s	* 13	* 35		25.5		* 53		
Max Q Clear Time (g_c+I1), s	8.1	20.4		20.0		14.2		
Green Ext Time (p_c), s	2.6	4.3		0.6		8.4		

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

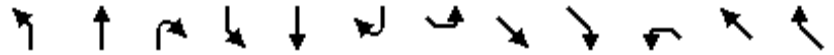
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	885	0	0	601	138	377	0	127	0	0	0
Future Volume (veh/h)	149	885	0	0	601	138	377	0	127	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1667	1827	0	0	1813	1900	1810	1810	1900			
Adj Flow Rate, veh/h	166	983	0	0	668	153	414	0	0			
Adj No. of Lanes	1	2	0	0	2	0	2	0	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91			
Percent Heavy Veh, %	14	4	0	0	5	5	5	2	0			
Cap, veh/h	195	2459	0	0	1468	336	515	0	241			
Arrive On Green	0.25	1.00	0.00	0.00	0.53	0.53	0.15	0.00	0.00			
Sat Flow, veh/h	1587	3563	0	0	2876	637	3447	0	1615			
Grp Volume(v), veh/h	166	983	0	0	413	408	414	0	0			
Grp Sat Flow(s),veh/h/ln	1587	1736	0	0	1722	1700	1723	0	1615			
Q Serve(g_s), s	9.0	0.0	0.0	0.0	13.4	13.5	10.5	0.0	0.0			
Cycle Q Clear(g_c), s	9.0	0.0	0.0	0.0	13.4	13.5	10.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.37	1.00		1.00			
Lane Grp Cap(c), veh/h	195	2459	0	0	907	896	515	0	241			
V/C Ratio(X)	0.85	0.40	0.00	0.00	0.45	0.46	0.80	0.00	0.00			
Avail Cap(c_a), veh/h	316	2459	0	0	907	896	785	0	368			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.75	0.75	0.00	0.00	0.72	0.72	1.00	0.00	0.00			
Uniform Delay (d), s/veh	33.2	0.0	0.0	0.0	13.2	13.3	37.0	0.0	0.0			
Incr Delay (d2), s/veh	9.1	0.4	0.0	0.0	0.3	0.3	3.6	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.4	0.1	0.0	0.0	6.4	6.3	5.2	0.0	0.0			
LnGrp Delay(d),s/veh	42.3	0.4	0.0	0.0	13.5	13.5	40.6	0.0	0.0			
LnGrp LOS	D	A			B	B	D					
Approach Vol, veh/h		1149			821			414				
Approach Delay, s/veh		6.4			13.5			40.6				
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		70.1		19.9	16.3	53.7		
Change Period (Y+Rc), s		* 6.3		6.5	* 5.3	* 6.3		
Max Green Setting (Gmax), s		* 57		20.5	* 18	* 34		
Max Q Clear Time (g_c+I1), s		2.0		12.5	11.0	15.5		
Green Ext Time (p_c), s		19.5		1.0	0.2	11.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	330	674	8	4	226	26	45	3	501	12	1	10
Future Volume (veh/h)	330	674	8	4	226	26	45	3	501	12	1	10
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1845	1900	1900	1745	1810	1900	1848	1827	1900	1900	1900
Adj Flow Rate, veh/h	367	749	9	4	251	29	50	3	557	13	1	11
Adj No. of Lanes	1	1	1	0	1	1	0	1	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	3	0	9	9	5	50	50	4	0	0	0
Cap, veh/h	437	850	745	64	473	421	439	23	378	331	48	530
Arrive On Green	0.09	0.46	0.46	0.27	0.27	0.27	0.24	0.24	0.24	0.01	0.35	0.35
Sat Flow, veh/h	1723	1845	1615	6	1728	1538	1315	94	1553	1810	136	1499
Grp Volume(v), veh/h	367	749	9	255	0	29	53	0	557	13	0	12
Grp Sat Flow(s),veh/h/ln	1723	1845	1615	1735	0	1538	1409	0	1553	1810	0	1635
Q Serve(g_s), s	5.3	21.6	0.2	0.0	0.0	0.8	1.6	0.0	14.3	0.3	0.0	0.3
Cycle Q Clear(g_c), s	5.3	21.6	0.2	7.3	0.0	0.8	1.7	0.0	14.3	0.3	0.0	0.3
Prop In Lane	1.00		1.00	0.02		1.00	0.94		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	437	850	745	537	0	421	462	0	378	331	0	578
V/C Ratio(X)	0.84	0.88	0.01	0.47	0.00	0.07	0.11	0.00	1.47	0.04	0.00	0.02
Avail Cap(c_a), veh/h	437	945	827	625	0	500	462	0	378	431	0	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.7	14.4	8.6	18.1	0.0	15.8	17.4	0.0	22.2	15.0	0.0	12.4
Incr Delay (d2), s/veh	13.6	9.0	0.0	0.7	0.0	0.1	0.1	0.0	227.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	13.0	0.1	3.6	0.0	0.4	0.7	0.0	29.9	0.1	0.0	0.1
LnGrp Delay(d),s/veh	32.3	23.4	8.6	18.8	0.0	15.9	17.6	0.0	249.2	15.1	0.0	12.4
LnGrp LOS	C	C	A	B		B	B		F	B		B
Approach Vol, veh/h		1125			284			610			25	
Approach Delay, s/veh		26.2			18.5			229.1			13.8	
Approach LOS		C			B			F			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Phs Duration (G+Y+Rc), s		32.3	6.5	20.0	11.0	21.3		26.5
Change Period (Y+Rc), s		* 5.2	5.7	5.7	5.7	* 5.2		5.7
Max Green Setting (Gmax), s		* 30	4.0	14.3	5.3	* 19		24.0
Max Q Clear Time (g_c+I1), s		23.6	2.3	16.3	7.3	9.3		2.3
Green Ext Time (p_c), s		3.4	0.0	0.0	0.0	4.7		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	85.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	647	2425	10	27	872	81	1	76	64	27	17	439
Future Volume (veh/h)	647	2425	10	27	872	81	1	76	64	27	17	439
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1810	1792	1638	1900	1845	1863	1377	1696	1727
Adj Flow Rate, veh/h	711	2665	11	29	938	87	1	84	71	30	19	488
Adj No. of Lanes	2	1	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	0	5	6	16	0	3	2	38	12	10
Cap, veh/h	780	1343	1176	89	1760	719	131	186	160	101	171	484
Arrive On Green	0.23	0.73	0.73	0.02	0.52	0.52	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	3408	1845	1615	1723	3406	1392	906	1845	1583	907	1696	1468
Grp Volume(v), veh/h	711	2665	11	29	938	87	1	84	71	30	19	488
Grp Sat Flow(s),veh/h/ln	1704	1845	1615	1723	1703	1392	906	1845	1583	907	1696	1468
Q Serve(g_s), s	30.2	108.1	0.3	1.2	27.3	4.8	0.1	6.4	6.3	4.8	1.5	15.0
Cycle Q Clear(g_c), s	30.2	108.1	0.3	1.2	27.3	4.8	1.7	6.4	6.3	11.2	1.5	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	780	1343	1176	89	1760	719	131	186	160	101	171	484
V/C Ratio(X)	0.91	1.98	0.01	0.33	0.53	0.12	0.01	0.45	0.44	0.30	0.11	1.01
Avail Cap(c_a), veh/h	1063	1343	1176	107	1760	719	131	186	160	101	171	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	20.2	5.5	35.8	23.9	18.5	61.4	62.9	62.8	68.1	60.7	49.8
Incr Delay (d2), s/veh	8.7	445.7	0.0	1.6	0.9	0.3	0.0	1.3	1.4	1.2	0.2	42.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	220.4	0.1	0.7	13.0	1.9	0.0	3.3	2.8	1.2	0.7	25.6
LnGrp Delay(d),s/veh	64.5	465.9	5.5	37.3	24.9	18.8	61.5	64.1	64.3	69.3	60.9	92.7
LnGrp LOS	E	F	A	D	C	B	E	E	E	E	E	F
Approach Vol, veh/h		3387			1054			156			537	
Approach Delay, s/veh		380.1			24.7			64.2			90.3	
Approach LOS		F			C			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	115.5		22.2	42.2	84.1		22.2
Change Period (Y+Rc), s	7.3	* 7.4		* 7.2	8.2	* 7.4		* 7.2
Max Green Setting (Gmax), s	5.6	* 1.1E2		* 15	46.3	* 66		* 15
Max Q Clear Time (g_c+I1), s	3.2	110.1		17.0	32.2	29.3		8.4
Green Ext Time (p_c), s	0.0	0.0		0.0	1.8	36.5		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	267.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	28	1	812	0	3251	123	464	944	0
Future Volume (veh/h)	0	0	0	28	1	812	0	3251	123	464	944	0
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1900	1681	0	1810	1900	1759	1743	0
Adj Flow Rate, veh/h				31	1	902	0	3612	137	516	1049	0
Adj No. of Lanes				0	1	1	0	2	0	1	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				13	0	13	0	5	5	8	9	0
Cap, veh/h				406	13	330	0	1774	67	268	2309	0
Arrive On Green				0.23	0.23	0.23	0.00	0.52	0.52	0.14	0.70	0.00
Sat Flow, veh/h				1756	57	1429	0	3469	127	1675	3399	0
Grp Volume(v), veh/h				32	0	902	0	1826	1923	516	1049	0
Grp Sat Flow(s),veh/h/ln				1812	0	1429	0	1719	1787	1675	1656	0
Q Serve(g_s), s				2.5	0.0	41.6	0.0	94.5	94.5	24.5	25.3	0.0
Cycle Q Clear(g_c), s				2.5	0.0	41.6	0.0	94.5	94.5	24.5	25.3	0.0
Prop In Lane				0.97		1.00	0.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h				419	0	330	0	903	938	268	2309	0
V/C Ratio(X)				0.08	0.00	2.73	0.00	2.02	2.05	1.92	0.45	0.00
Avail Cap(c_a), veh/h				419	0	330	0	903	938	268	2309	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh				54.2	0.0	69.2	0.0	42.8	42.8	75.9	12.1	0.0
Incr Delay (d2), s/veh				0.0	0.0	787.4	0.0	464.6	475.9	417.5	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	88.7	0.0	161.1	170.4	44.4	11.5	0.0
LnGrp Delay(d),s/veh				54.2	0.0	856.6	0.0	507.3	518.6	493.4	12.1	0.0
LnGrp LOS				D		F		F	F	F	B	
Approach Vol, veh/h					934			3749			1565	
Approach Delay, s/veh					829.1			513.1			170.8	
Approach LOS					F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	31.0	101.0		48.0		132.0		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	24.5	94.5		* 42		125.5		
Max Q Clear Time (g_c+I1), s	26.5	96.5		43.6		27.3		
Green Ext Time (p_c), s	0.0	0.0		0.0		30.8		

Intersection Summary	
HCM 2010 Ctrl Delay	474.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1947	1332	0	0	1353	29	55	216	626	0	0	0
Future Volume (veh/h)	1947	1332	0	0	1353	29	55	216	626	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1810	0	0	1741	1900	1845	1827	1810			
Adj Flow Rate, veh/h	2163	1480	0	0	1503	32	61	582	468			
Adj No. of Lanes	1	2	0	0	2	0	1	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	3	5	0	0	9	9	3	3	5			
Cap, veh/h	860	2636	0	0	883	19	293	304	256			
Arrive On Green	0.47	0.77	0.00	0.00	0.27	0.27	0.17	0.17	0.17			
Sat Flow, veh/h	1757	3529	0	0	3399	70	1757	1827	1538			
Grp Volume(v), veh/h	2163	1480	0	0	750	785	61	582	468			
Grp Sat Flow(s),veh/h/ln	1757	1719	0	0	1654	1728	1757	1827	1538			
Q Serve(g_s), s	84.0	31.7	0.0	0.0	48.0	48.0	5.4	30.0	30.0			
Cycle Q Clear(g_c), s	84.0	31.7	0.0	0.0	48.0	48.0	5.4	30.0	30.0			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	860	2636	0	0	441	461	293	304	256			
V/C Ratio(X)	2.52	0.56	0.00	0.00	1.70	1.70	0.21	1.91	1.83			
Avail Cap(c_a), veh/h	860	2636	0	0	441	461	293	304	256			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	43.9	8.6	0.0	0.0	66.0	66.0	64.7	75.0	75.0			
Incr Delay (d2), s/veh	682.3	0.1	0.0	0.0	324.6	326.0	1.6	422.2	386.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	205.7	14.8	0.0	0.0	61.7	64.6	2.8	50.8	40.3			
LnGrp Delay(d),s/veh	726.2	8.7	0.0	0.0	390.6	392.0	66.4	497.2	461.5			
LnGrp LOS	F	A			F	F	E	F	F			
Approach Vol, veh/h		3643			1535			1111				
Approach Delay, s/veh		434.7			391.3			458.5				
Approach LOS		F			F			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		144.0			90.0	54.0		36.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		138.0			84.0	48.0		30.0
Max Q Clear Time (g_c+I1), s		33.7			86.0	50.0		32.0
Green Ext Time (p_c), s		60.3			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	428.3
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	1807	0	0	1316	26	0	0	0	21	0	65
Future Volume (veh/h)	151	1807	0	0	1316	26	0	0	0	21	0	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1810	1900	1863	1746	1900	1900	1863	1900	1681	0	1863
Adj Flow Rate, veh/h	164	1964	0	0	1462	29	0	0	0	23	0	72
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	0	1
Peak Hour Factor	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	1	5	5	2	9	9	2	2	2	13	0	2
Cap, veh/h	681	2953	0	80	1371	27	0	2	0	39	0	0
Arrive On Green	0.38	0.86	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.02	0.00	0.00
Sat Flow, veh/h	1792	3529	0	222	3327	66	0	111765	0	1601	23	
Grp Volume(v), veh/h	164	1964	0	0	728	763	0	0	0	23	56.8	
Grp Sat Flow(s),veh/h/ln	1792	1719	0	222	1659	1734	0	1863	0	1601	E	
Q Serve(g_s), s	5.6	16.9	0.0	0.0	37.1	37.1	0.0	0.0	0.0	1.3		
Cycle Q Clear(g_c), s	5.6	16.9	0.0	0.0	37.1	37.1	0.0	0.0	0.0	1.3		
Prop In Lane	1.00		0.00	1.00		0.04	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	681	2953	0	80	684	715	0	2	0	39		
V/C Ratio(X)	0.24	0.66	0.00	0.00	1.07	1.07	0.00	0.00	0.00	0.59		
Avail Cap(c_a), veh/h	681	2953	0	80	684	715	0	373	0	89		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.99		
Uniform Delay (d), s/veh	19.0	2.1	0.0	0.0	26.4	26.5	0.0	0.0	0.0	43.5		
Incr Delay (d2), s/veh	0.2	1.2	0.0	0.0	43.1	43.3	0.0	0.0	0.0	13.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.8	8.1	0.0	0.0	25.1	26.3	0.0	0.0	0.0	0.7		
LnGrp Delay(d),s/veh	19.2	3.3	0.0	0.0	69.5	69.8	0.0	0.0	0.0	56.8		
LnGrp LOS	B	A			F	F				E		
Approach Vol, veh/h		2128			1491			0				
Approach Delay, s/veh		4.5			69.7			0.0				
Approach LOS		A			E							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6	7	8
Phs Duration (G+Y+Rc), s		83.3			40.2	43.1	6.7	0.0
Change Period (Y+Rc), s		6.0			6.0	* 6	4.5	6.0
Max Green Setting (Gmax), s		50.5			8.9	* 37	5.0	18.0
Max Q Clear Time (g_c+I1), s		18.9			7.6	39.1	3.3	0.0
Green Ext Time (p_c), s		22.2			0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	639	40	9	176	396	31	83	3	328	77	87
Future Volume (veh/h)	221	639	40	9	176	396	31	83	3	328	77	87
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1811	1900	1624	1864	1900	1900	1763	1900	1881	1863	1900
Adj Flow Rate, veh/h	246	710	44	10	193	435	34	92	3	360	85	96
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	2	5	5	17	4	4	0	8	8	1	2	0
Cap, veh/h	490	2154	133	391	894	800	286	684	22	626	385	334
Arrive On Green	0.09	0.65	0.65	0.50	0.50	0.50	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1774	3291	204	616	1771	1585	1222	3312	108	2538	1863	1615
Grp Volume(v), veh/h	246	371	383	10	193	435	34	46	49	360	85	96
Grp Sat Flow(s),veh/h/ln	1774	1720	1775	616	1771	1585	1222	1675	1744	1269	1863	1615
Q Serve(g_s), s	5.6	8.5	8.6	0.7	5.5	16.9	2.1	2.0	2.0	12.1	3.4	4.5
Cycle Q Clear(g_c), s	5.6	8.5	8.6	0.7	5.5	16.9	5.6	2.0	2.0	14.2	3.4	4.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	490	1126	1162	391	894	800	286	346	360	626	385	334
V/C Ratio(X)	0.50	0.33	0.33	0.03	0.22	0.54	0.12	0.13	0.14	0.57	0.22	0.29
Avail Cap(c_a), veh/h	626	1126	1162	391	894	800	414	521	543	892	580	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.82	0.82	0.82	0.25	0.25	0.25	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	6.8	6.8	11.2	12.4	15.2	32.0	29.1	29.1	34.9	29.7	30.1
Incr Delay (d2), s/veh	0.7	0.7	0.7	0.0	0.1	0.6	0.0	0.0	0.0	0.8	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.2	4.4	0.1	2.7	7.5	0.7	0.9	1.0	4.3	1.8	2.1
LnGrp Delay(d),s/veh	11.3	7.6	7.5	11.2	12.5	15.8	32.0	29.2	29.2	35.8	30.0	30.6
LnGrp LOS	B	A	A	B	B	B	C	C	C	D	C	C
Approach Vol, veh/h		1000			638			129			541	
Approach Delay, s/veh		8.5			14.8			29.9			33.9	
Approach LOS		A			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		65.4		24.6	13.5	51.9		24.6
Change Period (Y+Rc), s		6.5		6.0	5.5	* 6.5		6.0
Max Green Setting (Gmax), s		49.5		28.0	14.9	* 30		28.0
Max Q Clear Time (g_c+I1), s		10.6		16.2	7.6	18.9		7.6
Green Ext Time (p_c), s		10.5		2.4	0.4	5.8		2.9

Intersection Summary		
HCM 2010 Ctrl Delay		17.4
HCM 2010 LOS		B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	826	141	17	80	87	365	52	1715	105	432	1180	535
Future Volume (veh/h)	826	141	17	80	87	365	52	1715	105	432	1180	535
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1811	1900	1610	1712	1293	1900	1811	1900	1583	1827	1863
Adj Flow Rate, veh/h	879	150	18	84	92	384	55	1824	112	455	1242	563
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.94	0.94	0.94	0.95	0.95	0.95
Percent Heavy Veh, %	2	5	5	18	11	47	0	4	4	20	4	2
Cap, veh/h	382	493	59	231	456	293	107	1391	85	80	1466	669
Arrive On Green	0.04	0.10	0.10	0.07	0.27	0.27	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	3442	1587	190	1533	1712	1099	265	3295	200	194	3471	1583
Grp Volume(v), veh/h	879	0	168	84	92	384	55	943	993	455	1242	563
Grp Sat Flow(s),veh/h/ln	1721	0	1778	1533	1712	1099	265	1720	1775	194	1736	1583
Q Serve(g_s), s	10.0	0.0	7.9	4.1	3.7	24.0	9.0	38.0	38.0	0.0	29.0	28.7
Cycle Q Clear(g_c), s	10.0	0.0	7.9	4.1	3.7	24.0	38.0	38.0	38.0	38.0	29.0	28.7
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	382	0	552	231	456	293	107	726	750	80	1466	669
V/C Ratio(X)	2.30	0.00	0.30	0.36	0.20	1.31	0.52	1.30	1.32	5.69	0.85	0.84
Avail Cap(c_a), veh/h	382	0	552	246	456	293	107	726	750	80	1466	669
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.00	0.89	1.00	1.00	1.00	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	31.4	29.4	25.6	33.0	42.8	26.0	26.0	45.0	23.4	23.3
Incr Delay (d2), s/veh	591.7	0.0	1.3	1.0	0.2	162.2	3.0	141.7	152.5	2136.3	4.8	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	36.2	0.0	4.1	1.7	1.8	20.4	1.4	46.5	50.3	49.5	14.8	14.3
LnGrp Delay(d),s/veh	635.1	0.0	32.7	30.4	25.8	195.2	45.8	167.7	178.5	2181.3	28.2	32.8
LnGrp LOS	F		C	C	C	F	D	F	F	F	C	C
Approach Vol, veh/h		1047			560			1991			2260	
Approach Delay, s/veh		538.4			142.6			169.7			462.9	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	33.9		44.0	16.0	30.0		44.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	7.0	27.0		38.0	10.0	24.0		38.0
Max Q Clear Time (g_c+I1), s	6.1	9.9		40.0	12.0	26.0		40.0
Green Ext Time (p_c), s	0.0	4.0		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	346.1	
HCM 2010 LOS	F	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	469	0	0	2503	0	0
Future Volume (veh/h)	469	0	0	2503	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1367	1845	1881	1301	1759
Adj Flow Rate, veh/h	521	0	0	0	0	0
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	39	3	1	46	8
Cap, veh/h	1937	654	22	10	457	21
Arrive On Green	0.56	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	3442	1162	127374	1599	1239	3431
Grp Volume(v), veh/h	521	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1721	1162	1752	1599	1239	1671
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1937	654	22	10	457	21
V/C Ratio(X)	0.27	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	4083	1378	22541	10284	991	24420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	1.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	1.9	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A					
Approach Vol, veh/h	521		0			0
Approach Delay, s/veh	1.9		0.0			0.0
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	0.0				0.0		16.0
Change Period (Y+Rc), s	7.0	7.0				7.0		7.0
Max Green Setting (Gmax), s	7.0	103.0				117.0		19.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		3.2
Green Ext Time (p_c), s	0.0	0.0				0.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	1.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	765	0	0	2170	389	0	0	0	261	0	607
Future Volume (veh/h)	110	765	0	0	2170	389	0	0	0	261	0	607
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	0	1863	1845	1847	1900	1863	1900	1863	0	1792
Adj Flow Rate, veh/h	120	832	0	0	2309	0	0	0	0	290	0	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	0	2	3	7	2	2	2	2	0	6
Cap, veh/h	761	2648	0	2	896	401	0	2	0	383	0	0
Arrive On Green	0.43	0.76	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Sat Flow, veh/h	1757	3597	0	1774	3505	1570	0	1111765	0	3442	290	
Grp Volume(v), veh/h	120	832	0	0	2309	0	0	0	0	290	41.9	
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1774	1752	1570	0	1863	0	1721	D	
Q Serve(g_s), s	3.7	6.9	0.0	0.0	23.0	0.0	0.0	0.0	0.0	7.4		
Cycle Q Clear(g_c), s	3.7	6.9	0.0	0.0	23.0	0.0	0.0	0.0	0.0	7.4		
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	761	2648	0	2	896	401	0	2	0	383		
V/C Ratio(X)	0.16	0.31	0.00	0.00	2.58	0.00	0.00	0.00	0.00	0.76		
Avail Cap(c_a), veh/h	761	2648	0	138	896	401	0	373	0	688		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.19	0.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	15.5	3.5	0.0	0.0	33.5	0.0	0.0	0.0	0.0	38.8		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	710.7	0.0	0.0	0.0	0.0	3.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.8	3.2	0.0	0.0	99.5	0.0	0.0	0.0	0.0	3.7		
LnGrp Delay(d),s/veh	15.5	3.6	0.0	0.0	744.2	0.0	0.0	0.0	0.0	41.9		
LnGrp LOS	B	A			F					D		
Approach Vol, veh/h		952			2309			0				
Approach Delay, s/veh		5.1			744.2			0.0				
Approach LOS		A			F							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	74.0			45.0	29.0	16.0	0.0
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	23.0			7.0	23.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	10.0	8.9			5.7	25.0	9.4	0.0
Green Ext Time (p_c), s	0.0	4.8			0.1	0.0	0.7	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	488.7	
HCM 2010 LOS	F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	562	464	541	1331	0	0	0	0	189	764	1083
Future Volume (veh/h)	0	562	464	541	1331	0	0	0	0	189	764	1083
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1863	0				1827	1745	1827
Adj Flow Rate, veh/h	0	611	0	595	1463	0				210	849	1203
Adj No. of Lanes	0	2	1	1	2	0				1	1	2
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	3	2	0				4	9	4
Cap, veh/h	0	767	343	377	1561	0				735	737	1311
Arrive On Green	0.00	0.07	0.00	0.15	0.44	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	3597	1568	1757	3632	0				1740	1745	3106
Grp Volume(v), veh/h	0	611	0	595	1463	0				210	849	1203
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1770	0				1740	1745	1553
Q Serve(g_s), s	0.0	15.4	0.0	13.3	35.4	0.0				7.1	38.0	32.9
Cycle Q Clear(g_c), s	0.0	15.4	0.0	13.3	35.4	0.0				7.1	38.0	32.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	767	343	377	1561	0				735	737	1311
V/C Ratio(X)	0.00	0.80	0.00	1.58	0.94	0.00				0.29	1.15	0.92
Avail Cap(c_a), veh/h	0	767	343	377	1561	0				735	737	1311
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.93	0.00	0.39	0.39	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	39.8	0.0	25.3	24.0	0.0				17.1	26.0	24.5
Incr Delay (d2), s/veh	0.0	7.9	0.0	264.4	5.6	0.0				0.1	83.7	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.3	0.0	30.6	18.5	0.0				3.5	35.3	15.9
LnGrp Delay(d),s/veh	0.0	47.6	0.0	289.7	29.5	0.0				17.2	109.7	34.7
LnGrp LOS		D		F	C					B	F	C
Approach Vol, veh/h		611			2058						2262	
Approach Delay, s/veh		47.6			104.7						61.2	
Approach LOS		D			F						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.0	26.0		44.0		46.0		
Change Period (Y+Rc), s	6.7	6.3		6.0		6.3		
Max Green Setting (Gmax), s	13.3	19.7		38.0		39.7		
Max Q Clear Time (g_c+I1), s	15.3	17.4		40.0		37.4		
Green Ext Time (p_c), s	0.0	1.9		0.0		1.9		

Intersection Summary	
HCM 2010 Ctrl Delay	77.7
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	426	0	0	704	388	316	629	1247	0	0	0
Future Volume (veh/h)	325	426	0	0	704	388	316	629	1247	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1845	0	0	1810	1827	1743	1776	1881			
Adj Flow Rate, veh/h	357	468	0	0	774	0	336	669	1327			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.94	0.94	0.94			
Percent Heavy Veh, %	4	3	0	0	5	4	9	7	1			
Cap, veh/h	520	2060	0	0	753	340	701	750	675			
Arrive On Green	0.60	1.00	0.00	0.00	0.22	0.00	0.42	0.42	0.42			
Sat Flow, veh/h	1740	3597	0	0	3529	1553	1660	1776	1599			
Grp Volume(v), veh/h	357	468	0	0	774	0	336	669	1327			
Grp Sat Flow(s),veh/h/ln	1740	1752	0	0	1719	1553	1660	1776	1599			
Q Serve(g_s), s	12.6	0.0	0.0	0.0	19.7	0.0	13.2	31.4	38.0			
Cycle Q Clear(g_c), s	12.6	0.0	0.0	0.0	19.7	0.0	13.2	31.4	38.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	520	2060	0	0	753	340	701	750	675			
V/C Ratio(X)	0.69	0.23	0.00	0.00	1.03	0.00	0.48	0.89	1.97			
Avail Cap(c_a), veh/h	520	2060	0	0	753	340	701	750	675			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.69	0.69	0.00	0.00	0.77	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	15.2	0.0	0.0	0.0	35.2	0.0	18.8	24.1	26.0			
Incr Delay (d2), s/veh	2.2	0.2	0.0	0.0	36.4	0.0	0.2	12.6	439.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.3	0.1	0.0	0.0	13.1	0.0	6.0	17.9	99.2			
LnGrp Delay(d),s/veh	17.4	0.2	0.0	0.0	71.5	0.0	19.0	36.8	465.8			
LnGrp LOS	B	A			F		B	D	F			
Approach Vol, veh/h		825			774			2332				
Approach Delay, s/veh		7.6			71.5			278.4				
Approach LOS		A			E			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		60.0			34.0	26.0		44.0
Change Period (Y+Rc), s		* 6.7			6.7	* 6.3		6.0
Max Green Setting (Gmax), s		* 40			13.3	* 20		38.0
Max Q Clear Time (g_c+I1), s		2.0			14.6	21.7		40.0
Green Ext Time (p_c), s		2.3			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	180.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	744	912	17	10	595	175	14	1	4	79	8	484
Future Volume (veh/h)	744	912	17	10	595	175	14	1	4	79	8	484
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1810	1900	1900	1792	1863	1900	1900	1900	1863	1817	1845
Adj Flow Rate, veh/h	800	981	0	11	661	0	17	0	0	88	9	0
Adj No. of Lanes	2	2	1	1	2	1	2	0	1	2	1	1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	5	0	0	6	2	0	0	0	2	17	3
Cap, veh/h	1783	1114	523	747	644	300	104	0	47	227	116	100
Arrive On Green	0.51	0.32	0.00	0.38	0.19	0.00	0.03	0.00	0.00	0.06	0.06	0.00
Sat Flow, veh/h	3476	3438	1615	1810	3406	1583	3619	0	1615	3548	1817	1568
Grp Volume(v), veh/h	800	981	0	11	661	0	17	0	0	88	9	0
Grp Sat Flow(s),veh/h/ln	1738	1719	1615	1810	1703	1583	1810	0	1615	1774	1817	1568
Q Serve(g_s), s	17.5	32.4	0.0	0.0	22.7	0.0	0.6	0.0	0.0	2.9	0.6	0.0
Cycle Q Clear(g_c), s	17.5	32.4	0.0	0.0	22.7	0.0	0.6	0.0	0.0	2.9	0.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1783	1114	523	747	644	300	104	0	47	227	116	100
V/C Ratio(X)	0.45	0.88	0.00	0.01	1.03	0.00	0.16	0.00	0.00	0.39	0.08	0.00
Avail Cap(c_a), veh/h	1783	1209	568	747	644	300	694	0	310	680	348	301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.95	0.95	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	38.4	0.0	23.1	48.6	0.0	56.9	0.0	0.0	53.9	52.8	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	41.4	0.0	0.7	0.0	0.0	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	15.6	0.0	0.2	14.3	0.0	0.3	0.0	0.0	1.4	0.3	0.0
LnGrp Delay(d),s/veh	18.5	39.4	0.0	23.1	90.0	0.0	57.6	0.0	0.0	55.0	53.1	0.0
LnGrp LOS	B	D		C	F		E			D	D	
Approach Vol, veh/h		1781			672			17			97	
Approach Delay, s/veh		30.0			88.9			57.6			54.8	
Approach LOS		C			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	44.4		9.8	67.9	28.4		14.0
Change Period (Y+Rc), s	6.3	* 5.5		* 6.3	* 6.3	* 5.7		6.3
Max Green Setting (Gmax), s	8.0	* 42		* 23	* 27	* 23		23.0
Max Q Clear Time (g_c+I1), s	12.0	34.4		2.6	19.5	24.7		4.9
Green Ext Time (p_c), s	1.7	4.5		0.0	1.9	0.0		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	46.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	212	0	0	0	0	0	2592	1195
Future Volume (veh/h)	0	0	0	0	212	0	0	0	0	0	2592	1195
Number				7	4	14				5	2	12
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				0	1810	0				0	1827	1863
Adj Flow Rate, veh/h				0	236	0				0	2757	0
Adj No. of Lanes				0	2	0				0	3	1
Peak Hour Factor				0.90	0.90	0.90				0.94	0.94	0.94
Percent Heavy Veh, %				0	5	0				0	4	2
Cap, veh/h				0	319	0				0	3966	1259
Arrive On Green				0.00	0.09	0.00				0.00	0.80	0.00
Sat Flow, veh/h				0	3619	0				0	5152	1583
Grp Volume(v), veh/h				0	236	0				0	2757	0
Grp Sat Flow(s),veh/h/ln				0	1719	0				0	1663	1583
Q Serve(g_s), s				0.0	7.4	0.0				0.0	27.8	0.0
Cycle Q Clear(g_c), s				0.0	7.4	0.0				0.0	27.8	0.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	319	0				0	3966	1259
V/C Ratio(X)				0.00	0.74	0.00				0.00	0.70	0.00
Avail Cap(c_a), veh/h				0	563	0				0	3966	1259
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	48.6	0.0				0.0	5.2	0.0
Incr Delay (d2), s/veh				0.0	3.3	0.0				0.0	1.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	3.7	0.0				0.0	12.9	0.0
LnGrp Delay(d),s/veh				0.0	51.9	0.0				0.0	6.2	0.0
LnGrp LOS					D						A	
Approach Vol, veh/h					236						2757	
Approach Delay, s/veh					51.9						6.2	
Approach LOS					D						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		93.8		16.2				
Change Period (Y+Rc), s		6.3		6.0				
Max Green Setting (Gmax), s		79.7		18.0				
Max Q Clear Time (g_c+I1), s		29.8		9.4				
Green Ext Time (p_c), s		46.1		0.9				

Intersection Summary		
HCM 2010 Ctrl Delay		9.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	770	0	0	0	0	0	1008	167	0	0	0
Future Volume (veh/h)	0	770	0	0	0	0	0	1008	167	0	0	0
Number	3	8	18				1	6	16			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1776	0				0	1810	1329			
Adj Flow Rate, veh/h	0	811	0				0	1061	0			
Adj No. of Lanes	0	2	0				0	3	1			
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95			
Percent Heavy Veh, %	0	7	0				0	5	43			
Cap, veh/h	0	1004	0				0	2918	667			
Arrive On Green	0.00	0.30	0.00				0.00	0.59	0.00			
Sat Flow, veh/h	0	3551	0				0	5103	1129			
Grp Volume(v), veh/h	0	811	0				0	1061	0			
Grp Sat Flow(s),veh/h/ln	0	1687	0				0	1647	1129			
Q Serve(g_s), s	0.0	24.5	0.0				0.0	12.3	0.0			
Cycle Q Clear(g_c), s	0.0	24.5	0.0				0.0	12.3	0.0			
Prop In Lane	0.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	0	1004	0				0	2918	667			
V/C Ratio(X)	0.00	0.81	0.00				0.00	0.36	0.00			
Avail Cap(c_a), veh/h	0	1595	0				0	2918	667			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00				0.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	35.7	0.0				0.0	11.7	0.0			
Incr Delay (d2), s/veh	0.0	1.7	0.0				0.0	0.4	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	11.6	0.0				0.0	5.7	0.0			
LnGrp Delay(d),s/veh	0.0	37.4	0.0				0.0	12.1	0.0			
LnGrp LOS		D						B				
Approach Vol, veh/h		811						1061				
Approach Delay, s/veh		37.4						12.1				
Approach LOS		D						B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		8
Phs Duration (G+Y+Rc), s						71.3		38.7
Change Period (Y+Rc), s						6.3		6.0
Max Green Setting (Gmax), s						45.7		52.0
Max Q Clear Time (g_c+I1), s						14.3		26.5
Green Ext Time (p_c), s						12.6		6.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	342	2484	0	0	1643	258	0	0	0	504	0	371
Future Volume (veh/h)	342	2484	0	0	1643	258	0	0	0	504	0	371
Number	3	8	18	7	4	14				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1484	1810	0	0	1776	1610				1810	0	1827
Adj Flow Rate, veh/h	376	2730	0	0	1805	0				560	0	0
Adj No. of Lanes	2	3	0	0	3	1				2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.90	0.90	0.90
Percent Heavy Veh, %	28	5	0	0	7	18				5	0	4
Cap, veh/h	449	3099	0	0	1983	560				881	0	409
Arrive On Green	0.16	0.63	0.00	0.00	0.54	0.00				0.26	0.00	0.00
Sat Flow, veh/h	2743	5103	0	0	5007	1369				3343	0	1553
Grp Volume(v), veh/h	376	2730	0	0	1805	0				560	0	0
Grp Sat Flow(s),veh/h/ln	1371	1647	0	0	1616	1369				1672	0	1553
Q Serve(g_s), s	14.6	50.6	0.0	0.0	37.0	0.0				16.3	0.0	0.0
Cycle Q Clear(g_c), s	14.6	50.6	0.0	0.0	37.0	0.0				16.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	449	3099	0	0	1983	560				881	0	409
V/C Ratio(X)	0.84	0.88	0.00	0.00	0.91	0.00				0.64	0.00	0.00
Avail Cap(c_a), veh/h	449	3099	0	0	1983	560				881	0	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.56	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	44.6	17.1	0.0	0.0	23.2	0.0				35.8	0.0	0.0
Incr Delay (d2), s/veh	13.1	4.0	0.0	0.0	4.7	0.0				3.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	23.9	0.0	0.0	17.2	0.0				8.0	0.0	0.0
LnGrp Delay(d),s/veh	57.7	21.1	0.0	0.0	27.9	0.0				39.3	0.0	0.0
LnGrp LOS	E	C			C					D		
Approach Vol, veh/h		3106			1805						560	
Approach Delay, s/veh		25.5			27.9						39.3	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	51.0		35.0		75.0
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			18.0	45.0		29.0		69.0
Max Q Clear Time (g_c+I1), s			16.6	39.0		18.3		52.6
Green Ext Time (p_c), s			1.4	5.4		1.6		15.9

Intersection Summary	
HCM 2010 Ctrl Delay	27.7
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	93	53	64	0	1812	630
Future Volume (veh/h)	93	53	64	0	1812	630
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1810	1863	0	1776	1845
Adj Flow Rate, veh/h	103	59	70	0	1928	670
Adj No. of Lanes	1	1	1	0	3	1
Peak Hour Factor	0.90	0.90	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	10	5	2	0	7	3
Cap, veh/h	134	125	114	0	3411	1103
Arrive On Green	0.08	0.08	0.06	0.00	0.70	0.70
Sat Flow, veh/h	1645	1538	1774	70	5007	1568
Grp Volume(v), veh/h	103	59	70	55.4	1928	670
Grp Sat Flow(s),veh/h/ln	1645	1538	1774	E	1616	1568
Q Serve(g_s), s	6.8	4.0	4.2		21.5	24.3
Cycle Q Clear(g_c), s	6.8	4.0	4.2		21.5	24.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	134	125	114		3411	1103
V/C Ratio(X)	0.77	0.47	0.61		0.57	0.61
Avail Cap(c_a), veh/h	248	232	187		3411	1103
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	49.5	48.3	50.1		8.0	8.4
Incr Delay (d2), s/veh	9.0	2.8	5.3		0.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	1.8	2.2		9.7	11.2
LnGrp Delay(d),s/veh	58.5	51.0	55.4		8.7	10.9
LnGrp LOS	E	D	E		A	B
Approach Vol, veh/h	162				2598	
Approach Delay, s/veh	55.8				9.3	
Approach LOS	E				A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	12.5	83.2						14.3
Change Period (Y+Rc), s	5.4	5.8						5.4
Max Green Setting (Gmax), s	13.0	65.2						16.6
Max Q Clear Time (g_c+I1), s	10.2	26.3						8.8
Green Ext Time (p_c), s	0.0	31.8						0.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	41	232	146	10	20	579	1969	307	36	1523	65
Future Volume (veh/h)	23	41	232	146	10	20	579	1969	307	36	1523	65
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1900	1792	1462	1691	1900	1881	1810	1681	1776	1792	1863
Adj Flow Rate, veh/h	26	46	0	162	11	22	643	2188	341	40	1674	0
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	6	0	6	30	25	25	1	5	13	7	6	2
Cap, veh/h	247	297	238	209	79	158	765	2148	893	56	2180	705
Arrive On Green	0.16	0.16	0.00	0.16	0.16	0.16	0.44	1.00	1.00	0.03	0.45	0.00
Sat Flow, veh/h	1319	1900	1524	1063	504	1009	3476	3438	1429	1691	4893	1583
Grp Volume(v), veh/h	26	46	0	162	0	33	643	2188	341	40	1674	0
Grp Sat Flow(s),veh/h/ln	1319	1900	1524	1063	0	1513	1738	1719	1429	1691	1631	1583
Q Serve(g_s), s	1.9	2.3	0.0	14.9	0.0	2.1	18.1	0.0	0.0	2.6	31.7	0.0
Cycle Q Clear(g_c), s	4.0	2.3	0.0	17.2	0.0	2.1	18.1	0.0	0.0	2.6	31.7	0.0
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	297	238	209	0	237	765	2148	893	56	2180	705
V/C Ratio(X)	0.11	0.15	0.00	0.77	0.00	0.14	0.84	1.02	0.38	0.71	0.77	0.00
Avail Cap(c_a), veh/h	247	297	238	209	0	237	765	2148	893	80	2180	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.35	0.35	0.35	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	40.1	0.0	48.4	0.0	40.0	29.1	0.0	0.0	52.6	25.7	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	16.4	0.0	0.3	3.2	16.6	0.4	11.5	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.2	0.0	5.9	0.0	0.9	8.9	4.9	0.1	1.4	14.8	0.0
LnGrp Delay(d),s/veh	41.9	40.4	0.0	64.7	0.0	40.3	32.3	16.6	0.4	64.2	28.4	0.0
LnGrp LOS	D	D		E		D	C	F	A	E	C	
Approach Vol, veh/h		72			195			3172			1714	
Approach Delay, s/veh		40.9			60.6			18.0			29.2	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	55.0		24.0	10.5	75.5		24.0
Change Period (Y+Rc), s	6.8	* 6		* 6.8	* 6.8	* 6.8		* 6.8
Max Green Setting (Gmax), s	24.2	* 49		* 17	* 5.2	* 68		* 17
Max Q Clear Time (g_c+I1), s	20.1	33.7		19.2	4.6	2.0		6.0
Green Ext Time (p_c), s	3.5	11.8		0.0	0.0	57.5		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	511	387	77	79	58	211	1254	494	475	2264	101
Future Volume (veh/h)	164	511	387	77	79	58	211	1254	494	475	2264	101
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1824	1900	1450	1497	1900	1827	1753	1900	1759	1831	1900
Adj Flow Rate, veh/h	182	568	430	86	88	64	234	1393	549	528	2516	112
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	5	5	31	24	24	4	5	5	8	3	3
Cap, veh/h	436	582	441	111	464	310	238	874	323	216	1444	64
Arrive On Green	0.07	0.31	0.31	0.04	0.28	0.28	0.04	0.37	0.37	0.10	0.43	0.43
Sat Flow, veh/h	1660	1882	1425	1381	1633	1093	3375	2382	881	1675	3394	150
Grp Volume(v), veh/h	182	523	475	86	76	76	234	946	996	528	1280	1348
Grp Sat Flow(s),veh/h/ln	1660	1733	1573	1381	1422	1304	1688	1665	1597	1675	1739	1805
Q Serve(g_s), s	9.7	43.4	43.5	6.0	5.9	6.5	6.0	53.4	53.4	14.5	61.9	61.9
Cycle Q Clear(g_c), s	9.7	43.4	43.5	6.0	5.9	6.5	6.0	53.4	53.4	14.5	61.9	61.9
Prop In Lane	1.00		0.91	1.00		0.84	1.00		0.55	1.00		0.08
Lane Grp Cap(c), veh/h	436	536	487	111	404	370	238	611	586	216	740	768
V/C Ratio(X)	0.42	0.98	0.98	0.77	0.19	0.21	0.98	1.55	1.70	2.44	1.73	1.76
Avail Cap(c_a), veh/h	436	536	487	111	404	370	238	611	586	216	740	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	49.7	49.7	43.4	39.4	39.6	39.2	46.0	46.1	46.6	41.8	41.8
Incr Delay (d2), s/veh	0.5	32.7	34.6	27.2	0.3	0.3	53.2	254.9	321.4	661.5	334.2	345.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	25.6	23.5	2.0	2.3	2.4	3.7	67.7	75.8	48.4	98.3	104.4
LnGrp Delay(d),s/veh	36.0	82.4	84.3	70.5	39.7	40.0	92.4	301.0	367.5	708.0	376.0	387.1
LnGrp LOS	D	F	F	E	D	D	F	F	F	F	F	F
Approach Vol, veh/h		1180			238			2176			3156	
Approach Delay, s/veh		76.0			50.9			309.0			436.3	
Approach LOS		E			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	68.4	16.2	48.4	21.0	59.9	12.5	52.1
Change Period (Y+Rc), s	6.5	6.5	6.5	7.1	6.5	* 6.5	6.5	7.1
Max Green Setting (Gmax), s	6.0	61.4	9.7	41.3	14.5	* 53	6.0	45.0
Max Q Clear Time (g_c+I1), s	8.0	63.9	11.7	8.5	16.5	55.4	8.0	45.5
Green Ext Time (p_c), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		318.7
HCM 2010 LOS		F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	935	488	179	1457	1973	762
Future Volume (veh/h)	935	488	179	1457	1973	762
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1782	1900	1810	1792	1845	1810
Adj Flow Rate, veh/h	984	0	199	1619	2077	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.95	0.95	0.90	0.90	0.95	0.95
Percent Heavy Veh, %	9	0	5	6	3	5
Cap, veh/h	1053	501	156	2150	1862	817
Arrive On Green	0.31	0.00	0.07	0.63	0.53	0.00
Sat Flow, veh/h	3395	1615	1723	3495	3597	1538
Grp Volume(v), veh/h	984	0	199	1619	2077	0
Grp Sat Flow(s),veh/h/ln	1698	1615	1723	1703	1752	1538
Q Serve(g_s), s	59.1	0.0	14.8	70.2	111.6	0.0
Cycle Q Clear(g_c), s	59.1	0.0	14.8	70.2	111.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1053	501	156	2150	1862	817
V/C Ratio(X)	0.93	0.00	1.28	0.75	1.12	0.00
Avail Cap(c_a), veh/h	1180	561	156	2150	1862	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.64	0.64	1.00	0.00
Uniform Delay (d), s/veh	70.3	0.0	78.0	27.2	49.2	0.0
Incr Delay (d2), s/veh	12.8	0.0	152.7	1.6	60.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.6	0.0	15.6	33.3	69.3	0.0
LnGrp Delay(d),s/veh	83.1	0.0	230.7	28.8	109.3	0.0
LnGrp LOS	F		F	C	F	
Approach Vol, veh/h	984			1818	2077	
Approach Delay, s/veh	83.1			50.9	109.3	
Approach LOS	F			D	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	21.0	117.9				138.9		71.1
Change Period (Y+Rc), s	6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	15.0	103.7				124.7		73.0
Max Q Clear Time (g_c+I1), s	16.8	113.6				72.2		61.1
Green Ext Time (p_c), s	0.0	0.0				50.0		4.0

Intersection Summary	
HCM 2010 Ctrl Delay	82.3
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	434	41	349	1202	1318	1143
Future Volume (veh/h)	434	41	349	1202	1318	1143
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1756	1900	1863	1827	1881	1827
Adj Flow Rate, veh/h	482	0	388	1336	1464	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	0	2	4	1	4
Cap, veh/h	414	200	329	2838	2922	1270
Arrive On Green	0.12	0.00	0.82	0.82	1.00	0.00
Sat Flow, veh/h	3344	1615	361	3563	3668	1553
Grp Volume(v), veh/h	482	0	388	1336	1464	0
Grp Sat Flow(s),veh/h/ln	1672	1615	361	1736	1787	1553
Q Serve(g_s), s	26.0	0.0	171.7	24.0	0.0	0.0
Cycle Q Clear(g_c), s	26.0	0.0	171.7	24.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	414	200	329	2838	2922	1270
V/C Ratio(X)	1.16	0.00	1.18	0.47	0.50	0.00
Avail Cap(c_a), veh/h	414	200	329	2838	2922	1270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.93	0.93	0.09	0.00
Uniform Delay (d), s/veh	92.0	0.0	28.1	5.7	0.0	0.0
Incr Delay (d2), s/veh	97.3	0.0	105.8	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	0.0	28.8	11.4	0.0	0.0
LnGrp Delay(d),s/veh	189.3	0.0	133.9	5.8	0.1	0.0
LnGrp LOS	F		F	A	A	
Approach Vol, veh/h	482			1724	1464	
Approach Delay, s/veh	189.3			34.6	0.1	
Approach LOS	F			C	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		178.0				178.0		32.0
Change Period (Y+Rc), s		6.3				6.3		6.0
Max Green Setting (Gmax), s		171.7				171.7		26.0
Max Q Clear Time (g_c+I1), s		2.0				173.7		28.0
Green Ext Time (p_c), s		151.8				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	6	27	4	4	45	12	910	4	38	1221	100
Future Volume (veh/h)	162	6	27	4	4	45	12	910	4	38	1221	100
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1884	1900	1900	1900	1900	1900	1827	1900	1900	1881	1900
Adj Flow Rate, veh/h	180	7	30	4	4	50	13	1011	4	42	1357	111
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	4	4	0	1	1
Cap, veh/h	232	8	33	29	32	263	262	2749	11	421	2594	211
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1133	44	189	58	179	1485	367	3547	14	564	3347	273
Grp Volume(v), veh/h	217	0	0	58	0	0	13	495	520	42	722	746
Grp Sat Flow(s),veh/h/ln	1366	0	0	1723	0	0	367	1736	1825	564	1787	1833
Q Serve(g_s), s	26.5	0.0	0.0	0.0	0.0	0.0	2.9	18.8	18.8	5.3	32.0	32.4
Cycle Q Clear(g_c), s	32.8	0.0	0.0	6.3	0.0	0.0	35.3	18.8	18.8	24.2	32.0	32.4
Prop In Lane	0.83		0.14	0.07		0.86	1.00		0.01	1.00		0.15
Lane Grp Cap(c), veh/h	274	0	0	324	0	0	262	1345	1414	421	1385	1421
V/C Ratio(X)	0.79	0.00	0.00	0.18	0.00	0.00	0.05	0.37	0.37	0.10	0.52	0.52
Avail Cap(c_a), veh/h	452	0	0	529	0	0	262	1345	1414	421	1385	1421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	84.9	0.0	0.0	73.6	0.0	0.0	15.7	7.4	7.4	11.2	8.9	9.0
Incr Delay (d2), s/veh	7.2	0.0	0.0	0.4	0.0	0.0	0.1	0.2	0.2	0.4	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	2.9	0.0	0.0	0.3	9.0	9.5	0.9	16.1	16.8
LnGrp Delay(d),s/veh	92.1	0.0	0.0	74.0	0.0	0.0	15.8	7.7	7.7	11.6	10.1	10.2
LnGrp LOS	F			E			B	A	A	B	B	B
Approach Vol, veh/h		217			58			1028			1510	
Approach Delay, s/veh		92.1			74.0			7.8			10.2	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		167.8		42.2		167.8		42.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		136.0		64.0		136.0		64.0
Max Q Clear Time (g_c+I1), s		34.4		8.3		37.3		34.8
Green Ext Time (p_c), s		63.7		2.7		62.6		2.5

Intersection Summary		
HCM 2010 Ctrl Delay		16.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	3020	1	78	2257	559	44	90	84	597	46	442
Future Volume (veh/h)	216	3020	1	78	2257	559	44	90	84	597	46	442
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1827	1900	1900	1810	1827	1792	1845	1863	1845	1845	1810
Adj Flow Rate, veh/h	227	3179	1	86	2480	614	49	100	0	699	0	491
Adj No. of Lanes	2	4	0	1	3	1	1	1	1	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	4	0	5	4	6	3	2	3	3	5
Cap, veh/h	184	1918	1	97	1449	456	126	136	117	1131	0	577
Arrive On Green	0.05	0.29	0.29	0.05	0.29	0.29	0.07	0.07	0.00	0.32	0.00	0.32
Sat Flow, veh/h	3442	6538	2	1810	4940	1553	1707	1845	1583	3514	0	1538
Grp Volume(v), veh/h	227	2292	888	86	2480	614	49	100	0	699	0	491
Grp Sat Flow(s),veh/h/ln	1721	1571	1827	1810	1647	1553	1707	1845	1583	1757	0	1538
Q Serve(g_s), s	6.0	33.0	33.0	5.3	33.0	33.0	3.1	6.0	0.0	18.9	0.0	33.0
Cycle Q Clear(g_c), s	6.0	33.0	33.0	5.3	33.0	33.0	3.1	6.0	0.0	18.9	0.0	33.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	1383	536	97	1449	456	126	136	117	1131	0	577
V/C Ratio(X)	1.24	1.66	1.66	0.89	1.71	1.35	0.39	0.74	0.00	0.62	0.00	0.85
Avail Cap(c_a), veh/h	184	1383	536	97	1449	456	577	623	535	1218	0	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.3	39.8	39.8	52.9	39.8	39.8	49.7	51.0	0.0	32.3	0.0	32.3
Incr Delay (d2), s/veh	144.3	299.2	304.2	56.6	323.1	170.6	0.7	2.9	0.0	0.6	0.0	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	52.5	61.8	4.2	58.2	35.6	1.5	3.2	0.0	9.3	0.0	15.5
LnGrp Delay(d),s/veh	197.6	338.9	344.0	109.6	362.9	210.4	50.4	53.9	0.0	32.8	0.0	42.0
LnGrp LOS	F	F	F	F	F	F	D	D		C		D
Approach Vol, veh/h		3407			3180			149			1190	
Approach Delay, s/veh		330.8			326.6			52.8			36.6	
Approach LOS		F			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	40.0		43.7	13.0	40.0		15.8
Change Period (Y+Rc), s	7.0	7.0		7.5	7.0	7.0		7.5
Max Green Setting (Gmax), s	6.0	33.0		39.0	6.0	33.0		38.0
Max Q Clear Time (g_c+I1), s	7.3	35.0		35.0	8.0	35.0		8.0
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	0.0		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	279.7
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2137	1564	217	1793	0	0	0	0	307	0	1101
Future Volume (veh/h)	0	2137	1564	217	1793	0	0	0	0	307	0	1101
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1776	1827	1810	0				1827	1827	1810
Adj Flow Rate, veh/h	0	2298	0	241	1992	0				341	0	1223
Adj No. of Lanes	0	4	1	2	4	0				2	0	2
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	7	4	5	0				4	2	5
Cap, veh/h	0	2991	711	232	3688	0				1053	0	931
Arrive On Green	0.00	0.47	0.00	0.07	0.59	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	6604	1509	3375	6478	0				3480	0	3076
Grp Volume(v), veh/h	0	2298	0	241	1992	0				341	0	1223
Grp Sat Flow(s),veh/h/ln	0	1586	1509	1688	1556	0				1740	0	1538
Q Serve(g_s), s	0.0	37.2	0.0	8.5	23.8	0.0				9.4	0.0	37.5
Cycle Q Clear(g_c), s	0.0	37.2	0.0	8.5	23.8	0.0				9.4	0.0	37.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2991	711	232	3688	0				1053	0	931
V/C Ratio(X)	0.00	0.77	0.00	1.04	0.54	0.00				0.32	0.00	1.31
Avail Cap(c_a), veh/h	0	3303	786	232	3994	0				1053	0	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.1	0.0	57.7	15.1	0.0				33.4	0.0	43.2
Incr Delay (d2), s/veh	0.0	1.0	0.0	70.2	0.1	0.0				0.1	0.0	148.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.5	0.0	6.2	10.1	0.0				4.5	0.0	35.0
LnGrp Delay(d),s/veh	0.0	28.2	0.0	127.9	15.3	0.0				33.5	0.0	192.0
LnGrp LOS		C		F	B					C		F
Approach Vol, veh/h		2298			2233						1564	
Approach Delay, s/veh		28.2			27.4						157.4	
Approach LOS		C			C						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.9			15.0	64.9		44.0
Change Period (Y+Rc), s		6.5			6.5	6.5		6.5
Max Green Setting (Gmax), s		79.5			8.5	64.5		37.5
Max Q Clear Time (g_c+I1), s		25.8			10.5	39.2		39.5
Green Ext Time (p_c), s		26.6			0.0	19.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	61.1
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	317	1228	899	128	637	69	1024	158	355	93	42	349
Future Volume (veh/h)	317	1228	899	128	637	69	1024	158	355	93	42	349
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1863	1759	1810	1863	1900	1776	1827	1881	1845	1814	1845
Adj Flow Rate, veh/h	352	1364	0	135	671	73	1113	172	386	71	82	367
Adj No. of Lanes	2	4	1	2	4	0	2	1	1	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	8	5	2	2	7	4	1	3	6	3
Cap, veh/h	365	1756	410	167	1277	136	1152	642	641	209	216	710
Arrive On Green	0.11	0.27	0.00	0.05	0.22	0.22	0.35	0.35	0.35	0.12	0.12	0.12
Sat Flow, veh/h	3408	6408	1495	3343	5924	633	3281	1827	1599	1757	1814	3136
Grp Volume(v), veh/h	352	1364	0	135	542	202	1113	172	386	71	82	367
Grp Sat Flow(s),veh/h/ln	1704	1602	1495	1672	1602	1751	1640	1827	1599	1757	1814	1568
Q Serve(g_s), s	14.4	27.5	0.0	5.6	14.0	14.3	46.7	9.4	19.7	5.2	5.8	14.4
Cycle Q Clear(g_c), s	14.4	27.5	0.0	5.6	14.0	14.3	46.7	9.4	19.7	5.2	5.8	14.4
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	1756	410	167	1036	377	1152	642	641	209	216	710
V/C Ratio(X)	0.96	0.78	0.00	0.81	0.52	0.54	0.97	0.27	0.60	0.34	0.38	0.52
Avail Cap(c_a), veh/h	365	2168	506	167	1351	492	1154	643	643	219	227	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.3	46.9	0.0	65.9	48.6	48.7	44.6	32.6	33.1	56.6	56.9	47.5
Incr Delay (d2), s/veh	37.7	1.5	0.0	24.7	0.4	1.2	18.9	0.3	1.9	1.1	1.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	12.4	0.0	3.2	6.2	7.1	24.2	4.8	9.9	2.6	3.0	6.3
LnGrp Delay(d),s/veh	100.0	48.4	0.0	90.6	49.0	49.9	63.5	32.9	35.0	57.8	58.2	48.2
LnGrp LOS	F	D		F	D	D	E	C	C	E	E	D
Approach Vol, veh/h		1716			879			1671			520	
Approach Delay, s/veh		59.0			55.6			53.8			51.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	22.0	37.2		56.7	14.0	45.2		24.2
Change Period (Y+Rc), s	7.0	* 7		7.5	7.0	6.8		7.5
Max Green Setting (Gmax), s	15.0	* 39		49.3	7.0	47.4		17.5
Max Q Clear Time (g_c+I1), s	16.4	16.3		48.7	7.6	29.5		16.4
Green Ext Time (p_c), s	0.0	5.3		0.5	0.0	8.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	55.7
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	73	134	88	55	26	395	589	68	42	2939	390
Future Volume (veh/h)	253	73	134	88	55	26	395	589	68	42	2939	390
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1845	1827	1870	1900	1792	1810	1900	1776	1881	1863
Adj Flow Rate, veh/h	281	81	149	98	61	29	439	654	76	45	3127	415
Adj No. of Lanes	2	1	1	1	2	0	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	3	4	0	0	6	5	0	7	1	2
Cap, veh/h	329	312	270	146	378	168	379	2311	755	226	2169	825
Arrive On Green	0.10	0.17	0.17	0.08	0.16	0.16	0.11	0.47	0.47	0.07	0.42	0.42
Sat Flow, veh/h	3343	1810	1568	1740	2391	1067	3312	4940	1615	3281	5136	1583
Grp Volume(v), veh/h	281	81	149	98	44	46	439	654	76	45	3127	415
Grp Sat Flow(s),veh/h/ln	1672	1810	1568	1740	1776	1682	1656	1647	1615	1640	1712	1583
Q Serve(g_s), s	10.5	4.9	11.0	6.9	2.7	3.0	14.5	10.3	3.3	1.6	53.5	21.6
Cycle Q Clear(g_c), s	10.5	4.9	11.0	6.9	2.7	3.0	14.5	10.3	3.3	1.6	53.5	21.6
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	312	270	146	280	265	379	2311	755	226	2169	825
V/C Ratio(X)	0.85	0.26	0.55	0.67	0.16	0.17	1.16	0.28	0.10	0.20	1.44	0.50
Avail Cap(c_a), veh/h	330	596	516	194	607	575	379	2311	755	334	2169	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	45.4	47.9	56.3	46.1	46.2	56.1	20.7	18.8	55.7	36.6	19.7
Incr Delay (d2), s/veh	18.6	0.6	2.5	4.1	0.4	0.4	96.7	0.1	0.1	0.5	201.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	2.5	4.9	3.5	1.4	1.4	11.7	4.7	1.5	0.8	65.6	9.5
LnGrp Delay(d),s/veh	74.8	46.0	50.4	60.5	46.4	46.6	152.8	20.7	18.9	56.2	238.0	20.2
LnGrp LOS	E	D	D	E	D	D	F	C	B	E	F	C
Approach Vol, veh/h		511			188			1169			3587	
Approach Delay, s/veh		63.1			53.8			70.2			210.6	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	26.7	15.2	65.8	17.2	28.5	21.0	60.0
Change Period (Y+Rc), s	6.5	* 6.7	6.5	6.5	6.5	* 6.7	6.5	6.5
Max Green Setting (Gmax), s	12.5	* 43	12.9	55.1	14.1	* 42	14.5	53.5
Max Q Clear Time (g_c+I1), s	12.5	5.0	3.6	12.3	8.9	13.0	16.5	55.5
Green Ext Time (p_c), s	0.0	2.3	0.1	41.1	0.1	2.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	161.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	98	0	0	0	68	0	1339	37	0	0	0
Future Volume (veh/h)	0	98	0	0	0	68	0	1339	37	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1712	0	0	0	1712	0	1827	1900			
Adj Flow Rate, veh/h	0	109	0	0	0	74	0	1440	40			
Adj No. of Lanes	0	1	0	0	0	1	0	3	0			
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.93	0.93	0.93			
Percent Heavy Veh, %	11	11	0	0	0	11	0	4	0			
Cap, veh/h	0	1611	0	0	0	0	0	0	0			
Arrive On Green	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Sat Flow, veh/h	0	1712	0		0			0				
Grp Volume(v), veh/h	0	109	0		0.0			0.0				
Grp Sat Flow(s),veh/h/ln	0	1712	0									
Q Serve(g_s), s	0.0	0.4	0.0									
Cycle Q Clear(g_c), s	0.0	0.4	0.0									
Prop In Lane	0.00		0.00									
Lane Grp Cap(c), veh/h	0	1611	0									
V/C Ratio(X)	0.00	0.07	0.00									
Avail Cap(c_a), veh/h	0	1611	0									
HCM Platoon Ratio	1.00	1.00	1.00									
Upstream Filter(I)	0.00	1.00	0.00									
Uniform Delay (d), s/veh	0.0	0.2	0.0									
Incr Delay (d2), s/veh	0.0	0.1	0.0									
Initial Q Delay(d3),s/veh	0.0	0.0	0.0									
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0									
LnGrp Delay(d),s/veh	0.0	0.3	0.0									
LnGrp LOS		A										
Approach Vol, veh/h		109										
Approach Delay, s/veh		0.3										
Approach LOS		A										

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		110.0						
Change Period (Y+Rc), s		6.5						
Max Green Setting (Gmax), s		27.5						
Max Q Clear Time (g_c+I1), s		2.4						
Green Ext Time (p_c), s		0.5						

Intersection Summary		
HCM 2010 Ctrl Delay		0.3
HCM 2010 LOS		A

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	133	591	282	200	451	78
Future Volume (veh/h)	133	591	282	200	451	78
Number	1	6	2	12	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1776	1759	1792	1863	1845
Adj Flow Rate, veh/h	148	657	313	222	501	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	7	8	6	2	3
Cap, veh/h	398	786	779	675	549	485
Arrive On Green	0.44	0.44	0.44	0.44	0.31	0.00
Sat Flow, veh/h	841	1776	1759	1524	1774	1568
Grp Volume(v), veh/h	148	657	313	222	501	0
Grp Sat Flow(s),veh/h/ln	841	1776	1759	1524	1774	1568
Q Serve(g_s), s	8.2	18.5	6.8	5.4	15.4	0.0
Cycle Q Clear(g_c), s	15.0	18.5	6.8	5.4	15.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	398	786	779	675	549	485
V/C Ratio(X)	0.37	0.84	0.40	0.33	0.91	0.00
Avail Cap(c_a), veh/h	443	880	872	755	565	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.8	13.9	10.7	10.3	18.8	0.0
Incr Delay (d2), s/veh	0.6	6.5	0.3	0.3	19.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	10.4	3.4	2.3	10.4	0.0
LnGrp Delay(d),s/veh	16.3	20.4	11.0	10.6	37.8	0.0
LnGrp LOS	B	C	B	B	D	
Approach Vol, veh/h		805	535		501	
Approach Delay, s/veh		19.6	10.8		37.8	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		32.0				32.0		24.5
Change Period (Y+Rc), s		7.0				7.0		7.0
Max Green Setting (Gmax), s		28.0				28.0		18.0
Max Q Clear Time (g_c+I1), s		8.8				20.5		17.4
Green Ext Time (p_c), s		8.3				4.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	439	0	0	613	410	0	0	0	648	0	142
Future Volume (veh/h)	55	439	0	0	613	410	0	0	0	648	0	142
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1759	1900	1900	1827	1863	1863	1863	1900	1759	1759	1827
Adj Flow Rate, veh/h	61	488	0	0	674	0	0	0	0	712	0	156
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	2	0	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	4	8	8	0	4	2	2	2	2	8	0	4
Cap, veh/h	159	517	0	801	1762	804	2	2	0	846	0	392
Arrive On Green	0.05	0.15	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.25	0.00	0.25
Sat Flow, veh/h	1740	3431	0	1810	3471	1583	1774	1863	0	3351	0	1553
Grp Volume(v), veh/h	61	488	0	0	674	0	0	0	0	712	0	156
Grp Sat Flow(s),veh/h/ln	1740	1671	0	1810	1736	1583	1774	1863	0	1675	0	1553
Q Serve(g_s), s	3.6	15.9	0.0	0.0	13.1	0.0	0.0	0.0	0.0	22.2	0.0	9.2
Cycle Q Clear(g_c), s	3.6	15.9	0.0	0.0	13.1	0.0	0.0	0.0	0.0	22.2	0.0	9.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	517	0	801	1762	804	2	2	0	846	0	392
V/C Ratio(X)	0.38	0.94	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.84	0.00	0.40
Avail Cap(c_a), veh/h	176	517	0	801	1762	804	113	119	0	1599	0	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	46.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0	39.0	0.0	34.2
Incr Delay (d2), s/veh	1.5	28.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.4	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	9.3	0.0	0.0	6.3	0.0	0.0	0.0	0.0	10.6	0.0	4.0
LnGrp Delay(d),s/veh	47.4	74.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	41.4	0.0	34.8
LnGrp LOS	D	E			B					D		C
Approach Vol, veh/h		549			674			0			868	
Approach Delay, s/veh		71.1			16.7			0.0			40.2	
Approach LOS		E			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.2	24.5		34.3	13.4	62.3		0.0
Change Period (Y+Rc), s	6.5	7.5		6.5	7.5	6.5		6.0
Max Green Setting (Gmax), s	7.0	17.0		52.5	7.0	17.0		7.0
Max Q Clear Time (g_c+I1), s	10.0	17.9		24.2	5.6	15.1		0.0
Green Ext Time (p_c), s	0.0	0.0		3.6	0.0	1.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		40.7
HCM 2010 LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1031	0	0	863	281	159	1	542	0	0	0
Future Volume (veh/h)	56	1031	0	0	863	281	159	1	542	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1727	1792	1900	1900	1845	1667	1900	1863	1810			
Adj Flow Rate, veh/h	59	1085	0	0	938	0	177	1	0			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.90	0.90	0.90			
Percent Heavy Veh, %	10	6	6	3	3	14	5	0	5			
Cap, veh/h	743	2610	0	0	1091	441	220	1	192			
Arrive On Green	0.27	0.51	0.00	0.00	0.21	0.00	0.12	0.12	0.00			
Sat Flow, veh/h	1645	3495	0	0	3597	1417	1765	10	1538			
Grp Volume(v), veh/h	59	1085	0	0	938	0	178	0	0			
Grp Sat Flow(s),veh/h/ln	1645	1703	0	0	1752	1417	1775	0	1538			
Q Serve(g_s), s	0.0	21.7	0.0	0.0	28.4	0.0	10.7	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	21.7	0.0	0.0	28.4	0.0	10.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	743	2610	0	0	1091	441	221	0	192			
V/C Ratio(X)	0.08	0.42	0.00	0.00	0.86	0.00	0.80	0.00	0.00			
Avail Cap(c_a), veh/h	743	2610	0	0	1179	477	774	0	671			
HCM Platoon Ratio	0.67	0.67	0.67	0.67	0.67	0.67	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	23.5	11.5	0.0	0.0	41.2	0.0	46.8	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.6	0.0	6.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.3	10.4	0.0	0.0	13.8	0.0	5.7	0.0	0.0			
LnGrp Delay(d),s/veh	23.5	12.0	0.0	0.0	41.9	0.0	53.6	0.0	0.0			
LnGrp LOS	C	B			D		D					
Approach Vol, veh/h		1144			938			178				
Approach Delay, s/veh		12.6			41.9			53.6				
Approach LOS		B			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		90.3			50.0	40.2		19.7
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		50.0			7.0	37.0		48.0
Max Q Clear Time (g_c+I1), s		23.7			2.0	30.4		12.7
Green Ext Time (p_c), s		11.4			3.5	3.9		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	888	523	667	801	275	120	685	288	446	2075	224
Future Volume (veh/h)	12	888	523	667	801	275	120	685	288	446	2075	224
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1776	1863	1863	1825	1845	1681	1827	1827	1845	1827	1863
Adj Flow Rate, veh/h	13	987	581	544	1166	306	133	761	0	496	2306	249
Adj No. of Lanes	1	2	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	7	2	2	5	3	13	4	4	3	4	2
Cap, veh/h	226	452	202	564	1161	499	678	1768	551	279	1115	354
Arrive On Green	0.09	0.09	0.09	0.32	0.32	0.32	0.22	0.35	0.00	0.08	0.22	0.22
Sat Flow, veh/h	1774	3552	1583	1774	3650	1568	3107	4988	1553	3408	4988	1583
Grp Volume(v), veh/h	13	987	581	544	1166	306	133	761	0	496	2306	249
Grp Sat Flow(s),veh/h/ln	1774	1776	1583	1774	1825	1568	1553	1663	1553	1704	1663	1583
Q Serve(g_s), s	0.7	14.0	14.0	33.2	35.0	18.2	3.8	12.8	0.0	9.0	24.6	15.9
Cycle Q Clear(g_c), s	0.7	14.0	14.0	33.2	35.0	18.2	3.8	12.8	0.0	9.0	24.6	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	452	202	564	1161	499	678	1768	551	279	1115	354
V/C Ratio(X)	0.06	2.18	2.88	0.96	1.00	0.61	0.20	0.43	0.00	1.78	2.07	0.70
Avail Cap(c_a), veh/h	226	452	202	564	1161	499	678	1768	551	279	1115	354
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	50.3	50.3	36.9	37.5	31.8	35.1	27.0	0.0	50.5	42.7	39.3
Incr Delay (d2), s/veh	0.1	536.9	855.5	29.0	27.4	2.6	0.1	0.8	0.0	364.6	483.5	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	40.6	54.0	20.7	22.0	8.2	1.7	6.0	0.0	18.3	61.2	8.1
LnGrp Delay(d),s/veh	44.3	587.3	905.8	65.9	64.9	34.4	35.3	27.8	0.0	415.1	526.2	50.5
LnGrp LOS	D	F	F	E	F	C	D	C		F	F	D
Approach Vol, veh/h		1581			2016			894			3051	
Approach Delay, s/veh		699.9			60.5			28.9			469.3	
Approach LOS		F			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	31.5	31.0		43.0	16.0	46.5		22.0
Change Period (Y+Rc), s	7.0	6.4		8.0	7.0	* 7		8.0
Max Green Setting (Gmax), s	7.0	24.6		35.0	9.0	* 23		14.0
Max Q Clear Time (g_c+I1), s	15.8	26.6		37.0	11.0	14.8		16.0
Green Ext Time (p_c), s	0.7	0.0		0.0	0.0	3.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	356.2
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	1	4	0	445	9	257	128	276	3	9	204	142
Future Volume (veh/h)	1	4	0	445	9	257	128	276	3	9	204	142
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1503	1900	1900	1762	1810	1827	1828	1900	1900	1845	1776
Adj Flow Rate, veh/h	1	4	0	494	10	0	142	307	3	10	227	158
Adj No. of Lanes	0	2	0	0	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	33	33	33	0	0	5	4	4	4	0	3	7
Cap, veh/h	265	949	0	644	11	637	342	696	7	311	352	288
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.00	0.09	0.39	0.39	0.19	0.19	0.19
Sat Flow, veh/h	469	2359	0	1307	26	1538	1740	1807	18	1086	1845	1509
Grp Volume(v), veh/h	3	2	0	504	0	0	142	0	310	10	227	158
Grp Sat Flow(s),veh/h/ln	1460	1299	0	1334	0	1538	1740	0	1824	1086	1845	1509
Q Serve(g_s), s	0.0	0.1	0.0	24.8	0.0	0.0	4.3	0.0	8.8	0.5	7.9	6.6
Cycle Q Clear(g_c), s	0.1	0.1	0.0	24.9	0.0	0.0	4.3	0.0	8.8	0.5	7.9	6.6
Prop In Lane	0.37		0.00	0.98		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	676	539	0	655	0	637	342	0	703	311	352	288
V/C Ratio(X)	0.00	0.00	0.00	0.77	0.00	0.00	0.42	0.00	0.44	0.03	0.64	0.55
Avail Cap(c_a), veh/h	830	688	0	809	0	815	353	0	1019	492	660	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.0	0.0	19.3	0.0	0.0	18.7	0.0	15.9	23.1	26.1	25.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.6	0.0	0.0	0.8	0.0	0.4	0.0	2.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	9.8	0.0	0.0	2.1	0.0	4.5	0.2	4.2	2.9
LnGrp Delay(d),s/veh	12.0	12.0	0.0	22.9	0.0	0.0	19.6	0.0	16.3	23.1	28.0	27.1
LnGrp LOS	B	B		C			B		B	C	C	C
Approach Vol, veh/h		5			504			452			395	
Approach Delay, s/veh		12.0			22.9			17.4			27.6	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.6	20.3		35.9		33.9		35.9
Change Period (Y+Rc), s	7.0	7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s	7.6	25.0		37.0		39.0		37.0
Max Q Clear Time (g_c+I1), s	6.3	9.9		2.1		10.8		26.9
Green Ext Time (p_c), s	0.0	3.4		3.1		4.1		2.1

Intersection Summary		
HCM 2010 Ctrl Delay		22.4
HCM 2010 LOS		C

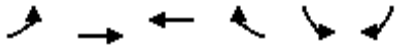
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	357	24	114	862	296	3	14	14	218	32	79
Future Volume (veh/h)	47	357	24	114	862	296	3	14	14	218	32	79
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1675	1900	1881	1810	1900	1900	1900	1727	1667	1900	1827
Adj Flow Rate, veh/h	52	397	27	127	958	329	3	16	16	240	35	87
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	8	14	14	1	6	6	0	0	10	14	0	4
Cap, veh/h	598	1305	88	219	490	167	82	86	67	275	329	749
Arrive On Green	0.31	0.43	0.43	0.03	0.06	0.06	0.05	0.05	0.05	0.17	0.17	0.17
Sat Flow, veh/h	1675	3025	205	1792	2518	860	1810	1900	1468	1587	1900	1553
Grp Volume(v), veh/h	52	208	216	127	652	635	3	16	16	240	35	87
Grp Sat Flow(s),veh/h/ln	1675	1591	1639	1792	1719	1658	1810	1900	1468	1587	1900	1553
Q Serve(g_s), s	0.0	7.7	7.8	5.9	17.5	17.5	0.1	0.7	0.9	13.3	1.4	0.0
Cycle Q Clear(g_c), s	0.0	7.7	7.8	5.9	17.5	17.5	0.1	0.7	0.9	13.3	1.4	0.0
Prop In Lane	1.00		0.13	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	598	686	707	219	334	322	82	86	67	275	329	749
V/C Ratio(X)	0.09	0.30	0.31	0.58	1.95	1.97	0.04	0.19	0.24	0.87	0.11	0.12
Avail Cap(c_a), veh/h	598	686	707	219	334	322	462	486	375	317	380	791
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.35	0.35	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	16.7	16.8	37.2	42.1	42.1	41.1	41.4	41.5	36.2	31.3	12.8
Incr Delay (d2), s/veh	0.1	1.1	1.0	1.3	431.9	439.7	0.2	1.0	1.8	20.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.6	3.7	3.0	48.4	47.4	0.1	0.4	0.4	7.4	0.7	1.2
LnGrp Delay(d),s/veh	21.5	17.8	17.8	38.6	474.0	481.8	41.3	42.4	43.3	56.6	31.5	12.8
LnGrp LOS	C	B	B	D	F	F	D	D	D	E	C	B
Approach Vol, veh/h		476			1414			35			362	
Approach Delay, s/veh		18.2			438.4			42.7			43.6	
Approach LOS		B			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	45.3		21.6	34.3	24.0		10.1
Change Period (Y+Rc), s	6.0	6.5		6.0	6.5	* 6.5		6.0
Max Green Setting (Gmax), s	7.0	17.5		18.0	7.0	* 18		23.0
Max Q Clear Time (g_c+I1), s	11.9	9.8		15.3	2.0	19.5		2.9
Green Ext Time (p_c), s	0.0	1.9		0.4	1.4	0.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	282.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	276	730	401	225	542
Future Volume (veh/h)	0	276	730	401	225	542
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1727	1845	1900	1845	1810
Adj Flow Rate, veh/h	0	300	811	0	245	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.92	0.92	0.90	0.90	0.92	0.92
Percent Heavy Veh, %	0	10	3	3	3	5
Cap, veh/h	0	2517	2688	0	340	153
Arrive On Green	0.00	0.25	0.77	0.00	0.10	0.00
Sat Flow, veh/h	0	3455	3689	0	3408	1538
Grp Volume(v), veh/h	0	300	811	0	245	0
Grp Sat Flow(s),veh/h/ln	0	1641	1752	0	1704	1538
Q Serve(g_s), s	0.0	6.3	6.3	0.0	6.3	0.0
Cycle Q Clear(g_c), s	0.0	6.3	6.3	0.0	6.3	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2517	2688	0	340	153
V/C Ratio(X)	0.00	0.12	0.30	0.00	0.72	0.00
Avail Cap(c_a), veh/h	0	2517	2688	0	947	427
HCM Platoon Ratio	1.00	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.91	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	10.2	3.2	0.0	39.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	3.1	0.0	3.1	0.0
LnGrp Delay(d),s/veh	0.0	10.2	3.4	0.0	42.2	0.0
LnGrp LOS		B	A		D	
Approach Vol, veh/h		300	811		245	
Approach Delay, s/veh		10.2	3.4		42.2	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		75.0		15.0		75.0		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		12.0		25.0		35.0		
Max Q Clear Time (g_c+I1), s		8.3		8.3		8.3		
Green Ext Time (p_c), s		2.6		0.7		10.9		

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	391	110	0	755	376	476
Future Volume (veh/h)	391	110	0	755	376	476
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1610	0	1827	1827	1845
Adj Flow Rate, veh/h	434	0	0	839	418	0
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	18	0	4	4	3
Cap, veh/h	2376	955	0	2421	533	248
Arrive On Green	0.70	0.00	0.00	0.70	0.16	0.00
Sat Flow, veh/h	3495	1369	0	3654	3375	1568
Grp Volume(v), veh/h	434	0	0	839	418	0
Grp Sat Flow(s),veh/h/ln	1703	1369	0	1736	1688	1568
Q Serve(g_s), s	4.0	0.0	0.0	8.7	10.7	0.0
Cycle Q Clear(g_c), s	4.0	0.0	0.0	8.7	10.7	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2376	955	0	2421	533	248
V/C Ratio(X)	0.18	0.00	0.00	0.35	0.78	0.00
Avail Cap(c_a), veh/h	2376	955	0	2421	1556	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.00	0.00	0.63	1.00	0.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	5.4	36.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	4.1	5.2	0.0
LnGrp Delay(d),s/veh	4.9	0.0	0.0	5.5	39.0	0.0
LnGrp LOS	A			A	D	
Approach Vol, veh/h	434			839	418	
Approach Delay, s/veh	4.9			5.5	39.0	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		69.3				69.3		20.7
Change Period (Y+Rc), s		6.5				6.5		6.5
Max Green Setting (Gmax), s		35.5				35.5		41.5
Max Q Clear Time (g_c+I1), s		6.0				10.7		12.7
Green Ext Time (p_c), s		13.3				12.2		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	545	322	123	737	2879	752
Future Volume (veh/h)	545	322	123	737	2879	752
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1810	1845	1810	1863	1827
Adj Flow Rate, veh/h	606	358	154	983	3164	864
Adj No. of Lanes	2	1	2	3	4	1
Peak Hour Factor	0.90	0.90	0.80	0.75	0.91	0.87
Percent Heavy Veh, %	2	5	3	5	2	4
Cap, veh/h	616	275	259	7456	8721	2113
Arrive On Green	0.18	0.18	0.08	1.00	1.00	1.00
Sat Flow, veh/h	3442	1538	3408	5103	6669	1553
Grp Volume(v), veh/h	606	358	154	983	3164	864
Grp Sat Flow(s),veh/h/ln	1721	1538	1704	1647	1602	1553
Q Serve(g_s), s	15.8	16.1	3.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.8	16.1	3.9	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	616	275	259	7456	8721	2113
V/C Ratio(X)	0.98	1.30	0.59	0.13	0.36	0.41
Avail Cap(c_a), veh/h	616	275	265	7456	8721	2113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	37.0	40.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	28.6	155.4	3.4	0.0	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	18.7	2.0	0.0	0.1	0.3
LnGrp Delay(d),s/veh	65.4	192.3	43.6	0.0	0.1	0.6
LnGrp LOS	E	F	D	A	A	A
Approach Vol, veh/h	964			1137	4028	
Approach Delay, s/veh	112.5			5.9	0.2	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	33.4	133.8				147.2		25.1
Change Period (Y+Rc), s	6.5	* 9				9.0		9.0
Max Green Setting (Gmax), s	7.0	* 45				55.9		16.1
Max Q Clear Time (g_c+I1), s	15.9	2.0				2.0		18.1
Green Ext Time (p_c), s	0.0	42.2				52.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	11.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	302	650	105	192	53
Future Vol, veh/h	16	302	650	105	192	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	328	707	114	209	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	707	0	-	0	906	707
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	199	-
Critical Hdwy	4.13	-	-	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	2.219	-	-	-	3.519	3.319
Pot Cap-1 Maneuver	889	-	-	-	291	434
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	889	-	-	-	284	434
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	797	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	60.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	889	-	-	-	307
HCM Lane V/C Ratio	0.02	-	-	-	0.867
HCM Control Delay (s)	9.1	0.1	-	-	60.8
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	2182	20	115	2551	416	76	55	14	374	82	128
Future Volume (veh/h)	56	2182	20	115	2551	416	76	55	14	374	82	128
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1828	1900	1863	1850	1900	1900	1900	1900	1881	1875	1863
Adj Flow Rate, veh/h	62	2424	22	126	2803	457	84	61	16	481	0	142
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	2	0	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	4	2	3	3	0	0	0	1	2	2
Cap, veh/h	88	3241	29	148	2851	442	303	302	79	541	0	329
Arrive On Green	0.03	0.64	0.64	0.04	0.65	0.65	0.21	0.21	0.21	0.21	0.00	0.21
Sat Flow, veh/h	1810	5099	46	1774	4412	684	1266	1452	381	2660	0	1583
Grp Volume(v), veh/h	62	1580	866	126	2104	1156	84	0	77	481	0	142
Grp Sat Flow(s),veh/h/ln	1810	1663	1819	1774	1683	1729	1266	0	1833	1330	0	1583
Q Serve(g_s), s	2.2	59.4	59.7	4.5	106.3	116.5	10.1	0.0	6.3	31.2	0.0	14.1
Cycle Q Clear(g_c), s	2.2	59.4	59.7	4.5	106.3	116.5	10.1	0.0	6.3	37.5	0.0	14.1
Prop In Lane	1.00		0.03	1.00		0.40	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	88	2114	1156	148	2176	1117	303	0	381	541	0	329
V/C Ratio(X)	0.71	0.75	0.75	0.85	0.97	1.03	0.28	0.00	0.20	0.89	0.00	0.43
Avail Cap(c_a), veh/h	90	2114	1156	249	2176	1117	303	0	381	541	0	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.1	22.8	22.8	37.7	30.1	31.9	60.6	0.0	59.0	75.2	0.0	62.1
Incr Delay (d2), s/veh	21.6	1.5	2.7	13.2	12.5	36.3	0.5	0.0	0.3	16.6	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	27.7	30.7	4.5	52.9	66.5	3.6	0.0	3.2	13.2	0.0	6.2
LnGrp Delay(d),s/veh	68.6	24.3	25.6	50.8	42.6	68.1	61.0	0.0	59.3	91.8	0.0	63.0
LnGrp LOS	E	C	C	D	D	F	E		E	F		E
Approach Vol, veh/h		2508			3386			161			623	
Approach Delay, s/veh		25.8			51.6			60.2			85.2	
Approach LOS		C			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.7	122.1		44.5	11.8	124.0		44.5
Change Period (Y+Rc), s	7.0	7.5		* 7	7.0	7.5		7.0
Max Green Setting (Gmax), s	17.0	104.5		* 38	5.0	116.5		37.0
Max Q Clear Time (g_c+I1), s	6.5	61.7		39.5	4.2	118.5		12.1
Green Ext Time (p_c), s	0.2	42.6		0.0	0.0	0.0		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

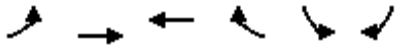
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	494	2164	33	20	1755	24	28	6	17	23	48	2381
Future Volume (veh/h)	494	2164	33	20	1755	24	28	6	17	23	48	2381
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1828	1900	1792	1880	1900	1900	1900	1900	1900	1900	1845
Adj Flow Rate, veh/h	549	2404	37	22	1950	27	31	7	19	24	51	0
Adj No. of Lanes	2	3	0	1	2	0	0	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	1	4	4	6	1	1	0	0	0	0	0	3
Cap, veh/h	341	1758	27	178	1273	18	564	124	745	651	876	723
Arrive On Green	0.08	0.35	0.35	0.08	0.35	0.35	0.46	0.46	0.46	0.46	0.46	0.00
Sat Flow, veh/h	3476	5063	78	1707	3608	50	1144	269	1615	1407	1900	1568
Grp Volume(v), veh/h	549	1578	863	22	963	1014	38	0	19	24	51	0
Grp Sat Flow(s),veh/h/ln	1738	1663	1814	1707	1786	1871	1412	0	1615	1407	1900	1568
Q Serve(g_s), s	13.5	62.5	62.5	0.0	63.5	63.5	2.1	0.0	1.2	1.8	2.7	0.0
Cycle Q Clear(g_c), s	13.5	62.5	62.5	0.0	63.5	63.5	4.8	0.0	1.2	6.5	2.7	0.0
Prop In Lane	1.00		0.04	1.00		0.03	0.82		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	1155	630	178	630	660	688	0	745	651	876	723
V/C Ratio(X)	1.61	1.37	1.37	0.12	1.53	1.54	0.06	0.00	0.03	0.04	0.06	0.00
Avail Cap(c_a), veh/h	341	1155	630	178	630	660	688	0	745	651	876	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.0	58.7	58.8	76.1	58.3	58.3	27.7	0.0	26.4	29.3	26.9	0.0
Incr Delay (d2), s/veh	288.5	170.2	176.7	0.7	245.8	248.6	0.2	0.0	0.1	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.1	56.0	62.2	1.0	74.4	78.4	1.1	0.0	0.5	0.7	1.4	0.0
LnGrp Delay(d),s/veh	341.5	229.0	235.4	76.7	304.1	306.9	27.9	0.0	26.5	29.4	27.0	0.0
LnGrp LOS	F	F	F	E	F	F	C		C	C	C	
Approach Vol, veh/h		2990			1999			57			75	
Approach Delay, s/veh		251.5			303.0			27.4			27.7	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.0	69.0		90.0	20.0	70.0		90.0
Change Period (Y+Rc), s	6.5	* 6.5		7.0	6.5	6.5		7.0
Max Green Setting (Gmax), s	14.5	* 63		83.0	13.5	63.5		83.0
Max Q Clear Time (g_c+I1), s	12.0	64.5		8.5	15.5	65.5		6.8
Green Ext Time (p_c), s	11.3	0.0		0.6	0.0	0.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	265.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	2666	1632	0	1265	521
Future Volume (veh/h)	0	2666	1632	0	1265	521
Number	1	6	2	12	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h	0	2962	1813	0	1406	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2183	2183	0	1032	475
Arrive On Green	0.00	0.62	0.62	0.00	0.30	0.00
Sat Flow, veh/h	0	3725	3725	0	3442	1583
Grp Volume(v), veh/h	0	2962	1813	0	1406	0
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1721	1583
Q Serve(g_s), s	0.0	111.0	72.5	0.0	54.0	0.0
Cycle Q Clear(g_c), s	0.0	111.0	72.5	0.0	54.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2183	2183	0	1032	475
V/C Ratio(X)	0.00	1.36	0.83	0.00	1.36	0.00
Avail Cap(c_a), veh/h	0	2183	2183	0	1032	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	34.5	27.1	0.0	63.0	0.0
Incr Delay (d2), s/veh	0.0	163.8	3.9	0.0	169.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	103.6	36.4	0.0	49.9	0.0
LnGrp Delay(d),s/veh	0.0	198.3	31.0	0.0	232.1	0.0
LnGrp LOS		F	C		F	
Approach Vol, veh/h		2962	1813		1406	
Approach Delay, s/veh		198.3	31.0		232.1	
Approach LOS		F	C		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		119.0		61.0		119.0		
Change Period (Y+Rc), s		8.0		7.0		8.0		
Max Green Setting (Gmax), s		111.0		54.0		111.0		
Max Q Clear Time (g_c+I1), s		74.5		56.0		113.0		
Green Ext Time (p_c), s		36.4		0.0		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	156.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	518	6	59	888	0	0	0	0	929	1721	1564
Future Volume (veh/h)	0	518	6	59	888	0	0	0	0	929	1721	1564
Number	1	6	16	5	2	12				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1859	1900	1863	1881	0				1881	1881	1810
Adj Flow Rate, veh/h	0	576	7	66	987	0				981	1983	1738
Adj No. of Lanes	0	2	0	1	2	0				1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	2	1	0				1	1	5
Cap, veh/h	0	765	9	92	764	0				1274	2675	1094
Arrive On Green	0.00	0.21	0.21	0.21	0.21	0.00				0.71	0.71	0.71
Sat Flow, veh/h	0	3668	43	828	3668	0				1792	3762	1538
Grp Volume(v), veh/h	0	285	298	66	987	0				981	1983	1738
Grp Sat Flow(s),veh/h/ln	0	1766	1852	828	1787	0				1792	1881	1538
Q Serve(g_s), s	0.0	27.2	27.2	11.3	38.5	0.0				62.9	58.0	128.0
Cycle Q Clear(g_c), s	0.0	27.2	27.2	38.5	38.5	0.0				62.9	58.0	128.0
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	378	396	92	764	0				1274	2675	1094
V/C Ratio(X)	0.00	0.75	0.75	0.72	1.29	0.00				0.77	0.74	1.59
Avail Cap(c_a), veh/h	0	378	396	92	764	0				1274	2675	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	66.3	66.3	85.5	70.8	0.0				16.6	15.9	26.0
Incr Delay (d2), s/veh	0.0	8.9	8.5	38.1	140.7	0.0				3.1	1.2	269.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.2	14.9	4.3	33.9	0.0				31.9	30.2	135.6
LnGrp Delay(d),s/veh	0.0	75.2	74.8	123.7	211.4	0.0				19.7	17.1	295.4
LnGrp LOS		E	E	F	F					B	B	F
Approach Vol, veh/h		583			1053						4702	
Approach Delay, s/veh		75.0			205.9						120.5	
Approach LOS		E			F						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		46.0		134.0		46.0		
Change Period (Y+Rc), s		7.5		6.0		7.5		
Max Green Setting (Gmax), s		38.5		128.0		38.5		
Max Q Clear Time (g_c+I1), s		40.5		130.0		29.2		
Green Ext Time (p_c), s		0.0		0.0		7.2		

Intersection Summary		
HCM 2010 Ctrl Delay		130.5
HCM 2010 LOS		F

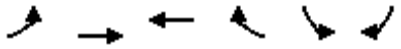
Notes

User approved volume balancing among the lanes for turning movement.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	87	351	40	83	116	246	1077	125	141	1533	61
Future Volume (veh/h)	50	87	351	40	83	116	246	1077	125	141	1533	61
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1881	1900	1843	1900	1863	1881	1900	1881	1882	1900
Adj Flow Rate, veh/h	56	97	390	43	89	125	273	1197	139	157	1703	68
Adj No. of Lanes	1	1	1	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	3	1	0	6	6	2	1	1	1	1	1
Cap, veh/h	179	416	515	215	157	220	297	2697	313	319	2710	108
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.10	0.58	0.58	0.05	0.53	0.53
Sat Flow, veh/h	1186	1845	1599	923	695	976	1774	4667	542	1792	5069	202
Grp Volume(v), veh/h	56	97	390	43	0	214	273	878	458	157	1150	621
Grp Sat Flow(s),veh/h/ln	1186	1845	1599	923	0	1671	1774	1712	1786	1792	1713	1846
Q Serve(g_s), s	6.9	6.8	34.4	6.3	0.0	17.9	12.6	22.9	22.9	6.2	37.0	37.1
Cycle Q Clear(g_c), s	24.8	6.8	34.4	13.0	0.0	17.9	12.6	22.9	22.9	6.2	37.0	37.1
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.30	1.00		0.11
Lane Grp Cap(c), veh/h	179	416	515	215	0	377	297	1978	1032	319	1831	987
V/C Ratio(X)	0.31	0.23	0.76	0.20	0.00	0.57	0.92	0.44	0.44	0.49	0.63	0.63
Avail Cap(c_a), veh/h	179	416	515	215	0	377	594	2276	1187	423	1831	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.1	49.7	47.8	55.1	0.0	54.0	34.2	18.9	18.9	16.0	25.6	25.7
Incr Delay (d2), s/veh	1.4	0.4	6.8	0.6	0.0	2.5	8.8	0.3	0.5	0.9	0.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.5	16.2	1.6	0.0	8.5	12.4	10.8	11.3	3.1	17.6	19.2
LnGrp Delay(d),s/veh	66.5	50.1	54.5	55.7	0.0	56.5	43.1	19.1	19.4	16.8	26.5	27.3
LnGrp LOS	E	D	D	E		E	D	B	B	B	C	C
Approach Vol, veh/h		543			257			1609			1928	
Approach Delay, s/veh		55.0			56.4			23.3			26.0	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.7	91.6		44.0	14.9	98.3		44.0
Change Period (Y+Rc), s	6.5	7.5		8.5	6.5	7.5		8.5
Max Green Setting (Gmax), s	15.2	80.5		35.5	17.5	104.5		35.5
Max Q Clear Time (g_c+I1), s	14.6	39.1		19.9	8.2	24.9		36.4
Green Ext Time (p_c), s	0.5	38.9		5.0	0.2	65.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.4
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	108	2740	2470	111	177	137
Future Volume (veh/h)	108	2740	2470	111	177	137
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	1881	1900	1863	1881
Adj Flow Rate, veh/h	120	3044	2714	122	197	152
Adj No. of Lanes	1	2	3	0	1	1
Peak Hour Factor	0.90	0.90	0.91	0.91	0.90	0.90
Percent Heavy Veh, %	3	1	1	1	2	1
Cap, veh/h	97	2949	4159	185	168	151
Arrive On Green	0.82	0.82	0.82	0.82	0.09	0.09
Sat Flow, veh/h	92	3668	5211	224	1774	1599
Grp Volume(v), veh/h	120	3044	1832	1004	197	152
Grp Sat Flow(s),veh/h/ln	92	1787	1712	1842	1774	1599
Q Serve(g_s), s	110.7	148.5	36.2	37.8	17.0	17.0
Cycle Q Clear(g_c), s	148.5	148.5	36.2	37.8	17.0	17.0
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	97	2949	2825	1519	168	151
V/C Ratio(X)	1.24	1.03	0.65	0.66	1.18	1.01
Avail Cap(c_a), veh/h	97	2949	2834	1525	168	151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	15.8	5.9	6.1	81.5	81.5
Incr Delay (d2), s/veh	169.0	25.6	0.6	1.2	124.7	75.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	82.2	17.0	19.5	14.1	10.7
LnGrp Delay(d),s/veh	226.5	41.4	6.5	7.3	206.2	156.5
LnGrp LOS	F	F	A	A	F	F
Approach Vol, veh/h		3164	2836		349	
Approach Delay, s/veh		48.4	6.8		184.5	
Approach LOS		D	A		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		156.0		24.0		156.0		
Change Period (Y+Rc), s		7.5		7.0		* 7.5		
Max Green Setting (Gmax), s		148.5		17.0		* 1.5E2		
Max Q Clear Time (g_c+I1), s		150.5		19.0		39.8		
Green Ext Time (p_c), s		0.0		0.0		108.2		

Intersection Summary	
HCM 2010 Ctrl Delay	37.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	765	90	63	1139	463	109	189	58	375	224	209
Future Volume (veh/h)	109	765	90	63	1139	463	109	189	58	375	224	209
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1883	1900	1900	1881	1863	1900	1886	1900	1881	1881	1863
Adj Flow Rate, veh/h	121	850	100	68	1238	0	121	210	64	322	354	225
Adj No. of Lanes	1	3	0	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	1	2	0	1	1	1	1	2
Cap, veh/h	204	1629	191	235	1681	518	445	341	104	393	413	348
Arrive On Green	0.06	0.35	0.35	0.04	0.33	0.00	0.25	0.25	0.25	0.22	0.22	0.22
Sat Flow, veh/h	1810	4667	547	1810	5136	1583	1810	1388	423	1792	1881	1583
Grp Volume(v), veh/h	121	623	327	68	1238	0	121	0	274	322	354	225
Grp Sat Flow(s),veh/h/ln	1810	1714	1787	1810	1712	1583	1810	0	1811	1792	1881	1583
Q Serve(g_s), s	6.6	21.8	21.9	3.7	32.1	0.0	8.1	0.0	20.2	25.7	27.2	19.5
Cycle Q Clear(g_c), s	6.6	21.8	21.9	3.7	32.1	0.0	8.1	0.0	20.2	25.7	27.2	19.5
Prop In Lane	1.00		0.31	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	204	1196	624	235	1681	518	445	0	445	393	413	348
V/C Ratio(X)	0.59	0.52	0.52	0.29	0.74	0.00	0.27	0.00	0.62	0.82	0.86	0.65
Avail Cap(c_a), veh/h	298	1517	791	253	1946	600	445	0	445	560	588	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	39.0	39.0	33.0	44.8	0.0	45.8	0.0	50.4	55.9	56.4	53.4
Incr Delay (d2), s/veh	2.7	0.4	0.7	0.7	1.3	0.0	1.5	0.0	6.2	6.4	8.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	10.4	10.9	1.9	15.4	0.0	4.3	0.0	10.9	13.5	15.2	8.7
LnGrp Delay(d),s/veh	37.6	39.3	39.7	33.7	46.1	0.0	47.4	0.0	56.6	62.3	65.1	55.4
LnGrp LOS	D	D	D	C	D		D		E	E	E	E
Approach Vol, veh/h		1071			1306			395			901	
Approach Delay, s/veh		39.2			45.5			53.8			61.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	58.5		43.0	13.2	55.3		39.0
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0
Max Green Setting (Gmax), s	6.9	66.6		37.0	16.5	57.0		47.0
Max Q Clear Time (g_c+I1), s	5.7	23.9		22.2	8.6	34.1		29.2
Green Ext Time (p_c), s	0.0	21.8		1.7	0.2	15.1		3.8

Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1725	7	5	2474	132	4	3	3	207	4	87
Future Volume (veh/h)	29	1725	7	5	2474	132	4	3	3	207	4	87
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1871	1900
Adj Flow Rate, veh/h	32	1917	8	5	2604	139	4	3	3	230	4	97
Adj No. of Lanes	1	2	0	0	2	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	40	2697	11	21	2489	132	282	160	160	217	3	77
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	105	3651	15	2	3368	178	1314	873	873	1001	17	422
Grp Volume(v), veh/h	32	938	987	1439	0	1309	4	0	6	331	0	0
Grp Sat Flow(s),veh/h/ln	105	1787	1879	1868	0	1680	1314	0	1746	1440	0	0
Q Serve(g_s), s	0.0	51.9	52.0	39.0	0.0	133.0	0.0	0.0	0.5	32.5	0.0	0.0
Cycle Q Clear(g_c), s	133.0	51.9	52.0	133.0	0.0	133.0	0.4	0.0	0.5	33.0	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.11	1.00		0.50	0.69		0.29
Lane Grp Cap(c), veh/h	40	1321	1388	1400	0	1242	282	0	320	298	0	0
V/C Ratio(X)	0.80	0.71	0.71	1.03	0.00	1.05	0.01	0.00	0.02	1.11	0.00	0.00
Avail Cap(c_a), veh/h	40	1321	1388	1400	0	1242	282	0	320	298	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	90.0	12.9	12.9	24.1	0.0	23.5	60.2	0.0	60.2	75.6	0.0	0.0
Incr Delay (d2), s/veh	72.2	2.0	1.9	31.3	0.0	41.2	0.0	0.0	0.0	85.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	26.0	27.3	81.8	0.0	75.3	0.2	0.0	0.2	21.9	0.0	0.0
LnGrp Delay(d),s/veh	162.2	14.9	14.8	55.5	0.0	64.7	60.2	0.0	60.3	160.9	0.0	0.0
LnGrp LOS	F	B	B	F		F	E		E	F		
Approach Vol, veh/h		1957			2748			10			331	
Approach Delay, s/veh		17.3			59.9			60.2			160.9	
Approach LOS		B			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		140.0		40.0		140.0		40.0
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s		133.0		33.0		133.0		33.0
Max Q Clear Time (g_c+I1), s		135.0		35.0		135.0		2.5
Green Ext Time (p_c), s		0.0		0.0		0.0		2.2

Intersection Summary		
HCM 2010 Ctrl Delay		50.0
HCM 2010 LOS		D

Intersection	
Int Delay, s/veh	282.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	1902	92	56	4039	65	0	0	84	0	0	321
Future Vol, veh/h	68	1902	92	56	4039	65	0	0	84	0	0	321
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Stop	-	-	Stop
Storage Length	345	-	0	250	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	95	95	95	90	90	90	90	90	90
Heavy Vehicles, %	3	1	0	0	1	0	2	2	0	2	2	3
Mvmt Flow	73	2045	99	59	4252	68	0	0	93	0	0	357

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	4252	0	-	2045	0	0	-	-	1023	-	-	2126
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.36	-	-	5.3	-	-	-	-	7.1	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.13	-	-	3.1	-	-	-	-	3.9	-	-	3.93
Pot Cap-1 Maneuver	~ 8	-	0	122	-	0	0	0	203	0	0	~ 34
Stage 1	-	-	0	-	-	0	0	0	-	0	0	-
Stage 2	-	-	0	-	-	0	0	0	-	0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	~ 8	-	-	122	-	-	-	-	203	-	-	~ 34
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	157.7	0.8	37	$ 4495.5
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	SBLn1
Capacity (veh/h)	203	~ 8	-	122	-	34
HCM Lane V/C Ratio	0.46	9.14	-	0.483	-	10.49
HCM Control Delay (s)	39	$ 4567.9	-	59.4	-	$ 4495.5
HCM Lane LOS	E	F	-	F	-	F
HCM 95th %tile Q(veh)	2.2	10.7	-	2.2	-	43.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.3

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	152	1018	879	9	6	242
Future Vol, veh/h	152	1018	879	9	6	242
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	90	90	95	95
Heavy Vehicles, %	1	1	2	0	0	0
Mvmt Flow	162	1083	977	10	6	255

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	987	0	-	0	2388	982
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	1406	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	704	-	-	-	38	305
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	229	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	704	-	-	-	16	305
Mov Cap-2 Maneuver	-	-	-	-	16	-
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	97	-

Approach	NB	SB	NE
HCM Control Delay, s	1.5	0	62.8
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NELn2	NBL	NBT	SBT	SBR
Capacity (veh/h)	16	305	704	-	-	-
HCM Lane V/C Ratio	0.395	0.835	0.23	-	-	-
HCM Control Delay (s)	$ 335.7	56	11.6	0	-	-
HCM Lane LOS	F	F	B	A	-	-
HCM 95th %tile Q(veh)	1	7.1	0.9	-	-	-

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	1016	110	106	1012	3	0	1	3	14	1	154
Future Volume (veh/h)	0	1016	110	106	1012	3	0	1	3	14	1	154
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1881	1900	1900	1900	1900	1900	1421	1900
Adj Flow Rate, veh/h	0	1104	120	115	1100	3	0	1	3	15	1	167
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	1	1	0	0	0	0	0	0
Cap, veh/h	0	1340	146	242	1522	4	0	46	137	150	8	176
Arrive On Green	0.00	0.81	0.81	0.81	0.81	0.81	0.00	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	0	1652	180	463	1875	5	0	420	1258	1001	77	1615
Grp Volume(v), veh/h	0	0	1224	115	0	1103	0	0	4	16	0	167
Grp Sat Flow(s),veh/h/ln	0	0	1831	463	0	1880	0	0	1678	1078	0	1615
Q Serve(g_s), s	0.0	0.0	64.7	32.0	0.0	45.5	0.0	0.0	0.4	2.1	0.0	17.5
Cycle Q Clear(g_c), s	0.0	0.0	64.7	96.7	0.0	45.5	0.0	0.0	0.4	2.5	0.0	17.5
Prop In Lane	0.00		0.10	1.00		0.00	0.00		0.75	0.94		1.00
Lane Grp Cap(c), veh/h	0	0	1486	242	0	1526	0	0	183	159	0	176
V/C Ratio(X)	0.00	0.00	0.82	0.48	0.00	0.72	0.00	0.00	0.02	0.10	0.00	0.95
Avail Cap(c_a), veh/h	0	0	1590	268	0	1633	0	0	183	159	0	176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	9.1	36.6	0.0	7.3	0.0	0.0	67.7	68.7	0.0	75.4
Incr Delay (d2), s/veh	0.0	0.0	3.5	1.4	0.0	1.5	0.0	0.0	0.0	0.3	0.0	52.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	33.7	4.2	0.0	23.9	0.0	0.0	0.2	0.7	0.0	10.4
LnGrp Delay(d),s/veh	0.0	0.0	12.6	38.1	0.0	8.8	0.0	0.0	67.8	69.0	0.0	127.7
LnGrp LOS			B	D		A			E	E		F
Approach Vol, veh/h		1224			1218			4			183	
Approach Delay, s/veh		12.6			11.6			67.8			122.5	
Approach LOS		B			B			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		145.2		25.1		145.2		25.1
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5
Max Green Setting (Gmax), s		147.9		18.6		147.9		18.6
Max Q Clear Time (g_c+I1), s		66.7		2.4		98.7		19.5
Green Ext Time (p_c), s		57.6		0.5		39.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	1703	99	279	3680	1162	325	262	328	809	168	155
Future Volume (veh/h)	184	1703	99	279	3680	1162	325	262	328	809	168	155
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1900	1881	1881	1881	1881	1900	1881	1863	1881	1900
Adj Flow Rate, veh/h	194	1793	104	294	3874	0	361	291	364	870	181	167
Adj No. of Lanes	1	3	1	2	3	1	1	1	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %	1	3	0	1	1	1	1	0	1	2	1	1
Cap, veh/h	140	2580	1052	343	2853	1173	249	201	327	612	130	120
Arrive On Green	0.06	0.51	0.51	0.10	0.56	0.00	0.14	0.11	0.11	0.18	0.14	0.14
Sat Flow, veh/h	1792	5036	1615	3476	5136	1599	1792	1900	1599	3442	902	832
Grp Volume(v), veh/h	194	1793	104	294	3874	0	361	291	364	870	0	348
Grp Sat Flow(s),veh/h/ln	1792	1679	1615	1738	1712	1599	1792	1900	1599	1721	0	1734
Q Serve(g_s), s	10.0	48.5	1.5	15.0	100.0	0.0	25.0	19.0	19.0	32.0	0.0	26.0
Cycle Q Clear(g_c), s	10.0	48.5	1.5	15.0	100.0	0.0	25.0	19.0	19.0	32.0	0.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	140	2580	1052	343	2853	1173	249	201	327	612	0	251
V/C Ratio(X)	1.39	0.69	0.10	0.86	1.36	0.00	1.45	1.45	1.11	1.42	0.00	1.39
Avail Cap(c_a), veh/h	140	2580	1052	579	2853	1173	249	201	327	612	0	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	33.2	4.3	79.9	40.0	0.0	77.5	80.5	43.8	74.0	0.0	77.0
Incr Delay (d2), s/veh	213.5	0.9	0.1	6.5	163.4	0.0	223.9	228.6	84.2	199.3	0.0	197.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	22.6	0.9	7.5	90.2	0.0	27.9	22.7	22.9	32.1	0.0	26.2
LnGrp Delay(d),s/veh	274.7	34.1	4.3	86.3	203.4	0.0	301.4	309.1	128.0	273.3	0.0	274.8
LnGrp LOS	F	C	A	F	F		F	F	F	F		F
Approach Vol, veh/h		2091			4168			1016			1218	
Approach Delay, s/veh		55.0			195.1			241.5			273.7	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	105.0	37.0	24.0	21.8	97.2	30.0	31.0
Change Period (Y+Rc), s	4.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	100.0	32.0	19.0	30.0	80.0	25.0	26.0
Max Q Clear Time (g_c+I1), s	12.0	102.0	34.0	21.0	17.0	50.5	27.0	28.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.8	29.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	177.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1978	1055	0	1477	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1978	1055	0	1477	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1845	0	1810	0			
Adj Flow Rate, veh/h				0	2174	0	0	1641	0			
Adj No. of Lanes				0	2	1	0	2	0			
Peak Hour Factor				0.91	0.91	0.91	0.90	0.90	0.90			
Percent Heavy Veh, %				0	1	3	0	5	0			
Cap, veh/h				0	2015	884	0	1270	0			
Arrive On Green				0.00	0.56	0.00	0.00	0.37	0.00			
Sat Flow, veh/h				0	3668	1568	0	3619	0			
Grp Volume(v), veh/h				0	2174	0	0	1641	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1568	0	1719	0			
Q Serve(g_s), s				0.0	101.5	0.0	0.0	66.5	0.0			
Cycle Q Clear(g_c), s				0.0	101.5	0.0	0.0	66.5	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	2015	884	0	1270	0			
V/C Ratio(X)				0.00	1.08	0.00	0.00	1.29	0.00			
Avail Cap(c_a), veh/h				0	2015	884	0	1270	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	39.2	0.0	0.0	56.8	0.0			
Incr Delay (d2), s/veh				0.0	45.0	0.0	0.0	137.4	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	62.4	0.0	0.0	55.8	0.0			
LnGrp Delay(d),s/veh				0.0	84.3	0.0	0.0	194.1	0.0			
LnGrp LOS					F			F				
Approach Vol, veh/h					2174			1641				
Approach Delay, s/veh					84.3			194.1				
Approach LOS					F			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		107.0		73.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		101.5		66.5				
Max Q Clear Time (g_c+I1), s		103.5		68.5				
Green Ext Time (p_c), s		0.0		0.0				

Intersection Summary		
HCM 2010 Ctrl Delay		131.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	998	716	50	1855	15	512	225	36	45	310	666
Future Volume (veh/h)	282	998	716	50	1855	15	512	225	36	45	310	666
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1881	1881	1900	1881	1900	1881	1884	1900	1845	1881	1845
Adj Flow Rate, veh/h	313	1109	796	55	2038	16	539	237	38	48	333	716
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	1	1	1	1	1	3	1	3
Cap, veh/h	212	1876	839	115	1444	11	329	634	102	282	418	348
Arrive On Green	0.10	0.52	0.52	0.40	0.40	0.40	0.14	0.40	0.40	0.22	0.22	0.22
Sat Flow, veh/h	1774	3574	1599	240	3635	29	1792	1585	254	1089	1881	1568
Grp Volume(v), veh/h	313	1109	796	55	1001	1053	539	0	275	48	333	716
Grp Sat Flow(s),veh/h/ln	1774	1787	1599	240	1787	1876	1792	0	1839	1089	1881	1568
Q Serve(g_s), s	17.5	38.5	84.8	36.8	71.5	71.5	26.0	0.0	19.0	6.5	30.1	40.0
Cycle Q Clear(g_c), s	17.5	38.5	84.8	52.3	71.5	71.5	26.0	0.0	19.0	6.5	30.1	40.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	212	1876	839	115	710	745	329	0	736	282	418	348
V/C Ratio(X)	1.47	0.59	0.95	0.48	1.41	1.41	1.64	0.00	0.37	0.17	0.80	2.05
Avail Cap(c_a), veh/h	212	1876	839	115	710	745	329	0	736	282	418	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.8	29.4	40.4	55.4	54.3	54.3	50.0	0.0	38.1	57.0	66.2	70.0
Incr Delay (d2), s/veh	236.6	0.8	20.0	6.5	192.6	193.9	301.8	0.0	0.5	0.5	11.2	484.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.5	19.1	41.9	2.7	73.3	77.2	43.9	0.0	9.7	2.0	16.9	64.2
LnGrp Delay(d),s/veh	299.5	30.2	60.4	61.9	246.9	248.1	351.8	0.0	38.6	57.4	77.3	554.6
LnGrp LOS	F	C	E	E	F	F	F		D	E	E	F
Approach Vol, veh/h		2218			2109			814			1097	
Approach Delay, s/veh		79.0			242.7			246.0			387.9	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6	7	8
Phs Duration (G+Y+Rc), s	23.0	78.0		79.0		101.0	32.0	47.0
Change Period (Y+Rc), s	5.5	6.5		7.0		6.5	6.0	7.0
Max Green Setting (Gmax), s	17.5	71.5		72.0		94.5	26.0	40.0
Max Q Clear Time (g_c+I1), s	19.5	73.5		21.0		86.8	28.0	42.0
Green Ext Time (p_c), s	0.0	0.0		18.6		7.7	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	210.5	
HCM 2010 LOS	F	

Intersection	
Int Delay, s/veh	525.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	16	435	0	59	82	132	3	22	482	452	6	12
Future Vol, veh/h	16	435	0	59	82	132	3	22	482	452	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	3	0	0	9	4	0	0	1	1	0	11
Mvmt Flow	18	483	0	66	91	147	3	24	536	502	7	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	483	0	0	699	888	242	585	815	119
Stage 1	-	-	-	-	-	-	519	519	-	296	296	-
Stage 2	-	-	-	-	-	-	180	369	-	289	519	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.92	7.52	6.5	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.52	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.52	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.31	3.51	4	3.41
Pot Cap-1 Maneuver	1341	-	-	1090	-	-	330	285	762	~ 397	314	882
Stage 1	-	-	-	-	-	-	513	536	-	691	672	-
Stage 2	-	-	-	-	-	-	810	624	-	697	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1341	-	-	1090	-	-	298	260	762	~ 102	286	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	298	260	-	~ 102	286	-
Stage 1	-	-	-	-	-	-	504	526	-	679	624	-
Stage 2	-	-	-	-	-	-	733	580	-	~ 194	526	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.4	1.9	28.2	$ 1869.3
HCM LOS			D	F

Minor Lane/Major Mvmt	NELn1	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1
Capacity (veh/h)	697	1341	-	-	1090	-	-	105
HCM Lane V/C Ratio	0.808	0.013	-	-	0.06	-	-	4.974
HCM Control Delay (s)	28.2	7.7	0.1	-	8.5	0.1		$ 1869.3
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	8.4	0	-	-	0.2	-	-	55.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	499	715	187	0	0	0	0	174	89	86
Future Volume (veh/h)	0	870	499	715	187	0	0	0	0	174	89	86
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1876	1900	1845	1810	0				1900	1816	1863
Adj Flow Rate, veh/h	0	967	554	753	197	0				189	97	93
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	3	5	0				2	2	2
Cap, veh/h	0	866	481	819	3002	0				166	85	227
Arrive On Green	0.00	0.39	0.39	0.43	0.87	0.00				0.14	0.14	0.14
Sat Flow, veh/h	0	2306	1230	1757	3529	0				1162	596	1583
Grp Volume(v), veh/h	0	774	747	753	197	0				286	0	93
Grp Sat Flow(s),veh/h/ln	0	1782	1659	1757	1719	0				1758	0	1583
Q Serve(g_s), s	0.0	50.9	50.9	48.0	1.0	0.0				18.6	0.0	7.0
Cycle Q Clear(g_c), s	0.0	50.9	50.9	48.0	1.0	0.0				18.6	0.0	7.0
Prop In Lane	0.00		0.74	1.00		0.00				0.66		1.00
Lane Grp Cap(c), veh/h	0	698	650	819	3002	0				251	0	227
V/C Ratio(X)	0.00	1.11	1.15	0.92	0.07	0.00				1.14	0.00	0.41
Avail Cap(c_a), veh/h	0	698	650	819	3002	0				251	0	227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	39.5	39.6	32.6	1.1	0.0				55.7	0.0	50.7
Incr Delay (d2), s/veh	0.0	67.8	84.7	1.9	0.0	0.0				98.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	38.1	38.6	25.5	0.5	0.0				15.9	0.0	3.1
LnGrp Delay(d),s/veh	0.0	107.3	124.3	34.4	1.1	0.0				154.5	0.0	51.6
LnGrp LOS		F	F	C	A					F		D
Approach Vol, veh/h		1521			950						379	
Approach Delay, s/veh		115.7			27.5						129.3	
Approach LOS		F			C						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	63.0	57.0		24.0		120.0		
Change Period (Y+Rc), s	6.1	* 6.1		* 5.4		6.1		
Max Green Setting (Gmax), s	43.3	* 51		* 19		99.9		
Max Q Clear Time (g_c+I1), s	50.0	52.9		20.6		3.0		
Green Ext Time (p_c), s	0.0	0.0		0.0		4.6		

Intersection Summary	
HCM 2010 Ctrl Delay	88.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	634	410	0	0	822	676	80	0	360	0	0	0
Future Volume (veh/h)	634	410	0	0	822	676	80	0	360	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1827	0	0	1861	1900	1900	1759	1638			
Adj Flow Rate, veh/h	704	456	0	0	865	712	89	0	400			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90			
Percent Heavy Veh, %	2	4	0	0	3	3	16	0	16			
Cap, veh/h	657	2772	0	0	782	611	192	0	160			
Arrive On Green	0.57	1.00	0.00	0.00	0.41	0.41	0.11	0.00	0.11			
Sat Flow, veh/h	1774	3563	0	0	1984	1478	1675	0	1392			
Grp Volume(v), veh/h	704	456	0	0	806	771	89	0	400			
Grp Sat Flow(s),veh/h/ln	1774	1736	0	0	1768	1600	1675	0	1392			
Q Serve(g_s), s	44.1	0.0	0.0	0.0	53.8	53.8	6.5	0.0	14.9			
Cycle Q Clear(g_c), s	44.1	0.0	0.0	0.0	53.8	53.8	6.5	0.0	14.9			
Prop In Lane	1.00		0.00	0.00		0.92	1.00		1.00			
Lane Grp Cap(c), veh/h	657	2772	0	0	732	662	192	0	160			
V/C Ratio(X)	1.07	0.16	0.00	0.00	1.10	1.16	0.46	0.00	2.51			
Avail Cap(c_a), veh/h	657	2772	0	0	732	662	192	0	160			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.81	0.81	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.8	0.0	0.0	0.0	38.1	38.1	53.8	0.0	57.5			
Incr Delay (d2), s/veh	35.4	0.0	0.0	0.0	61.6	87.1	7.8	0.0	696.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	29.9	0.0	0.0	0.0	38.7	39.8	3.4	0.0	36.6			
LnGrp Delay(d),s/veh	59.2	0.0	0.0	0.0	99.7	125.2	61.7	0.0	753.8			
LnGrp LOS	F	A			F	F	E		F			
Approach Vol, veh/h		1160			1577			489				
Approach Delay, s/veh		35.9			112.2			627.9				
Approach LOS		D			F			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		109.8			50.0	59.8		20.2
Change Period (Y+Rc), s		* 6			5.9	* 6		5.3
Max Green Setting (Gmax), s		* 1E2			44.1	* 54		14.9
Max Q Clear Time (g_c+I1), s		2.0			46.1	55.8		16.9
Green Ext Time (p_c), s		83.1			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	162.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	700	337	663	107	106	798
Future Volume (veh/h)	700	337	663	107	106	798
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1956	1937	1712	1727	1881	1918
Adj Flow Rate, veh/h	778	374	737	0	114	858
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.93	0.93
Percent Heavy Veh, %	1	2	11	10	1	3
Cap, veh/h	1005	553	1405	634	386	2060
Arrive On Green	0.28	0.28	0.43	0.00	0.06	0.57
Sat Flow, veh/h	3615	1647	3338	1468	1792	3741
Grp Volume(v), veh/h	778	374	737	0	114	858
Grp Sat Flow(s),veh/h/ln	1807	1647	1626	1468	1792	1823
Q Serve(g_s), s	15.8	15.5	13.3	0.0	2.6	10.7
Cycle Q Clear(g_c), s	15.8	15.5	13.3	0.0	2.6	10.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1005	553	1405	634	386	2060
V/C Ratio(X)	0.77	0.68	0.52	0.00	0.30	0.42
Avail Cap(c_a), veh/h	2837	1388	2900	1309	913	4820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	22.7	16.6	0.0	11.7	9.8
Incr Delay (d2), s/veh	1.2	1.3	0.4	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	7.3	6.0	0.0	1.3	5.4
LnGrp Delay(d),s/veh	27.6	24.1	17.0	0.0	12.1	10.0
LnGrp LOS	C	C	B		B	B
Approach Vol, veh/h	1152		737			972
Approach Delay, s/veh	26.5		17.0			10.2
Approach LOS	C		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.6	40.4				51.0		28.6
Change Period (Y+Rc), s	6.0	6.0				* 6		6.5
Max Green Setting (Gmax), s	28.0	71.0				* 1.1E2		62.5
Max Q Clear Time (g_c+I1), s	14.6	15.3				12.7		17.8
Green Ext Time (p_c), s	0.2	19.1				20.9		4.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	593	1428	17	44	1856	118	10	21	33	40	12	785
Future Volume (veh/h)	593	1428	17	44	1856	118	10	21	33	40	12	785
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1825	1900	1976	1827	1918	1824	1753	1754	1900	1871	1845
Adj Flow Rate, veh/h	659	1587	19	46	1954	124	11	23	37	42	13	0
Adj No. of Lanes	2	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	3	4	4	0	4	3	6	6	4	0	0	3
Cap, veh/h	1175	2719	33	174	1582	743	58	96	106	103	26	111
Arrive On Green	0.34	0.78	0.78	0.03	0.46	0.46	0.07	0.07	0.07	0.07	0.07	0.00
Sat Flow, veh/h	3408	3509	42	1882	3471	1631	343	1350	1491	814	369	1568
Grp Volume(v), veh/h	659	783	823	46	1954	124	34	0	37	55	0	0
Grp Sat Flow(s),veh/h/ln	1704	1733	1817	1882	1736	1631	1693	0	1491	1183	0	1568
Q Serve(g_s), s	22.0	26.0	26.0	2.0	63.8	6.3	0.0	0.0	3.3	4.4	0.0	0.0
Cycle Q Clear(g_c), s	22.0	26.0	26.0	2.0	63.8	6.3	2.6	0.0	3.3	7.0	0.0	0.0
Prop In Lane	1.00		0.02	1.00		1.00	0.32		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	1175	1344	1408	174	1582	743	154	0	106	129	0	111
V/C Ratio(X)	0.56	0.58	0.58	0.26	1.24	0.17	0.22	0.00	0.35	0.43	0.00	0.00
Avail Cap(c_a), veh/h	1175	1344	1408	218	1582	743	442	0	377	385	0	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.43	0.43	0.43	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.3	6.5	6.5	26.6	38.1	22.4	61.6	0.0	62.0	64.3	0.0	0.0
Incr Delay (d2), s/veh	0.5	1.9	1.8	0.3	108.4	0.2	0.7	0.0	2.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	12.9	13.5	1.0	54.4	2.9	1.3	0.0	1.4	2.2	0.0	0.0
LnGrp Delay(d),s/veh	37.8	8.3	8.2	26.8	146.5	22.7	62.3	0.0	63.9	66.5	0.0	0.0
LnGrp LOS	D	A	A	C	F	C	E		E	E		
Approach Vol, veh/h		2265			2124			71			55	
Approach Delay, s/veh		16.9			136.7			63.2			66.5	
Approach LOS		B			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	114.1		16.1	53.9	70.0		16.1
Change Period (Y+Rc), s	5.6	5.6		* 6.2	* 5.6	6.2		* 6.2
Max Green Setting (Gmax), s	7.4	80.4		* 35	* 23	63.8		* 35
Max Q Clear Time (g_c+I1), s	4.0	28.0		9.0	24.0	65.8		5.3
Green Ext Time (p_c), s	0.0	25.4		0.6	0.0	0.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	74.6
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	1615	47	101	2279	10	50	0	111	47	0	44
Future Volume (veh/h)	5	1615	47	101	2279	10	50	0	111	47	0	44
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1826	1900	1881	1860	1900	1900	1845	1863	1667	1743	1900
Adj Flow Rate, veh/h	5	1737	51	106	2399	11	56	0	123	52	0	49
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	4	4	1	2	2	0	0	2	14	0	0
Cap, veh/h	105	2455	72	226	2843	13	182	0	202	117	0	189
Arrive On Green	0.71	0.71	0.71	0.04	0.79	0.79	0.13	0.00	0.13	0.13	0.00	0.13
Sat Flow, veh/h	146	3443	101	1792	3607	17	1024	0	1583	1130	0	1482
Grp Volume(v), veh/h	5	872	916	106	1174	1236	56	0	123	52	0	49
Grp Sat Flow(s),veh/h/ln	146	1735	1809	1792	1767	1857	1024	0	1583	1130	0	1482
Q Serve(g_s), s	3.1	40.6	41.2	2.1	58.7	59.0	5.5	0.0	10.3	6.4	0.0	4.2
Cycle Q Clear(g_c), s	51.6	40.6	41.2	2.1	58.7	59.0	9.7	0.0	10.3	16.1	0.0	4.2
Prop In Lane	1.00		0.06	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	1237	1290	226	1393	1464	182	0	202	117	0	189
V/C Ratio(X)	0.05	0.71	0.71	0.47	0.84	0.84	0.31	0.00	0.61	0.44	0.00	0.26
Avail Cap(c_a), veh/h	105	1237	1290	329	1393	1464	189	0	210	123	0	197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.1	11.6	11.7	15.3	9.4	9.4	59.5	0.0	57.8	65.1	0.0	55.1
Incr Delay (d2), s/veh	0.5	1.9	1.9	1.5	6.0	5.8	3.4	0.0	10.8	9.3	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.8	21.0	2.2	30.4	31.9	2.2	0.0	5.1	2.3	0.0	1.9
LnGrp Delay(d),s/veh	29.5	13.5	13.5	16.8	15.3	15.1	62.9	0.0	68.6	74.4	0.0	57.7
LnGrp LOS	C	B	B	B	B	B	E		E	E		E
Approach Vol, veh/h		1793			2516			179			101	
Approach Delay, s/veh		13.6			15.3			66.8			66.3	
Approach LOS		B			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.5	105.4		24.0		116.0		24.0
Change Period (Y+Rc), s	5.6	5.6		* 6.2		5.6		* 6.2
Max Green Setting (Gmax), s	13.0	91.0		* 19		109.6		* 19
Max Q Clear Time (g_c+I1), s	4.1	53.6		12.3		61.0		18.1
Green Ext Time (p_c), s	0.1	37.3		1.4		45.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	978	854	60	1879	0	0	0	0	345	188	67
Future Volume (veh/h)	0	978	854	60	1879	0	0	0	0	345	188	67
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1810	1845	1810	1863	0				1792	1853	1696
Adj Flow Rate, veh/h	0	1029	899	67	2088	0				296	331	0
Adj No. of Lanes	0	2	1	1	2	0				1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	5	3	5	2	0				6	1	12
Cap, veh/h	0	1983	905	251	2444	0				345	374	291
Arrive On Green	0.00	0.58	0.58	0.06	0.69	0.00				0.20	0.20	0.00
Sat Flow, veh/h	0	3529	1568	1723	3632	0				1707	1853	1442
Grp Volume(v), veh/h	0	1029	899	67	2088	0				296	331	0
Grp Sat Flow(s),veh/h/ln	0	1719	1568	1723	1770	0				1707	1853	1442
Q Serve(g_s), s	0.0	21.7	68.2	1.7	53.4	0.0				20.1	20.8	0.0
Cycle Q Clear(g_c), s	0.0	21.7	68.2	1.7	53.4	0.0				20.1	20.8	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1983	905	251	2444	0				345	374	291
V/C Ratio(X)	0.00	0.52	0.99	0.27	0.85	0.00				0.86	0.88	0.00
Avail Cap(c_a), veh/h	0	1983	905	263	2444	0				484	525	409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.15	0.15	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.3	25.2	10.9	14.0	0.0				46.2	46.5	0.0
Incr Delay (d2), s/veh	0.0	1.0	28.5	0.0	0.7	0.0				8.1	9.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	36.4	0.8	26.0	0.0				10.2	11.7	0.0
LnGrp Delay(d),s/veh	0.0	16.3	53.7	10.9	14.7	0.0				54.3	56.4	0.0
LnGrp LOS		B	D	B	B					D	E	
Approach Vol, veh/h		1928			2155						627	
Approach Delay, s/veh		33.7			14.5						55.4	
Approach LOS		C			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.6	75.7		30.6		89.4		
Change Period (Y+Rc), s	6.5	6.5		* 6.4		6.5		
Max Green Setting (Gmax), s	8.0	58.6		* 34		73.1		
Max Q Clear Time (g_c+I1), s	3.7	70.2		22.8		55.4		
Green Ext Time (p_c), s	0.0	0.0		1.4		17.7		

Intersection Summary	
HCM 2010 Ctrl Delay	27.8
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	1181	0	0	1319	790	620	402	23	0	0	0
Future Volume (veh/h)	142	1181	0	0	1319	790	620	402	23	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1727	1810	0	0	1881	1956	1845	1873	1864			
Adj Flow Rate, veh/h	149	1243	0	0	1466	0	568	616	0			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	10	5	0	0	1	1	3	1	6			
Cap, veh/h	505	2683	0	0	1514	704	593	632	535			
Arrive On Green	0.31	0.78	0.00	0.00	0.42	0.00	0.11	0.11	0.00			
Sat Flow, veh/h	1645	3529	0	0	3668	1663	1757	1873	1585			
Grp Volume(v), veh/h	149	1243	0	0	1466	0	568	616	0			
Grp Sat Flow(s),veh/h/ln	1645	1719	0	0	1787	1663	1757	1873	1585			
Q Serve(g_s), s	8.3	14.9	0.0	0.0	48.1	0.0	38.6	39.3	0.0			
Cycle Q Clear(g_c), s	8.3	14.9	0.0	0.0	48.1	0.0	38.6	39.3	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	505	2683	0	0	1514	704	593	632	535			
V/C Ratio(X)	0.30	0.46	0.00	0.00	0.97	0.00	0.96	0.97	0.00			
Avail Cap(c_a), veh/h	505	2683	0	0	1519	707	593	632	535			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.78	0.78	0.00	0.00	0.42	0.00	0.45	0.45	0.00			
Uniform Delay (d), s/veh	31.7	4.5	0.0	0.0	33.8	0.0	52.5	52.8	0.0			
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.0	8.8	0.0	15.7	18.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.8	7.1	0.0	0.0	25.5	0.0	21.4	23.6	0.0			
LnGrp Delay(d),s/veh	32.0	5.0	0.0	0.0	42.6	0.0	68.2	70.9	0.0			
LnGrp LOS	C	A			D		E	E				
Approach Vol, veh/h		1392			1466			1184				
Approach Delay, s/veh		7.9			42.6			69.6				
Approach LOS		A			D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		99.8			42.9	56.8		47.0
Change Period (Y+Rc), s		6.0			6.0	* 6		6.5
Max Green Setting (Gmax), s		67.0			11.5	* 51		40.5
Max Q Clear Time (g_c+I1), s		16.9			10.3	50.1		41.3
Green Ext Time (p_c), s		12.7			0.1	0.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1134	50	152	1908	6	110	7	212	33	42	90
Future Volume (veh/h)	20	1134	50	152	1908	6	110	7	212	33	42	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1811	1900	1863	1863	1900	1900	1882	1827	1900	1865	1900
Adj Flow Rate, veh/h	21	1194	53	165	2074	7	122	8	236	37	47	100
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	13	5	5	2	2	0	0	0	4	0	0	0
Cap, veh/h	128	2093	93	428	2300	1049	144	6	332	36	34	41
Arrive On Green	0.05	1.00	1.00	0.05	0.65	0.65	0.05	0.05	0.05	0.16	0.16	0.16
Sat Flow, veh/h	1601	3356	149	1774	3539	1615	528	35	1553	0	211	252
Grp Volume(v), veh/h	21	612	635	165	2074	7	130	0	236	184	0	0
Grp Sat Flow(s),veh/h/ln	1601	1720	1785	1774	1770	1615	563	0	1553	463	0	0
Q Serve(g_s), s	0.6	0.0	0.0	4.0	59.5	0.2	0.0	0.0	17.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	4.0	59.5	0.2	19.5	0.0	17.1	19.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	0.94		1.00	0.20		0.54
Lane Grp Cap(c), veh/h	128	1073	1113	428	2300	1049	150	0	332	111	0	0
V/C Ratio(X)	0.16	0.57	0.57	0.39	0.90	0.01	0.87	0.00	0.71	1.65	0.00	0.00
Avail Cap(c_a), veh/h	168	1073	1113	566	2300	1049	150	0	332	111	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	0.0	0.0	7.0	17.8	7.4	59.7	0.0	49.5	48.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	1.6	1.6	0.0	0.6	0.0	37.8	0.0	6.5	330.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.5	0.5	1.9	29.0	0.1	5.9	0.0	8.0	13.9	0.0	0.0
LnGrp Delay(d),s/veh	22.2	1.6	1.6	7.0	18.4	7.4	97.5	0.0	55.9	378.9	0.0	0.0
LnGrp LOS	C	A	A	A	B	A	F		E	F		
Approach Vol, veh/h		1268			2246			366			184	
Approach Delay, s/veh		1.9			17.5			70.7			378.9	
Approach LOS		A			B			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	81.3		26.0	9.5	84.5		26.0
Change Period (Y+Rc), s	6.5	6.5		6.5	6.5	6.5		6.5
Max Green Setting (Gmax), s	15.5	65.5		19.5	6.0	75.0		19.5
Max Q Clear Time (g_c+I1), s	6.0	2.0		21.5	2.6	61.5		21.5
Green Ext Time (p_c), s	0.2	63.0		0.0	0.0	11.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	690	58	102	185	0	0	0	0	51	859	192
Future Volume (veh/h)	0	690	58	102	185	0	0	0	0	51	859	192
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1883	1900	1845	1863	0				1900	1849	1900
Adj Flow Rate, veh/h	0	767	64	113	206	0				57	954	213
Adj No. of Lanes	0	2	0	1	2	0				0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	3	2	0				0	3	0
Cap, veh/h	0	1628	136	278	1723	0				65	1130	267
Arrive On Green	0.00	0.49	0.49	0.49	0.49	0.00				0.13	0.13	0.13
Sat Flow, veh/h	0	3437	279	651	3632	0				160	2763	653
Grp Volume(v), veh/h	0	410	421	113	206	0				658	0	566
Grp Sat Flow(s),veh/h/ln	0	1788	1833	651	1770	0				1841	0	1734
Q Serve(g_s), s	0.0	18.3	18.3	16.8	3.8	0.0				42.1	0.0	38.0
Cycle Q Clear(g_c), s	0.0	18.3	18.3	35.1	3.8	0.0				42.1	0.0	38.0
Prop In Lane	0.00		0.15	1.00		0.00				0.09		0.38
Lane Grp Cap(c), veh/h	0	871	893	278	1723	0				753	0	709
V/C Ratio(X)	0.00	0.47	0.47	0.41	0.12	0.00				0.87	0.00	0.80
Avail Cap(c_a), veh/h	0	871	893	278	1723	0				806	0	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				0.47	0.00	0.47
Uniform Delay (d), s/veh	0.0	20.5	20.5	32.2	16.8	0.0				48.9	0.0	47.1
Incr Delay (d2), s/veh	0.0	1.8	1.8	4.4	0.1	0.0				5.0	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.4	9.7	3.4	1.9	0.0				22.5	0.0	18.8
LnGrp Delay(d),s/veh	0.0	22.3	22.3	36.6	16.9	0.0				53.9	0.0	49.8
LnGrp LOS		C	C	D	B					D		D
Approach Vol, veh/h		831			319						1224	
Approach Delay, s/veh		22.3			23.9						52.0	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		64.4		55.6		64.4		
Change Period (Y+Rc), s		6.0		6.5		6.0		
Max Green Setting (Gmax), s		55.0		52.5		55.0		
Max Q Clear Time (g_c+I1), s		20.3		44.1		37.1		
Green Ext Time (p_c), s		11.5		5.0		8.6		

Intersection Summary		
HCM 2010 Ctrl Delay		37.8
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	238	0	0	223	21	64	521	91	0	0	0
Future Volume (veh/h)	503	238	0	0	223	21	64	521	91	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1881	1863	0	0	1866	1900	1900	1844	1900			
Adj Flow Rate, veh/h	559	264	0	0	248	23	70	566	99			
Adj No. of Lanes	1	2	0	0	2	0	0	2	0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92			
Percent Heavy Veh, %	1	2	0	0	2	2	0	3	0			
Cap, veh/h	766	2340	0	0	2170	200	77	645	119			
Arrive On Green	0.22	0.22	0.00	0.00	0.66	0.66	0.23	0.23	0.23			
Sat Flow, veh/h	1115	3632	0	0	3376	302	326	2750	506			
Grp Volume(v), veh/h	559	264	0	0	133	138	392	0	343			
Grp Sat Flow(s),veh/h/ln	1115	1770	0	0	1773	1813	1828	0	1755			
Q Serve(g_s), s	57.0	7.2	0.0	0.0	3.3	3.4	25.1	0.0	22.3			
Cycle Q Clear(g_c), s	60.4	7.2	0.0	0.0	3.3	3.4	25.1	0.0	22.3			
Prop In Lane	1.00		0.00	0.00		0.17	0.18		0.29			
Lane Grp Cap(c), veh/h	766	2340	0	0	1172	1198	429	0	412			
V/C Ratio(X)	0.73	0.11	0.00	0.00	0.11	0.12	0.91	0.00	0.83			
Avail Cap(c_a), veh/h	766	2340	0	0	1172	1198	449	0	431			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.87	0.87	0.00	0.00	0.76	0.76	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.1	18.7	0.0	0.0	7.5	7.5	44.7	0.0	43.7			
Incr Delay (d2), s/veh	5.3	0.1	0.0	0.0	0.0	0.0	22.4	0.0	12.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	18.7	3.5	0.0	0.0	1.6	1.7	15.3	0.0	12.2			
LnGrp Delay(d),s/veh	46.4	18.8	0.0	0.0	7.5	7.5	67.2	0.0	56.4			
LnGrp LOS	D	B			A	A	E		E			
Approach Vol, veh/h		823			271			735				
Approach Delay, s/veh		37.5			7.5			62.1				
Approach LOS		D			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.3				85.3		34.7
Change Period (Y+Rc), s		6.0				6.0		6.5
Max Green Setting (Gmax), s		78.0				78.0		29.5
Max Q Clear Time (g_c+I1), s		62.4				5.4		27.1
Green Ext Time (p_c), s		6.2				8.9		1.1

Intersection Summary		
HCM 2010 Ctrl Delay		43.0
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	809	256	122	1004	84	609	222	206	163	95	171
Future Volume (veh/h)	170	809	256	122	1004	84	609	222	206	163	95	171
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1814	1900	1810	1866	1900	1863	1881	1863	1863	1861	1900
Adj Flow Rate, veh/h	183	870	275	136	1116	93	641	234	217	181	106	190
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	5	2	2	2	1	2	2	4	4
Cap, veh/h	184	922	291	162	1117	93	590	676	569	348	87	157
Arrive On Green	0.08	0.36	0.36	0.06	0.34	0.34	0.31	0.36	0.36	0.10	0.15	0.15
Sat Flow, veh/h	1740	2580	814	1723	3313	276	1774	1881	1583	1774	599	1073
Grp Volume(v), veh/h	183	581	564	136	597	612	641	234	217	181	0	296
Grp Sat Flow(s),veh/h/ln	1740	1724	1671	1723	1772	1817	1774	1881	1583	1774	0	1672
Q Serve(g_s), s	14.9	59.1	59.3	9.3	60.9	61.0	56.1	16.5	18.4	15.6	0.0	26.4
Cycle Q Clear(g_c), s	14.9	59.1	59.3	9.3	60.9	61.0	56.1	16.5	18.4	15.6	0.0	26.4
Prop In Lane	1.00		0.49	1.00		0.15	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	184	616	597	162	597	612	590	676	569	348	0	244
V/C Ratio(X)	0.99	0.94	0.94	0.84	1.00	1.00	1.09	0.35	0.38	0.52	0.00	1.21
Avail Cap(c_a), veh/h	184	616	597	162	597	612	590	676	569	348	0	244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	56.3	56.4	45.4	60.0	60.0	54.0	42.5	43.1	57.8	0.0	77.3
Incr Delay (d2), s/veh	64.7	23.1	24.0	31.1	36.5	36.4	62.9	0.3	0.4	1.4	0.0	127.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	32.0	31.4	5.8	35.9	36.8	39.8	8.6	8.1	7.7	0.0	20.8
LnGrp Delay(d),s/veh	123.3	79.4	80.4	76.5	96.4	96.4	117.0	42.8	43.5	59.2	0.0	205.0
LnGrp LOS	F	E	F	E	F	F	F	D	D	E		F
Approach Vol, veh/h		1328			1345			1092			477	
Approach Delay, s/veh		85.9			94.4			86.5			149.7	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	71.4	61.0	32.0	20.3	67.7	22.4	70.6
Change Period (Y+Rc), s	* 5.3	* 6.7	* 4.9	5.6	* 5.3	* 6.7	* 4.9	5.6
Max Green Setting (Gmax), s	* 11	* 64	* 56	26.4	* 15	* 61	* 18	65.0
Max Q Clear Time (g_c+I1), s	11.3	61.3	58.1	28.4	16.9	63.0	17.6	20.4
Green Ext Time (p_c), s	0.0	2.2	0.0	0.0	0.0	0.0	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	95.9
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	1452	31	14	1388	182	23	12	44	192	9	38
Future Volume (veh/h)	38	1452	31	14	1388	182	23	12	44	192	9	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1880	1900	1900	1816	1900	1900	1812	1900	1881	1800	1900
Adj Flow Rate, veh/h	42	1613	34	15	1461	192	26	13	49	213	10	42
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	1	5	5	5	11	11	11	1	29	29
Cap, veh/h	193	2635	55	35	2160	282	99	57	157	287	56	236
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	307	3578	75	14	2933	383	367	307	847	1348	303	1272
Grp Volume(v), veh/h	42	804	843	874	0	794	88	0	0	213	0	52
Grp Sat Flow(s),veh/h/ln	307	1786	1867	1744	0	1585	1522	0	0	1348	0	1575
Q Serve(g_s), s	12.6	32.4	32.6	0.0	0.0	39.8	2.4	0.0	0.0	17.3	0.0	4.2
Cycle Q Clear(g_c), s	52.4	32.4	32.6	36.7	0.0	39.8	7.1	0.0	0.0	24.5	0.0	4.2
Prop In Lane	1.00		0.04	0.02		0.24	0.30		0.56	1.00		0.81
Lane Grp Cap(c), veh/h	193	1316	1375	1309	0	1168	313	0	0	287	0	292
V/C Ratio(X)	0.22	0.61	0.61	0.67	0.00	0.68	0.28	0.00	0.00	0.74	0.00	0.18
Avail Cap(c_a), veh/h	215	1447	1512	1432	0	1284	498	0	0	454	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	9.5	9.5	10.0	0.0	10.5	52.7	0.0	0.0	60.3	0.0	51.6
Incr Delay (d2), s/veh	0.6	0.6	0.6	1.1	0.0	1.3	0.5	0.0	0.0	3.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	16.1	16.9	18.6	0.0	17.6	3.2	0.0	0.0	8.9	0.0	1.8
LnGrp Delay(d),s/veh	24.8	10.1	10.1	11.1	0.0	11.8	53.2	0.0	0.0	64.1	0.0	51.8
LnGrp LOS	C	B	B	B		B	D			E		D
Approach Vol, veh/h		1689			1668			88			265	
Approach Delay, s/veh		10.5			11.4			53.2			61.7	
Approach LOS		B			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		116.9		33.4		116.9		33.4
Change Period (Y+Rc), s		6.2		5.5		6.2		5.5
Max Green Setting (Gmax), s		121.8		46.5		121.8		46.5
Max Q Clear Time (g_c+I1), s		54.4		26.5		41.8		9.1
Green Ext Time (p_c), s		56.4		1.4		64.9		1.6

Intersection Summary		
HCM 2010 Ctrl Delay		15.6
HCM 2010 LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1145	543	161	1286	0	0	0	0	201	0	297
Future Volume (veh/h)	0	1145	543	161	1286	0	0	0	0	201	0	297
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1810	1881	1881	1827	0				1845	0	1597
Adj Flow Rate, veh/h	0	1272	0	169	1354	0				223	0	0
Adj No. of Lanes	0	2	1	1	2	0				1	0	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95				0.90	0.90	0.90
Percent Heavy Veh, %	0	5	1	1	4	0				3	0	19
Cap, veh/h	0	1435	667	308	2357	0				268	0	207
Arrive On Green	0.00	0.42	0.00	0.17	0.68	0.00				0.15	0.00	0.00
Sat Flow, veh/h	0	3529	1599	1792	3563	0				1757	0	1357
Grp Volume(v), veh/h	0	1272	0	169	1354	0				223	0	0
Grp Sat Flow(s),veh/h/ln	0	1719	1599	1792	1736	0				1757	0	1357
Q Serve(g_s), s	0.0	23.9	0.0	6.0	14.4	0.0				8.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	23.9	0.0	6.0	14.4	0.0				8.6	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1435	667	308	2357	0				268	0	207
V/C Ratio(X)	0.00	0.89	0.00	0.55	0.57	0.00				0.83	0.00	0.00
Avail Cap(c_a), veh/h	0	1508	701	308	2357	0				339	0	262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.65	0.00	0.13	0.13	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.9	0.0	26.5	5.9	0.0				28.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.7	0.0	0.3	0.1	0.0				13.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.4	0.0	3.0	6.8	0.0				5.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.5	0.0	26.8	6.0	0.0				42.1	0.0	0.0
LnGrp LOS		C		C	A					D		
Approach Vol, veh/h		1272			1523						223	
Approach Delay, s/veh		24.5			8.3						42.1	
Approach LOS		C			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.3	35.5		16.2		53.8		
Change Period (Y+Rc), s	* 6.3	* 6.3		5.5		* 6.3		
Max Green Setting (Gmax), s	* 8.7	* 31		13.5		* 45		
Max Q Clear Time (g_c+I1), s	10.0	25.9		10.6		16.4		
Green Ext Time (p_c), s	0.5	3.3		0.2		12.7		

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	1081	0	0	955	301	492	0	145	0	0	0
Future Volume (veh/h)	265	1081	0	0	955	301	492	0	145	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1810	1881	0	0	1849	1900	1845	1845	1863			
Adj Flow Rate, veh/h	294	1201	0	0	1016	320	547	0	0			
Adj No. of Lanes	1	2	0	0	2	0	2	0	1			
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.90	0.90	0.90			
Percent Heavy Veh, %	5	1	0	0	3	3	3	0	2			
Cap, veh/h	471	2677	0	0	1017	318	612	0	276			
Arrive On Green	0.55	1.00	0.00	0.00	0.39	0.39	0.17	0.00	0.00			
Sat Flow, veh/h	1723	3668	0	0	2728	824	3514	0	1583			
Grp Volume(v), veh/h	294	1201	0	0	675	661	547	0	0			
Grp Sat Flow(s),veh/h/ln	1723	1787	0	0	1757	1704	1757	0	1583			
Q Serve(g_s), s	8.2	0.0	0.0	0.0	26.8	27.0	10.7	0.0	0.0			
Cycle Q Clear(g_c), s	8.2	0.0	0.0	0.0	26.8	27.0	10.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.48	1.00		1.00			
Lane Grp Cap(c), veh/h	471	2677	0	0	678	657	612	0	276			
V/C Ratio(X)	0.62	0.45	0.00	0.00	1.00	1.01	0.89	0.00	0.00			
Avail Cap(c_a), veh/h	471	2677	0	0	678	657	612	0	276			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.50	0.50	0.00	0.00	0.26	0.26	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.4	0.0	0.0	0.0	21.4	21.5	28.3	0.0	0.0			
Incr Delay (d2), s/veh	1.3	0.3	0.0	0.0	16.5	19.5	15.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.9	0.1	0.0	0.0	16.0	16.2	6.5	0.0	0.0			
LnGrp Delay(d),s/veh	14.7	0.3	0.0	0.0	38.0	41.0	43.7	0.0	0.0			
LnGrp LOS	B	A			D	F	D					
Approach Vol, veh/h		1495			1336			547				
Approach Delay, s/veh		3.1			39.5			43.7				
Approach LOS		A			D			D				

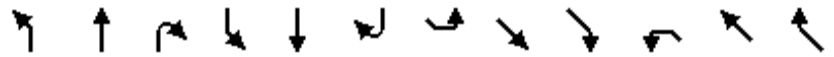
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		58.8		18.7	25.5	33.3		
Change Period (Y+Rc), s		* 6.3		6.5	* 6.3	* 6.3		
Max Green Setting (Gmax), s		* 45		12.2	* 13	* 27		
Max Q Clear Time (g_c+I1), s		2.0		12.7	10.2	29.0		
Green Ext Time (p_c), s		13.0		0.0	1.6	0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	468	750	8	1	696	56	47	3	543	17	9	13
Future Volume (veh/h)	468	750	8	1	696	56	47	3	543	17	9	13
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1827	1900	1900	1860	1863	1900	1800	1863	1900	1795	1900
Adj Flow Rate, veh/h	493	789	8	1	773	62	52	3	603	19	10	14
Adj No. of Lanes	1	1	1	0	1	1	0	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	4	0	2	2	2	50	50	2	0	14	14
Cap, veh/h	536	1361	1203	29	848	722	187	9	164	140	111	156
Arrive On Green	0.25	0.75	0.75	0.46	0.46	0.46	0.10	0.10	0.10	0.02	0.16	0.16
Sat Flow, veh/h	1792	1827	1615	0	1860	1583	1269	89	1583	1810	678	950
Grp Volume(v), veh/h	493	789	8	774	0	62	55	0	603	19	0	24
Grp Sat Flow(s),veh/h/ln	1792	1827	1615	1860	0	1583	1358	0	1583	1810	0	1628
Q Serve(g_s), s	27.0	24.3	0.2	0.0	0.0	2.8	4.6	0.0	8.1	1.2	0.0	1.6
Cycle Q Clear(g_c), s	27.0	24.3	0.2	48.7	0.0	2.8	4.7	0.0	8.1	1.2	0.0	1.6
Prop In Lane	1.00		1.00	0.00		1.00	0.95		1.00	1.00		0.58
Lane Grp Cap(c), veh/h	536	1361	1203	877	0	722	196	0	164	140	0	267
V/C Ratio(X)	0.92	0.58	0.01	0.88	0.00	0.09	0.28	0.00	3.68	0.14	0.00	0.09
Avail Cap(c_a), veh/h	553	1790	1583	1288	0	1073	447	0	458	169	0	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.0	7.2	4.1	31.8	0.0	19.3	52.6	0.0	21.8	47.7	0.0	44.5
Incr Delay (d2), s/veh	20.5	0.4	0.0	5.3	0.0	0.1	0.8	0.0	1222.0	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.6	12.2	0.1	26.2	0.0	1.2	1.8	0.0	60.7	0.6	0.0	0.7
LnGrp Delay(d),s/veh	63.5	7.6	4.1	37.1	0.0	19.4	53.4	0.0	1243.9	48.1	0.0	44.7
LnGrp LOS	E	A	A	D		B	D		F	D		D
Approach Vol, veh/h		1290			836			658			43	
Approach Delay, s/veh		28.9			35.8			1144.3			46.2	
Approach LOS		C			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Phs Duration (G+Y+Rc), s		99.3	7.6	18.7	36.8	62.5		26.3
Change Period (Y+Rc), s		* 5.7	5.7	5.7	* 5.7	5.2		5.7
Max Green Setting (Gmax), s		* 1.2E2	4.0	36.3	* 32	85.1		46.0
Max Q Clear Time (g_c+I1), s		26.3	3.2	10.1	29.0	50.7		3.6
Green Ext Time (p_c), s		9.4	0.0	2.9	2.1	6.6		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	290.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	437	1650	12	50	1799	97	15	67	62	120	68	1059
Future Volume (veh/h)	437	1650	12	50	1799	97	15	67	62	120	68	1059
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1845	1900	1900	1881	1827	1900	1900	1810	1681	1545	1845
Adj Flow Rate, veh/h	460	1737	13	53	1894	102	17	74	69	133	76	1177
Adj No. of Lanes	2	1	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	3	0	0	1	4	0	0	5	13	23	3
Cap, veh/h	1275	1395	1221	84	1439	625	61	177	143	103	144	738
Arrive On Green	0.38	0.76	0.76	0.02	0.40	0.40	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	3375	1845	1615	1810	3574	1553	450	1900	1538	1120	1545	1568
Grp Volume(v), veh/h	460	1737	13	53	1894	102	17	74	69	133	76	1177
Grp Sat Flow(s),veh/h/ln	1688	1845	1615	1810	1787	1553	450	1900	1538	1120	1545	1568
Q Serve(g_s), s	17.7	136.3	0.4	1.2	72.6	7.6	6.7	6.6	7.7	10.2	8.5	16.8
Cycle Q Clear(g_c), s	17.7	136.3	0.4	1.2	72.6	7.6	15.2	6.6	7.7	16.8	8.5	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1275	1395	1221	84	1439	625	61	177	143	103	144	738
V/C Ratio(X)	0.36	1.25	0.01	0.63	1.32	0.16	0.28	0.42	0.48	1.29	0.53	1.59
Avail Cap(c_a), veh/h	1275	1395	1221	90	1439	625	61	177	143	103	144	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	22.0	5.4	86.0	53.8	34.4	85.2	77.1	77.6	87.0	78.0	47.7
Incr Delay (d2), s/veh	0.1	116.6	0.0	10.7	147.1	0.4	1.8	1.2	1.9	185.0	2.9	273.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	113.8	0.2	2.9	65.2	3.3	0.9	3.6	3.3	10.4	3.7	89.4
LnGrp Delay(d),s/veh	40.6	138.6	5.4	96.7	201.0	34.9	87.0	78.3	79.5	272.1	80.8	321.6
LnGrp LOS	D	F	A	F	F	C	F	E	E	F	F	F
Approach Vol, veh/h		2210			2049			160			1386	
Approach Delay, s/veh		117.4			190.0			79.7			303.6	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	143.7		24.0	76.3	80.0		24.0
Change Period (Y+Rc), s	* 8.2	* 7.4		* 7.2	* 8.2	7.4		* 7.2
Max Green Setting (Gmax), s	* 5	* 1.4E2		* 17	* 68	72.6		* 17
Max Q Clear Time (g_c+I1), s	13.2	138.3		18.8	19.7	74.6		17.2
Green Ext Time (p_c), s	0.0	0.0		0.0	1.3	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	186.5
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	8	1660	0	2631	50	497	1527	0
Future Volume (veh/h)	0	0	0	59	8	1660	0	2631	50	497	1527	0
Number				7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1835	1696	0	1826	1900	1827	1845	0
Adj Flow Rate, veh/h				66	9	1844	0	2829	54	529	1624	0
Adj No. of Lanes				0	1	1	0	2	0	1	2	0
Peak Hour Factor				0.90	0.90	0.90	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %				12	0	12	0	4	4	4	3	0
Cap, veh/h				653	89	609	0	1552	30	224	2048	0
Arrive On Green				0.42	0.42	0.42	0.00	0.45	0.45	0.11	0.58	0.00
Sat Flow, veh/h				1547	211	1442	0	3575	66	1740	3597	0
Grp Volume(v), veh/h				75	0	1844	0	1405	1478	529	1624	0
Grp Sat Flow(s),veh/h/ln				1758	0	1442	0	1735	1815	1740	1752	0
Q Serve(g_s), s				4.6	0.0	76.0	0.0	80.2	80.2	19.0	64.6	0.0
Cycle Q Clear(g_c), s				4.6	0.0	76.0	0.0	80.2	80.2	19.0	64.6	0.0
Prop In Lane				0.88		1.00	0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h				742	0	609	0	773	808	224	2048	0
V/C Ratio(X)				0.10	0.00	3.03	0.00	1.82	1.83	2.36	0.79	0.00
Avail Cap(c_a), veh/h				742	0	609	0	773	808	224	2048	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh				31.4	0.0	52.0	0.0	49.9	49.9	64.6	29.0	0.0
Incr Delay (d2), s/veh				0.0	0.0	917.3	0.0	372.7	377.8	614.7	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.3	0.0	185.4	0.0	118.5	125.0	49.4	31.2	0.0
LnGrp Delay(d),s/veh				31.4	0.0	969.3	0.0	422.6	427.7	679.3	29.3	0.0
LnGrp LOS				C		F		F	F	F	C	
Approach Vol, veh/h					1919			2883			2153	
Approach Delay, s/veh					932.7			425.2			189.0	
Approach LOS					F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	25.0	87.0		82.0		112.0		
Change Period (Y+Rc), s	6.0	* 6.4		6.0		6.4		
Max Green Setting (Gmax), s	19.0	* 67		76.0		91.6		
Max Q Clear Time (g_c+I1), s	21.0	82.2		78.0		66.6		
Green Ext Time (p_c), s	0.0	0.0		0.0		25.0		

Intersection Summary	
HCM 2010 Ctrl Delay	492.1
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1748	942	0	0	1852	80	172	686	1067	0	0	0
Future Volume (veh/h)	1748	942	0	0	1852	80	172	686	1067	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1810	1827	0	0	1847	1900	1900	1885	1845			
Adj Flow Rate, veh/h	1942	1047	0	0	2058	89	191	1080	974			
Adj No. of Lanes	1	2	0	0	2	0	1	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	5	4	0	0	3	3	0	0	3			
Cap, veh/h	701	2430	0	0	971	42	422	440	366			
Arrive On Green	0.38	0.70	0.00	0.00	0.28	0.28	0.23	0.23	0.23			
Sat Flow, veh/h	1723	3563	0	0	3521	147	1810	1885	1568			
Grp Volume(v), veh/h	1942	1047	0	0	1046	1101	191	1080	974			
Grp Sat Flow(s),veh/h/ln	1723	1736	0	0	1755	1821	1810	1885	1568			
Q Serve(g_s), s	69.0	23.3	0.0	0.0	51.0	51.0	16.3	42.0	42.0			
Cycle Q Clear(g_c), s	69.0	23.3	0.0	0.0	51.0	51.0	16.3	42.0	42.0			
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00			
Lane Grp Cap(c), veh/h	701	2430	0	0	497	516	422	440	366			
V/C Ratio(X)	2.77	0.43	0.00	0.00	2.10	2.13	0.45	2.46	2.66			
Avail Cap(c_a), veh/h	701	2430	0	0	497	516	422	440	366			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	53.5	11.6	0.0	0.0	64.5	64.5	59.1	69.0	69.0			
Incr Delay (d2), s/veh	797.7	0.1	0.0	0.0	503.6	516.8	3.5	661.7	755.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	90.1	11.1	0.0	0.0	94.3	99.7	8.6	102.7	95.0			
LnGrp Delay(d),s/veh	851.2	11.6	0.0	0.0	568.1	581.3	62.6	730.7	824.8			
LnGrp LOS	F	B			F	F	E	F	F			
Approach Vol, veh/h		2989			2147			2245				
Approach Delay, s/veh		557.1			574.9			714.7				
Approach LOS		F			F			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		132.0			75.0	57.0		48.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		126.0			69.0	51.0		42.0
Max Q Clear Time (g_c+I1), s		25.3			71.0	53.0		44.0
Green Ext Time (p_c), s		98.4			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	610.2
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	321	1688	0	0	1769	56	0	0	0	60	0	163
Future Volume (veh/h)	321	1688	0	0	1769	56	0	0	0	60	0	163
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1900	1862	1900	1900	1863	1900	1827	0	1863
Adj Flow Rate, veh/h	357	1876	0	0	1966	62	0	0	0	66	0	179
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	1	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	4	0	2	2	2	2	2	4	0	2
Cap, veh/h	576	3106	0	40	1902	60	0	1	0	82	0	0
Arrive On Green	0.32	0.89	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.05	0.00	0.00
Sat Flow, veh/h	1810	3563	0	247	3501	110	0	1765	0	1740	66	
Grp Volume(v), veh/h	357	1876	0	0	988	1040	0	0	0	66	125.3	
Grp Sat Flow(s),veh/h/ln	1810	1736	0	247	1769	1842	0	1863	0	1740	F	
Q Serve(g_s), s	30.2	22.3	0.0	0.0	97.8	97.8	0.0	0.0	0.0	6.8		
Cycle Q Clear(g_c), s	30.2	22.3	0.0	0.0	97.8	97.8	0.0	0.0	0.0	6.8		
Prop In Lane	1.00		0.00	1.00		0.06	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	576	3106	0	40	961	1001	0	1	0	82		
V/C Ratio(X)	0.62	0.60	0.00	0.00	1.03	1.04	0.00	0.00	0.00	0.81		
Avail Cap(c_a), veh/h	576	3106	0	40	961	1001	0	186	0	84		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.96		
Uniform Delay (d), s/veh	52.1	2.2	0.0	0.0	41.1	41.1	0.0	0.0	0.0	85.0		
Incr Delay (d2), s/veh	2.0	0.9	0.0	0.0	17.2	21.1	0.0	0.0	0.0	40.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	15.4	10.8	0.0	0.0	52.1	55.4	0.0	0.0	0.0	4.2		
LnGrp Delay(d),s/veh	54.2	3.0	0.0	0.0	58.3	62.2	0.0	0.0	0.0	125.3		
LnGrp LOS	D	A			F	F				F		
Approach Vol, veh/h		2233			2028			0				
Approach Delay, s/veh		11.2			60.3			0.0				
Approach LOS		B			E							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6	7	8
Phs Duration (G+Y+Rc), s		167.1			63.3	103.8	12.9	0.0
Change Period (Y+Rc), s		6.0			6.0	* 6	4.5	6.0
Max Green Setting (Gmax), s		136.8			34.5	* 98	8.7	18.0
Max Q Clear Time (g_c+I1), s		24.3			32.2	99.8	8.8	0.0
Green Ext Time (p_c), s		41.0			1.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	449	706	202	59	292	739	91	170	29	562	157	178
Future Volume (veh/h)	449	706	202	59	292	739	91	170	29	562	157	178
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1810	1871	1900	1900	1900	1900	1881	1827	1863
Adj Flow Rate, veh/h	488	767	220	63	311	786	101	189	32	592	165	187
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.90	0.90	0.90	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	5	3	3	0	0	0	1	4	2
Cap, veh/h	509	1729	496	227	601	538	281	929	155	654	548	475
Arrive On Green	0.09	0.21	0.21	0.34	0.34	0.34	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1792	2743	787	552	1777	1590	1045	3098	516	2263	1827	1583
Grp Volume(v), veh/h	488	500	487	63	311	786	101	109	112	592	165	187
Grp Sat Flow(s),veh/h/ln	1792	1787	1742	552	1777	1590	1045	1805	1809	1132	1827	1583
Q Serve(g_s), s	44.8	43.9	43.9	15.4	25.3	60.9	14.8	8.1	8.3	45.7	12.5	16.9
Cycle Q Clear(g_c), s	44.8	43.9	43.9	15.4	25.3	60.9	27.3	8.1	8.3	54.0	12.5	16.9
Prop In Lane	1.00		0.45	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	509	1127	1099	227	601	538	281	542	543	654	548	475
V/C Ratio(X)	0.96	0.44	0.44	0.28	0.52	1.46	0.36	0.20	0.21	0.90	0.30	0.39
Avail Cap(c_a), veh/h	523	1127	1099	227	601	538	281	542	543	654	548	475
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.09	0.09	0.09	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.6	43.7	43.7	44.5	47.8	59.6	59.0	46.9	47.0	67.9	48.5	50.0
Incr Delay (d2), s/veh	22.8	0.9	0.9	0.1	0.1	208.6	0.1	0.0	0.0	16.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.5	22.1	21.5	2.4	12.5	57.9	4.3	4.1	4.2	16.2	6.4	7.4
LnGrp Delay(d),s/veh	96.4	44.6	44.6	44.6	47.9	268.2	59.1	46.9	47.0	84.0	48.8	50.5
LnGrp LOS	F	D	D	D	D	F	E	D	D	F	D	D
Approach Vol, veh/h		1475			1160			322			944	
Approach Delay, s/veh		61.7			197.0			50.8			71.2	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		120.0		60.0	52.6	67.4		60.0
Change Period (Y+Rc), s		6.5		6.0	5.5	* 6.5		6.0
Max Green Setting (Gmax), s		113.5		54.0	48.5	* 60		54.0
Max Q Clear Time (g_c+I1), s		45.9		56.0	46.8	62.9		29.3
Green Ext Time (p_c), s		44.4		0.0	0.3	0.0		7.0

Intersection Summary	
HCM 2010 Ctrl Delay	103.4
HCM 2010 LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1199	140	112	87	109	371	164	1249	55	211	1990	852
Future Volume (veh/h)	1199	140	112	87	109	371	164	1249	55	211	1990	852
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1823	1900	1610	1743	1759	1863	1832	1900	1367	1863	1845
Adj Flow Rate, veh/h	1276	149	119	97	121	412	182	1388	61	234	2211	947
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	6	6	18	9	8	2	2	2	39	2	3
Cap, veh/h	637	253	202	250	261	224	40	1926	84	112	2006	889
Arrive On Green	0.06	0.09	0.09	0.06	0.15	0.15	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	3476	940	751	1533	1743	1495	67	3398	149	269	3539	1568
Grp Volume(v), veh/h	1276	0	268	97	121	412	182	710	739	234	2211	947
Grp Sat Flow(s),veh/h/ln	1738	0	1691	1533	1743	1495	67	1741	1806	269	1770	1568
Q Serve(g_s), s	33.0	0.0	27.4	9.5	11.4	27.0	0.0	53.7	54.0	48.0	102.0	102.0
Cycle Q Clear(g_c), s	33.0	0.0	27.4	9.5	11.4	27.0	102.0	53.7	54.0	102.0	102.0	102.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	637	0	455	250	261	224	40	986	1024	112	2006	889
V/C Ratio(X)	2.00	0.00	0.59	0.39	0.46	1.84	4.55	0.72	0.72	2.10	1.10	1.07
Avail Cap(c_a), veh/h	637	0	455	262	261	224	40	986	1024	112	2006	889
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.00	0.73	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	84.6	0.0	72.4	59.4	69.9	76.5	90.0	28.5	28.6	74.6	39.0	39.0
Incr Delay (d2), s/veh	455.2	0.0	4.1	1.0	1.3	393.4	1640.0	2.0	1.9	522.8	54.3	49.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	56.2	0.0	13.4	4.1	5.6	35.7	20.2	26.4	27.4	21.8	64.7	56.1
LnGrp Delay(d),s/veh	539.8	0.0	76.5	60.4	71.1	469.9	1730.0	30.5	30.5	597.4	93.3	88.3
LnGrp LOS	F		E	E	E	F	F	C	C	F	F	F
Approach Vol, veh/h		1544			630			1631			3392	
Approach Delay, s/veh		459.3			330.3			220.2			126.7	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.6	54.4		108.0	39.0	33.0		108.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	13.0	47.0		102.0	33.0	27.0		102.0
Max Q Clear Time (g_c+I1), s	11.5	29.4		104.0	35.0	29.0		104.0
Green Ext Time (p_c), s	0.0	3.4		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	237.1	
HCM 2010 LOS	F	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2409	0	0	480	0	0
Future Volume (veh/h)	2409	0	0	480	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1638	1827	1863	1557	1863
Adj Flow Rate, veh/h	2677	0	0	0	0	0
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.90	0.90	0.93	0.93	0.90	0.90
Percent Heavy Veh, %	1	16	4	2	22	2
Cap, veh/h	2616	1048	2	1	253	649
Arrive On Green	0.75	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	3476	1392	126149	1583	1483	3632
Grp Volume(v), veh/h	2677	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1738	1392	1736	1583	1483	1770
Q Serve(g_s), s	135.5	0.0	0.0	0.0	2.3	0.0
Cycle Q Clear(g_c), s	135.5	0.0	0.0	0.0	2.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	2616	1048	2	1	253	649
V/C Ratio(X)	1.02	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2616	1048	366	167	253	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	23.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	72.6	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	46.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	F					
Approach Vol, veh/h	2677		0			0
Approach Delay, s/veh	46.0		0.0			0.0
Approach LOS	D					

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	40.0	0.0				40.0		140.0
Change Period (Y+Rc), s	7.0	7.0				7.0		4.5
Max Green Setting (Gmax), s	7.0	19.0				33.0		135.5
Max Q Clear Time (g_c+I1), s	10.0	0.0				0.0		137.5
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	600	2258	0	0	678	801	0	0	0	255	0	121
Future Volume (veh/h)	600	2258	0	0	678	801	0	0	0	255	0	121
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	0	1900	1845	1900	1900	1863	1900	1863	0	1827
Adj Flow Rate, veh/h	659	2481	0	0	721	0	0	0	0	268	0	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.94	0.94	0.94	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	3	1	0	0	3	4	2	2	2	2	0	4
Cap, veh/h	1015	2244	0	331	817	376	0	1	0	307	0	0
Arrive On Green	0.58	0.63	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.09	0.00	0.00
Sat Flow, veh/h	1757	3668	0	1810	3505	1615	0	1765	0	3442	268	
Grp Volume(v), veh/h	659	2481	0	0	721	0	0	0	0	268	100.6	
Grp Sat Flow(s),veh/h/ln	1757	1787	0	1810	1752	1615	0	1863	0	1721	F	
Q Serve(g_s), s	45.6	113.0	0.0	0.0	35.8	0.0	0.0	0.0	0.0	13.8		
Cycle Q Clear(g_c), s	45.6	113.0	0.0	0.0	35.8	0.0	0.0	0.0	0.0	13.8		
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	1015	2244	0	331	817	376	0	1	0	307		
V/C Ratio(X)	0.65	1.11	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.87		
Avail Cap(c_a), veh/h	1015	2244	0	331	1071	493	0	186	0	344		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.32	0.32	0.00	0.00	0.82	0.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	25.7	33.5	0.0	0.0	66.7	0.0	0.0	0.0	0.0	81.0		
Incr Delay (d2), s/veh	0.5	50.1	0.0	0.0	6.0	0.0	0.0	0.0	0.0	19.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	22.3	71.1	0.0	0.0	18.0	0.0	0.0	0.0	0.0	7.4		
LnGrp Delay(d),s/veh	26.1	83.6	0.0	0.0	72.6	0.0	0.0	0.0	0.0	100.6		
LnGrp LOS	C	F			E					F		
Approach Vol, veh/h		3140			721			0				
Approach Delay, s/veh		71.6			72.6			0.0				
Approach LOS		E			E							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6	7	8
Phs Duration (G+Y+Rc), s	39.0	119.0			110.0	47.9	22.0	0.0
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	113.0			65.0	55.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	10.0	115.0			47.6	37.8	15.8	0.0
Green Ext Time (p_c), s	0.0	0.0			2.1	4.2	0.2	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	73.6	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1639	874	788	1104	0	0	0	0	380	959	375
Future Volume (veh/h)	0	1639	874	788	1104	0	0	0	0	380	959	375
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1863	1881	1845	0				1863	1795	1810
Adj Flow Rate, veh/h	0	1762	0	847	1187	0				422	1066	417
Adj No. of Lanes	0	2	1	1	2	0				1	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.90	0.90	0.90
Percent Heavy Veh, %	0	1	2	1	3	0				2	6	5
Cap, veh/h	0	1086	481	451	2000	0				641	648	1111
Arrive On Green	0.00	0.40	0.00	0.23	0.57	0.00				0.36	0.36	0.36
Sat Flow, veh/h	0	3668	1583	1792	3597	0				1774	1795	3076
Grp Volume(v), veh/h	0	1762	0	847	1187	0				422	1066	417
Grp Sat Flow(s),veh/h/ln	0	1787	1583	1792	1752	0				1774	1795	1538
Q Serve(g_s), s	0.0	54.7	0.0	41.3	39.6	0.0				35.9	65.0	18.0
Cycle Q Clear(g_c), s	0.0	54.7	0.0	41.3	39.6	0.0				35.9	65.0	18.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1086	481	451	2000	0				641	648	1111
V/C Ratio(X)	0.00	1.62	0.00	1.88	0.59	0.00				0.66	1.64	0.38
Avail Cap(c_a), veh/h	0	1086	481	451	2000	0				641	648	1111
HCM Platoon Ratio	1.00	1.33	1.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.45	0.00	0.58	0.58	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	53.6	0.0	60.2	25.1	0.0				48.2	57.5	42.5
Incr Delay (d2), s/veh	0.0	281.9	0.0	399.9	0.3	0.0				2.8	297.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	69.5	0.0	72.5	19.2	0.0				18.1	85.7	7.7
LnGrp Delay(d),s/veh	0.0	335.6	0.0	460.2	25.4	0.0				51.0	354.5	42.8
LnGrp LOS		F		F	C					D	F	D
Approach Vol, veh/h		1762			2034						1905	
Approach Delay, s/veh		335.6			206.5						219.0	
Approach LOS		F			F						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	48.0	61.0		71.0		109.0		
Change Period (Y+Rc), s	6.7	6.3		6.0		6.3		
Max Green Setting (Gmax), s	41.3	54.7		65.0		102.7		
Max Q Clear Time (g_c+I1), s	43.3	56.7		67.0		41.6		
Green Ext Time (p_c), s	0.0	0.0		0.0		53.4		

Intersection Summary		
HCM 2010 Ctrl Delay	250.6	
HCM 2010 LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	938	1081	0	0	730	861	367	773	1374	0	0	0
Future Volume (veh/h)	938	1081	0	0	730	861	367	773	1374	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1881	1810	1845	1881			
Adj Flow Rate, veh/h	987	1138	0	0	802	0	408	859	1527			
Adj No. of Lanes	1	2	0	0	2	1	1	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.90	0.90	0.90			
Percent Heavy Veh, %	2	2	0	0	2	1	5	3	1			
Cap, veh/h	414	1927	0	0	983	444	670	717	622			
Arrive On Green	0.08	0.18	0.00	0.00	0.28	0.00	0.39	0.39	0.39			
Sat Flow, veh/h	1774	3632	0	0	3632	1599	1723	1845	1599			
Grp Volume(v), veh/h	987	1138	0	0	802	0	408	859	1527			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1599	1723	1845	1599			
Q Serve(g_s), s	42.0	53.1	0.0	0.0	38.1	0.0	34.1	70.0	70.0			
Cycle Q Clear(g_c), s	42.0	53.1	0.0	0.0	38.1	0.0	34.1	70.0	70.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	414	1927	0	0	983	444	670	717	622			
V/C Ratio(X)	2.38	0.59	0.00	0.00	0.82	0.00	0.61	1.20	2.46			
Avail Cap(c_a), veh/h	414	1927	0	0	983	444	670	717	622			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.09	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	83.1	55.4	0.0	0.0	60.7	0.0	44.0	55.0	55.0			
Incr Delay (d2), s/veh	623.6	0.1	0.0	0.0	0.5	0.0	1.2	102.1	659.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	92.4	26.1	0.0	0.0	18.7	0.0	16.4	56.0	144.9			
LnGrp Delay(d),s/veh	706.7	55.5	0.0	0.0	61.2	0.0	45.2	157.1	714.9			
LnGrp LOS	F	E			E		D	F	F			
Approach Vol, veh/h		2125			802			2794				
Approach Delay, s/veh		358.0			61.2			445.6				
Approach LOS		F			E			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		104.0			48.0	56.0		76.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		98.0			42.0	50.0		70.0
Max Q Clear Time (g_c+I1), s		55.1			44.0	40.1		72.0
Green Ext Time (p_c), s		11.4			0.0	5.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	359.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1338	1037	79	27	512	254	11	10	19	234	15	1068
Future Volume (veh/h)	1338	1037	79	27	512	254	11	10	19	234	15	1068
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1863	1900	1900	1863	1845	1900	1900	1900	1881	1883	1863
Adj Flow Rate, veh/h	1470	1140	0	29	551	0	12	12	0	260	17	0
Adj No. of Lanes	2	2	1	1	2	1	1	1	1	2	1	1
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	2	0	0	2	3	0	0	0	1	0	2
Cap, veh/h	2084	2513	1147	102	511	226	56	59	50	316	166	140
Arrive On Green	0.20	0.23	0.00	0.03	0.14	0.00	0.03	0.03	0.00	0.09	0.09	0.00
Sat Flow, veh/h	3476	3539	1615	1810	3539	1568	1810	1900	1615	3583	1883	1583
Grp Volume(v), veh/h	1470	1140	0	29	551	0	12	12	0	260	17	0
Grp Sat Flow(s),veh/h/ln	1738	1770	1615	1810	1770	1568	1810	1900	1615	1792	1883	1583
Q Serve(g_s), s	71.0	49.7	0.0	2.6	26.0	0.0	1.2	1.1	0.0	12.8	1.5	0.0
Cycle Q Clear(g_c), s	71.0	49.7	0.0	2.6	26.0	0.0	1.2	1.1	0.0	12.8	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	2084	2513	1147	102	511	226	56	59	50	316	166	140
V/C Ratio(X)	0.71	0.45	0.00	0.29	1.08	0.00	0.21	0.20	0.00	0.82	0.10	0.00
Avail Cap(c_a), veh/h	2084	2513	1147	120	511	226	231	243	206	950	499	420
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.61	0.61	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.4	39.0	0.0	70.9	77.0	0.0	85.1	85.0	0.0	80.7	75.5	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.9	54.3	0.0	1.9	1.7	0.0	5.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.2	24.4	0.0	1.3	16.6	0.0	0.6	0.6	0.0	6.6	0.8	0.0
LnGrp Delay(d),s/veh	57.5	39.0	0.0	71.9	131.3	0.0	86.9	86.7	0.0	86.1	75.8	0.0
LnGrp LOS	E	D		E	F		F	F		F	E	
Approach Vol, veh/h		2610			580			24			277	
Approach Delay, s/veh		49.4			128.3			86.8			85.4	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.8	134.1		11.9	114.2	31.7		22.2
Change Period (Y+Rc), s	* 5.7	* 6.3		* 6.3	* 6.3	* 5.7		6.3
Max Green Setting (Gmax), s	* 8	* 78		* 23	* 59	* 26		47.7
Max Q Clear Time (g_c+I1), s	14.6	51.7		3.2	73.0	28.0		14.8
Green Ext Time (p_c), s	0.0	18.8		0.0	0.0	0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.6
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	259	0	0	0	0	0	1540	326
Future Volume (veh/h)	0	0	0	0	259	0	0	0	0	0	1540	326
Number				7	4	14				5	2	12
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				0	1881	0				0	1863	1845
Adj Flow Rate, veh/h				0	278	0				0	1674	0
Adj No. of Lanes				0	2	0				0	3	1
Peak Hour Factor				0.93	0.93	0.93				0.92	0.92	0.92
Percent Heavy Veh, %				0	1	0				0	2	3
Cap, veh/h				0	466	0				0	3434	1059
Arrive On Green				0.00	0.13	0.00				0.00	0.68	0.00
Sat Flow, veh/h				0	3762	0				0	5253	1568
Grp Volume(v), veh/h				0	278	0				0	1674	0
Grp Sat Flow(s),veh/h/ln				0	1787	0				0	1695	1568
Q Serve(g_s), s				0.0	4.6	0.0				0.0	10.1	0.0
Cycle Q Clear(g_c), s				0.0	4.6	0.0				0.0	10.1	0.0
Prop In Lane				0.00		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				0	466	0				0	3434	1059
V/C Ratio(X)				0.00	0.60	0.00				0.00	0.49	0.00
Avail Cap(c_a), veh/h				0	1525	0				0	5680	1751
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				0.00	1.00	0.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	26.0	0.0				0.0	5.0	0.0
Incr Delay (d2), s/veh				0.0	1.2	0.0				0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	2.4	0.0				0.0	4.7	0.0
LnGrp Delay(d),s/veh				0.0	27.2	0.0				0.0	5.1	0.0
LnGrp LOS					C						A	
Approach Vol, veh/h					278						1674	
Approach Delay, s/veh					27.2						5.1	
Approach LOS					C						A	

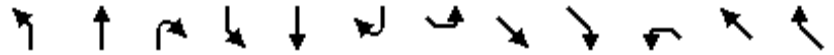
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		49.0		14.3				
Change Period (Y+Rc), s		6.3		6.0				
Max Green Setting (Gmax), s		70.7		27.0				
Max Q Clear Time (g_c+I1), s		12.1		6.6				
Green Ext Time (p_c), s		30.7		1.7				

Intersection Summary		
HCM 2010 Ctrl Delay		8.3
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	398	0	0	0	0	0	2309	235	0	0	0
Future Volume (veh/h)	0	398	0	0	0	0	0	2309	235	0	0	0
Number	3	8	18				1	6	16			
Initial Q (Qb), veh	0	0	0				0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1863	0				0	1863	1792			
Adj Flow Rate, veh/h	0	419	0				0	2566	0			
Adj No. of Lanes	0	2	0				0	3	1			
Peak Hour Factor	0.95	0.95	0.95				0.90	0.90	0.90			
Percent Heavy Veh, %	0	2	0				0	2	6			
Cap, veh/h	0	530	0				0	3719	1114			
Arrive On Green	0.00	0.15	0.00				0.00	0.73	0.00			
Sat Flow, veh/h	0	3725	0				0	5253	1524			
Grp Volume(v), veh/h	0	419	0				0	2566	0			
Grp Sat Flow(s),veh/h/ln	0	1770	0				0	1695	1524			
Q Serve(g_s), s	0.0	11.8	0.0				0.0	28.3	0.0			
Cycle Q Clear(g_c), s	0.0	11.8	0.0				0.0	28.3	0.0			
Prop In Lane	0.00		0.00				0.00		1.00			
Lane Grp Cap(c), veh/h	0	530	0				0	3719	1114			
V/C Ratio(X)	0.00	0.79	0.00				0.00	0.69	0.00			
Avail Cap(c_a), veh/h	0	752	0				0	3719	1114			
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00				0.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	42.4	0.0				0.0	7.5	0.0			
Incr Delay (d2), s/veh	0.0	3.8	0.0				0.0	1.1	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	6.0	0.0				0.0	13.4	0.0			
LnGrp Delay(d),s/veh	0.0	46.2	0.0				0.0	8.6	0.0			
LnGrp LOS		D						A				
Approach Vol, veh/h		419						2566				
Approach Delay, s/veh		46.2						8.6				
Approach LOS		D						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		8
Phs Duration (G+Y+Rc), s						82.0		21.5
Change Period (Y+Rc), s						6.3		6.0
Max Green Setting (Gmax), s						75.7		22.0
Max Q Clear Time (g_c+I1), s						30.3		13.8
Green Ext Time (p_c), s						40.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	602	2252	0	0	2312	270	0	0	0	654	0	276
Future Volume (veh/h)	602	2252	0	0	2312	270	0	0	0	654	0	276
Number	3	8	18	7	4	14				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1827	0	0	1827	1712				1845	0	1810
Adj Flow Rate, veh/h	662	2475	0	0	2513	0				711	0	0
Adj No. of Lanes	2	3	0	0	3	1				2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	3	4	0	0	4	11				3	0	5
Cap, veh/h	629	3530	0	0	2379	694				682	0	308
Arrive On Green	0.18	0.71	0.00	0.00	0.48	0.00				0.20	0.00	0.00
Sat Flow, veh/h	3408	5152	0	0	5152	1455				3408	0	1538
Grp Volume(v), veh/h	662	2475	0	0	2513	0				711	0	0
Grp Sat Flow(s),veh/h/ln	1704	1663	0	0	1663	1455				1704	0	1538
Q Serve(g_s), s	24.0	37.4	0.0	0.0	62.0	0.0				26.0	0.0	0.0
Cycle Q Clear(g_c), s	24.0	37.4	0.0	0.0	62.0	0.0				26.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	629	3530	0	0	2379	694				682	0	308
V/C Ratio(X)	1.05	0.70	0.00	0.00	1.06	0.00				1.04	0.00	0.00
Avail Cap(c_a), veh/h	629	3530	0	0	2379	694				682	0	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.29	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	53.0	11.0	0.0	0.0	34.0	0.0				52.0	0.0	0.0
Incr Delay (d2), s/veh	50.3	1.2	0.0	0.0	29.0	0.0				46.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	17.3	0.0	0.0	34.8	0.0				16.6	0.0	0.0
LnGrp Delay(d),s/veh	103.3	12.2	0.0	0.0	63.0	0.0				98.2	0.0	0.0
LnGrp LOS	F	B			F					F		
Approach Vol, veh/h		3137			2513						711	
Approach Delay, s/veh		31.4			63.0						98.2	
Approach LOS		C			E						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			30.0	68.0		32.0		98.0
Change Period (Y+Rc), s			6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s			24.0	62.0		26.0		92.0
Max Q Clear Time (g_c+I1), s			26.0	64.0		28.0		39.4
Green Ext Time (p_c), s			0.0	0.0		0.0		46.8

Intersection Summary	
HCM 2010 Ctrl Delay	51.4
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	350	88	112	0	1354	241
Future Volume (veh/h)	350	88	112	0	1354	241
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1863	0	1810	1845
Adj Flow Rate, veh/h	389	98	122	0	1425	254
Adj No. of Lanes	1	1	1	0	3	1
Peak Hour Factor	0.90	0.90	0.92	0.92	0.95	0.95
Percent Heavy Veh, %	1	3	2	0	5	3
Cap, veh/h	451	395	169	0	2171	689
Arrive On Green	0.25	0.25	0.10	0.00	0.44	0.44
Sat Flow, veh/h	1792	1568	1774	122	5103	1568
Grp Volume(v), veh/h	389	98	122	39.8	1425	254
Grp Sat Flow(s),veh/h/ln	1792	1568	1774	D	1647	1568
Q Serve(g_s), s	16.1	3.9	5.2		17.7	8.4
Cycle Q Clear(g_c), s	16.1	3.9	5.2		17.7	8.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	451	395	169		2171	689
V/C Ratio(X)	0.86	0.25	0.72		0.66	0.37
Avail Cap(c_a), veh/h	843	738	344		2647	840
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	27.8	23.2	34.2		17.2	14.6
Incr Delay (d2), s/veh	5.0	0.3	5.7		0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	1.7	2.8		8.2	3.7
LnGrp Delay(d),s/veh	32.8	23.6	39.8		17.7	15.1
LnGrp LOS	C	C	D		B	B
Approach Vol, veh/h	487				1679	
Approach Delay, s/veh	31.0				17.3	
Approach LOS	C				B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	12.8	40.0						25.0
Change Period (Y+Rc), s	5.4	* 5.8						5.4
Max Green Setting (Gmax), s	15.1	* 42						36.6
Max Q Clear Time (g_c+I1), s	7.2	19.7						18.1
Green Ext Time (p_c), s	0.2	14.5						1.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	17	631	212	28	42	307	2122	99	15	1739	40
Future Volume (veh/h)	83	17	631	212	28	42	307	2122	99	15	1739	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1545	1881	1597	1658	1900	1845	1863	1407	1638	1845	1900
Adj Flow Rate, veh/h	92	19	0	236	31	47	341	2358	110	17	1932	0
Adj No. of Lanes	1	1	1	1	1	0	2	2	1	1	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	23	1	19	23	23	3	2	35	16	3	0
Cap, veh/h	282	335	347	302	129	196	524	2141	724	33	2409	773
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.20	0.80	0.80	0.02	0.48	0.00
Sat Flow, veh/h	1303	1545	1599	1189	596	903	3408	3539	1196	1560	5036	1615
Grp Volume(v), veh/h	92	19	0	236	0	78	341	2358	110	17	1932	0
Grp Sat Flow(s),veh/h/ln	1303	1545	1599	1189	0	1499	1704	1770	1196	1560	1679	1615
Q Serve(g_s), s	8.2	1.3	0.0	25.5	0.0	5.6	11.9	78.6	2.7	1.4	42.2	0.0
Cycle Q Clear(g_c), s	13.7	1.3	0.0	26.8	0.0	5.6	11.9	78.6	2.7	1.4	42.2	0.0
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	335	347	302	0	325	524	2141	724	33	2409	773
V/C Ratio(X)	0.33	0.06	0.00	0.78	0.00	0.24	0.65	1.10	0.15	0.51	0.80	0.00
Avail Cap(c_a), veh/h	282	335	347	302	0	325	524	2141	724	72	2409	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.63	0.63	0.63	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	40.4	0.0	51.0	0.0	42.0	48.5	12.7	5.3	63.0	28.7	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.0	12.5	0.0	0.4	1.8	50.8	0.3	8.9	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.6	0.0	9.4	0.0	2.4	5.7	52.2	0.9	0.7	20.2	0.0
LnGrp Delay(d),s/veh	48.4	40.4	0.0	63.5	0.0	42.4	50.3	63.5	5.6	71.9	31.6	0.0
LnGrp LOS	D	D		E		D	D	F	A	E	C	
Approach Vol, veh/h		111			314			2809			1949	
Approach Delay, s/veh		47.0			58.2			59.6			32.0	
Approach LOS		D			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.8	68.2		35.0	9.6	85.4		35.0
Change Period (Y+Rc), s	6.8	* 6		* 6.8	* 6.8	* 6.8		* 6.8
Max Green Setting (Gmax), s	20.0	* 62		* 28	* 6	* 76		* 28
Max Q Clear Time (g_c+I1), s	13.7	44.2		28.8	3.4	80.6		15.7
Green Ext Time (p_c), s	3.9	14.8		0.0	0.0	0.0		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	115	282	376	422	575	313	2009	73	85	1137	189
Future Volume (veh/h)	192	115	282	376	422	575	313	2009	73	85	1137	189
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1818	1900	1743	1783	1900	1881	1777	1900	1450	1812	1900
Adj Flow Rate, veh/h	213	128	313	418	469	639	348	2232	81	92	1236	205
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	11	13	13	9	6	6	1	5	5	31	3	3
Cap, veh/h	162	450	403	257	470	420	379	1533	55	98	1225	202
Arrive On Green	0.08	0.26	0.26	0.09	0.28	0.28	0.09	0.46	0.46	0.04	0.41	0.41
Sat Flow, veh/h	1630	1728	1546	1660	1694	1515	3476	3324	120	1381	2960	488
Grp Volume(v), veh/h	213	128	313	418	469	639	348	1127	1186	92	716	725
Grp Sat Flow(s),veh/h/ln	1630	1728	1546	1660	1694	1515	1738	1688	1756	1381	1722	1726
Q Serve(g_s), s	13.5	10.7	33.8	16.5	49.8	49.9	13.7	83.0	83.0	6.7	74.5	74.5
Cycle Q Clear(g_c), s	13.5	10.7	33.8	16.5	49.8	49.9	13.7	83.0	83.0	6.7	74.5	74.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		0.28
Lane Grp Cap(c), veh/h	162	450	403	257	470	420	379	778	810	98	713	714
V/C Ratio(X)	1.31	0.28	0.78	1.63	1.00	1.52	0.92	1.45	1.47	0.94	1.00	1.02
Avail Cap(c_a), veh/h	162	450	403	257	470	420	379	778	810	98	713	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	53.1	61.7	55.6	65.0	65.1	56.5	48.5	48.5	84.4	52.8	52.8
Incr Delay (d2), s/veh	177.6	0.4	9.5	300.4	41.2	246.4	26.5	208.7	216.1	72.3	34.8	37.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	5.1	15.5	30.8	28.7	49.6	10.0	83.8	88.8	6.5	42.3	43.0
LnGrp Delay(d),s/veh	229.7	53.6	71.2	356.1	106.3	311.5	83.0	257.2	264.6	156.7	87.5	90.3
LnGrp LOS	F	D	E	F	F	F	F	F	F	F	F	F
Approach Vol, veh/h		654			1526			2661			1533	
Approach Delay, s/veh		119.4			260.6			237.7			93.0	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	81.0	20.0	57.0	14.0	89.0	23.0	54.0
Change Period (Y+Rc), s	6.5	6.5	6.5	7.1	6.5	6.0	6.5	7.1
Max Green Setting (Gmax), s	15.5	74.5	13.5	49.9	7.5	83.0	16.5	46.9
Max Q Clear Time (g_c+I1), s	15.7	76.5	15.5	51.9	8.7	85.0	18.5	35.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8

Intersection Summary		
HCM 2010 Ctrl Delay		196.2
HCM 2010 LOS		F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1255	271	84	1960	953	676
Future Volume (veh/h)	1255	271	84	1960	953	676
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1760	1900	1863	1827	1810	1827
Adj Flow Rate, veh/h	1379	0	92	2154	1025	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.93	0.93
Percent Heavy Veh, %	9	0	2	4	5	4
Cap, veh/h	1285	619	236	1785	1426	644
Arrive On Green	0.38	0.00	0.05	0.51	0.41	0.00
Sat Flow, veh/h	3353	1615	1774	3563	3529	1553
Grp Volume(v), veh/h	1379	0	92	2154	1025	0
Grp Sat Flow(s),veh/h/ln	1677	1615	1774	1736	1719	1553
Q Serve(g_s), s	46.0	0.0	3.4	61.7	29.8	0.0
Cycle Q Clear(g_c), s	46.0	0.0	3.4	61.7	29.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1285	619	236	1785	1426	644
V/C Ratio(X)	1.07	0.00	0.39	1.21	0.72	0.00
Avail Cap(c_a), veh/h	1285	619	243	1785	1426	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.56	0.56	1.00	0.00
Uniform Delay (d), s/veh	37.0	0.0	22.2	29.2	29.3	0.0
Incr Delay (d2), s/veh	47.1	0.0	0.4	96.3	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.7	0.0	1.7	53.1	14.7	0.0
LnGrp Delay(d),s/veh	84.1	0.0	22.7	125.4	32.4	0.0
LnGrp LOS	F		C	F	C	
Approach Vol, veh/h	1379			2246	1025	
Approach Delay, s/veh	84.1			121.2	32.4	
Approach LOS	F			F	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.9	56.1				68.0		52.0
Change Period (Y+Rc), s	6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	6.3	49.3				61.7		46.0
Max Q Clear Time (g_c+I1), s	5.4	31.8				63.7		48.0
Green Ext Time (p_c), s	0.0	16.8				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	90.7
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	563	86	137	1481	850	374
Future Volume (veh/h)	563	86	137	1481	850	374
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1801	1900	1900	1863	1863	1712
Adj Flow Rate, veh/h	626	0	152	1646	934	0
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.91	0.91
Percent Heavy Veh, %	6	0	0	2	2	11
Cap, veh/h	765	360	471	2388	2388	982
Arrive On Green	0.22	0.00	0.67	0.67	1.00	0.00
Sat Flow, veh/h	3431	1615	609	3632	3632	1455
Grp Volume(v), veh/h	626	0	152	1646	934	0
Grp Sat Flow(s),veh/h/ln	1716	1615	609	1770	1770	1455
Q Serve(g_s), s	20.8	0.0	13.0	33.9	0.0	0.0
Cycle Q Clear(g_c), s	20.8	0.0	13.0	33.9	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	765	360	471	2388	2388	982
V/C Ratio(X)	0.82	0.00	0.32	0.69	0.39	0.00
Avail Cap(c_a), veh/h	944	444	471	2388	2388	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.94	0.94	0.62	0.00
Uniform Delay (d), s/veh	44.3	0.0	8.5	11.9	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	0.4	0.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	2.2	16.7	0.1	0.0
LnGrp Delay(d),s/veh	51.5	0.0	8.8	12.7	0.3	0.0
LnGrp LOS	D		A	B	A	
Approach Vol, veh/h	626			1798	934	
Approach Delay, s/veh	51.5			12.4	0.3	
Approach LOS	D			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		87.3				87.3		32.7
Change Period (Y+Rc), s		6.3				6.3		6.0
Max Green Setting (Gmax), s		74.7				74.7		33.0
Max Q Clear Time (g_c+I1), s		2.0				35.9		22.8
Green Ext Time (p_c), s		57.6				34.0		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	20	26	5	10	86	46	874	8	68	703	165
Future Volume (veh/h)	95	20	26	5	10	86	46	874	8	68	703	165
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1883	1900	1900	1900	1900	1900	1843	1900	1863	1881	1900
Adj Flow Rate, veh/h	106	22	29	6	11	96	48	920	8	73	756	177
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	3	3	2	1	1
Cap, veh/h	179	35	37	37	33	214	527	2726	24	471	2205	516
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.77	0.77	0.77	1.00	1.00	1.00
Sat Flow, veh/h	860	235	248	35	218	1427	610	3556	31	600	2876	673
Grp Volume(v), veh/h	157	0	0	113	0	0	48	453	475	73	470	463
Grp Sat Flow(s),veh/h/ln	1344	0	0	1680	0	0	610	1750	1837	600	1787	1762
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	2.4	9.8	9.8	1.8	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	7.5	0.0	0.0	2.4	9.8	9.8	11.6	0.0	0.0
Prop In Lane	0.68		0.18	0.05		0.85	1.00		0.02	1.00		0.38
Lane Grp Cap(c), veh/h	252	0	0	284	0	0	527	1342	1408	471	1370	1351
V/C Ratio(X)	0.62	0.00	0.00	0.40	0.00	0.00	0.09	0.34	0.34	0.15	0.34	0.34
Avail Cap(c_a), veh/h	498	0	0	568	0	0	527	1342	1408	471	1370	1351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	49.3	0.0	0.0	46.5	0.0	0.0	3.5	4.4	4.4	0.6	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0	1.3	0.0	0.0	0.1	0.2	0.2	0.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	0.0	3.5	0.0	0.0	0.4	4.7	5.0	0.4	0.2	0.2
LnGrp Delay(d),s/veh	52.8	0.0	0.0	47.8	0.0	0.0	3.7	4.6	4.6	1.3	0.6	0.6
LnGrp LOS	D			D			A	A	A	A	A	A
Approach Vol, veh/h		157			113			976			1006	
Approach Delay, s/veh		52.8			47.8			4.6			0.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		23.0		97.0		23.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		71.0		39.0		71.0		39.0
Max Q Clear Time (g_c+I1), s		13.6		9.5		11.8		15.7
Green Ext Time (p_c), s		30.9		2.5		31.4		2.3

Intersection Summary		
HCM 2010 Ctrl Delay		8.4
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	2834	10	127	3307	484	86	27	116	480	13	124
Future Volume (veh/h)	156	2834	10	127	3307	484	86	27	116	480	13	124
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1845	1900	1863	1845	1863	1900	1810	1863	1881	1882	1845
Adj Flow Rate, veh/h	170	3080	11	137	3556	520	96	30	0	543	0	138
Adj No. of Lanes	2	4	0	1	3	1	1	1	1	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	3	2	3	2	0	5	2	1	0	3
Cap, veh/h	1148	1557	6	592	1192	375	121	121	106	608	0	789
Arrive On Green	0.33	0.24	0.24	0.44	0.31	0.31	0.07	0.07	0.00	0.17	0.00	0.17
Sat Flow, veh/h	3442	6577	23	1774	5036	1583	1810	1810	1583	3583	0	1568
Grp Volume(v), veh/h	170	2229	862	137	3556	520	96	30	0	543	0	138
Grp Sat Flow(s),veh/h/ln	1721	1587	1841	1774	1679	1583	1810	1810	1583	1792	0	1568
Q Serve(g_s), s	5.2	35.5	35.5	7.2	35.5	35.5	7.8	2.4	0.0	22.2	0.0	0.0
Cycle Q Clear(g_c), s	5.2	35.5	35.5	7.2	35.5	35.5	7.8	2.4	0.0	22.2	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1148	1126	436	592	1192	375	121	121	106	608	0	789
V/C Ratio(X)	0.15	1.98	1.98	0.23	2.98	1.39	0.80	0.25	0.00	0.89	0.00	0.17
Avail Cap(c_a), veh/h	1148	1126	436	592	1192	375	458	458	401	991	0	957
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.30	0.30	0.30	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	57.2	57.3	29.8	51.4	51.4	69.0	66.4	0.0	60.9	0.0	20.3
Incr Delay (d2), s/veh	0.0	443.5	449.1	0.0	893.3	179.4	4.4	0.4	0.0	3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	61.8	72.4	3.5	115.0	34.2	4.1	1.2	0.0	11.3	0.0	3.1
LnGrp Delay(d),s/veh	35.1	500.7	506.4	29.8	944.7	230.8	73.4	66.8	0.0	64.8	0.0	20.3
LnGrp LOS	D	F	F	C	F	F	E	E		E		C
Approach Vol, veh/h		3261			4213			126			681	
Approach Delay, s/veh		477.9			826.8			71.9			55.8	
Approach LOS		F			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	57.0	42.5		33.0	57.0	42.5		17.5
Change Period (Y+Rc), s	7.0	7.0		7.5	7.0	7.0		7.5
Max Green Setting (Gmax), s	6.0	35.5		41.5	6.0	35.5		38.0
Max Q Clear Time (g_c+I1), s	9.2	37.5		24.2	7.2	37.5		9.8
Green Ext Time (p_c), s	0.0	0.0		1.2	0.0	0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	614.5
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2365	1065	389	3053	0	0	0	0	402	0	865
Future Volume (veh/h)	0	2365	1065	389	3053	0	0	0	0	402	0	865
Number	1	6	16	5	2	12				3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1792	1881	1845	0				1863	1863	1759
Adj Flow Rate, veh/h	0	2516	0	414	3248	0				447	0	961
Adj No. of Lanes	0	4	1	2	4	0				2	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.90	0.90	0.90
Percent Heavy Veh, %	0	4	6	1	3	0				2	0	8
Cap, veh/h	0	2786	675	406	3829	0				1100	0	927
Arrive On Green	0.00	0.44	0.00	0.04	0.20	0.00				0.31	0.00	0.31
Sat Flow, veh/h	0	6540	1524	3476	6604	0				3548	0	2991
Grp Volume(v), veh/h	0	2516	0	414	3248	0				447	0	961
Grp Sat Flow(s),veh/h/ln	0	1571	1524	1738	1586	0				1774	0	1495
Q Serve(g_s), s	0.0	55.7	0.0	17.5	74.0	0.0				14.9	0.0	46.5
Cycle Q Clear(g_c), s	0.0	55.7	0.0	17.5	74.0	0.0				14.9	0.0	46.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2786	675	406	3829	0				1100	0	927
V/C Ratio(X)	0.00	0.90	0.00	1.02	0.85	0.00				0.41	0.00	1.04
Avail Cap(c_a), veh/h	0	2786	675	406	3829	0				1100	0	927
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.8	0.0	72.1	53.5	0.0				40.9	0.0	51.8
Incr Delay (d2), s/veh	0.0	0.5	0.0	19.1	0.2	0.0				0.1	0.0	39.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	24.2	0.0	9.5	32.6	0.0				7.3	0.0	24.3
LnGrp Delay(d),s/veh	0.0	39.3	0.0	91.2	53.7	0.0				40.9	0.0	91.2
LnGrp LOS		D		F	D					D		F
Approach Vol, veh/h		2516			3662						1408	
Approach Delay, s/veh		39.3			57.9						75.2	
Approach LOS		D			E						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		97.0			24.0	73.0		53.0
Change Period (Y+Rc), s		6.5			6.5	6.5		6.5
Max Green Setting (Gmax), s		90.5			17.5	66.5		46.5
Max Q Clear Time (g_c+I1), s		76.0			19.5	57.7		48.5
Green Ext Time (p_c), s		14.5			0.0	8.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	1059	1220	353	1360	134	1414	211	352	116	183	668
Future Volume (veh/h)	488	1059	1220	353	1360	134	1414	211	352	116	183	668
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1810	1845	1881	1900	1792	1863	1881	1900	1865	1881
Adj Flow Rate, veh/h	542	1177	0	388	1495	147	1554	232	387	127	201	734
Adj No. of Lanes	2	4	1	2	4	0	2	1	1	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	5	3	1	1	6	2	1	0	2	1
Cap, veh/h	265	1819	441	204	1632	160	1115	627	634	223	230	643
Arrive On Green	0.03	0.09	0.00	0.06	0.27	0.27	0.34	0.34	0.34	0.12	0.12	0.12
Sat Flow, veh/h	3408	6346	1538	3408	6037	593	3312	1863	1599	1810	1865	3198
Grp Volume(v), veh/h	542	1177	0	388	1202	440	1554	232	387	127	201	734
Grp Sat Flow(s),veh/h/ln	1704	1586	1538	1704	1618	1777	1656	1863	1599	1810	1865	1599
Q Serve(g_s), s	11.6	26.8	0.0	9.0	36.0	36.1	50.5	14.2	28.9	9.9	15.9	18.5
Cycle Q Clear(g_c), s	11.6	26.8	0.0	9.0	36.0	36.1	50.5	14.2	28.9	9.9	15.9	18.5
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1819	441	204	1312	480	1115	627	634	223	230	643
V/C Ratio(X)	2.05	0.65	0.00	1.90	0.92	0.92	1.39	0.37	0.61	0.57	0.87	1.14
Avail Cap(c_a), veh/h	265	1828	443	204	1333	488	1115	627	634	223	230	643
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	60.6	0.0	70.5	53.1	53.1	49.7	37.7	36.0	62.0	64.6	59.9
Incr Delay (d2), s/veh	476.7	0.3	0.0	421.6	11.4	24.9	182.7	0.5	2.0	3.8	29.1	81.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.0	11.8	0.0	16.2	17.5	21.1	51.4	7.4	13.1	5.2	10.1	15.5
LnGrp Delay(d),s/veh	549.8	60.9	0.0	492.1	64.5	77.9	232.5	38.2	38.0	65.8	93.7	141.5
LnGrp LOS	F	E		F	E	E	F	D	D	E	F	F
Approach Vol, veh/h		1719			2030			2173			1062	
Approach Delay, s/veh		215.0			149.2			177.1			123.4	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.6	47.4		58.0	16.0	50.0		26.0
Change Period (Y+Rc), s	7.0	6.8		7.5	7.0	* 7		7.5
Max Green Setting (Gmax), s	11.6	41.2		50.5	9.0	* 43		18.5
Max Q Clear Time (g_c+I1), s	13.6	38.1		52.5	11.0	28.8		20.5
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	8.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	170.2
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	591	224	531	227	268	128	743	2273	360	184	1230	508
Future Volume (veh/h)	591	224	531	227	268	128	743	2273	360	184	1230	508
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1881	1881	1900	1881	1900	1863	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	657	249	590	247	291	139	782	2393	379	196	1309	540
Adj No. of Lanes	2	1	1	1	2	0	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	1	1	0	1	1	2	1	1	1	2	2
Cap, veh/h	469	423	360	269	560	261	542	1867	581	270	1443	667
Arrive On Green	0.14	0.22	0.22	0.15	0.24	0.24	0.16	0.36	0.36	0.08	0.28	0.28
Sat Flow, veh/h	3408	1881	1599	1810	2369	1104	3442	5136	1599	3476	5085	1583
Grp Volume(v), veh/h	657	249	590	247	218	212	782	2393	379	196	1309	540
Grp Sat Flow(s),veh/h/ln	1704	1881	1599	1810	1787	1686	1721	1712	1599	1738	1695	1583
Q Serve(g_s), s	19.5	16.7	21.6	19.1	15.0	15.6	22.3	51.5	28.0	7.8	35.2	20.8
Cycle Q Clear(g_c), s	19.5	16.7	21.6	19.1	15.0	15.6	22.3	51.5	28.0	7.8	35.2	20.8
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	469	423	360	269	422	398	542	1867	581	270	1443	667
V/C Ratio(X)	1.40	0.59	1.64	0.92	0.52	0.53	1.44	1.28	0.65	0.73	0.91	0.81
Avail Cap(c_a), veh/h	469	526	447	277	527	498	542	1867	581	270	1472	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	49.0	25.1	59.4	47.0	47.3	59.7	45.1	37.6	63.9	48.9	13.1
Incr Delay (d2), s/veh	192.7	1.9	300.4	32.2	1.4	1.6	209.6	131.0	2.6	9.8	8.4	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	8.9	40.9	12.0	7.6	7.4	26.3	46.9	12.8	4.1	17.6	10.4
LnGrp Delay(d),s/veh	253.8	50.9	325.5	91.7	48.4	48.8	269.3	176.1	40.2	73.6	57.3	20.3
LnGrp LOS	F	D	F	F	D	D	F	F	D	E	E	C
Approach Vol, veh/h		1496			677			3554			2045	
Approach Delay, s/veh		248.3			64.3			182.1			49.1	
Approach LOS		F			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	40.2	17.5	58.0	27.6	38.6	28.8	46.7
Change Period (Y+Rc), s	6.5	* 6.7	6.5	6.5	6.5	* 6.7	6.5	6.5
Max Green Setting (Gmax), s	19.5	* 42	11.0	51.5	21.7	* 40	21.5	41.0
Max Q Clear Time (g_c+I1), s	21.5	17.6	9.8	53.5	21.1	23.6	24.3	37.2
Green Ext Time (p_c), s	0.0	10.4	0.1	0.0	0.0	8.3	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	149.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	73	0	0	0	161	0	3257	15	0	0	0
Future Volume (veh/h)	0	73	0	0	0	161	0	3257	15	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1827	0	0	0	1863	0	1845	1900			
Adj Flow Rate, veh/h	0	81	0	0	0	179	0	3502	16			
Adj No. of Lanes	0	1	0	0	0	1	0	3	0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	0	2	0	3	0			
Cap, veh/h	0	227	0	0	0	0	0	0	0			
Arrive On Green	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Sat Flow, veh/h	0	1827	0		0			0				
Grp Volume(v), veh/h	0	81	0		0.0			0.0				
Grp Sat Flow(s),veh/h/ln	0	1827	0									
Q Serve(g_s), s	0.0	0.3	0.0									
Cycle Q Clear(g_c), s	0.0	0.3	0.0									
Prop In Lane	0.00		0.00									
Lane Grp Cap(c), veh/h	0	227	0									
V/C Ratio(X)	0.00	0.36	0.00									
Avail Cap(c_a), veh/h	0	4307	0									
HCM Platoon Ratio	1.00	1.00	1.00									
Upstream Filter(I)	0.00	1.00	0.00									
Uniform Delay (d), s/veh	0.0	3.0	0.0									
Incr Delay (d2), s/veh	0.0	0.9	0.0									
Initial Q Delay(d3),s/veh	0.0	0.0	0.0									
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0									
LnGrp Delay(d),s/veh	0.0	3.9	0.0									
LnGrp LOS		A										
Approach Vol, veh/h		81										
Approach Delay, s/veh		3.9										
Approach LOS		A										

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		7.4						
Change Period (Y+Rc), s		6.5						
Max Green Setting (Gmax), s		17.5						
Max Q Clear Time (g_c+I1), s		2.3						
Green Ext Time (p_c), s		0.2						

Intersection Summary	
HCM 2010 Ctrl Delay	3.9
HCM 2010 LOS	A

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	87	93	939	654	339	119
Future Volume (veh/h)	87	93	939	654	339	119
Number	1	6	2	12	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1827	1827	1845	1827	1776
Adj Flow Rate, veh/h	96	102	1043	727	377	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	4	4	3	4	7
Cap, veh/h	112	1269	1269	1089	396	344
Arrive On Green	0.23	0.23	0.69	0.69	0.23	0.00
Sat Flow, veh/h	251	1827	1827	1568	1740	1509
Grp Volume(v), veh/h	96	102	1043	727	377	0
Grp Sat Flow(s),veh/h/ln	251	1827	1827	1568	1740	1509
Q Serve(g_s), s	51.9	7.9	73.2	47.5	38.5	0.0
Cycle Q Clear(g_c), s	125.0	7.9	73.2	47.5	38.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	112	1269	1269	1089	396	344
V/C Ratio(X)	0.85	0.08	0.82	0.67	0.95	0.00
Avail Cap(c_a), veh/h	112	1269	1269	1089	435	377
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	112.3	24.2	19.6	15.7	68.5	0.0
Incr Delay (d2), s/veh	52.3	0.1	6.1	3.2	29.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	4.0	38.7	21.4	21.8	0.0
LnGrp Delay(d),s/veh	164.6	24.4	25.7	18.9	98.3	0.0
LnGrp LOS	F	C	C	B	F	
Approach Vol, veh/h		198	1770		377	
Approach Delay, s/veh		92.4	22.9		98.3	
Approach LOS		F	C		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		132.0				132.0		48.0
Change Period (Y+Rc), s		7.0				7.0		7.0
Max Green Setting (Gmax), s		121.0				121.0		45.0
Max Q Clear Time (g_c+I1), s		75.2				127.0		40.5
Green Ext Time (p_c), s		25.1				0.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	875	0	0	450	393	0	0	0	358	0	48
Future Volume (veh/h)	173	875	0	0	450	393	0	0	0	358	0	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1827	1900	1863	1845	1863	1863	1863	1900	1743	1743	1845
Adj Flow Rate, veh/h	190	962	0	0	500	0	0	0	0	377	0	51
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	4	2	3	2	2	2	2	9	0	3
Cap, veh/h	679	2515	0	434	2539	1147	2	2	0	483	0	228
Arrive On Green	0.72	0.72	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.15	0.00	0.15
Sat Flow, veh/h	894	3563	0	1774	3505	1583	1774	1863	0	3320	0	1568
Grp Volume(v), veh/h	190	962	0	0	500	0	0	0	0	377	0	51
Grp Sat Flow(s),veh/h/ln	894	1736	0	1774	1752	1583	1774	1863	0	1660	0	1568
Q Serve(g_s), s	8.7	10.6	0.0	0.0	4.6	0.0	0.0	0.0	0.0	10.9	0.0	2.9
Cycle Q Clear(g_c), s	13.2	10.6	0.0	0.0	4.6	0.0	0.0	0.0	0.0	10.9	0.0	2.9
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	679	2515	0	434	2539	1147	2	2	0	483	0	228
V/C Ratio(X)	0.28	0.38	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.78	0.00	0.22
Avail Cap(c_a), veh/h	679	2515	0	556	2539	1147	124	130	0	1345	0	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.6	5.2	0.0	0.0	4.4	0.0	0.0	0.0	0.0	41.2	0.0	37.7
Incr Delay (d2), s/veh	1.0	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.1	0.0	0.0	2.3	0.0	0.0	0.0	0.0	5.2	0.0	1.3
LnGrp Delay(d),s/veh	7.6	5.7	0.0	0.0	4.6	0.0	0.0	0.0	0.0	44.0	0.0	38.2
LnGrp LOS	A	A			A					D		D
Approach Vol, veh/h		1152			500			0			428	
Approach Delay, s/veh		6.0			4.6			0.0			43.3	
Approach LOS		A			A						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	79.0		21.0		79.0		0.0
Change Period (Y+Rc), s	6.5	* 6.5		6.5		6.5		6.0
Max Green Setting (Gmax), s	7.0	* 22		40.5		33.5		7.0
Max Q Clear Time (g_c+I1), s	10.0	15.2		12.9		6.6		0.0
Green Ext Time (p_c), s	0.0	5.1		1.6		13.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	357	876	0	0	765	673	78	0	385	0	0	0
Future Volume (veh/h)	357	876	0	0	765	673	78	0	385	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1776	1900	1900	1845	1776	1900	1759	1863			
Adj Flow Rate, veh/h	397	973	0	0	850	0	87	0	0			
Adj No. of Lanes	1	2	0	0	2	1	0	1	1			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Percent Heavy Veh, %	3	7	7	3	3	7	2	0	2			
Cap, veh/h	890	2740	0	0	1079	464	114	0	107			
Arrive On Green	0.89	1.00	0.00	0.00	0.21	0.00	0.07	0.00	0.00			
Sat Flow, veh/h	1757	3463	0	0	3597	1509	1675	0	1583			
Grp Volume(v), veh/h	397	973	0	0	850	0	87	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1687	0	0	1752	1509	1675	0	1583			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	23.0	0.0	5.1	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	23.0	0.0	5.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	890	2740	0	0	1079	464	114	0	107			
V/C Ratio(X)	0.45	0.36	0.00	0.00	0.79	0.00	0.77	0.00	0.00			
Avail Cap(c_a), veh/h	890	2740	0	0	1332	574	436	0	412			
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00			
Upstream Filter(I)	0.84	0.84	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.8	0.0	0.0	0.0	36.6	0.0	45.8	0.0	0.0			
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.0	0.3	0.0	10.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.0	0.0	11.2	0.0	2.7	0.0	0.0			
LnGrp Delay(d),s/veh	3.1	0.3	0.0	0.0	36.9	0.0	56.1	0.0	0.0			
LnGrp LOS	A	A			D		E					
Approach Vol, veh/h		1370			850			87				
Approach Delay, s/veh		1.1			36.9			56.1				
Approach LOS		A			D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		87.2			50.4	36.8		12.8
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		62.0			18.0	38.0		26.0
Max Q Clear Time (g_c+I1), s		2.0			2.0	25.0		7.1
Green Ext Time (p_c), s		14.2			8.6	5.8		0.3

Intersection Summary		
HCM 2010 Ctrl Delay		16.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	766	271	272	663	337	373	2275	770	461	1281	401
Future Volume (veh/h)	224	766	271	272	663	337	373	2275	770	461	1281	401
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1812	1827	1845	1787	1810	1827	1863	1881	1863	1863	1881
Adj Flow Rate, veh/h	249	851	301	302	737	374	405	2473	0	501	1392	436
Adj No. of Lanes	1	2	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	5	4	3	7	5	4	2	1	2	2	1
Cap, veh/h	235	471	202	369	751	323	844	2238	704	310	1454	457
Arrive On Green	0.09	0.09	0.09	0.21	0.21	0.21	0.25	0.44	0.00	0.09	0.29	0.29
Sat Flow, veh/h	1810	3624	1553	1757	3574	1538	3375	5085	1599	3442	5085	1599
Grp Volume(v), veh/h	249	851	301	302	737	374	405	2473	0	501	1392	436
Grp Sat Flow(s),veh/h/ln	1810	1812	1553	1757	1787	1538	1688	1695	1599	1721	1695	1599
Q Serve(g_s), s	13.0	13.0	13.0	16.4	20.5	21.0	10.2	44.0	0.0	9.0	26.9	26.8
Cycle Q Clear(g_c), s	13.0	13.0	13.0	16.4	20.5	21.0	10.2	44.0	0.0	9.0	26.9	26.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	471	202	369	751	323	844	2238	704	310	1454	457
V/C Ratio(X)	1.06	1.81	1.49	0.82	0.98	1.16	0.48	1.11	0.00	1.62	0.96	0.95
Avail Cap(c_a), veh/h	235	471	202	369	751	323	844	2238	704	310	1454	457
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	45.6	45.6	37.7	39.3	39.5	32.0	28.0	0.0	45.5	35.1	35.0
Incr Delay (d2), s/veh	68.2	369.4	240.4	14.1	28.3	100.1	0.4	54.7	0.0	292.3	15.4	31.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	30.7	19.1	9.4	13.1	17.9	4.8	31.8	0.0	16.8	14.6	15.8
LnGrp Delay(d),s/veh	113.8	415.1	286.1	51.7	67.6	139.6	32.4	82.7	0.0	337.8	50.5	67.0
LnGrp LOS	F	F	F	D	E	F	C	F		F	D	E
Approach Vol, veh/h		1401			1413			2878			2329	
Approach Delay, s/veh		333.8			83.3			75.6			115.4	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.5	35.0		29.0	16.0	51.5		21.0
Change Period (Y+Rc), s	7.0	6.4		8.0	7.0	* 7		8.0
Max Green Setting (Gmax), s	8.0	28.6		21.0	9.0	* 28		13.0
Max Q Clear Time (g_c+I1), s	12.2	28.9		23.0	11.0	46.0		15.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	133.6
HCM 2010 LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	4	26	10	128	3	114	220	33	4	1	366	396
Future Volume (veh/h)	4	26	10	128	3	114	220	33	4	1	366	396
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1761	1712	1863	1850	1900	1900	1810	1827
Adj Flow Rate, veh/h	4	29	11	142	3	0	244	37	4	1	389	421
Adj No. of Lanes	0	2	0	0	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	50	50	11	2	3	3	0	5	4
Cap, veh/h	52	334	116	200	3	201	508	1287	139	999	1251	1074
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.00	0.05	0.78	0.78	0.46	0.46	0.46
Sat Flow, veh/h	209	2412	839	1163	25	1455	1774	1641	177	1388	1810	1553
Grp Volume(v), veh/h	23	0	21	145	0	0	244	0	41	1	389	421
Grp Sat Flow(s),veh/h/ln	1879	0	1581	1187	0	1455	1774	0	1819	1388	1810	1553
Q Serve(g_s), s	0.0	0.0	2.1	19.8	0.0	0.0	7.0	0.0	0.9	0.1	24.3	32.0
Cycle Q Clear(g_c), s	1.9	0.0	2.1	21.9	0.0	0.0	7.0	0.0	0.9	0.1	24.3	32.0
Prop In Lane	0.17		0.53	0.98		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	219	204	0	201	508	0	1426	999	1251	1074
V/C Ratio(X)	0.08	0.00	0.09	0.71	0.00	0.00	0.48	0.00	0.03	0.00	0.31	0.39
Avail Cap(c_a), veh/h	534	0	439	384	0	404	699	0	1426	999	1251	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	0.82	0.00	0.00	1.00	0.00	1.00	0.55	0.55	0.55
Uniform Delay (d), s/veh	67.7	0.0	67.7	77.3	0.0	0.0	9.2	0.0	4.3	14.9	21.4	23.5
Incr Delay (d2), s/veh	0.1	0.0	0.2	3.8	0.0	0.0	0.7	0.0	0.0	0.0	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.9	7.3	0.0	0.0	3.5	0.0	0.5	0.0	12.3	13.9
LnGrp Delay(d),s/veh	67.8	0.0	67.9	81.0	0.0	0.0	9.9	0.0	4.3	14.9	21.8	24.1
LnGrp LOS	E		E	F			A		A	B	C	C
Approach Vol, veh/h		44			145			285			811	
Approach Delay, s/veh		67.8			81.0			9.1			23.0	
Approach LOS		E			F			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	16.7	131.4		31.9		148.1		31.9
Change Period (Y+Rc), s	7.0	7.0		7.0		7.0		7.0
Max Green Setting (Gmax), s	29.0	80.0		50.0		116.0		50.0
Max Q Clear Time (g_c+I1), s	9.0	34.0		4.1		2.9		23.9
Green Ext Time (p_c), s	0.7	4.8		1.1		4.8		1.0

Intersection Summary		
HCM 2010 Ctrl Delay		28.0
HCM 2010 LOS		C

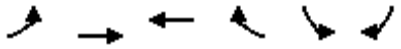
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	785	14	23	282	119	24	22	146	290	8	35
Future Volume (veh/h)	55	785	14	23	282	119	24	22	146	290	8	35
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1863	1900	1900	1686	1900	1900	1900	1900	1759	1900	1827
Adj Flow Rate, veh/h	61	872	16	26	313	132	27	24	162	322	9	39
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	12	2	2	0	10	10	0	0	0	8	0	4
Cap, veh/h	267	867	16	179	416	172	239	251	214	372	422	482
Arrive On Green	0.09	0.24	0.24	0.04	0.19	0.19	0.13	0.13	0.13	0.22	0.22	0.22
Sat Flow, veh/h	1616	3557	65	1810	2213	914	1810	1900	1615	1675	1900	1553
Grp Volume(v), veh/h	61	434	454	26	225	220	27	24	162	322	9	39
Grp Sat Flow(s),veh/h/ln	1616	1770	1852	1810	1602	1525	1810	1900	1615	1675	1900	1553
Q Serve(g_s), s	0.0	16.5	16.5	0.9	9.0	9.3	0.9	0.8	6.5	12.5	0.3	0.0
Cycle Q Clear(g_c), s	0.0	16.5	16.5	0.9	9.0	9.3	0.9	0.8	6.5	12.5	0.3	0.0
Prop In Lane	1.00		0.04	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	432	451	179	301	287	239	251	214	372	422	482
V/C Ratio(X)	0.23	1.01	1.01	0.15	0.75	0.77	0.11	0.10	0.76	0.87	0.02	0.08
Avail Cap(c_a), veh/h	292	432	451	294	391	372	615	646	549	470	533	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	25.6	25.6	26.3	25.9	26.1	25.9	25.8	28.3	25.4	20.6	16.5
Incr Delay (d2), s/veh	0.4	44.7	43.8	0.4	6.8	8.3	0.2	0.2	5.4	13.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	13.3	13.8	0.4	4.5	4.6	0.5	0.4	3.2	7.1	0.1	0.5
LnGrp Delay(d),s/veh	28.3	70.3	69.4	26.7	32.8	34.4	26.1	26.0	33.8	38.3	20.6	16.6
LnGrp LOS	C	F	F	C	C	C	C	C	C	D	C	B
Approach Vol, veh/h		949			471			213			370	
Approach Delay, s/veh		67.2			33.2			31.9			35.6	
Approach LOS		E			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	23.0		21.0	12.5	19.2		15.0
Change Period (Y+Rc), s	6.0	6.5		6.0	6.5	* 6.5		6.0
Max Green Setting (Gmax), s	7.0	16.5		19.0	7.0	* 17		23.0
Max Q Clear Time (g_c+I1), s	2.9	18.5		14.5	2.0	11.3		8.5
Green Ext Time (p_c), s	0.0	0.0		0.5	2.8	1.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	49.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	803	309	577	126	115
Future Volume (veh/h)	0	803	309	577	126	115
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1696	1881	1810	1696
Adj Flow Rate, veh/h	0	882	343	0	140	0
Adj No. of Lanes	0	2	2	1	2	1
Peak Hour Factor	0.91	0.91	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	3	12	1	5	12
Cap, veh/h	0	2686	2470	1225	280	121
Arrive On Green	0.00	0.77	0.77	0.00	0.08	0.00
Sat Flow, veh/h	0	3689	3308	1599	3343	1442
Grp Volume(v), veh/h	0	882	343	0	140	0
Grp Sat Flow(s),veh/h/ln	0	1752	1612	1599	1672	1442
Q Serve(g_s), s	0.0	6.3	2.2	0.0	3.2	0.0
Cycle Q Clear(g_c), s	0.0	6.3	2.2	0.0	3.2	0.0
Prop In Lane	0.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2686	2470	1225	280	121
V/C Ratio(X)	0.00	0.33	0.14	0.00	0.50	0.00
Avail Cap(c_a), veh/h	0	2686	2470	1225	334	144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.95	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	2.9	2.4	0.0	35.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	1.0	0.0	1.5	0.0
LnGrp Delay(d),s/veh	0.0	2.9	2.6	0.0	36.4	0.0
LnGrp LOS		A	A		D	
Approach Vol, veh/h		882	343		140	
Approach Delay, s/veh		2.9	2.6		36.4	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		67.3		12.7		67.3		
Change Period (Y+Rc), s		6.0		6.0		6.0		
Max Green Setting (Gmax), s		26.0		8.0		28.0		
Max Q Clear Time (g_c+I1), s		8.3		5.2		4.2		
Green Ext Time (p_c), s		9.7		0.1		11.5		

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	360	569	0	763	123	351
Future Volume (veh/h)	360	569	0	763	123	351
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1863	0	1863	1557	1863
Adj Flow Rate, veh/h	400	0	0	848	132	0
Adj No. of Lanes	2	1	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.93	0.93
Percent Heavy Veh, %	5	2	0	2	22	2
Cap, veh/h	2595	1195	0	2671	238	131
Arrive On Green	0.75	0.00	0.00	0.75	0.08	0.00
Sat Flow, veh/h	3529	1583	0	3725	2877	1583
Grp Volume(v), veh/h	400	0	0	848	132	0
Grp Sat Flow(s),veh/h/ln	1719	1583	0	1770	1439	1583
Q Serve(g_s), s	2.6	0.0	0.0	6.2	3.5	0.0
Cycle Q Clear(g_c), s	2.6	0.0	0.0	6.2	3.5	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2595	1195	0	2671	238	131
V/C Ratio(X)	0.15	0.00	0.00	0.32	0.55	0.00
Avail Cap(c_a), veh/h	2595	1195	0	2671	917	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.00	0.00	0.27	1.00	0.00
Uniform Delay (d), s/veh	2.7	0.0	0.0	3.2	35.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	3.0	1.5	0.0
LnGrp Delay(d),s/veh	2.8	0.0	0.0	3.2	37.3	0.0
LnGrp LOS	A			A	D	
Approach Vol, veh/h	400			848	132	
Approach Delay, s/veh	2.8			3.2	37.3	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		66.9				66.9		13.1
Change Period (Y+Rc), s		6.5				6.5		6.5
Max Green Setting (Gmax), s		41.5				41.5		25.5
Max Q Clear Time (g_c+I1), s		4.6				8.2		5.5
Green Ext Time (p_c), s		14.3				13.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	571	140	314	2082	1516	935
Future Volume (veh/h)	571	140	314	2082	1516	935
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1792	1863	1863	1845	1863
Adj Flow Rate, veh/h	614	151	341	2263	1684	1039
Adj No. of Lanes	2	1	2	3	4	1
Peak Hour Factor	0.93	0.93	0.92	0.92	0.90	0.90
Percent Heavy Veh, %	4	6	2	2	3	2
Cap, veh/h	675	305	1819	5204	2626	655
Arrive On Green	0.20	0.20	0.53	1.00	0.41	0.41
Sat Flow, veh/h	3375	1524	3442	5253	6604	1583
Grp Volume(v), veh/h	614	151	341	2263	1684	1039
Grp Sat Flow(s),veh/h/ln	1688	1524	1721	1695	1586	1583
Q Serve(g_s), s	14.2	7.0	4.1	0.0	16.9	33.1
Cycle Q Clear(g_c), s	14.2	7.0	4.1	0.0	16.9	33.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	675	305	1819	5204	2626	655
V/C Ratio(X)	0.91	0.50	0.19	0.43	0.64	1.59
Avail Cap(c_a), veh/h	675	305	1819	5204	2626	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	28.4	9.9	0.0	18.7	23.5
Incr Delay (d2), s/veh	15.2	1.1	0.0	0.3	1.2	270.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	3.0	2.0	0.1	7.6	63.7
LnGrp Delay(d),s/veh	46.5	29.5	9.9	0.3	19.9	294.4
LnGrp LOS	D	C	A	A	B	F
Approach Vol, veh/h	765			2604	2723	
Approach Delay, s/veh	43.1			1.5	124.7	
Approach LOS	D			A	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	51.6	39.6				91.2		25.0
Change Period (Y+Rc), s	9.0	* 6.5				9.0		9.0
Max Green Setting (Gmax), s	38.3	* 33				46.0		16.0
Max Q Clear Time (g_c+I1), s	16.1	35.1				2.0		16.2
Green Ext Time (p_c), s	0.5	0.0				29.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	61.8
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	720	416	82	328	42
Future Vol, veh/h	21	720	416	82	328	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	-	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	783	452	89	357	46

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	437	0
Stage 1	-	-	0	-
Stage 2	-	-	437	-
Critical Hdwy	4.14	-	7.54	6.94
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.54	-
Follow-up Hdwy	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	503	-
Stage 1	-	-	-	-
Stage 2	-	-	568	-
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	503	-
Mov Cap-2 Maneuver	-	-	503	-
Stage 1	-	-	-	-
Stage 2	-	-	568	-

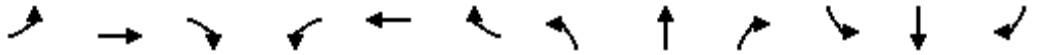
Approach	EB	SB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	EBL	EBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

4.2.3 Design Year Build Alternatives

4.2.3.1 Glenn McConnell Parkway

4.2.3.1.1 Alternative 1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1102	947	0	2686	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1102	947	0	2686	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1863	0	1863	0			
Adj Flow Rate, veh/h				0	1160	0	0	2827	0			
Adj No. of Lanes				0	2	1	0	3	0			
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %				0	1	2	0	2	0			
Cap, veh/h				0	1751	776	0	2187	0			
Arrive On Green				0.00	0.49	0.00	0.00	0.43	0.00			
Sat Flow, veh/h				0	3668	1583	0	5421	0			
Grp Volume(v), veh/h				0	1160	0	0	2827	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1583	0	1695	0			
Q Serve(g_s), s				0.0	36.8	0.0	0.0	64.5	0.0			
Cycle Q Clear(g_c), s				0.0	36.8	0.0	0.0	64.5	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	1751	776	0	2187	0			
V/C Ratio(X)				0.00	0.66	0.00	0.00	1.29	0.00			
Avail Cap(c_a), veh/h				0	1751	776	0	2187	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	28.9	0.0	0.0	42.7	0.0			
Incr Delay (d2), s/veh				0.0	2.0	0.0	0.0	135.3	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	18.5	0.0	0.0	57.6	0.0			
LnGrp Delay(d),s/veh				0.0	30.9	0.0	0.0	178.1	0.0			
LnGrp LOS					C			F				
Approach Vol, veh/h					1160			2827				
Approach Delay, s/veh					30.9			178.1				
Approach LOS					C			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		79.0		71.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		73.5		64.5				
Max Q Clear Time (g_c+I1), s		38.8		66.5				
Green Ext Time (p_c), s		15.2		0.0				

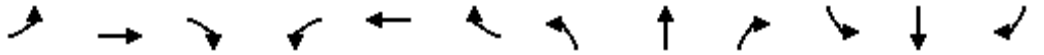
Intersection Summary	
HCM 2010 Ctrl Delay	135.2
HCM 2010 LOS	F

Intersection: 5: Paul Cantrell Blvd & I-526 EB Ramps

Movement	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	T	T
Maximum Queue (ft)	1089	1114	1115	1390	1391	1384
Average Queue (ft)	918	1077	1087	1358	1359	1358
95th Queue (ft)	1327	1239	1116	1375	1378	1375
Link Distance (ft)	1070	1070	1070	1338	1338	1338
Upstream Blk Time (%)	9	70	84	73	74	73
Queuing Penalty (veh)	0	0	0	0	0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1978	1055	0	1477	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1978	1055	0	1477	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1845	0	1810	0			
Adj Flow Rate, veh/h				0	2174	0	0	1641	0			
Adj No. of Lanes				0	2	1	0	3	0			
Peak Hour Factor				0.91	0.91	0.91	0.90	0.90	0.90			
Percent Heavy Veh, %				0	1	3	0	5	0			
Cap, veh/h				0	2252	988	0	1433	0			
Arrive On Green				0.00	0.63	0.00	0.00	0.29	0.00			
Sat Flow, veh/h				0	3668	1568	0	5266	0			
Grp Volume(v), veh/h				0	2174	0	0	1641	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1568	0	1647	0			
Q Serve(g_s), s				0.0	86.2	0.0	0.0	43.5	0.0			
Cycle Q Clear(g_c), s				0.0	86.2	0.0	0.0	43.5	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	2252	988	0	1433	0			
V/C Ratio(X)				0.00	0.97	0.00	0.00	1.15	0.00			
Avail Cap(c_a), veh/h				0	2252	988	0	1433	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	26.2	0.0	0.0	53.3	0.0			
Incr Delay (d2), s/veh				0.0	12.4	0.0	0.0	74.2	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	46.2	0.0	0.0	29.6	0.0			
LnGrp Delay(d),s/veh				0.0	38.6	0.0	0.0	127.4	0.0			
LnGrp LOS					D			F				
Approach Vol, veh/h					2174			1641				
Approach Delay, s/veh					38.6			127.4				
Approach LOS					D			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		100.0		50.0				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		94.5		43.5				
Max Q Clear Time (g_c+I1), s		88.2		45.5				
Green Ext Time (p_c), s		6.1		0.0				

Intersection Summary	
HCM 2010 Ctrl Delay	76.8
HCM 2010 LOS	E

Intersection: 5: Paul Cantrell Blvd & I-526 EB Ramps

Movement	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	T	T
Maximum Queue (ft)	1155	1170	1173	768	741	680
Average Queue (ft)	1001	1136	1142	556	534	478
95th Queue (ft)	1362	1267	1217	855	821	754
Link Distance (ft)	1128	1128	1128	1459	1459	1459
Upstream Blk Time (%)	5	50	56			
Queuing Penalty (veh)	0	0	0			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

4.2.3.1.2 Alternative 3

Movement	EBL	EBR	NBL	NBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (veh/h)	0	0	1310	0	0	4949	0	0	0	0
Future Volume (veh/h)	0	0	1310	0	0	4949	0	0	0	0
Number			3	18	5	2	12			
Initial Q (Qb), veh			0	0	0	0	0			
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00		1.00			
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln			1863	0	0	1863	0			
Adj Flow Rate, veh/h			1310	0	0	4949	0			
Adj No. of Lanes			3	0	0	4	0			
Peak Hour Factor			1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %			2	0	0	2	0			
Cap, veh/h			0	0	0	6194	0			
Arrive On Green			0.00	0.00	0.00	0.97	0.00			
Sat Flow, veh/h			0		0	6929	0			
Grp Volume(v), veh/h			0.0		0	4949	0			
Grp Sat Flow(s),veh/h/ln					0	1602	0			
Q Serve(g_s), s					0.0	20.4	0.0			
Cycle Q Clear(g_c), s					0.0	20.4	0.0			
Prop In Lane					0.00		0.00			
Lane Grp Cap(c), veh/h					0	6194	0			
V/C Ratio(X)					0.00	0.80	0.00			
Avail Cap(c_a), veh/h					0	6194	0			
HCM Platoon Ratio					1.00	1.00	1.00			
Upstream Filter(I)					0.00	1.00	0.00			
Uniform Delay (d), s/veh					0.0	0.4	0.0			
Incr Delay (d2), s/veh					0.0	1.1	0.0			
Initial Q Delay(d3),s/veh					0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln					0.0	8.1	0.0			
LnGrp Delay(d),s/veh					0.0	1.6	0.0			
LnGrp LOS						A				
Approach Vol, veh/h						4949				
Approach Delay, s/veh						1.6				
Approach LOS						A				

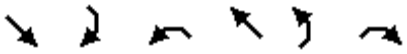
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		180.0						
Change Period (Y+Rc), s		6.0						
Max Green Setting (Gmax), s		128.0						
Max Q Clear Time (g_c+I1), s		22.4						
Green Ext Time (p_c), s		104.8						

Intersection Summary	
HCM 2010 Ctrl Delay	1.6
HCM 2010 LOS	A

Movement	WBL	WBR	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (veh/h)	0	0	3030	0	0	0	0	0	1102	0
Future Volume (veh/h)	0	0	3030	0	0	0	0	0	1102	0
Number			7	14				1	6	16
Initial Q (Qb), veh			0	0				0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00				1.00		1.00
Parking Bus, Adj			1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0				0	1863	0
Adj Flow Rate, veh/h			3030	0				0	1102	0
Adj No. of Lanes			3	0				0	3	0
Peak Hour Factor			1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %			2	0				0	2	0
Cap, veh/h			0	0				0	4916	0
Arrive On Green			0.00	0.00				0.00	0.97	0.00
Sat Flow, veh/h			0					0	5421	0
Grp Volume(v), veh/h			0.0					0	1102	0
Grp Sat Flow(s),veh/h/ln								0	1695	0
Q Serve(g_s), s								0.0	1.7	0.0
Cycle Q Clear(g_c), s								0.0	1.7	0.0
Prop In Lane								0.00		0.00
Lane Grp Cap(c), veh/h								0	4916	0
V/C Ratio(X)								0.00	0.22	0.00
Avail Cap(c_a), veh/h								0	4916	0
HCM Platoon Ratio								1.00	1.00	1.00
Upstream Filter(I)								0.00	1.00	0.00
Uniform Delay (d), s/veh								0.0	0.1	0.0
Incr Delay (d2), s/veh								0.0	0.1	0.0
Initial Q Delay(d3),s/veh								0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln								0.0	0.8	0.0
LnGrp Delay(d),s/veh								0.0	0.2	0.0
LnGrp LOS									A	
Approach Vol, veh/h									1102	
Approach Delay, s/veh									0.2	
Approach LOS									A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						180.0		
Change Period (Y+Rc), s						6.0		
Max Green Setting (Gmax), s						49.0		
Max Q Clear Time (g_c+I1), s						3.7		
Green Ext Time (p_c), s						5.2		

Intersection Summary	
HCM 2010 Ctrl Delay	0.2
HCM 2010 LOS	A



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	767	0	0	0	0	4949
Future Volume (veh/h)	767	0	0	0	0	4949
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	767	0			0	4949
Adj No. of Lanes	3	0			0	4
Peak Hour Factor	1.00	1.00			1.00	1.00
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	877	0			0	0
Arrive On Green	0.17	0.00			0.00	0.00
Sat Flow, veh/h	5421	0			0	
Grp Volume(v), veh/h	767	0			0.0	
Grp Sat Flow(s),veh/h/ln	1695	0				
Q Serve(g_s), s	26.5	0.0				
Cycle Q Clear(g_c), s	26.5	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	877	0				
V/C Ratio(X)	0.87	0.00				
Avail Cap(c_a), veh/h	1130	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	72.6	0.0				
Incr Delay (d2), s/veh	6.4	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	12.9	0.0				
LnGrp Delay(d),s/veh	79.0	0.0				
LnGrp LOS	E					
Approach Vol, veh/h	767					
Approach Delay, s/veh	79.0					
Approach LOS	E					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				35.5				
Change Period (Y+Rc), s				4.5				
Max Green Setting (Gmax), s				40.0				
Max Q Clear Time (g_c+I1), s				28.5				
Green Ext Time (p_c), s				2.6				

Intersection Summary	
HCM 2010 Ctrl Delay	79.0
HCM 2010 LOS	E

Movement	NBL	NBR	SEL	SER	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	208	0	0	0	0	1102
Future Volume (veh/h)	208	0	0	0	0	1102
Number	7	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	208	0			0	1102
Adj No. of Lanes	2	0			0	3
Peak Hour Factor	1.00	1.00			1.00	1.00
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	0	0			0	0
Arrive On Green	0.00	0.00			0.00	0.00
Sat Flow, veh/h	0				0	
Grp Volume(v), veh/h	0.0				0.0	
Grp Sat Flow(s),veh/h/ln						
Q Serve(g_s), s						
Cycle Q Clear(g_c), s						
Prop In Lane						
Lane Grp Cap(c), veh/h						
V/C Ratio(X)						
Avail Cap(c_a), veh/h						
HCM Platoon Ratio						
Upstream Filter(I)						
Uniform Delay (d), s/veh						
Incr Delay (d2), s/veh						
Initial Q Delay(d3),s/veh						
%ile BackOfQ(50%),veh/ln						
LnGrp Delay(d),s/veh						
LnGrp LOS						
Approach Vol, veh/h						
Approach Delay, s/veh						
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs								
Phs Duration (G+Y+Rc), s								
Change Period (Y+Rc), s								
Max Green Setting (Gmax), s								
Max Q Clear Time (g_c+I1), s								
Green Ext Time (p_c), s								

Intersection Summary	
HCM 2010 Ctrl Delay	0.0
HCM 2010 LOS	A

Intersection: 4: Glenn McConnell EB & Glenn McConnell WB

Movement	NB	NB	NB	B1761	B1761	B1761	NE	NE	NE	NE
Directions Served	L	L	L	T	T	T	T	T	T	T
Maximum Queue (ft)	119	97	94	514	518	512	151	164	154	167
Average Queue (ft)	94	84	73	461	469	468	128	138	120	149
95th Queue (ft)	109	94	91	565	570	577	141	153	177	182
Link Distance (ft)	39	39	39	486	486	486	86	86	86	86
Upstream Blk Time (%)	78	78	78	9	10	11	50	56	24	28
Queuing Penalty (veh)	340	341	341	37	44	47	616	693	297	352
Storage Bay Dist (ft)										
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 5: Glenn McConnell WB Thru & Glenn McConnell EB & Glenn McConnell EB Thru

Movement	SE	SE	SE	SW	SW	SW
Directions Served	L	L	L	T	T	T
Maximum Queue (ft)	134	127	131	160	174	184
Average Queue (ft)	108	110	107	141	150	157
95th Queue (ft)	149	118	117	151	159	178
Link Distance (ft)	58	58	58	99	99	99
Upstream Blk Time (%)	25	32	33	81	81	77
Queuing Penalty (veh)	248	320	334	298	296	283
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 86: I-526 WB Off-Ramp

Movement	SE	SE	SE	NE	NE	NE
Directions Served	T	T	T	R	R	R
Maximum Queue (ft)	136	140	150	64	63	60
Average Queue (ft)	116	117	115	30	39	11
95th Queue (ft)	127	130	135	62	73	44
Link Distance (ft)	111	111	111	39	39	39
Upstream Blk Time (%)	58	50	38	1	8	1
Queuing Penalty (veh)	148	127	98	14	93	15
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 87: I-526 EB Off-Ramp & Glenn McConnell WB Thru

Movement	NB	NB	SW	SW	SW
Directions Served	L	L	R	R	R
Maximum Queue (ft)	94	93	135	142	135
Average Queue (ft)	56	30	95	93	93
95th Queue (ft)	99	82	168	169	168
Link Distance (ft)	90	90	114	114	114
Upstream Blk Time (%)	5	1	7	8	7
Queuing Penalty (veh)	5	1	27	28	27
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 249:

Movement	EB	EB	NB
Directions Served	L	L	T
Maximum Queue (ft)	225	245	180
Average Queue (ft)	186	204	90
95th Queue (ft)	253	264	202
Link Distance (ft)	150	150	91
Upstream Blk Time (%)	28	50	5
Queuing Penalty (veh)	376	671	44
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 251: Glenn McConnell EB Thru

Movement	EB	EB	EB	EB	EB
Directions Served	T	T	R	R	R
Maximum Queue (ft)	562	570	554	529	469
Average Queue (ft)	425	442	369	321	287
95th Queue (ft)	735	744	640	539	451
Link Distance (ft)	519	519	519	519	519
Upstream Blk Time (%)	3	7	1	0	0
Queuing Penalty (veh)	35	78	16	4	1
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 252: I-526 EB Off Ramp & Glenn McConnell EB

Movement	EB	SE
Directions Served	T	L
Maximum Queue (ft)	87	4
Average Queue (ft)	23	0
95th Queue (ft)	62	3
Link Distance (ft)	186	121
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 253: I-526 WB Off-Ramp & I-526 WB Off Ramp

Movement	WB	WB	WB
Directions Served	L	L	T
Maximum Queue (ft)	479	440	78
Average Queue (ft)	262	237	3
95th Queue (ft)	433	410	55
Link Distance (ft)	1211	1211	1211
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 254: I-526 EB Off Ramp & I-526 EB Off-Ramp

Movement	NE	NE
Directions Served	L	L
Maximum Queue (ft)	72	12
Average Queue (ft)	6	0
95th Queue (ft)	36	7
Link Distance (ft)	1013	1013
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 255: Glenn McConnell WB Thru

Movement	WB	WB	WB	WB
Directions Served	T	T	T	R
Maximum Queue (ft)	1500	1577	1610	600
Average Queue (ft)	886	1009	1031	369
95th Queue (ft)	1675	1965	2034	840
Link Distance (ft)	1615	1615	1615	
Upstream Blk Time (%)	1	12	36	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				500
Storage Blk Time (%)			48	0
Queuing Penalty (veh)			458	0

Intersection: 256: Glenn McConnell EB

Movement	EB	EB	EB	EB	EB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	1886	1888	1887	1882	1866
Average Queue (ft)	1852	1857	1854	1851	1828
95th Queue (ft)	1869	1878	1874	1867	1917
Link Distance (ft)	1832	1832	1832	1832	1832
Upstream Blk Time (%)	44	85	85	59	9
Queuing Penalty (veh)	0	0	0	0	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 257: Glenn McConnell WB & I-526 WB Off Ramp

Movement	NB	NB
Directions Served	L	L
Maximum Queue (ft)	20	14
Average Queue (ft)	1	0
95th Queue (ft)	15	10
Link Distance (ft)	91	91
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 7154

Movement	EBL	EBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (veh/h)	0	0	2743	0	0	2540	0	0	0	0
Future Volume (veh/h)	0	0	2743	0	0	2540	0	0	0	0
Number			3	18	5	2	12			
Initial Q (Qb), veh			0	0	0	0	0			
Ped-Bike Adj(A_pbT)			1.00	1.00	1.00		1.00			
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln			1863	0	0	1863	0			
Adj Flow Rate, veh/h			2743	0	0	2540	0			
Adj No. of Lanes			3	0	0	4	0			
Peak Hour Factor			1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %			2	0	0	2	0			
Cap, veh/h			0	0	0	5927	0			
Arrive On Green			0.00	0.00	0.00	0.93	0.00			
Sat Flow, veh/h			0		0	6929	0			
Grp Volume(v), veh/h			0.0		0	2540	0			
Grp Sat Flow(s),veh/h/ln					0	1602	0			
Q Serve(g_s), s					0.0	3.9	0.0			
Cycle Q Clear(g_c), s					0.0	3.9	0.0			
Prop In Lane					0.00		0.00			
Lane Grp Cap(c), veh/h					0	5927	0			
V/C Ratio(X)					0.00	0.43	0.00			
Avail Cap(c_a), veh/h					0	5927	0			
HCM Platoon Ratio					1.00	1.00	1.00			
Upstream Filter(I)					0.00	1.00	0.00			
Uniform Delay (d), s/veh					0.0	0.4	0.0			
Incr Delay (d2), s/veh					0.0	0.2	0.0			
Initial Q Delay(d3),s/veh					0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln					0.0	1.7	0.0			
LnGrp Delay(d),s/veh					0.0	0.6	0.0			
LnGrp LOS						A				
Approach Vol, veh/h						2540				
Approach Delay, s/veh						0.6				
Approach LOS						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		80.0						
Change Period (Y+Rc), s		6.0						
Max Green Setting (Gmax), s		29.0						
Max Q Clear Time (g_c+I1), s		5.9						
Green Ext Time (p_c), s		15.0						

Intersection Summary	
HCM 2010 Ctrl Delay	0.6
HCM 2010 LOS	A

Movement	WBL	WBR	SEL	SER	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (veh/h)	0	0	1950	0	0	0	0	0	1978	0
Future Volume (veh/h)	0	0	1950	0	0	0	0	0	1978	0
Number			7	14				1	6	16
Initial Q (Qb), veh			0	0				0	0	0
Ped-Bike Adj(A_pbT)			1.00	1.00				1.00		1.00
Parking Bus, Adj			1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0				0	1863	0
Adj Flow Rate, veh/h			1950	0				0	1978	0
Adj No. of Lanes			3	0				0	3	0
Peak Hour Factor			1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %			2	0				0	2	0
Cap, veh/h			0	0				0	4704	0
Arrive On Green			0.00	0.00				0.00	0.93	0.00
Sat Flow, veh/h			0					0	5421	0
Grp Volume(v), veh/h			0.0					0	1978	0
Grp Sat Flow(s),veh/h/ln								0	1695	0
Q Serve(g_s), s								0.0	3.8	0.0
Cycle Q Clear(g_c), s								0.0	3.8	0.0
Prop In Lane								0.00		0.00
Lane Grp Cap(c), veh/h								0	4704	0
V/C Ratio(X)								0.00	0.42	0.00
Avail Cap(c_a), veh/h								0	4704	0
HCM Platoon Ratio								1.00	1.00	1.00
Upstream Filter(I)								0.00	1.00	0.00
Uniform Delay (d), s/veh								0.0	0.4	0.0
Incr Delay (d2), s/veh								0.0	0.3	0.0
Initial Q Delay(d3),s/veh								0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln								0.0	1.8	0.0
LnGrp Delay(d),s/veh								0.0	0.6	0.0
LnGrp LOS									A	
Approach Vol, veh/h									1978	
Approach Delay, s/veh									0.6	
Approach LOS									A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						80.0		
Change Period (Y+Rc), s						6.0		
Max Green Setting (Gmax), s						35.0		
Max Q Clear Time (g_c+I1), s						5.8		
Green Ext Time (p_c), s						11.6		

Intersection Summary	
HCM 2010 Ctrl Delay	0.6
HCM 2010 LOS	A

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	887	0	0	0	0	2540
Future Volume (veh/h)	887	0	0	0	0	2540
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	887	0			0	2540
Adj No. of Lanes	3	0			0	4
Peak Hour Factor	1.00	1.00			1.00	1.00
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	1048	0			0	0
Arrive On Green	0.21	0.00			0.00	0.00
Sat Flow, veh/h	5421	0			0	
Grp Volume(v), veh/h	887	0			0.0	
Grp Sat Flow(s),veh/h/ln	1695	0				
Q Serve(g_s), s	13.4	0.0				
Cycle Q Clear(g_c), s	13.4	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	1048	0				
V/C Ratio(X)	0.85	0.00				
Avail Cap(c_a), veh/h	1144	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	30.5	0.0				
Incr Delay (d2), s/veh	5.7	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	6.8	0.0				
LnGrp Delay(d),s/veh	36.2	0.0				
LnGrp LOS	D					
Approach Vol, veh/h	887					
Approach Delay, s/veh	36.2					
Approach LOS	D					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				21.0				
Change Period (Y+Rc), s				4.5				
Max Green Setting (Gmax), s				18.0				
Max Q Clear Time (g_c+I1), s				15.4				
Green Ext Time (p_c), s				1.1				

Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Movement	NBL	NBR	SEL	SER	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	765	0	0	0	0	1978
Future Volume (veh/h)	765	0	0	0	0	1978
Number	7	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	765	0			0	1978
Adj No. of Lanes	2	0			0	3
Peak Hour Factor	1.00	1.00			1.00	1.00
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	0	0			0	0
Arrive On Green	0.00	0.00			0.00	0.00
Sat Flow, veh/h	0				0	
Grp Volume(v), veh/h	0.0				0.0	
Grp Sat Flow(s),veh/h/ln						
Q Serve(g_s), s						
Cycle Q Clear(g_c), s						
Prop In Lane						
Lane Grp Cap(c), veh/h						
V/C Ratio(X)						
Avail Cap(c_a), veh/h						
HCM Platoon Ratio						
Upstream Filter(I)						
Uniform Delay (d), s/veh						
Incr Delay (d2), s/veh						
Initial Q Delay(d3),s/veh						
%ile BackOfQ(50%),veh/ln						
LnGrp Delay(d),s/veh						
LnGrp LOS						
Approach Vol, veh/h						
Approach Delay, s/veh						
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs								
Phs Duration (G+Y+Rc), s								
Change Period (Y+Rc), s								
Max Green Setting (Gmax), s								
Max Q Clear Time (g_c+I1), s								
Green Ext Time (p_c), s								

Intersection Summary	
HCM 2010 Ctrl Delay	0.0
HCM 2010 LOS	A

Intersection: 4: Glenn McConnell EB & Glenn McConnell WB

Movement	NW	NW	NW	B1761	B1761	B1761	NE	NE	NE	NE
Directions Served	L	L	L	T	T	T	T	T	T	T
Maximum Queue (ft)	104	88	83	414	408	387	162	166	176	188
Average Queue (ft)	72	69	66	265	267	246	136	143	151	160
95th Queue (ft)	87	79	74	386	381	351	148	155	164	173
Link Distance (ft)	10	10	10	413	413	413	94	94	94	94
Upstream Blk Time (%)	48	48	47	0	0	0	67	69	61	65
Queuing Penalty (veh)	438	443	428	3	1	1	426	439	388	415
Storage Bay Dist (ft)										
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 5: Glenn McConnell WB Thru & Glenn McConnell EB & Glenn McConnell EB Thru

Movement	SE	SE	SE	SW	SW	SW
Directions Served	L	L	L	T	T	T
Maximum Queue (ft)	123	109	111	170	180	186
Average Queue (ft)	93	89	85	139	148	158
95th Queue (ft)	106	99	97	156	164	173
Link Distance (ft)	35	35	35	92	92	92
Upstream Blk Time (%)	55	58	59	77	78	78
Queuing Penalty (veh)	357	379	384	511	512	516
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 86: I-526 WB Off-Ramp

Movement	SE	SE	SE	NE
Directions Served	T	T	T	R
Maximum Queue (ft)	133	147	139	6
Average Queue (ft)	118	116	105	0
95th Queue (ft)	126	138	142	4
Link Distance (ft)	106	106	106	1
Upstream Blk Time (%)	43	21	14	0
Queuing Penalty (veh)	129	62	42	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 87: I-526 EB Off-Ramp & Glenn McConnell WB Thru

Movement	NB	NB	SW	SW	SW
Directions Served	L	L	R	R	R
Maximum Queue (ft)	150	152	134	138	139
Average Queue (ft)	118	102	108	109	110
95th Queue (ft)	158	157	159	158	158
Link Distance (ft)	127	127	113	113	113
Upstream Blk Time (%)	7	3	11	11	12
Queuing Penalty (veh)	26	11	72	75	76
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 249:

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 251: Glenn McConnell EB Thru

Movement	EB	EB	EB	EB	EB
Directions Served	T	T	R	R	R
Maximum Queue (ft)	243	303	350	398	375
Average Queue (ft)	12	18	178	213	219
95th Queue (ft)	133	166	327	355	340
Link Distance (ft)	519	519	519	519	519
Upstream Blk Time (%)	0	0		0	
Queuing Penalty (veh)	0	0		0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 252: I-526 EB Off Ramp & Glenn McConnell EB

Movement	EB	SE	SE
Directions Served	T	L	L
Maximum Queue (ft)	71	9	11
Average Queue (ft)	15	0	1
95th Queue (ft)	45	9	9
Link Distance (ft)	167	88	88
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 253: I-526 WB Off-Ramp

Movement	SW	SW	SW
Directions Served	L	L	R
Maximum Queue (ft)	235	224	109
Average Queue (ft)	132	85	4
95th Queue (ft)	215	207	104
Link Distance (ft)	1178	1178	1178
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 254: I-526 EB Off Ramp & I-526 EB Off-Ramp

Movement	NE	NE
Directions Served	L	L
Maximum Queue (ft)	127	69
Average Queue (ft)	27	5
95th Queue (ft)	86	32
Link Distance (ft)	937	937
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 255: Glenn McConnell WB Thru

Movement	WB	WB	WB	WB
Directions Served	T	T	T	R
Maximum Queue (ft)	2129	2144	2149	600
Average Queue (ft)	1950	2071	2085	600
95th Queue (ft)	2357	2352	2309	600
Link Distance (ft)	2094	2094	2094	
Upstream Blk Time (%)	9	56	87	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				500
Storage Blk Time (%)			90	
Queuing Penalty (veh)			954	

Intersection: 256: Glenn McConnell EB

Movement	EB	EB	EB	EB	EB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	1161	1167	1144	1073	410
Average Queue (ft)	821	839	811	753	19
95th Queue (ft)	1246	1263	1246	1186	200
Link Distance (ft)	2683	2683	2683	2683	2683
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 257:

Movement	NB	NB
Directions Served	L	L
Maximum Queue (ft)	25	8
Average Queue (ft)	1	0
95th Queue (ft)	13	7
Link Distance (ft)	92	92
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 7088

4.2.3.1.3 Alternative 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3030	398	0	1102	947	208	0	36	767	0	691
Future Volume (veh/h)	0	3030	398	0	1102	947	208	0	36	767	0	691
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863	1863	0	1863	1863	0	1863
Adj Flow Rate, veh/h	0	3293	0	0	1198	0	226	0	0	834	0	0
Adj No. of Lanes	0	4	1	0	4	1	3	0	1	2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	2	0	2	2	0	2
Cap, veh/h	0	4859	1201	0	4859	1201	424	0	0	0	0	0
Arrive On Green	0.00	0.76	0.00	0.00	0.76	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	6669	1583	0	6669	1583	5003	226			0	
Grp Volume(v), veh/h	0	3293	0	0	1198	0	226	26.3			0.0	
Grp Sat Flow(s),veh/h/ln	0	1602	1583	0	1602	1583	1668	C				
Q Serve(g_s), s	0.0	14.7	0.0	0.0	3.2	0.0	2.5					
Cycle Q Clear(g_c), s	0.0	14.7	0.0	0.0	3.2	0.0	2.5					
Prop In Lane	0.00		1.00	0.00		1.00	1.00					
Lane Grp Cap(c), veh/h	0	4859	1201	0	4859	1201	424					
V/C Ratio(X)	0.00	0.68	0.00	0.00	0.25	0.00	0.53					
Avail Cap(c_a), veh/h	0	4859	1201	0	4859	1201	436					
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00	1.00					
Uniform Delay (d), s/veh	0.0	3.4	0.0	0.0	2.1	0.0	25.2					
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.1	0.0	1.2					
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
%ile BackOfQ(50%),veh/ln	0.0	6.4	0.0	0.0	1.4	0.0	1.2					
LnGrp Delay(d),s/veh	0.0	4.2	0.0	0.0	2.2	0.0	26.3					
LnGrp LOS		A			A		C					
Approach Vol, veh/h		3293			1198							
Approach Delay, s/veh		4.2			2.2							
Approach LOS		A			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6	7	
Phs Duration (G+Y+Rc), s		48.0				48.0	9.4	
Change Period (Y+Rc), s		4.5				4.5	4.5	
Max Green Setting (Gmax), s		43.5				43.5	5.0	
Max Q Clear Time (g_c+I1), s		16.7				5.2	4.5	
Green Ext Time (p_c), s		26.6				37.9	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Intersection: 6: I-526 EB Ramps/I-526 WB Ramps & Glenn McConnell Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	T	T	T	T	T	R	L	L	L
Maximum Queue (ft)	570	507	418	272	242	214	123	81	118	224	187	80
Average Queue (ft)	407	374	270	135	152	102	26	6	4	140	88	7
95th Queue (ft)	525	487	374	247	218	186	77	62	83	207	188	49
Link Distance (ft)	654	654	654	654	579	579	579	579	579	523	523	523
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: I-526 EB Ramps/I-526 WB Ramps & Glenn McConnell Pkwy

Movement	SB	SB	SB	SB
Directions Served	L	L	R	R
Maximum Queue (ft)	437	392	91	79
Average Queue (ft)	278	228	7	3
95th Queue (ft)	425	370	103	56
Link Distance (ft)	441	441	441	441
Upstream Blk Time (%)	2	1	0	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1950	300	0	1978	1055	765	0	46	887	0	743
Future Volume (veh/h)	0	1950	300	0	1978	1055	765	0	46	887	0	743
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863	1863	0	1863	1863	0	1863
Adj Flow Rate, veh/h	0	2120	0	0	2150	0	832	0	0	964	0	0
Adj No. of Lanes	0	4	1	0	4	1	3	0	1	2	0	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	2	0	2	2	0	2
Cap, veh/h	0	4162	1029	0	4162	1029	1057	0	0	0	0	0
Arrive On Green	0.00	0.65	0.00	0.00	0.65	0.00	0.21	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	6669	1583	0	6669	1583	5003	832			0	
Grp Volume(v), veh/h	0	2120	0	0	2150	0	832	26.9			0.0	
Grp Sat Flow(s),veh/h/ln	0	1602	1583	0	1602	1583	1668	C				
Q Serve(g_s), s	0.0	11.2	0.0	0.0	11.4	0.0	10.2					
Cycle Q Clear(g_c), s	0.0	11.2	0.0	0.0	11.4	0.0	10.2					
Prop In Lane	0.00		1.00	0.00		1.00	1.00					
Lane Grp Cap(c), veh/h	0	4162	1029	0	4162	1029	1057					
V/C Ratio(X)	0.00	0.51	0.00	0.00	0.52	0.00	0.79					
Avail Cap(c_a), veh/h	0	4162	1029	0	4162	1029	1277					
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00	1.00					
Uniform Delay (d), s/veh	0.0	5.9	0.0	0.0	6.0	0.0	24.1					
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.1	0.0	2.8					
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
%ile BackOfQ(50%),veh/ln	0.0	5.0	0.0	0.0	5.0	0.0	4.9					
LnGrp Delay(d),s/veh	0.0	6.4	0.0	0.0	6.1	0.0	26.9					
LnGrp LOS		A			A		C					
Approach Vol, veh/h		2120			2150							
Approach Delay, s/veh		6.4			6.1							
Approach LOS		A			A							

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6	7	
Phs Duration (G+Y+Rc), s		46.5				46.5	18.2	
Change Period (Y+Rc), s		4.5				4.5	4.5	
Max Green Setting (Gmax), s		42.0				42.0	16.5	
Max Q Clear Time (g_c+I1), s		13.2				13.4	12.2	
Green Ext Time (p_c), s		28.2				28.0	1.5	

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

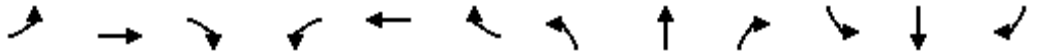
Intersection: 6: I-526 EB Ramps/I-526 WB Ramps & Glenn McConnell Pkwy

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	T	T	T	T	T	R	L	L	L
Maximum Queue (ft)	419	398	295	181	450	418	334	442	303	449	415	306
Average Queue (ft)	310	271	181	58	325	288	206	92	10	332	293	207
95th Queue (ft)	397	366	272	155	421	387	300	257	153	433	396	293
Link Distance (ft)	698	698	698	698	748	748	748	748	748	640	640	640
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 6: I-526 EB Ramps/I-526 WB Ramps & Glenn McConnell Pkwy

Movement	SB	SB	SB	SB
Directions Served	L	L	R	R
Maximum Queue (ft)	398	349	142	32
Average Queue (ft)	249	204	14	1
95th Queue (ft)	370	325	78	15
Link Distance (ft)	474	474	474	474
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

4.2.3.1.4 Alternative 5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1102	947	0	621	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1102	947	0	621	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1863	0	1863	0			
Adj Flow Rate, veh/h				0	1160	0	0	654	0			
Adj No. of Lanes				0	2	1	0	3	0			
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %				0	1	2	0	2	0			
Cap, veh/h				0	2677	1186	0	869	0			
Arrive On Green				0.00	0.75	0.00	0.00	0.17	0.00			
Sat Flow, veh/h				0	3668	1583	0	5421	0			
Grp Volume(v), veh/h				0	1160	0	0	654	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1583	0	1695	0			
Q Serve(g_s), s				0.0	18.1	0.0	0.0	18.4	0.0			
Cycle Q Clear(g_c), s				0.0	18.1	0.0	0.0	18.4	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	2677	1186	0	869	0			
V/C Ratio(X)				0.00	0.43	0.00	0.00	0.75	0.00			
Avail Cap(c_a), veh/h				0	2677	1186	0	2187	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	7.0	0.0	0.0	59.2	0.0			
Incr Delay (d2), s/veh				0.0	0.5	0.0	0.0	1.3	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	9.1	0.0	0.0	8.7	0.0			
LnGrp Delay(d),s/veh				0.0	7.5	0.0	0.0	60.5	0.0			
LnGrp LOS					A			E				
Approach Vol, veh/h					1160			654				
Approach Delay, s/veh					7.5			60.5				
Approach LOS					A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		117.9		32.1				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		73.5		64.5				
Max Q Clear Time (g_c+I1), s		20.1		20.4				
Green Ext Time (p_c), s		17.7		5.3				

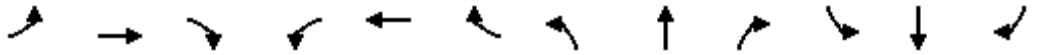
Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Intersection: 5: Paul Cantrell Blvd & I-526 EB Ramps

Movement	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	T	T
Maximum Queue (ft)	305	366	454	309	288	239
Average Queue (ft)	162	134	112	218	200	143
95th Queue (ft)	255	272	340	286	268	241
Link Distance (ft)	1070	1070	1070	1338	1338	1338
Upstream Blk Time (%)		0	0			
Queuing Penalty (veh)		0	0			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	1978	1055	0	443	0	0	0	0
Future Volume (veh/h)	0	0	0	0	1978	1055	0	443	0	0	0	0
Number				5	2	12	7	4	14			
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln				0	1881	1845	0	1810	0			
Adj Flow Rate, veh/h				0	2174	0	0	492	0			
Adj No. of Lanes				0	2	1	0	3	0			
Peak Hour Factor				0.91	0.91	0.91	0.90	0.90	0.90			
Percent Heavy Veh, %				0	1	3	0	5	0			
Cap, veh/h				0	2812	1233	0	659	0			
Arrive On Green				0.00	0.79	0.00	0.00	0.13	0.00			
Sat Flow, veh/h				0	3668	1568	0	5266	0			
Grp Volume(v), veh/h				0	2174	0	0	492	0			
Grp Sat Flow(s),veh/h/ln				0	1787	1568	0	1647	0			
Q Serve(g_s), s				0.0	49.7	0.0	0.0	14.4	0.0			
Cycle Q Clear(g_c), s				0.0	49.7	0.0	0.0	14.4	0.0			
Prop In Lane				0.00		1.00	0.00		0.00			
Lane Grp Cap(c), veh/h				0	2812	1233	0	659	0			
V/C Ratio(X)				0.00	0.77	0.00	0.00	0.75	0.00			
Avail Cap(c_a), veh/h				0	2812	1233	0	1433	0			
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)				0.00	1.00	0.00	0.00	1.00	0.00			
Uniform Delay (d), s/veh				0.0	8.7	0.0	0.0	62.6	0.0			
Incr Delay (d2), s/veh				0.0	2.1	0.0	0.0	1.7	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				0.0	25.0	0.0	0.0	6.7	0.0			
LnGrp Delay(d),s/veh				0.0	10.9	0.0	0.0	64.3	0.0			
LnGrp LOS					B			E				
Approach Vol, veh/h					2174			492				
Approach Delay, s/veh					10.9			64.3				
Approach LOS					B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				
Phs Duration (G+Y+Rc), s		123.5		26.5				
Change Period (Y+Rc), s		5.5		6.5				
Max Green Setting (Gmax), s		94.5		43.5				
Max Q Clear Time (g_c+I1), s		51.7		16.4				
Green Ext Time (p_c), s		36.1		3.6				

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Intersection: 5: Paul Cantrell Blvd & I-526 EB Ramps

Movement	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	T	T
Maximum Queue (ft)	530	934	864	265	255	205
Average Queue (ft)	270	304	125	177	162	91
95th Queue (ft)	439	673	506	242	233	205
Link Distance (ft)	1128	1128	1128	1459	1459	1459
Upstream Blk Time (%)	0	0	0			
Queuing Penalty (veh)	0	0	0			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

4.2.3.2 Magwood Drive

4.2.3.2.1 Alternative 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	516	0	689	96	218	0	0	1110	28
Future Volume (veh/h)	0	0	0	516	0	689	96	218	0	0	1110	28
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				573	0	0	107	242	0	0	1233	0
Adj No. of Lanes				2	0	1	1	2	0	0	4	1
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				708	0	326	400	2413	0	0	3646	901
Arrive On Green				0.21	0.00	0.00	0.11	1.00	0.00	0.00	0.57	0.00
Sat Flow, veh/h				3442	0	1583	1774	3632	0	0	6669	1583
Grp Volume(v), veh/h				573	0	0	107	242	0	0	1233	0
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1774	1770	0	0	1602	1583
Q Serve(g_s), s				12.7	0.0	0.0	1.8	0.0	0.0	0.0	8.2	0.0
Cycle Q Clear(g_c), s				12.7	0.0	0.0	1.8	0.0	0.0	0.0	8.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				708	0	326	400	2413	0	0	3646	901
V/C Ratio(X)				0.81	0.00	0.00	0.27	0.10	0.00	0.00	0.34	0.00
Avail Cap(c_a), veh/h				1140	0	524	533	2413	0	0	3646	901
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.98	0.98	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				30.3	0.0	0.0	5.7	0.0	0.0	0.0	9.2	0.0
Incr Delay (d2), s/veh				2.3	0.0	0.0	0.3	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.3	0.0	0.0	0.9	0.0	0.0	0.0	3.7	0.0
LnGrp Delay(d),s/veh				32.6	0.0	0.0	6.0	0.1	0.0	0.0	9.5	0.0
LnGrp LOS				C			A	A			A	
Approach Vol, veh/h					573			349			1233	
Approach Delay, s/veh					32.6			1.9			9.5	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		59.1			9.0	50.0		20.9
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		44.5			10.5	29.5		26.5
Max Q Clear Time (g_c+I1), s		2.0			3.8	10.2		14.7
Green Ext Time (p_c), s		15.0			0.1	10.4		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	424	132	0	0	0	0	223	286	945	681	0
Future Volume (veh/h)	91	424	132	0	0	0	0	223	286	945	681	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	101	471	0				0	248	318	1050	757	0
Adj No. of Lanes	2	2	1				0	2	2	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	597	614	275				0	1118	881	1176	2527	0
Arrive On Green	0.17	0.17	0.00				0.00	0.32	0.32	0.34	0.71	0.00
Sat Flow, veh/h	3442	3539	1583				0	3632	2787	3442	3632	0
Grp Volume(v), veh/h	101	471	0				0	248	318	1050	757	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1583				0	1770	1393	1721	1770	0
Q Serve(g_s), s	2.0	10.1	0.0				0.0	4.1	7.0	23.1	6.2	0.0
Cycle Q Clear(g_c), s	2.0	10.1	0.0				0.0	4.1	7.0	23.1	6.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	597	614	275				0	1118	881	1176	2527	0
V/C Ratio(X)	0.17	0.77	0.00				0.00	0.22	0.36	0.89	0.30	0.00
Avail Cap(c_a), veh/h	774	796	356				0	1118	881	1312	2527	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	28.1	31.5	0.0				0.0	20.1	21.1	24.9	4.2	0.0
Incr Delay (d2), s/veh	0.1	3.4	0.0				0.0	0.5	1.2	6.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	5.3	0.0				0.0	2.1	2.8	12.0	3.0	0.0
LnGrp Delay(d),s/veh	28.3	34.9	0.0				0.0	20.6	22.3	31.7	4.4	0.0
LnGrp LOS	C	C						C	C	C	A	
Approach Vol, veh/h		572						566			1807	
Approach Delay, s/veh		33.7						21.5			20.3	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.8	29.8		18.4		61.6		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	30.5	18.0		18.0		53.0		
Max Q Clear Time (g_c+I1), s	25.1	9.0		12.1		8.2		
Green Ext Time (p_c), s	2.2	5.1		1.7		10.9		

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Notes

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	L	T	T	T	T	T	T
Maximum Queue (ft)	283	221	90	96	115	502	465	176	59
Average Queue (ft)	177	114	46	51	53	247	204	59	14
95th Queue (ft)	252	215	87	84	111	424	386	124	45
Link Distance (ft)	347	347	76	76	76	690	690	690	690
Upstream Blk Time (%)			2	1	4				
Queuing Penalty (veh)			2	1	4				
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	T	T	R	T	T	R	R	L	L	T
Maximum Queue (ft)	106	43	233	204	44	93	170	202	56	99	126	140
Average Queue (ft)	51	4	155	96	4	34	75	54	2	78	85	79
95th Queue (ft)	93	24	214	191	27	76	141	166	33	122	123	138
Link Distance (ft)	444	444	444	444	444	285	285	285	285	76	76	76
Upstream Blk Time (%)								0		18	19	12
Queuing Penalty (veh)								0		74	76	49
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	SB
Directions Served	T
Maximum Queue (ft)	89
Average Queue (ft)	42
95th Queue (ft)	94
Link Distance (ft)	76
Upstream Blk Time (%)	2
Queuing Penalty (veh)	6
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 213

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	279	0	1162	325	446	0	0	977	155
Future Volume (veh/h)	0	0	0	279	0	1162	325	446	0	0	977	155
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				294	0	0	361	496	0	0	1051	0
Adj No. of Lanes				2	0	1	1	2	0	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				386	0	178	913	2788	0	0	2029	501
Arrive On Green				0.11	0.00	0.00	0.84	1.00	0.00	0.00	0.32	0.00
Sat Flow, veh/h				3442	0	1583	1774	3632	0	0	6669	1583
Grp Volume(v), veh/h				294	0	0	361	496	0	0	1051	0
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1774	1770	0	0	1602	1583
Q Serve(g_s), s				7.5	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0
Cycle Q Clear(g_c), s				7.5	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				386	0	178	913	2788	0	0	2029	501
V/C Ratio(X)				0.76	0.00	0.00	0.40	0.18	0.00	0.00	0.52	0.00
Avail Cap(c_a), veh/h				669	0	308	913	2788	0	0	2029	501
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.85	0.85	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				38.8	0.0	0.0	2.6	0.0	0.0	0.0	25.1	0.0
Incr Delay (d2), s/veh				3.1	0.0	0.0	0.2	0.1	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.7	0.0	0.0	1.3	0.0	0.0	0.0	5.5	0.0
LnGrp Delay(d),s/veh				41.9	0.0	0.0	2.9	0.1	0.0	0.0	26.1	0.0
LnGrp LOS				D			A	A			C	
Approach Vol, veh/h					294			857			1051	
Approach Delay, s/veh					41.9			1.3			26.1	
Approach LOS					D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		75.4			42.4	33.0		14.6
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		63.5			30.5	28.5		17.5
Max Q Clear Time (g_c+I1), s		2.0			2.0	14.1		9.5
Green Ext Time (p_c), s		5.1			4.8	6.4		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	314	328	0	0	0	0	587	328	809	447	0
Future Volume (veh/h)	184	314	328	0	0	0	0	587	328	809	447	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	204	349	0				0	652	364	899	497	0
Adj No. of Lanes	2	2	1				0	2	2	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	483	497	222				0	1424	1121	1057	2689	0
Arrive On Green	0.14	0.14	0.00				0.00	0.40	0.40	0.31	0.76	0.00
Sat Flow, veh/h	3442	3539	1583				0	3632	2787	3442	3632	0
Grp Volume(v), veh/h	204	349	0				0	652	364	899	497	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1583				0	1770	1393	1721	1770	0
Q Serve(g_s), s	4.9	8.5	0.0				0.0	12.1	8.1	22.0	3.5	0.0
Cycle Q Clear(g_c), s	4.9	8.5	0.0				0.0	12.1	8.1	22.0	3.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	483	497	222				0	1424	1121	1057	2689	0
V/C Ratio(X)	0.42	0.70	0.00				0.00	0.46	0.32	0.85	0.18	0.00
Avail Cap(c_a), veh/h	784	806	361				0	1424	1121	1740	2689	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	0.87	0.87	0.00
Uniform Delay (d), s/veh	35.3	36.9	0.0				0.0	19.7	18.5	29.2	3.0	0.0
Incr Delay (d2), s/veh	0.6	1.8	0.0				0.0	1.1	0.8	2.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	4.2	0.0				0.0	6.1	3.2	10.8	1.8	0.0
LnGrp Delay(d),s/veh	35.9	38.7	0.0				0.0	20.8	19.3	31.2	3.2	0.0
LnGrp LOS	D	D						C	B	C	A	
Approach Vol, veh/h		553						1016			1396	
Approach Delay, s/veh		37.7						20.2			21.2	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.2	40.7		17.1		72.9		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	15.5	10.5		20.5		60.5		
Max Q Clear Time (g_c+I1), s	24.0	14.1		10.5		5.5		
Green Ext Time (p_c), s	3.6	0.0		2.2		13.5		

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Notes

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	196	252	193	118	120	106	354	347	344	164	108
Average Queue (ft)	117	76	7	85	76	56	283	243	115	15	16
95th Queue (ft)	180	194	131	130	122	107	409	407	307	83	67
Link Distance (ft)	912	912	912	90	90	90	324	324	324	324	324
Upstream Blk Time (%)		0	0	7	5	1	22	17	7		
Queuing Penalty (veh)		0	0	17	12	3	0	0	0		
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	T	T	R	T	T	R	R	L	L	T
Maximum Queue (ft)	166	141	203	176	96	309	291	221	100	118	136	142
Average Queue (ft)	91	24	127	62	14	173	145	65	8	107	104	75
95th Queue (ft)	147	82	188	149	61	305	272	192	69	125	134	143
Link Distance (ft)	444	444	444	444	444	285	285	285	285	90	90	90
Upstream Blk Time (%)						7	2	0		52	43	2
Queuing Penalty (veh)						0	0	0		162	136	7
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	SB
Directions Served	T
Maximum Queue (ft)	110
Average Queue (ft)	56
95th Queue (ft)	115
Link Distance (ft)	90
Upstream Blk Time (%)	1
Queuing Penalty (veh)	3
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 341

4.2.3.2.2 Alternative 2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	516	0	689	96	218	0	0	1110	28
Future Volume (veh/h)	0	0	0	516	0	689	96	218	0	0	1110	28
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				573	0	0	107	242	0	0	1233	0
Adj No. of Lanes				2	0	1	1	2	0	0	4	1
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				720	0	331	405	2344	0	0	3431	848
Arrive On Green				0.21	0.00	0.00	0.13	1.00	0.00	0.00	0.54	0.00
Sat Flow, veh/h				3442	0	1583	1774	3632	0	0	6669	1583
Grp Volume(v), veh/h				573	0	0	107	242	0	0	1233	0
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1774	1770	0	0	1602	1583
Q Serve(g_s), s				11.1	0.0	0.0	1.7	0.0	0.0	0.0	7.7	0.0
Cycle Q Clear(g_c), s				11.1	0.0	0.0	1.7	0.0	0.0	0.0	7.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				720	0	331	405	2344	0	0	3431	848
V/C Ratio(X)				0.80	0.00	0.00	0.26	0.10	0.00	0.00	0.36	0.00
Avail Cap(c_a), veh/h				1106	0	509	509	2344	0	0	3431	848
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.98	0.98	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				26.3	0.0	0.0	5.7	0.0	0.0	0.0	9.4	0.0
Incr Delay (d2), s/veh				2.3	0.0	0.0	0.3	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.5	0.0	0.0	0.8	0.0	0.0	0.0	3.5	0.0
LnGrp Delay(d),s/veh				28.6	0.0	0.0	6.0	0.1	0.0	0.0	9.6	0.0
LnGrp LOS				C			A	A			A	
Approach Vol, veh/h					573			349			1233	
Approach Delay, s/veh					28.6			1.9			9.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		50.9			8.9	42.0		19.1
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		38.5			8.5	25.5		22.5
Max Q Clear Time (g_c+I1), s		2.0			3.7	9.7		13.1
Green Ext Time (p_c), s		14.2			0.1	9.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	0	132	0	0	0	0	223	286	945	681	0
Future Volume (veh/h)	91	0	132	0	0	0	0	223	286	945	681	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	101	0	0				0	248	318	1050	757	0
Adj No. of Lanes	2	0	1				0	2	2	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	211	0	97				0	1603	1262	1008	2867	0
Arrive On Green	0.06	0.00	0.00				0.00	0.45	0.45	0.29	0.81	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	2787	3442	3632	0
Grp Volume(v), veh/h	101	0	0				0	248	318	1050	757	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1393	1721	1770	0
Q Serve(g_s), s	2.0	0.0	0.0				0.0	2.9	4.9	20.5	3.6	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0				0.0	2.9	4.9	20.5	3.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	211	0	97				0	1603	1262	1008	2867	0
V/C Ratio(X)	0.48	0.00	0.00				0.00	0.15	0.25	1.04	0.26	0.00
Avail Cap(c_a), veh/h	885	0	407				0	1603	1262	1008	2867	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.87	0.87	0.00
Uniform Delay (d), s/veh	31.8	0.0	0.0				0.0	11.3	11.8	24.8	1.6	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0				0.0	0.2	0.5	37.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0				0.0	1.5	2.0	15.0	1.8	0.0
LnGrp Delay(d),s/veh	33.4	0.0	0.0				0.0	11.5	12.3	62.7	1.8	0.0
LnGrp LOS	C							B	B	F	A	
Approach Vol, veh/h		101						566			1807	
Approach Delay, s/veh		33.4						11.9			37.2	
Approach LOS		C						B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	25.0	36.2		8.8		61.2		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	20.5	18.0		18.0		43.0		
Max Q Clear Time (g_c+I1), s	22.5	6.9		4.0		5.6		
Green Ext Time (p_c), s	0.0	6.0		0.2		10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Notes

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T
Maximum Queue (ft)	251	206	9	89	85	106	347	347	341	174
Average Queue (ft)	162	98	0	38	44	38	284	235	103	16
95th Queue (ft)	226	196	9	78	77	95	397	386	279	85
Link Distance (ft)	347	347	347	76	76	76	324	324	324	324
Upstream Blk Time (%)				1	1	2	16	11	4	0
Queuing Penalty (veh)				1	1	2	0	0	0	0
Storage Bay Dist (ft)										
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	R	L	L	T	T
Maximum Queue (ft)	109	41	47	78	156	148	17	97	119	139	85
Average Queue (ft)	56	4	3	25	60	21	1	84	86	71	29
95th Queue (ft)	98	23	23	60	116	93	11	114	117	143	81
Link Distance (ft)	444	444	444	284	284	284	284	76	76	76	76
Upstream Blk Time (%)								30	29	8	1
Queuing Penalty (veh)								123	117	34	2
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Network Summary

Network wide Queuing Penalty: 280

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	279	0	1162	325	446	0	0	977	155
Future Volume (veh/h)	0	0	0	279	0	1162	325	446	0	0	977	155
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				294	0	0	361	496	0	0	1051	0
Adj No. of Lanes				2	0	1	1	2	0	0	4	1
Peak Hour Factor				0.95	0.95	0.95	0.90	0.90	0.90	0.93	0.93	0.93
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				392	0	180	759	2783	0	0	2884	712
Arrive On Green				0.11	0.00	0.00	0.38	1.00	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3442	0	1583	1774	3632	0	0	6669	1583
Grp Volume(v), veh/h				294	0	0	361	496	0	0	1051	0
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1774	1770	0	0	1602	1583
Q Serve(g_s), s				7.4	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0
Cycle Q Clear(g_c), s				7.4	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				392	0	180	759	2783	0	0	2884	712
V/C Ratio(X)				0.75	0.00	0.00	0.48	0.18	0.00	0.00	0.36	0.00
Avail Cap(c_a), veh/h				822	0	378	759	2783	0	0	2884	712
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.87	0.87	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				38.6	0.0	0.0	13.1	0.0	0.0	0.0	16.3	0.0
Incr Delay (d2), s/veh				2.9	0.0	0.0	0.4	0.1	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.7	0.0	0.0	5.7	0.0	0.0	0.0	4.4	0.0
LnGrp Delay(d),s/veh				41.6	0.0	0.0	13.5	0.1	0.0	0.0	16.6	0.0
LnGrp LOS				D			B	A			B	
Approach Vol, veh/h					294			857			1051	
Approach Delay, s/veh					41.6			5.7			16.6	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		75.3			30.3	45.0		14.7
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5
Max Green Setting (Gmax), s		59.5			14.5	40.5		21.5
Max Q Clear Time (g_c+I1), s		2.0			2.0	11.7		9.4
Green Ext Time (p_c), s		5.1			3.7	8.8		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	0	99	0	0	0	0	587	328	809	447	0
Future Volume (veh/h)	184	0	99	0	0	0	0	587	328	809	447	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	204	0	0				0	652	364	899	497	0
Adj No. of Lanes	2	0	1				0	2	2	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	293	0	135				0	1619	1275	1057	2884	0
Arrive On Green	0.09	0.00	0.00				0.00	0.46	0.46	0.31	0.81	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	2787	3442	3632	0
Grp Volume(v), veh/h	204	0	0				0	652	364	899	497	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1393	1721	1770	0
Q Serve(g_s), s	5.2	0.0	0.0				0.0	11.0	7.3	22.0	2.7	0.0
Cycle Q Clear(g_c), s	5.2	0.0	0.0				0.0	11.0	7.3	22.0	2.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	293	0	135				0	1619	1275	1057	2884	0
V/C Ratio(X)	0.70	0.00	0.00				0.00	0.40	0.29	0.85	0.17	0.00
Avail Cap(c_a), veh/h	784	0	361				0	1619	1275	1740	2884	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	40.0	0.0	0.0				0.0	16.2	15.2	29.2	1.8	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.0				0.0	0.7	0.6	2.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0				0.0	5.5	2.9	10.8	1.4	0.0
LnGrp Delay(d),s/veh	43.0	0.0	0.0				0.0	17.0	15.8	31.4	1.9	0.0
LnGrp LOS	D							B	B	C	A	
Approach Vol, veh/h		204						1016			1396	
Approach Delay, s/veh		43.0						16.6			20.9	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.2	45.7		12.2		77.8		
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		
Max Green Setting (Gmax), s	15.5	10.5		20.5		60.5		
Max Q Clear Time (g_c+I1), s	24.0	13.0		7.2		4.7		
Green Ext Time (p_c), s	3.6	0.0		0.5		13.6		

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	237	255	216	117	138	112	348	347	293	93	108
Average Queue (ft)	145	81	7	94	90	71	272	222	87	15	18
95th Queue (ft)	216	198	91	131	140	115	397	384	230	77	71
Link Distance (ft)	347	347	347	90	90	90	324	324	324	324	324
Upstream Blk Time (%)		0	0	22	8	2	15	10	3	0	
Queuing Penalty (veh)		0	0	57	20	5	0	0	0	0	
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	R	L	L	T	T
Maximum Queue (ft)	167	143	22	302	274	190	36	118	131	141	116
Average Queue (ft)	102	33	1	178	132	51	2	104	101	95	73
95th Queue (ft)	153	100	11	309	244	157	24	130	136	148	121
Link Distance (ft)	444	444	444	284	284	284	284	90	90	90	90
Upstream Blk Time (%)				4	0			46	40	6	2
Queuing Penalty (veh)				0	0			145	125	20	7
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Network Summary

Network wide Queuing Penalty: 379

4.2.3.2.3 Alternative 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	0	132	516	0	689	96	127	256	945	165	28
Future Volume (veh/h)	91	0	132	516	0	689	96	127	256	945	165	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1863	0	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	101	0	147	573	0	0	107	141	0	1050	183	0
Adj No. of Lanes	1	0	1	2	0	1	2	1	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	233	0	0	679	0	0	209	505	430	1190	1037	881
Arrive On Green	0.08	0.00	0.00	0.20	0.00	0.00	0.06	0.27	0.00	0.35	0.56	0.00
Sat Flow, veh/h	1774	101		3442	573		3442	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	101	34.1		573	35.7		107	141	0	1050	183	0
Grp Sat Flow(s),veh/h/ln	1774	C		1721	D		1721	1863	1583	1721	1863	1583
Q Serve(g_s), s	4.1			11.7			2.2	4.3	0.0	20.9	3.5	0.0
Cycle Q Clear(g_c), s	4.1			11.7			2.2	4.3	0.0	20.9	3.5	0.0
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233			679			209	505	430	1190	1037	881
V/C Ratio(X)	0.43			0.84			0.51	0.28	0.00	0.88	0.18	0.00
Avail Cap(c_a), veh/h	1050			780			331	505	430	1348	1037	881
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9			28.1			33.1	20.9	0.0	22.4	7.9	0.0
Incr Delay (d2), s/veh	1.3			7.6			1.9	1.4	0.0	6.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0			6.2			1.1	2.4	0.0	11.0	1.9	0.0
LnGrp Delay(d),s/veh	34.1			35.7			35.1	22.3	0.0	29.0	8.3	0.0
LnGrp LOS	C			D			D	C		C	A	
Approach Vol, veh/h								248			1233	
Approach Delay, s/veh								27.8			25.9	
Approach LOS								C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	29.7	24.2	18.9		8.9	45.0	10.0	
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5	
Max Green Setting (Gmax), s	28.5	19.0	16.5		7.0	40.5	39.0	
Max Q Clear Time (g_c+I1), s	22.9	6.3	13.7		4.2	5.5	6.1	
Green Ext Time (p_c), s	2.3	1.4	0.7		0.1	2.0	0.3	

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Notes

Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	L	L	L	L	T	R	L	L	T	R
Maximum Queue (ft)	116	61	297	252	118	62	150	180	581	532	358	58
Average Queue (ft)	52	11	192	149	54	6	65	55	414	369	100	2
95th Queue (ft)	95	49	272	238	103	36	121	140	623	582	345	57
Link Distance (ft)	443	443	646	646	322	322	322	322	580	580	580	580
Upstream Blk Time (%)									6	4	1	0
Queuing Penalty (veh)									0	0	0	0
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Network Summary

Network wide Queuing Penalty: 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	0	99	279	0	1162	325	262	328	809	168	155
Future Volume (veh/h)	184	0	99	279	0	1162	325	262	328	809	168	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1863	0	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	0	110	310	0	0	361	291	0	899	187	0
Adj No. of Lanes	1	0	1	2	0	1	2	1	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	262	0	0	424	0	0	502	583	495	1090	902	766
Arrive On Green	0.15	0.00	0.00	0.12	0.00	0.00	0.15	0.31	0.00	0.32	0.48	0.00
Sat Flow, veh/h	1774	204		3442	310		3442	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	204	29.8		310	29.4		361	291	0	899	187	0
Grp Sat Flow(s),veh/h/ln	1774	C		1721	C		1721	1863	1583	1721	1863	1583
Q Serve(g_s), s	6.7			5.3			6.1	7.7	0.0	14.7	3.5	0.0
Cycle Q Clear(g_c), s	6.7			5.3			6.1	7.7	0.0	14.7	3.5	0.0
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262			424			502	583	495	1090	902	766
V/C Ratio(X)	0.78			0.73			0.72	0.50	0.00	0.82	0.21	0.00
Avail Cap(c_a), veh/h	935			538			879	583	495	1445	902	766
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9			25.6			24.8	17.0	0.0	19.2	9.0	0.0
Incr Delay (d2), s/veh	4.9			3.7			2.0	3.0	0.0	3.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6			2.7			3.0	4.5	0.0	7.3	1.9	0.0
LnGrp Delay(d),s/veh	29.8			29.4			26.7	20.0	0.0	22.2	9.5	0.0
LnGrp LOS	C			C			C	C		C	A	
Approach Vol, veh/h								652			1086	
Approach Delay, s/veh								23.7			20.0	
Approach LOS								C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	23.7	23.5	12.0		13.3	33.9	13.5	
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5	
Max Green Setting (Gmax), s	25.5	19.0	9.5		15.5	29.0	32.0	
Max Q Clear Time (g_c+I1), s	16.7	9.7	7.3		8.1	5.5	8.7	
Green Ext Time (p_c), s	2.6	1.9	0.3		0.8	2.9	0.6	

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	L	R	L	L	T	R	L	L	T
Maximum Queue (ft)	176	28	200	221	377	218	168	209	197	354	309	147
Average Queue (ft)	94	1	113	60	15	122	59	111	55	217	173	61
95th Queue (ft)	153	16	176	160	190	191	148	182	149	317	275	119
Link Distance (ft)	443	443	748	748	748	322	322	322	322	587	587	587
Upstream Blk Time (%)				0	0							
Queuing Penalty (veh)				0	0							
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

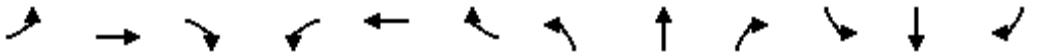
Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	46
Average Queue (ft)	3
95th Queue (ft)	22
Link Distance (ft)	587
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

4.2.3.2.4 Alternative 4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	516	0	689	96	218	0	0	1110	28
Future Volume (vph)	0	0	0	516	0	689	96	218	0	0	1110	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	0	1583	3367	1863	0	0	6408	1482
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3433	0	1583	3367	1863	0	0	6408	1482
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						733						117
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		497			913			67			2101	
Travel Time (s)		11.3			20.8			1.5			47.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	4%	2%	2%	2%	2%	9%
Adj. Flow (vph)	0	0	0	561	0	749	104	237	0	0	1207	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	561	0	749	104	237	0	0	1207	30
Turn Type				Prot		Free	Prot	NA			NA	Perm
Protected Phases				3			5 4	2 4			6	
Permitted Phases						Free						6
Detector Phase				3			5 4	2 4			6	6
Switch Phase												
Minimum Initial (s)				8.0							15.0	15.0
Minimum Split (s)				14.0							24.0	24.0
Total Split (s)				30.0							72.0	72.0
Total Split (%)				21.4%							51.4%	51.4%
Maximum Green (s)				24.0							66.0	66.0
Yellow Time (s)				4.0							4.0	4.0
All-Red Time (s)				2.0							2.0	2.0
Lost Time Adjust (s)				0.0							0.0	0.0
Total Lost Time (s)				6.0							6.0	6.0
Lead/Lag				Lag							Lead	Lead
Lead-Lag Optimize?				Yes							Yes	Yes
Vehicle Extension (s)				3.0							3.0	3.0
Recall Mode				None							Min	Min
Act Effct Green (s)				28.0		140.0	40.7	38.0			53.3	53.3
Actuated g/C Ratio				0.20		1.00	0.29	0.27			0.38	0.38
v/c Ratio				0.82		0.47	0.11	0.47			0.49	0.05
Control Delay				64.6		1.0	2.2	3.5			33.2	0.1
Queue Delay				0.2		0.0	0.0	0.0			0.0	0.0
Total Delay				64.7		1.0	2.2	3.5			33.2	0.1
LOS				E		A	A	A			C	A
Approach Delay					28.3			3.1			32.4	
Approach LOS					C			A			C	
90th %ile Green (s)				24.0							66.0	66.0
90th %ile Term Code				Max							Coord	Coord

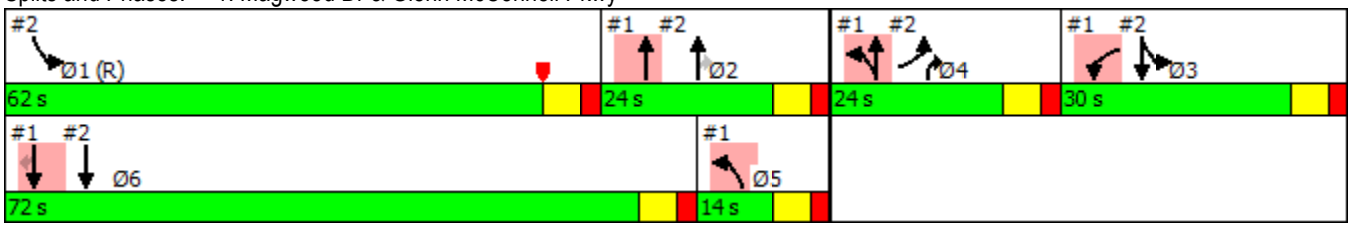
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	8.0	15.0	8.0	8.0
Minimum Split (s)	14.0	24.0	24.0	14.0
Total Split (s)	62.0	24.0	24.0	14.0
Total Split (%)	44%	17%	17%	10%
Maximum Green (s)	56.0	18.0	18.0	8.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	C-Max	Min	None	Min
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
90th %ile Green (s)	56.0	18.0	18.0	8.0
90th %ile Term Code	Coord	Max	Max	Max

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Green (s)				24.0							61.5	61.5
70th %ile Term Code				Max							Coord	Coord
50th %ile Green (s)				26.0							53.9	53.9
50th %ile Term Code				Max							Coord	Coord
30th %ile Green (s)				29.3							46.7	46.7
30th %ile Term Code				Max							Coord	Coord
10th %ile Green (s)				36.9							38.4	38.4
10th %ile Term Code				Max							Coord	Coord
Queue Length 50th (ft)				259		0	0	4			240	0
Queue Length 95th (ft)				#378		0	30	8			234	0
Internal Link Dist (ft)		417			833			1			2021	
Turn Bay Length (ft)												
Base Capacity (vph)				687		1583	1059	526			3020	760
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				5		0	0	0			228	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.82		0.47	0.10	0.45			0.43	0.04

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 1:SBL, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 27.1	Intersection LOS: C
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

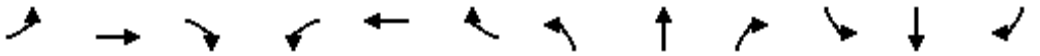
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Magwood Dr & Glenn McConnell Pkwy



Lane Group	Ø1	Ø2	Ø4	Ø5
70th %ile Green (s)	56.0	18.0	18.0	12.5
70th %ile Term Code	Coord	Max	Max	Hold
50th %ile Green (s)	56.0	18.0	16.0	20.1
50th %ile Term Code	Coord	Max	Gap	Hold
30th %ile Green (s)	56.0	17.7	13.0	27.0
30th %ile Term Code	Coord	Gap	Gap	Hold
10th %ile Green (s)	56.0	15.0	8.1	32.6
10th %ile Term Code	Coord	Min	Gap	Hold
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



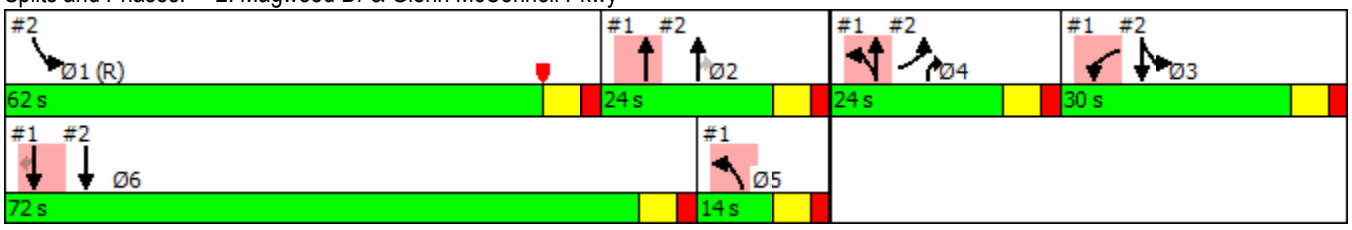
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	0	132	0	0	0	0	223	349	945	681	0
Future Volume (vph)	91	0	132	0	0	0	0	223	349	945	681	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	0	1583	0	0	0	0	3505	2760	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	0	1583	0	0	0	0	3505	2760	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210						210			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1042			410			485			67	
Travel Time (s)		23.7			9.3			11.0			1.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	99	0	143	0	0	0	0	242	379	1027	740	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	0	143	0	0	0	0	242	379	1027	740	0
Turn Type	Prot		Free					NA	custom	Prot	NA	
Protected Phases	4							2	4	1 3	6 3	
Permitted Phases			Free						2			
Detector Phase	4							2	4	1 3	6 3	
Switch Phase												
Minimum Initial (s)	8.0							15.0	8.0			
Minimum Split (s)	24.0							24.0	24.0			
Total Split (s)	24.0							24.0	24.0			
Total Split (%)	17.1%							17.1%	17.1%			
Maximum Green (s)	18.0							18.0	18.0			
Yellow Time (s)	4.0							4.0	4.0			
All-Red Time (s)	2.0							2.0	2.0			
Lost Time Adjust (s)	0.0							0.0	0.0			
Total Lost Time (s)	6.0							6.0	6.0			
Lead/Lag	Lead							Lag	Lead			
Lead-Lag Optimize?	Yes							Yes	Yes			
Vehicle Extension (s)	3.0							3.0	3.0			
Recall Mode	None							Min	None			
Act Effct Green (s)	14.6		140.0					17.3	38.0	90.0	87.3	
Actuated g/C Ratio	0.10		1.00					0.12	0.27	0.64	0.62	
v/c Ratio	0.54		0.09					0.56	0.42	0.47	0.34	
Control Delay	69.4		0.1					62.9	18.7	7.1	0.8	
Queue Delay	0.0		0.0					0.4	0.0	0.0	0.0	
Total Delay	69.4		0.1					63.3	18.7	7.1	0.8	
LOS	E		A					E	B	A	A	
Approach Delay		28.5						36.1			4.4	
Approach LOS		C						D			A	
90th %ile Green (s)	18.0							18.0	18.0			
90th %ile Term Code	Max							Max	Max			

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	15.0
Minimum Split (s)	14.0	14.0	14.0	24.0
Total Split (s)	62.0	30.0	14.0	72.0
Total Split (%)	44%	21%	10%	51%
Maximum Green (s)	56.0	24.0	8.0	66.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	C-Max	None	Min	Min
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
90th %ile Green (s)	56.0	24.0	8.0	66.0
90th %ile Term Code	Coord	Max	Max	Coord

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Green (s)	18.0							18.0	18.0			
70th %ile Term Code	Max							Max	Max			
50th %ile Green (s)	16.0							18.0	16.0			
50th %ile Term Code	Gap							Max	Gap			
30th %ile Green (s)	13.0							17.7	13.0			
30th %ile Term Code	Gap							Gap	Gap			
10th %ile Green (s)	8.1							15.0	8.1			
10th %ile Term Code	Gap							Min	Gap			
Queue Length 50th (ft)	86		0					110	67	164	1	
Queue Length 95th (ft)	146		0					156	115	144	31	
Internal Link Dist (ft)		962			330			405			1	
Turn Bay Length (ft)												
Base Capacity (vph)	227		1583					450	963	2207	2528	
Starvation Cap Reductn	0		0					0	0	0	0	
Spillback Cap Reductn	0		0					35	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.44		0.09					0.58	0.39	0.47	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 1:SBL, Start of Yellow, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Magwood Dr & Glenn McConnell Pkwy



Lane Group	Ø1	Ø3	Ø5	Ø6
70th %ile Green (s)	56.0	24.0	12.5	61.5
70th %ile Term Code	Coord	Max	Hold	Coord
50th %ile Green (s)	56.0	26.0	20.1	53.9
50th %ile Term Code	Coord	Max	Hold	Coord
30th %ile Green (s)	56.0	29.3	27.0	46.7
30th %ile Term Code	Coord	Max	Hold	Coord
10th %ile Green (s)	56.0	36.9	32.6	38.4
10th %ile Term Code	Coord	Max	Hold	Coord
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

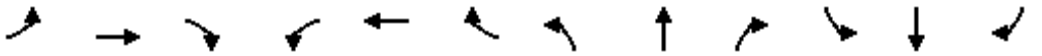
Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	L	L	T	T	T	T	T
Maximum Queue (ft)	348	314	28	10	41	462	468	139	138
Average Queue (ft)	235	203	7	0	5	286	294	57	54
95th Queue (ft)	325	289	25	6	25	411	416	107	108
Link Distance (ft)	870	870	5	5	5	2060	2060	2060	2060
Upstream Blk Time (%)			3	0	8				
Queuing Penalty (veh)			3	0	8				
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	R	R	L	L	T	T
Maximum Queue (ft)	173	68	164	214	199	147	41	64	22	8
Average Queue (ft)	75	8	74	110	77	9	8	13	1	0
95th Queue (ft)	143	42	135	192	191	64	29	44	14	7
Link Distance (ft)	989	989	435	435	435	435	5	5	5	5
Upstream Blk Time (%)							10	12	1	
Queuing Penalty (veh)							40	50	4	
Storage Bay Dist (ft)										
Storage Blk Time (%)										
Queuing Penalty (veh)										

Network Summary

Network wide Queuing Penalty: 106



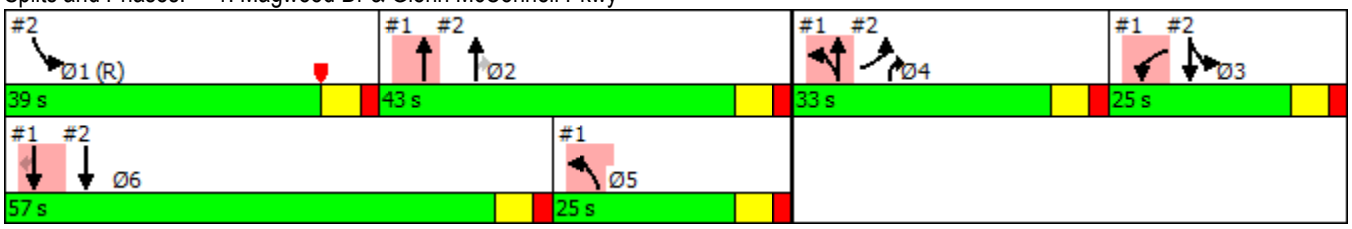
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	279	0	1162	325	446	0	0	977	155
Future Volume (vph)	0	0	0	279	0	1162	325	446	0	0	977	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	0	1583	3433	1863	0	0	6408	1583
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3433	0	1583	3433	1863	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						679						168
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		497			913			67			2235	
Travel Time (s)		11.3			20.8			1.5			50.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	303	0	1263	353	485	0	0	1062	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	303	0	1263	353	485	0	0	1062	168
Turn Type				Prot		Free	Prot	NA			NA	Perm
Protected Phases				3			5 4	2 4			6	
Permitted Phases						Free						6
Detector Phase				3			5 4	2 4			6	6
Switch Phase												
Minimum Initial (s)				8.0							15.0	15.0
Minimum Split (s)				14.0							24.0	24.0
Total Split (s)				25.0							57.0	57.0
Total Split (%)				17.9%							40.7%	40.7%
Maximum Green (s)				19.0							51.0	51.0
Yellow Time (s)				4.0							4.0	4.0
All-Red Time (s)				2.0							2.0	2.0
Lost Time Adjust (s)				0.0							0.0	0.0
Total Lost Time (s)				6.0							6.0	6.0
Lead/Lag				Lag							Lead	Lead
Lead-Lag Optimize?				Yes							Yes	Yes
Vehicle Extension (s)				3.0							3.0	3.0
Recall Mode				None							Min	Min
Act Effct Green (s)				22.2		140.0	56.4	65.3			43.4	43.4
Actuated g/C Ratio				0.16		1.00	0.40	0.47			0.31	0.31
v/c Ratio				0.56		0.80	0.26	0.56			0.53	0.28
Control Delay				59.7		4.3	5.7	2.4			40.5	5.4
Queue Delay				0.0		0.0	0.0	0.0			0.2	0.0
Total Delay				59.7		4.3	5.7	2.4			40.8	5.4
LOS				E		A	A	A			D	A
Approach Delay					15.0			3.8			35.9	
Approach LOS					B			A			D	
90th %ile Green (s)				19.0							51.0	51.0
90th %ile Term Code				Max							Coord	Coord
70th %ile Green (s)				19.0							49.0	49.0

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	8.0	15.0	8.0	8.0
Minimum Split (s)	14.0	24.0	24.0	14.0
Total Split (s)	39.0	43.0	33.0	25.0
Total Split (%)	28%	31%	24%	18%
Maximum Green (s)	33.0	37.0	27.0	19.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	C-Max	Min	None	Min
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
90th %ile Green (s)	33.0	37.0	27.0	19.0
90th %ile Term Code	Coord	Max	Max	Max
70th %ile Green (s)	33.0	37.0	27.0	21.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Term Code				Max							Coord	Coord
50th %ile Green (s)				19.0							42.7	42.7
50th %ile Term Code				Max							Coord	Coord
30th %ile Green (s)				25.5							37.8	37.8
30th %ile Term Code				Max							Coord	Coord
10th %ile Green (s)				28.6							36.5	36.5
10th %ile Term Code				Gap							Coord	Coord
Queue Length 50th (ft)				136		0	36	2			234	0
Queue Length 95th (ft)				188		0	181	3			247	49
Internal Link Dist (ft)		417			833			1			2155	
Turn Bay Length (ft)												
Base Capacity (vph)				544		1583	1441	881			2334	683
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			513	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.56		0.80	0.24	0.55			0.58	0.25

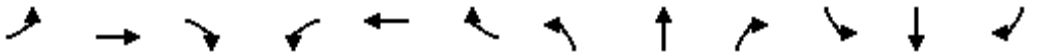
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 1:SBL, Start of Yellow, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 19.5		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Magwood Dr & Glenn McConnell Pkwy



Lane Group	Ø1	Ø2	Ø4	Ø5
70th %ile Term Code	Coord	Max	Max	Hold
50th %ile Green (s)	33.0	36.1	27.9	26.4
50th %ile Term Code	Coord	Gap	Max	Hold
30th %ile Green (s)	33.0	33.1	24.4	28.3
30th %ile Term Code	Coord	Gap	Gap	Hold
10th %ile Green (s)	40.6	29.2	17.6	33.3
10th %ile Term Code	Coord	Gap	Gap	Hold
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



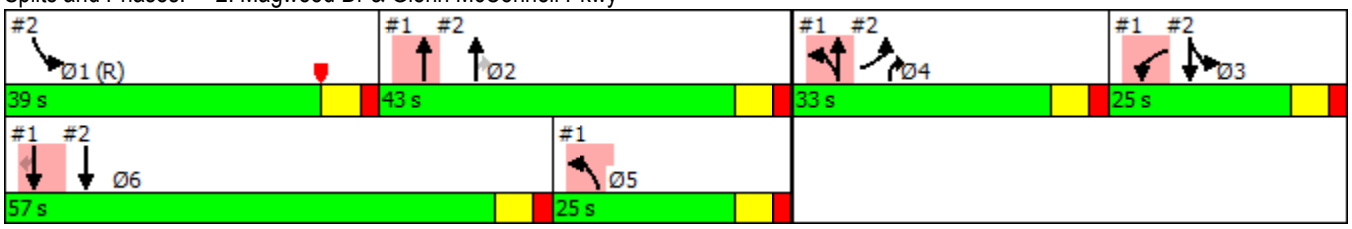
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	0	99	0	0	0	0	587	328	809	447	0
Future Volume (vph)	184	0	99	0	0	0	0	587	328	809	447	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	0	1583	0	0	0	0	3539	2787	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	0	1583	0	0	0	0	3539	2787	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210						113			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1042			410			445			67	
Travel Time (s)		23.7			9.3			10.1			1.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	200	0	108	0	0	0	0	638	357	879	486	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	0	108	0	0	0	0	638	357	879	486	0
Turn Type	Prot		Free					NA	custom	Prot	NA	
Protected Phases	4							2	4	1 3	6 3	
Permitted Phases			Free						2			
Detector Phase	4							2	4	1 3	6 3	
Switch Phase												
Minimum Initial (s)	8.0							15.0	8.0			
Minimum Split (s)	24.0							24.0	24.0			
Total Split (s)	33.0							43.0	33.0			
Total Split (%)	23.6%							30.7%	23.6%			
Maximum Green (s)	27.0							37.0	27.0			
Yellow Time (s)	4.0							4.0	4.0			
All-Red Time (s)	2.0							2.0	2.0			
Lost Time Adjust (s)	0.0							0.0	0.0			
Total Lost Time (s)	6.0							6.0	6.0			
Lead/Lag	Lead							Lag	Lead			
Lead-Lag Optimize?	Yes							Yes	Yes			
Vehicle Extension (s)	3.0							3.0	3.0			
Recall Mode	None							Min	None			
Act Effct Green (s)	24.8		140.0					34.5	65.3	62.7	71.6	
Actuated g/C Ratio	0.18		1.00					0.25	0.47	0.45	0.51	
v/c Ratio	0.64		0.07					0.73	0.26	0.57	0.27	
Control Delay	62.9		0.1					53.8	14.9	17.4	0.6	
Queue Delay	0.0		0.0					1.9	0.0	0.0	0.0	
Total Delay	62.9		0.1					55.7	14.9	17.4	0.6	
LOS	E		A					E	B	B	A	
Approach Delay		40.9						41.0			11.4	
Approach LOS		D						D			B	
90th %ile Green (s)	27.0							37.0	27.0			
90th %ile Term Code	Max							Max	Max			
70th %ile Green (s)	27.0							37.0	27.0			

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	8.0	8.0	8.0	15.0
Minimum Split (s)	14.0	14.0	14.0	24.0
Total Split (s)	39.0	25.0	25.0	57.0
Total Split (%)	28%	18%	18%	41%
Maximum Green (s)	33.0	19.0	19.0	51.0
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	C-Max	None	Min	Min
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
90th %ile Green (s)	33.0	19.0	19.0	51.0
90th %ile Term Code	Coord	Max	Max	Coord
70th %ile Green (s)	33.0	19.0	21.0	49.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Term Code	Max							Max	Max			
50th %ile Green (s)	27.9							36.1	27.9			
50th %ile Term Code	Max							Gap	Max			
30th %ile Green (s)	24.4							33.1	24.4			
30th %ile Term Code	Gap							Gap	Gap			
10th %ile Green (s)	17.6							29.2	17.6			
10th %ile Term Code	Gap							Gap	Gap			
Queue Length 50th (ft)	166		0					278	67	145	1	
Queue Length 95th (ft)	254		0					345	102	148	1	
Internal Link Dist (ft)		962			330			365			1	
Turn Bay Length (ft)												
Base Capacity (vph)	343		1583					935	1405	1538	2002	
Starvation Cap Reductn	0		0					0	0	0	0	
Spillback Cap Reductn	0		0					159	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.58		0.07					0.82	0.25	0.57	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 1:SBL, Start of Yellow, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Magwood Dr & Glenn McConnell Pkwy



Lane Group	Ø1	Ø3	Ø5	Ø6
70th %ile Term Code	Coord	Max	Hold	Coord
50th %ile Green (s)	33.0	19.0	26.4	42.7
50th %ile Term Code	Coord	Max	Hold	Coord
30th %ile Green (s)	33.0	25.5	28.3	37.8
30th %ile Term Code	Coord	Max	Hold	Coord
10th %ile Green (s)	40.6	28.6	33.3	36.5
10th %ile Term Code	Coord	Gap	Hold	Coord
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary

Intersection: 1: Magwood Dr & Glenn McConnell Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	R	L	L	T	T	T	T	T	R
Maximum Queue (ft)	226	200	267	26	33	52	593	599	364	254	66
Average Queue (ft)	147	103	9	20	14	10	409	417	147	87	6
95th Queue (ft)	210	192	152	33	36	35	722	725	544	328	35
Link Distance (ft)	862	862	862	5	5	5	2200	2200	2200	2200	2200
Upstream Blk Time (%)			0	10	5	11					
Queuing Penalty (veh)			0	26	13	28					
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Magwood Dr & Glenn McConnell Pkwy

Movement	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	T	R	R	L	L	T	T
Maximum Queue (ft)	258	357	417	261	86	60	60	24	9
Average Queue (ft)	142	215	262	78	6	32	35	1	0
95th Queue (ft)	231	329	395	210	54	59	58	11	6
Link Distance (ft)	989	399	399	399	399	5	5	5	5
Upstream Blk Time (%)		1	5	0		49	52	2	0
Queuing Penalty (veh)		0	0	0		153	164	7	1
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 393

4.2.3.2.5 Alternative 5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	0	132	516	0	689	96	127	256	945	165	28
Future Volume (veh/h)	91	0	132	516	0	689	96	127	256	945	165	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1863	0	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	101	0	147	573	0	0	107	141	0	1050	183	0
Adj No. of Lanes	1	0	1	2	0	1	2	1	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	233	0	0	679	0	0	209	505	430	1190	1037	881
Arrive On Green	0.08	0.00	0.00	0.20	0.00	0.00	0.06	0.27	0.00	0.35	0.56	0.00
Sat Flow, veh/h	1774	101		3442	573		3442	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	101	34.1		573	35.7		107	141	0	1050	183	0
Grp Sat Flow(s),veh/h/ln	1774	C		1721	D		1721	1863	1583	1721	1863	1583
Q Serve(g_s), s	4.1			11.7			2.2	4.3	0.0	20.9	3.5	0.0
Cycle Q Clear(g_c), s	4.1			11.7			2.2	4.3	0.0	20.9	3.5	0.0
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233			679			209	505	430	1190	1037	881
V/C Ratio(X)	0.43			0.84			0.51	0.28	0.00	0.88	0.18	0.00
Avail Cap(c_a), veh/h	1050			780			331	505	430	1348	1037	881
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9			28.1			33.1	20.9	0.0	22.4	7.9	0.0
Incr Delay (d2), s/veh	1.3			7.6			1.9	1.4	0.0	6.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0			6.2			1.1	2.4	0.0	11.0	1.9	0.0
LnGrp Delay(d),s/veh	34.1			35.7			35.1	22.3	0.0	29.0	8.3	0.0
LnGrp LOS	C			D			D	C		C	A	
Approach Vol, veh/h								248			1233	
Approach Delay, s/veh								27.8			25.9	
Approach LOS								C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	29.7	24.2	18.9		8.9	45.0	10.0	
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5	
Max Green Setting (Gmax), s	28.5	19.0	16.5		7.0	40.5	39.0	
Max Q Clear Time (g_c+I1), s	22.9	6.3	13.7		4.2	5.5	6.1	
Green Ext Time (p_c), s	2.3	1.4	0.7		0.1	2.0	0.3	

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Notes

Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	L	L	L	T	R	L	L	T
Maximum Queue (ft)	120	78	287	253	123	62	140	163	404	374	135
Average Queue (ft)	53	9	187	144	52	6	62	45	261	218	54
95th Queue (ft)	99	47	264	232	97	33	113	123	367	327	107
Link Distance (ft)	443	443	652	652	352	352	352	352	612	612	612
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Network Summary

Network wide Queuing Penalty: 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	0	99	279	0	1162	325	262	328	809	168	155
Future Volume (veh/h)	184	0	99	279	0	1162	325	262	328	809	168	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1863	0	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	0	110	310	0	0	361	291	0	899	187	0
Adj No. of Lanes	1	0	1	2	0	1	2	1	1	2	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	262	0	0	424	0	0	502	583	495	1090	902	766
Arrive On Green	0.15	0.00	0.00	0.12	0.00	0.00	0.15	0.31	0.00	0.32	0.48	0.00
Sat Flow, veh/h	1774	204		3442	310		3442	1863	1583	3442	1863	1583
Grp Volume(v), veh/h	204	29.8		310	29.4		361	291	0	899	187	0
Grp Sat Flow(s),veh/h/ln	1774	C		1721	C		1721	1863	1583	1721	1863	1583
Q Serve(g_s), s	6.7			5.3			6.1	7.7	0.0	14.7	3.5	0.0
Cycle Q Clear(g_c), s	6.7			5.3			6.1	7.7	0.0	14.7	3.5	0.0
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262			424			502	583	495	1090	902	766
V/C Ratio(X)	0.78			0.73			0.72	0.50	0.00	0.82	0.21	0.00
Avail Cap(c_a), veh/h	935			538			879	583	495	1445	902	766
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.9			25.6			24.8	17.0	0.0	19.2	9.0	0.0
Incr Delay (d2), s/veh	4.9			3.7			2.0	3.0	0.0	3.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6			2.7			3.0	4.5	0.0	7.3	1.9	0.0
LnGrp Delay(d),s/veh	29.8			29.4			26.7	20.0	0.0	22.2	9.5	0.0
LnGrp LOS	C			C			C	C		C	A	
Approach Vol, veh/h								652			1086	
Approach Delay, s/veh								23.7			20.0	
Approach LOS								C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	23.7	23.5	12.0		13.3	33.9	13.5	
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5	
Max Green Setting (Gmax), s	25.5	19.0	9.5		15.5	29.0	32.0	
Max Q Clear Time (g_c+I1), s	16.7	9.7	7.3		8.1	5.5	8.7	
Green Ext Time (p_c), s	2.6	1.9	0.3		0.8	2.9	0.6	

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	L	R	L	L	T	R	L	L	T
Maximum Queue (ft)	189	41	249	350	386	199	157	215	158	298	261	146
Average Queue (ft)	93	2	111	66	26	118	50	105	39	193	150	57
95th Queue (ft)	158	18	197	203	250	179	132	180	115	261	232	110
Link Distance (ft)	443	443	755	755	755	357	357	357	357	624	624	624
Upstream Blk Time (%)			0	0	0							
Queuing Penalty (veh)			0	0	0							
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 3: Glenn McConnell Pkwy & Magwood Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	37
Average Queue (ft)	2
95th Queue (ft)	17
Link Distance (ft)	624
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

5.0 Reasonable Alternatives Screening

5.1 I-526 & I-26 System-To-System Interchange

5.1.1 HCS Analysis Results

5.1.1.1 No Build

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1970	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1280	240	390	2250
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	7.00	7.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.935	0.935
Flow Rate (v_i), pc/h	1456	261	444	2560
Weaving Flow Rate (v_w), pc/h	2821	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1900	Density-Based Capacity (c_{IWL}), pc/h/ln		1763
Total Flow Rate (v), pc/h	4721	Demand Flow-Based Capacity (c_{IW}), pc/h		4013
Volume Ratio (VR)	0.598	Weaving Segment Capacity (c_W), veh/h		3762
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		4013
Maximum Weaving Length (L_{MAX}), ft	8994	Volume-to-Capacity Ratio (v/c)		1.18

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1970	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1460	660	470	2140
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	1632	716	525	2391
Weaving Flow Rate (v_w), pc/h	3107	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2157	Density-Based Capacity (c_{IWL}), pc/h/ln		1770
Total Flow Rate (v), pc/h	5264	Demand Flow-Based Capacity (c_{IW}), pc/h		4068
Volume Ratio (VR)	0.590	Weaving Segment Capacity (c_W), veh/h		3888
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		4068
Maximum Weaving Length (L_{MAX}), ft	8897	Volume-to-Capacity Ratio (v/c)		1.29

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	3100	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2950	2280	500	320
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	3297	2475	559	358
Weaving Flow Rate (v_w), pc/h	2833	Freeway Max Capacity (c_{IFL}), pc/h/ln		2350
Non-Weaving Flow Rate (v_{NW}), pc/h	3856	Density-Based Capacity (c_{IWL}), pc/h/ln		2055
Total Flow Rate (v), pc/h	6689	Demand Flow-Based Capacity (c_{IW}), pc/h		5660
Volume Ratio (VR)	0.424	Weaving Segment Capacity (c_W), veh/h		5447
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		5660
Maximum Weaving Length (L_{MAX}), ft	6952	Volume-to-Capacity Ratio (v/c)		1.18

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	3100	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2570	1610	360	160
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	2872	1748	391	174
Weaving Flow Rate (v_w), pc/h	1922	Freeway Max Capacity (c_{IFL}), pc/h/ln		2350
Non-Weaving Flow Rate (v_{NW}), pc/h	3263	Density-Based Capacity (c_{IWL}), pc/h/ln		2101
Total Flow Rate (v), pc/h	5185	Demand Flow-Based Capacity (c_{IW}), pc/h		6469
Volume Ratio (VR)	0.371	Weaving Segment Capacity (c_W), veh/h		6079
Minimum Lane Change Rate (LC_{MIN}), lc/h	1922	Adjusted Weaving Area Capacity, pc/h		6303
Maximum Weaving Length (L_{MAX}), ft	6358	Volume-to-Capacity Ratio (v/c)		0.82

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1012	Average Weaving Speed (S_W), mi/h	54.2
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1775	Average Non-Weaving Speed (S_{NW}), mi/h	42.9
Weaving Lane Change Rate (LC_W), lc/h	2245	Average Speed (S), mi/h	46.5
Weaving Lane Change Rate (LC_{All}), lc/h	4020	Density (D), pc/mi/ln	37.2
Weaving Intensity Factor (W)	0.277	Level of Service (LOS)	E

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	730	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2410	1470	0	1920
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	2.00	9.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.980	0.917	0.917
Flow Rate (v_i), pc/h	2897	1596	0	2227
Weaving Flow Rate (v_w), pc/h	3823	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2897	Density-Based Capacity (c_{IWL}), pc/h/ln		1695
Total Flow Rate (v), pc/h	6720	Demand Flow-Based Capacity (c_{IW}), pc/h		4218
Volume Ratio (VR)	0.569	Weaving Segment Capacity (c_W), veh/h		3873
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		4218
Maximum Weaving Length (L_{MAX}), ft	8644	Volume-to-Capacity Ratio (v/c)		1.59

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	730	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1990	990	0	2090
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	3.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.971	0.952	0.952
Flow Rate (v_i), pc/h	2350	1085	0	2336
Weaving Flow Rate (v_w), pc/h	3421	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2350	Density-Based Capacity (c_{IWL}), pc/h/ln		1672
Total Flow Rate (v), pc/h	5771	Demand Flow-Based Capacity (c_{IW}), pc/h		4047
Volume Ratio (VR)	0.593	Weaving Segment Capacity (c_W), veh/h		3783
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		4047
Maximum Weaving Length (L_{MAX}), ft	8934	Volume-to-Capacity Ratio (v/c)		1.43

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1600	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3060	730	0	290
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	15.00	15.00	4.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.870	0.870	0.962
Flow Rate (v_i), pc/h	3550	893	0	321
Weaving Flow Rate (v_w), pc/h	1214	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3550	Density-Based Capacity (c_{IWL}), pc/h/ln		2032
Total Flow Rate (v), pc/h	4764	Demand Flow-Based Capacity (c_{IW}), pc/h		9412
Volume Ratio (VR)	0.255	Weaving Segment Capacity (c_W), veh/h		5555
Minimum Lane Change Rate (LC_{MIN}), lc/h	1214	Adjusted Weaving Area Capacity, pc/h		6096
Maximum Weaving Length (L_{MAX}), ft	5106	Volume-to-Capacity Ratio (v/c)		0.78

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	852	Average Weaving Speed (S_W), mi/h	49.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1021	Average Non-Weaving Speed (S_{NW}), mi/h	43.6
Weaving Lane Change Rate (LC_W), lc/h	1477	Average Speed (S), mi/h	44.9
Weaving Lane Change Rate (LC_{All}), lc/h	2498	Density (D), pc/mi/ln	35.4
Weaving Intensity Factor (W)	0.321	Level of Service (LOS)	E

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1600	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3630	650	0	260
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	6.00	7.00	7.00	3.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.935	0.935	0.971
Flow Rate (v_i), pc/h	4095	740	0	285
Weaving Flow Rate (v_w), pc/h	1025	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4095	Density-Based Capacity (c_{IWL}), pc/h/ln		2075
Total Flow Rate (v), pc/h	5120	Demand Flow-Based Capacity (c_{IW}), pc/h		12000
Volume Ratio (VR)	0.200	Weaving Segment Capacity (c_W), veh/h		5873
Minimum Lane Change Rate (LC_{MIN}), lc/h	1025	Adjusted Weaving Area Capacity, pc/h		6225
Maximum Weaving Length (L_{MAX}), ft	4536	Volume-to-Capacity Ratio (v/c)		0.82

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	983	Average Weaving Speed (S_W), mi/h	49.3
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1133	Average Non-Weaving Speed (S_{NW}), mi/h	44.4
Weaving Lane Change Rate (LC_W), lc/h	1288	Average Speed (S), mi/h	45.3
Weaving Lane Change Rate (LC_{All}), lc/h	2421	Density (D), pc/mi/ln	37.7
Weaving Intensity Factor (W)	0.313	Level of Service (LOS)	E

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction	SCDOT	Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	1850	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6570	310	1740	2860
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.980	0.980	0.980
Flow Rate (v_i), pc/h	7622	337	1889	3105
Weaving Flow Rate (v_w), pc/h	3442	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	9511	Density-Based Capacity (c_{IWL}), pc/h/ln		2042
Total Flow Rate (v), pc/h	12953	Demand Flow-Based Capacity (c_{IW}), pc/h		9023
Volume Ratio (VR)	0.266	Weaving Segment Capacity (c_W), veh/h		8508
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		9023
Maximum Weaving Length (L_{MAX}), ft	5222	Volume-to-Capacity Ratio (v/c)		1.44

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	1850	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3240	560	1200	2440
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3759	608	1303	2649
Weaving Flow Rate (v_w), pc/h	3257	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	5062	Density-Based Capacity (c_{IWL}), pc/h/ln		1937
Total Flow Rate (v), pc/h	8319	Demand Flow-Based Capacity (c_{IW}), pc/h		6122
Volume Ratio (VR)	0.392	Weaving Segment Capacity (c_W), veh/h		5826
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		6123
Maximum Weaving Length (L_{MAX}), ft	6592	Volume-to-Capacity Ratio (v/c)		1.36

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2280	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1750	3010	1050	930
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.980	0.980	0.980
Flow Rate (v_i), pc/h	2030	3267	1140	1010
Weaving Flow Rate (v_w), pc/h	4277	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3170	Density-Based Capacity (c_{IWL}), pc/h/ln		1928
Total Flow Rate (v), pc/h	7447	Demand Flow-Based Capacity (c_{IW}), pc/h		6098
Volume Ratio (VR)	0.574	Weaving Segment Capacity (c_W), veh/h		5871
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		6098
Maximum Weaving Length (L_{MAX}), ft	7138	Volume-to-Capacity Ratio (v/c)		1.22

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2280	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	4810	3140	1050	620
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.980	0.980	0.980
Flow Rate (v_i), pc/h	5526	3409	1140	673
Weaving Flow Rate (v_w), pc/h	4082	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	6666	Density-Based Capacity (c_{IWL}), pc/h/ln		2100
Total Flow Rate (v), pc/h	10748	Demand Flow-Based Capacity (c_{IW}), pc/h		9211
Volume Ratio (VR)	0.380	Weaving Segment Capacity (c_W), veh/h		8771
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		9211
Maximum Weaving Length (L_{MAX}), ft	4892	Volume-to-Capacity Ratio (v/c)		1.17

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1900	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1925	1115	155	575
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.980	0.980	0.980
Flow Rate (v_i), pc/h	2395	1210	168	624
Weaving Flow Rate (v_w), pc/h	1834	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2563	Density-Based Capacity (c_{IWL}), pc/h/ln		1920
Total Flow Rate (v), pc/h	4397	Demand Flow-Based Capacity (c_{IW}), pc/h		5755
Volume Ratio (VR)	0.417	Weaving Segment Capacity (c_W), veh/h		5248
Minimum Lane Change Rate (LC_{MIN}), lc/h	1834	Adjusted Weaving Area Capacity, pc/h		5755
Maximum Weaving Length (L_{MAX}), ft	6872	Volume-to-Capacity Ratio (v/c)		0.76

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	487	Average Weaving Speed (S_W), mi/h	48.9
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	787	Average Non-Weaving Speed (S_{NW}), mi/h	41.5
Weaving Lane Change Rate (LC_W), lc/h	2269	Average Speed (S), mi/h	44.3
Weaving Lane Change Rate (LC_{All}), lc/h	3056	Density (D), pc/mi/ln	24.8
Weaving Intensity Factor (W)	0.329	Level of Service (LOS)	C

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1900	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	4310	1630	230	420
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.980	0.980	0.980
Flow Rate (v_i), pc/h	5044	1769	250	456
Weaving Flow Rate (v_w), pc/h	2225	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	5294	Density-Based Capacity (c_{IWL}), pc/h/ln		2021
Total Flow Rate (v), pc/h	7519	Demand Flow-Based Capacity (c_{IW}), pc/h		8108
Volume Ratio (VR)	0.296	Weaving Segment Capacity (c_W), veh/h		7537
Minimum Lane Change Rate (LC_{MIN}), lc/h	2225	Adjusted Weaving Area Capacity, pc/h		8084
Maximum Weaving Length (L_{MAX}), ft	5541	Volume-to-Capacity Ratio (v/c)		0.93

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1006	Average Weaving Speed (S_W), mi/h	47.0
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1350	Average Non-Weaving Speed (S_{NW}), mi/h	35.0
Weaving Lane Change Rate (LC_W), lc/h	2660	Average Speed (S), mi/h	37.9
Weaving Lane Change Rate (LC_{All}), lc/h	4010	Density (D), pc/mi/ln	49.6
Weaving Intensity Factor (W)	0.407	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1550	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6400	1150	290	500
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	7.00	7.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.935	0.935	0.917
Flow Rate (v_i), pc/h	7425	1308	330	580
Weaving Flow Rate (v_w), pc/h	1888	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	7755	Density-Based Capacity (c_{IWL}), pc/h/ln		2075
Total Flow Rate (v), pc/h	9643	Demand Flow-Based Capacity (c_{IW}), pc/h		12245
Volume Ratio (VR)	0.196	Weaving Segment Capacity (c_W), veh/h		7636
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		8299
Maximum Weaving Length (L_{MAX}), ft	4495	Volume-to-Capacity Ratio (v/c)		1.16

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1550	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3220	860	410	480
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	5.00	5.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.952	0.952	0.917
Flow Rate (v_i), pc/h	3736	961	458	557
Weaving Flow Rate (v_w), pc/h	1518	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4194	Density-Based Capacity (c_{IWL}), pc/h/ln		2019
Total Flow Rate (v), pc/h	5712	Demand Flow-Based Capacity (c_{IW}), pc/h		9023
Volume Ratio (VR)	0.266	Weaving Segment Capacity (c_W), veh/h		7476
Minimum Lane Change Rate (LC_{MIN}), lc/h	1518	Adjusted Weaving Area Capacity, pc/h		8076
Maximum Weaving Length (L_{MAX}), ft	5222	Volume-to-Capacity Ratio (v/c)		0.71

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	650	Average Weaving Speed (S_W), mi/h	48.0
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	934	Average Non-Weaving Speed (S_{NW}), mi/h	42.2
Weaving Lane Change Rate (LC_W), lc/h	1902	Average Speed (S), mi/h	43.6
Weaving Lane Change Rate (LC_{All}), lc/h	2836	Density (D), pc/mi/ln	32.8
Weaving Intensity Factor (W)	0.364	Level of Service (LOS)	D

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	25.0
Segment Length (L) / Acceleration Length (LA),ft	1500	545
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1520	1830
Peak Hour Factor (PHF)	0.94	0.95
Total Trucks, %	9.00	15.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.870
Flow Rate (vi),pc/h	1763	2214
Capacity (c), pc/h	4600	1900
Volume-to-Capacity Ratio (v/c)	0.86	1.17

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.502
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	1763	Ramp Junction Speed (S), mi/h	51.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	3977	Average Density (D), pc/mi/ln	39.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.1

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	25.0
Segment Length (L) / Acceleration Length (LA),ft	1500	545
Terrain Type	Rolling	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2120	1770
Peak Hour Factor (PHF)	0.94	0.95
Total Trucks, %	5.00	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.909	0.971
Flow Rate (vi),pc/h	2481	1919
Capacity (c), pc/h	4600	1900
Volume-to-Capacity Ratio (v/c)	0.96	1.01

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.611
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	2481	Ramp Junction Speed (S), mi/h	49.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	4400	Average Density (D), pc/mi/ln	44.9
Level of Service (LOS)	E	Density in Ramp Influence Area (DR), pc/mi/ln	35.6

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HCS7 Freeway Weaving Report

Project Information

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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	550	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	2.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2910	360	0	970
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	8.00	8.00	4.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.926	0.926	0.962
Flow Rate (v_i), pc/h	3498	414	0	1073
Weaving Flow Rate (v_w), pc/h	1487	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3498	Density-Based Capacity (c_{IWL}), pc/h/ln		1917
Total Flow Rate (v), pc/h	4985	Demand Flow-Based Capacity (c_{IW}), pc/h		8054
Volume Ratio (VR)	0.298	Weaving Segment Capacity (c_W), veh/h		5205
Minimum Lane Change Rate (LC_{MIN}), lc/h	1487	Adjusted Weaving Area Capacity, pc/h		5752
Maximum Weaving Length (L_{MAX}), ft	5562	Volume-to-Capacity Ratio (v/c)		0.87

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	385	Average Weaving Speed (S_W), mi/h	42.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	441	Average Non-Weaving Speed (S_{NW}), mi/h	41.3
Weaving Lane Change Rate (LC_W), lc/h	1621	Average Speed (S), mi/h	41.6
Weaving Lane Change Rate (LC_{All}), lc/h	2062	Density (D), pc/mi/ln	39.9
Weaving Intensity Factor (W)	0.641	Level of Service (LOS)	E

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HCS7 Freeway Weaving Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	550	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	2.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2220	510	0	760
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	3.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.971	0.952	0.952
Flow Rate (v_i), pc/h	2621	559	0	849
Weaving Flow Rate (v_w), pc/h	1408	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2621	Density-Based Capacity (c_{IWL}), pc/h/ln		1874
Total Flow Rate (v), pc/h	4029	Demand Flow-Based Capacity (c_{IW}), pc/h		6877
Volume Ratio (VR)	0.349	Weaving Segment Capacity (c_W), veh/h		5180
Minimum Lane Change Rate (LC_{MIN}), lc/h	1408	Adjusted Weaving Area Capacity, pc/h		5622
Maximum Weaving Length (L_{MAX}), ft	6115	Volume-to-Capacity Ratio (v/c)		0.72

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	288	Average Weaving Speed (S_W), mi/h	43.6
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	260	Average Non-Weaving Speed (S_{NW}), mi/h	43.4
Weaving Lane Change Rate (LC_W), lc/h	1542	Average Speed (S), mi/h	43.5
Weaving Lane Change Rate (LC_{All}), lc/h	1802	Density (D), pc/mi/ln	30.9
Weaving Intensity Factor (W)	0.576	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3040	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1261
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.8
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	17.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Information

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Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5940	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2317
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.97
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	41.7
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6900	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2668
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.11
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Information

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Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3700	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1431
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	20.4
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Project Description	Through | Southbound CD	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	620	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	0	940	30	1800
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.980	0.980	0.980
Flow Rate (v_i), pc/h	0	1020	33	1954
Weaving Flow Rate (v_W), pc/h	2974	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	33	Density-Based Capacity (c_{IWL}), pc/h/ln		1170
Total Flow Rate (v), pc/h	3007	Demand Flow-Based Capacity (c_{IW}), pc/h		2427
Volume Ratio (VR)	0.989	Weaving Segment Capacity (c_W), veh/h		2293
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		2340
Maximum Weaving Length (L_{MAX}), ft	14079	Volume-to-Capacity Ratio (v/c)		1.29

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Project Description	Through | Southbound CD	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	620	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	0	760	0	1770
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.980	0.980	0.980
Flow Rate (v_i), pc/h	0	825	0	1921
Weaving Flow Rate (v_w), pc/h	2746	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	0	Density-Based Capacity (c_{IWL}), pc/h/ln		1159
Total Flow Rate (v), pc/h	2746	Demand Flow-Based Capacity (c_{IW}), pc/h		2400
Volume Ratio (VR)	1.000	Weaving Segment Capacity (c_W), veh/h		2272
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		2318
Maximum Weaving Length (L_{MAX}), ft	14232	Volume-to-Capacity Ratio (v/c)		1.18

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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5.1.1.2 Alternative 1

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1140	440
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	7.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.935	0.980
Flow Rate (vi),pc/h	1297	478
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.24

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	300.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.257
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	507
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	790	Ramp Junction Speed (S), mi/h	56.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	1268	Average Density (D), pc/mi/ln	10.5
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	8.3

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1985	1010
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	5.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.952	0.980
Flow Rate (vi),pc/h	2218	1096
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.55

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	629.4	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.288
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	867
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	54.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	58.7
Flow in Lanes 1 and 2 (v12), pc/h	1351	Ramp Junction Speed (S), mi/h	55.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	2447	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.2

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3300	2680	630	250
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3688	2909	684	271
Weaving Flow Rate (v_w), pc/h	3180	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4372	Density-Based Capacity (c_{IWL}), pc/h/ln		2091
Total Flow Rate (v), pc/h	7552	Demand Flow-Based Capacity (c_{IW}), pc/h		8314
Volume Ratio (VR)	0.421	Weaving Segment Capacity (c_W), veh/h		8034
Minimum Lane Change Rate (LC_{MIN}), lc/h	271	Adjusted Weaving Area Capacity, pc/h		8314
Maximum Weaving Length (L_{MAX}), ft	5352	Volume-to-Capacity Ratio (v/c)		0.91

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1143	Average Weaving Speed (S_W), mi/h	52.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1355	Average Non-Weaving Speed (S_{NW}), mi/h	50.8
Weaving Lane Change Rate (LC_W), lc/h	1088	Average Speed (S), mi/h	51.3
Weaving Lane Change Rate (LC_{All}), lc/h	2443	Density (D), pc/mi/ln	29.4
Weaving Intensity Factor (W)	0.214	Level of Service (LOS)	D

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3270	2080	360	160
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3654	2258	391	174
Weaving Flow Rate (v_w), pc/h	2432	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4045	Density-Based Capacity (c_{IWL}), pc/h/ln		2130
Total Flow Rate (v), pc/h	6477	Demand Flow-Based Capacity (c_{IW}), pc/h		9333
Volume Ratio (VR)	0.375	Weaving Segment Capacity (c_W), veh/h		8999
Minimum Lane Change Rate (LC_{MIN}), lc/h	174	Adjusted Weaving Area Capacity, pc/h		9333
Maximum Weaving Length (L_{MAX}), ft	4836	Volume-to-Capacity Ratio (v/c)		0.69

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1058	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1288	Average Non-Weaving Speed (S_{NW}), mi/h	52.5
Weaving Lane Change Rate (LC_W), lc/h	991	Average Speed (S), mi/h	52.5
Weaving Lane Change Rate (LC_{All}), lc/h	2279	Density (D), pc/mi/ln	24.7
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2134
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	60.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	35.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3685	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2215
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3200	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1924
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.4
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2920	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1724
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	26.1
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1530	350	0	50
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	7.00	7.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.935	0.935
Flow Rate (v_i), pc/h	1741	380	0	57
Weaving Flow Rate (v_w), pc/h	437	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1741	Density-Based Capacity (c_{IWL}), pc/h/ln		2136
Total Flow Rate (v), pc/h	2178	Demand Flow-Based Capacity (c_{IW}), pc/h		11940
Volume Ratio (VR)	0.201	Weaving Segment Capacity (c_W), veh/h		6042
Minimum Lane Change Rate (LC_{MIN}), lc/h	437	Adjusted Weaving Area Capacity, pc/h		6408
Maximum Weaving Length (L_{MAX}), ft	4546	Volume-to-Capacity Ratio (v/c)		0.34

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	418	Average Weaving Speed (S_W), mi/h	53.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1082	Average Non-Weaving Speed (S_{NW}), mi/h	53.4
Weaving Lane Change Rate (LC_W), lc/h	717	Average Speed (S), mi/h	53.3
Weaving Lane Change Rate (LC_{All}), lc/h	1799	Density (D), pc/mi/ln	13.6
Weaving Intensity Factor (W)	0.180	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2925	320	0	70
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	3269	347	0	78
Weaving Flow Rate (v_w), pc/h	425	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3269	Density-Based Capacity (c_{IWL}), pc/h/ln		2202
Total Flow Rate (v), pc/h	3694	Demand Flow-Based Capacity (c_{IW}), pc/h		20870
Volume Ratio (VR)	0.115	Weaving Segment Capacity (c_W), veh/h		6306
Minimum Lane Change Rate (LC_{MIN}), lc/h	425	Adjusted Weaving Area Capacity, pc/h		6606
Maximum Weaving Length (L_{MAX}), ft	3686	Volume-to-Capacity Ratio (v/c)		0.56

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	785	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1396	Average Non-Weaving Speed (S_{NW}), mi/h	51.0
Weaving Lane Change Rate (LC_W), lc/h	705	Average Speed (S), mi/h	51.2
Weaving Lane Change Rate (LC_{All}), lc/h	2101	Density (D), pc/mi/ln	24.0
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2840	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1648
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3000	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1692
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5120	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1980
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	54.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	36.5
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3660	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1415
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	6840	1780
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	7935	2065
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.86	0.94

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.354
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1656
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	63.3
Flow in Lanes 1 and 2 (v12), pc/h	4624	Ramp Junction Speed (S), mi/h	57.3
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	34.6
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.5

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	4310	1980
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.943
Flow Rate (vi),pc/h	5000	2234
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.54	1.02

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.369
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	780
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3440	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	3440	Average Density (D), pc/mi/ln	45.0
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	20.3

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3450	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1000
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	71.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.9
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6980	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2005
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	31.8
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	310	2260	90	820
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	13.00	13.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.885	0.885	0.855
Flow Rate (v_i), pc/h	386	2717	108	1020
Weaving Flow Rate (v_w), pc/h	3737	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	494	Density-Based Capacity (c_{IWL}), pc/h/ln		1583
Total Flow Rate (v), pc/h	4231	Demand Flow-Based Capacity (c_{IW}), pc/h		3964
Volume Ratio (VR)	0.883	Weaving Segment Capacity (c_W), veh/h		3468
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3963
Maximum Weaving Length (L_{MAX}), ft	11070	Volume-to-Capacity Ratio (v/c)		1.07

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	300	2575	80	740
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	11.00	11.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.901	0.901	0.909
Flow Rate (v_i), pc/h	351	3040	94	866
Weaving Flow Rate (v_w), pc/h	3906	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	445	Density-Based Capacity (c_{IWL}), pc/h/ln		1568
Total Flow Rate (v), pc/h	4351	Demand Flow-Based Capacity (c_{IW}), pc/h		3898
Volume Ratio (VR)	0.898	Weaving Segment Capacity (c_W), veh/h		3520
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3897
Maximum Weaving Length (L_{MAX}), ft	11271	Volume-to-Capacity Ratio (v/c)		1.12

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1840	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	763
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4620	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1802
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	27.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	720	790	0	350
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	17.00	17.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.855	0.855	0.855
Flow Rate (v_i), pc/h	896	983	0	435
Weaving Flow Rate (v_w), pc/h	1418	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	896	Density-Based Capacity (c_{IWL}), pc/h/ln		1825
Total Flow Rate (v), pc/h	2314	Demand Flow-Based Capacity (c_{IW}), pc/h		5710
Volume Ratio (VR)	0.613	Weaving Segment Capacity (c_W), veh/h		4681
Minimum Lane Change Rate (LC_{MIN}), lc/h	1418	Adjusted Weaving Area Capacity, pc/h		5475
Maximum Weaving Length (L_{MAX}), ft	7611	Volume-to-Capacity Ratio (v/c)		0.42

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	125	Average Weaving Speed (S_W), mi/h	49.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	366	Average Non-Weaving Speed (S_{NW}), mi/h	46.1
Weaving Lane Change Rate (LC_W), lc/h	1621	Average Speed (S), mi/h	48.2
Weaving Lane Change Rate (LC_{All}), lc/h	1987	Density (D), pc/mi/ln	16.0
Weaving Intensity Factor (W)	0.298	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1000	800	0	510
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	10.00	10.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.909	0.909	0.909
Flow Rate (v_i), pc/h	1170	936	0	597
Weaving Flow Rate (v_w), pc/h	1533	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1170	Density-Based Capacity (c_{IWL}), pc/h/ln		1867
Total Flow Rate (v), pc/h	2703	Demand Flow-Based Capacity (c_{IW}), pc/h		6173
Volume Ratio (VR)	0.567	Weaving Segment Capacity (c_W), veh/h		5091
Minimum Lane Change Rate (LC_{MIN}), lc/h	1533	Adjusted Weaving Area Capacity, pc/h		5601
Maximum Weaving Length (L_{MAX}), ft	7054	Volume-to-Capacity Ratio (v/c)		0.48

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	164	Average Weaving Speed (S_W), mi/h	49.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	422	Average Non-Weaving Speed (S_{NW}), mi/h	44.6
Weaving Lane Change Rate (LC_W), lc/h	1736	Average Speed (S), mi/h	47.0
Weaving Lane Change Rate (LC_{All}), lc/h	2158	Density (D), pc/mi/ln	19.2
Weaving Intensity Factor (W)	0.318	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6040	1430	290	490
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	7.00	7.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.935	0.935	0.917
Flow Rate (v_i), pc/h	7007	1627	330	568
Weaving Flow Rate (v_w), pc/h	2195	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	7337	Density-Based Capacity (c_{IWL}), pc/h/ln		2044
Total Flow Rate (v), pc/h	9532	Demand Flow-Based Capacity (c_{IW}), pc/h		10435
Volume Ratio (VR)	0.230	Weaving Segment Capacity (c_W), veh/h		7528
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		8176
Maximum Weaving Length (L_{MAX}), ft	4845	Volume-to-Capacity Ratio (v/c)		1.17

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2770	1250	410	460
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	5.00	5.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.952	0.952	0.917
Flow Rate (v_i), pc/h	3214	1397	458	534
Weaving Flow Rate (v_w), pc/h	1931	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3672	Density-Based Capacity (c_{IWL}), pc/h/ln		1950
Total Flow Rate (v), pc/h	5603	Demand Flow-Based Capacity (c_{IW}), pc/h		6957
Volume Ratio (VR)	0.345	Weaving Segment Capacity (c_W), veh/h		6460
Minimum Lane Change Rate (LC_{MIN}), lc/h	1931	Adjusted Weaving Area Capacity, pc/h		6957
Maximum Weaving Length (L_{MAX}), ft	6072	Volume-to-Capacity Ratio (v/c)		0.81

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	551	Average Weaving Speed (S_W), mi/h	47.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	799	Average Non-Weaving Speed (S_{NW}), mi/h	39.4
Weaving Lane Change Rate (LC_W), lc/h	2307	Average Speed (S), mi/h	41.8
Weaving Lane Change Rate (LC_{All}), lc/h	3106	Density (D), pc/mi/ln	33.5
Weaving Intensity Factor (W)	0.401	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Project Information

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1322
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.5
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

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Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3430	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1301
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.2
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1510	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	940
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.7
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Project Information

Analyst		Date	5/7/2020
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Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1800	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1054
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5060	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1957
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2330	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	901
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.1.1.3 Alternative 2

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1140	440
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	7.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.935	0.980
Flow Rate (vi),pc/h	1297	478
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.24

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	300.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.257
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	507
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	790	Ramp Junction Speed (S), mi/h	56.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	1268	Average Density (D), pc/mi/ln	10.5
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	8.3

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1985	1010
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	5.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.952	0.980
Flow Rate (vi),pc/h	2218	1096
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.55

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	629.4	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.288
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	867
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	54.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	58.7
Flow in Lanes 1 and 2 (v12), pc/h	1351	Ramp Junction Speed (S), mi/h	55.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	2447	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.2

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3300	2680	630	250
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3688	2909	684	271
Weaving Flow Rate (v_w), pc/h	3180	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4372	Density-Based Capacity (c_{IWL}), pc/h/ln		2091
Total Flow Rate (v), pc/h	7552	Demand Flow-Based Capacity (c_{IW}), pc/h		8314
Volume Ratio (VR)	0.421	Weaving Segment Capacity (c_W), veh/h		8034
Minimum Lane Change Rate (LC_{MIN}), lc/h	271	Adjusted Weaving Area Capacity, pc/h		8314
Maximum Weaving Length (L_{MAX}), ft	5352	Volume-to-Capacity Ratio (v/c)		0.91

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1143	Average Weaving Speed (S_W), mi/h	52.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1355	Average Non-Weaving Speed (S_{NW}), mi/h	50.8
Weaving Lane Change Rate (LC_W), lc/h	1088	Average Speed (S), mi/h	51.3
Weaving Lane Change Rate (LC_{All}), lc/h	2443	Density (D), pc/mi/ln	29.4
Weaving Intensity Factor (W)	0.214	Level of Service (LOS)	D

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3270	2080	360	160
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3654	2258	391	174
Weaving Flow Rate (v_w), pc/h	2432	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4045	Density-Based Capacity (c_{IWL}), pc/h/ln		2130
Total Flow Rate (v), pc/h	6477	Demand Flow-Based Capacity (c_{IW}), pc/h		9333
Volume Ratio (VR)	0.375	Weaving Segment Capacity (c_W), veh/h		8999
Minimum Lane Change Rate (LC_{MIN}), lc/h	174	Adjusted Weaving Area Capacity, pc/h		9333
Maximum Weaving Length (L_{MAX}), ft	4836	Volume-to-Capacity Ratio (v/c)		0.69

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1058	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1288	Average Non-Weaving Speed (S_{NW}), mi/h	52.5
Weaving Lane Change Rate (LC_W), lc/h	991	Average Speed (S), mi/h	52.5
Weaving Lane Change Rate (LC_{All}), lc/h	2279	Density (D), pc/mi/ln	24.7
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2134
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	60.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	35.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3685	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2215
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3200	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1924
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.4
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2920	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1724
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	26.1
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1530	350	0	50
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	7.00	7.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.935	0.935
Flow Rate (v_i), pc/h	1741	380	0	57
Weaving Flow Rate (v_w), pc/h	437	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1741	Density-Based Capacity (c_{IWL}), pc/h/ln		2136
Total Flow Rate (v), pc/h	2178	Demand Flow-Based Capacity (c_{IW}), pc/h		11940
Volume Ratio (VR)	0.201	Weaving Segment Capacity (c_W), veh/h		6042
Minimum Lane Change Rate (LC_{MIN}), lc/h	437	Adjusted Weaving Area Capacity, pc/h		6408
Maximum Weaving Length (L_{MAX}), ft	4546	Volume-to-Capacity Ratio (v/c)		0.34

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	418	Average Weaving Speed (S_W), mi/h	53.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1082	Average Non-Weaving Speed (S_{NW}), mi/h	53.4
Weaving Lane Change Rate (LC_W), lc/h	717	Average Speed (S), mi/h	53.3
Weaving Lane Change Rate (LC_{All}), lc/h	1799	Density (D), pc/mi/ln	13.6
Weaving Intensity Factor (W)	0.180	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2925	320	0	70
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	3269	347	0	78
Weaving Flow Rate (v_w), pc/h	425	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3269	Density-Based Capacity (c_{IWL}), pc/h/ln		2202
Total Flow Rate (v), pc/h	3694	Demand Flow-Based Capacity (c_{IW}), pc/h		20870
Volume Ratio (VR)	0.115	Weaving Segment Capacity (c_W), veh/h		6306
Minimum Lane Change Rate (LC_{MIN}), lc/h	425	Adjusted Weaving Area Capacity, pc/h		6606
Maximum Weaving Length (L_{MAX}), ft	3686	Volume-to-Capacity Ratio (v/c)		0.56

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	785	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1396	Average Non-Weaving Speed (S_{NW}), mi/h	51.0
Weaving Lane Change Rate (LC_W), lc/h	705	Average Speed (S), mi/h	51.2
Weaving Lane Change Rate (LC_{All}), lc/h	2101	Density (D), pc/mi/ln	24.0
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2840	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1648
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3000	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1692
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5120	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1980
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	54.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	36.5
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3660	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1415
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	6840	1780
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	7935	2065
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.86	0.94

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.354
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1656
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	63.3
Flow in Lanes 1 and 2 (v12), pc/h	4624	Ramp Junction Speed (S), mi/h	57.3
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	34.6
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.5

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	4310	1980
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.943
Flow Rate (vi),pc/h	5000	2234
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.54	1.02

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.369
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	780
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3440	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	3440	Average Density (D), pc/mi/ln	45.0
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	20.3

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3450	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1000
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	71.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.9
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6980	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2005
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	31.8
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2260	310	820	90
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	13.00	13.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.885	0.885	0.855
Flow Rate (v_i), pc/h	2812	373	986	112
Weaving Flow Rate (v_w), pc/h	485	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3798	Density-Based Capacity (c_{IWL}), pc/h/ln		2269
Total Flow Rate (v), pc/h	4283	Demand Flow-Based Capacity (c_{IW}), pc/h		30973
Volume Ratio (VR)	0.113	Weaving Segment Capacity (c_W), veh/h		5885
Minimum Lane Change Rate (LC_{MIN}), lc/h	485	Adjusted Weaving Area Capacity, pc/h		6807
Maximum Weaving Length (L_{MAX}), ft	2100	Volume-to-Capacity Ratio (v/c)		0.63

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	646	Average Weaving Speed (S_W), mi/h	51.3
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1126	Average Non-Weaving Speed (S_{NW}), mi/h	49.7
Weaving Lane Change Rate (LC_W), lc/h	714	Average Speed (S), mi/h	49.9
Weaving Lane Change Rate (LC_{All}), lc/h	1840	Density (D), pc/mi/ln	28.6
Weaving Intensity Factor (W)	0.241	Level of Service (LOS)	D

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Analyst		Date	5/7/2020
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Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2575	300	740	80
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	11.00	11.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.901	0.901	0.909
Flow Rate (v_i), pc/h	3014	354	874	94
Weaving Flow Rate (v_w), pc/h	448	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3888	Density-Based Capacity (c_{IWL}), pc/h/ln		2277
Total Flow Rate (v), pc/h	4336	Demand Flow-Based Capacity (c_{IW}), pc/h		33981
Volume Ratio (VR)	0.103	Weaving Segment Capacity (c_W), veh/h		6194
Minimum Lane Change Rate (LC_{MIN}), lc/h	448	Adjusted Weaving Area Capacity, pc/h		6831
Maximum Weaving Length (L_{MAX}), ft	2003	Volume-to-Capacity Ratio (v/c)		0.63

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	661	Average Weaving Speed (S_W), mi/h	51.3
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1145	Average Non-Weaving Speed (S_{NW}), mi/h	49.8
Weaving Lane Change Rate (LC_W), lc/h	677	Average Speed (S), mi/h	50.0
Weaving Lane Change Rate (LC_{All}), lc/h	1822	Density (D), pc/mi/ln	28.9
Weaving Intensity Factor (W)	0.239	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1840	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	763
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Information

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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4620	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1802
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	27.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	720	790	0	350
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	17.00	17.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.855	0.855	0.855
Flow Rate (v_i), pc/h	896	983	0	435
Weaving Flow Rate (v_w), pc/h	1418	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	896	Density-Based Capacity (c_{IWL}), pc/h/ln		1825
Total Flow Rate (v), pc/h	2314	Demand Flow-Based Capacity (c_{IW}), pc/h		5710
Volume Ratio (VR)	0.613	Weaving Segment Capacity (c_W), veh/h		4681
Minimum Lane Change Rate (LC_{MIN}), lc/h	1418	Adjusted Weaving Area Capacity, pc/h		5475
Maximum Weaving Length (L_{MAX}), ft	7611	Volume-to-Capacity Ratio (v/c)		0.42

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	125	Average Weaving Speed (S_W), mi/h	49.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	366	Average Non-Weaving Speed (S_{NW}), mi/h	46.1
Weaving Lane Change Rate (LC_W), lc/h	1621	Average Speed (S), mi/h	48.2
Weaving Lane Change Rate (LC_{All}), lc/h	1987	Density (D), pc/mi/ln	16.0
Weaving Intensity Factor (W)	0.298	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1000	800	0	510
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	10.00	10.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.909	0.909	0.909
Flow Rate (v_i), pc/h	1170	936	0	597
Weaving Flow Rate (v_w), pc/h	1533	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1170	Density-Based Capacity (c_{IWL}), pc/h/ln		1867
Total Flow Rate (v), pc/h	2703	Demand Flow-Based Capacity (c_{IW}), pc/h		6173
Volume Ratio (VR)	0.567	Weaving Segment Capacity (c_W), veh/h		5091
Minimum Lane Change Rate (LC_{MIN}), lc/h	1533	Adjusted Weaving Area Capacity, pc/h		5601
Maximum Weaving Length (L_{MAX}), ft	7054	Volume-to-Capacity Ratio (v/c)		0.48

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	164	Average Weaving Speed (S_W), mi/h	49.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	422	Average Non-Weaving Speed (S_{NW}), mi/h	44.6
Weaving Lane Change Rate (LC_W), lc/h	1736	Average Speed (S), mi/h	47.0
Weaving Lane Change Rate (LC_{All}), lc/h	2158	Density (D), pc/mi/ln	19.2
Weaving Intensity Factor (W)	0.318	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6040	1430	290	490
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	7.00	7.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.935	0.935	0.917
Flow Rate (v_i), pc/h	7007	1627	330	568
Weaving Flow Rate (v_w), pc/h	2195	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	7337	Density-Based Capacity (c_{IWL}), pc/h/ln		2044
Total Flow Rate (v), pc/h	9532	Demand Flow-Based Capacity (c_{IW}), pc/h		10435
Volume Ratio (VR)	0.230	Weaving Segment Capacity (c_W), veh/h		7528
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		8176
Maximum Weaving Length (L_{MAX}), ft	4845	Volume-to-Capacity Ratio (v/c)		1.17

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2770	1250	410	460
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	9.00	5.00	5.00	9.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.917	0.952	0.952	0.917
Flow Rate (v_i), pc/h	3214	1397	458	534
Weaving Flow Rate (v_w), pc/h	1931	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3672	Density-Based Capacity (c_{IWL}), pc/h/ln		1950
Total Flow Rate (v), pc/h	5603	Demand Flow-Based Capacity (c_{IW}), pc/h		6957
Volume Ratio (VR)	0.345	Weaving Segment Capacity (c_W), veh/h		6460
Minimum Lane Change Rate (LC_{MIN}), lc/h	1931	Adjusted Weaving Area Capacity, pc/h		6957
Maximum Weaving Length (L_{MAX}), ft	6072	Volume-to-Capacity Ratio (v/c)		0.81

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	551	Average Weaving Speed (S_W), mi/h	47.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	799	Average Non-Weaving Speed (S_{NW}), mi/h	39.4
Weaving Lane Change Rate (LC_W), lc/h	2307	Average Speed (S), mi/h	41.8
Weaving Lane Change Rate (LC_{All}), lc/h	3106	Density (D), pc/mi/ln	33.5
Weaving Intensity Factor (W)	0.401	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Project Information

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1322
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.5
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3430	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1301
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.2
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1510	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	940
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.7
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Project Information

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Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1800	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1054
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5060	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1957
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2330	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	901
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.1.1.4 Alternative 1A

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
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Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1140	440
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	7.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.935	0.980
Flow Rate (vi),pc/h	1297	478
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.24

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	300.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.257
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	507
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	790	Ramp Junction Speed (S), mi/h	56.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	1268	Average Density (D), pc/mi/ln	10.5
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	8.3

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HCS7 Freeway Merge Report

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Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1985	1010
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	5.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.952	0.980
Flow Rate (vi),pc/h	2218	1096
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.55

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	629.4	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.288
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	867
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	54.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	58.7
Flow in Lanes 1 and 2 (v12), pc/h	1351	Ramp Junction Speed (S), mi/h	55.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	2447	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.2

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3300	2680	630	250
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3688	2909	684	271
Weaving Flow Rate (v_w), pc/h	3180	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4372	Density-Based Capacity (c_{IWL}), pc/h/ln		2091
Total Flow Rate (v), pc/h	7552	Demand Flow-Based Capacity (c_{IW}), pc/h		8314
Volume Ratio (VR)	0.421	Weaving Segment Capacity (c_W), veh/h		8034
Minimum Lane Change Rate (LC_{MIN}), lc/h	271	Adjusted Weaving Area Capacity, pc/h		8314
Maximum Weaving Length (L_{MAX}), ft	5352	Volume-to-Capacity Ratio (v/c)		0.91

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1143	Average Weaving Speed (S_W), mi/h	52.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1355	Average Non-Weaving Speed (S_{NW}), mi/h	50.8
Weaving Lane Change Rate (LC_W), lc/h	1088	Average Speed (S), mi/h	51.3
Weaving Lane Change Rate (LC_{All}), lc/h	2443	Density (D), pc/mi/ln	29.4
Weaving Intensity Factor (W)	0.214	Level of Service (LOS)	D

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Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3270	2080	360	160
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3654	2258	391	174
Weaving Flow Rate (v_w), pc/h	2432	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4045	Density-Based Capacity (c_{IWL}), pc/h/ln		2130
Total Flow Rate (v), pc/h	6477	Demand Flow-Based Capacity (c_{IW}), pc/h		9333
Volume Ratio (VR)	0.375	Weaving Segment Capacity (c_W), veh/h		8999
Minimum Lane Change Rate (LC_{MIN}), lc/h	174	Adjusted Weaving Area Capacity, pc/h		9333
Maximum Weaving Length (L_{MAX}), ft	4836	Volume-to-Capacity Ratio (v/c)		0.69

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1058	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1288	Average Non-Weaving Speed (S_{NW}), mi/h	52.5
Weaving Lane Change Rate (LC_W), lc/h	991	Average Speed (S), mi/h	52.5
Weaving Lane Change Rate (LC_{All}), lc/h	2279	Density (D), pc/mi/ln	24.7
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	930	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.70	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1200	140	180	2350
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	13.00	13.00	13.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.885	0.885	0.885
Flow Rate (v_i), pc/h	1442	168	216	2825
Weaving Flow Rate (v_W), pc/h	2993	Freeway Max Capacity (c_{IFL}), pc/h/ln		2250
Non-Weaving Flow Rate (v_{NW}), pc/h	1658	Density-Based Capacity (c_{IWL}), pc/h/ln		1590
Total Flow Rate (v), pc/h	4651	Demand Flow-Based Capacity (c_{IW}), pc/h		3727
Volume Ratio (VR)	0.644	Weaving Segment Capacity (c_W), veh/h		3298
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3727
Maximum Weaving Length (L_{MAX}), ft	9558	Volume-to-Capacity Ratio (v/c)		1.25

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	930	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.70	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1030	60	270	2655
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	11.00	11.00	11.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.901	0.901	0.901
Flow Rate (v_i), pc/h	1216	71	319	3135

Weaving Flow Rate (v_w), pc/h	3206	Freeway Max Capacity (c_{IFL}), pc/h/ln	2250
Non-Weaving Flow Rate (v_{NW}), pc/h	1535	Density-Based Capacity (c_{IWL}), pc/h/ln	1560
Total Flow Rate (v), pc/h	4741	Demand Flow-Based Capacity (c_{IW}), pc/h	3550
Volume Ratio (VR)	0.676	Weaving Segment Capacity (c_W), veh/h	3199
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h	3550
Maximum Weaving Length (L_{MAX}), ft	9955	Volume-to-Capacity Ratio (v/c)	1.34

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3200	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1924
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.4
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2920	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1724
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	26.1
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1280	350	0	300
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	7.00	7.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.935	0.935
Flow Rate (v_i), pc/h	1456	380	0	341
Weaving Flow Rate (v_w), pc/h	721	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1456	Density-Based Capacity (c_{IWL}), pc/h/ln		2031
Total Flow Rate (v), pc/h	2177	Demand Flow-Based Capacity (c_{IW}), pc/h		7251
Volume Ratio (VR)	0.331	Weaving Segment Capacity (c_W), veh/h		5745
Minimum Lane Change Rate (LC_{MIN}), lc/h	721	Adjusted Weaving Area Capacity, pc/h		6093
Maximum Weaving Length (L_{MAX}), ft	5919	Volume-to-Capacity Ratio (v/c)		0.36

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	349	Average Weaving Speed (S_W), mi/h	52.6
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1023	Average Non-Weaving Speed (S_{NW}), mi/h	51.3
Weaving Lane Change Rate (LC_W), lc/h	1001	Average Speed (S), mi/h	51.7
Weaving Lane Change Rate (LC_{All}), lc/h	2024	Density (D), pc/mi/ln	14.0
Weaving Intensity Factor (W)	0.198	Level of Service (LOS)	B

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Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2045	320	0	950
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	2285	347	0	1062
Weaving Flow Rate (v_w), pc/h	1409	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2285	Density-Based Capacity (c_{IWL}), pc/h/ln		1989
Total Flow Rate (v), pc/h	3694	Demand Flow-Based Capacity (c_{IW}), pc/h		6299
Volume Ratio (VR)	0.381	Weaving Segment Capacity (c_W), veh/h		5696
Minimum Lane Change Rate (LC_{MIN}), lc/h	1409	Adjusted Weaving Area Capacity, pc/h		5967
Maximum Weaving Length (L_{MAX}), ft	6469	Volume-to-Capacity Ratio (v/c)		0.62

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	548	Average Weaving Speed (S_W), mi/h	50.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1194	Average Non-Weaving Speed (S_{NW}), mi/h	43.9
Weaving Lane Change Rate (LC_W), lc/h	1689	Average Speed (S), mi/h	46.3
Weaving Lane Change Rate (LC_{All}), lc/h	2883	Density (D), pc/mi/ln	26.6
Weaving Intensity Factor (W)	0.261	Level of Service (LOS)	C

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2840	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1648
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3000	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1692
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5120	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1980
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	54.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	36.5
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3660	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1415
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	6890	1830
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	7993	2123
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.87	0.97

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.359
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1656
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	63.3
Flow in Lanes 1 and 2 (v12), pc/h	4682	Ramp Junction Speed (S), mi/h	57.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.0

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	4360	2030
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.943
Flow Rate (vi),pc/h	5058	2290
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.55	1.04

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.374
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	781
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3497	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	3497	Average Density (D), pc/mi/ln	45.0
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	20.8

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3450	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1000
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	71.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.9
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6980	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2005
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	31.8
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	310	2440	90	820
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	13.00	13.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.885	0.885	0.855
Flow Rate (v_i), pc/h	386	2933	108	1020
Weaving Flow Rate (v_W), pc/h	3953	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	494	Density-Based Capacity (c_{IWL}), pc/h/ln		1577
Total Flow Rate (v), pc/h	4447	Demand Flow-Based Capacity (c_{IW}), pc/h		3937
Volume Ratio (VR)	0.889	Weaving Segment Capacity (c_W), veh/h		3447
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3937
Maximum Weaving Length (L_{MAX}), ft	11150	Volume-to-Capacity Ratio (v/c)		1.13

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	300	2845	80	740
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	11.00	11.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.901	0.901	0.909
Flow Rate (v_i), pc/h	351	3359	94	866
Weaving Flow Rate (v_w), pc/h	4225	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	445	Density-Based Capacity (c_{IWL}), pc/h/ln		1561
Total Flow Rate (v), pc/h	4670	Demand Flow-Based Capacity (c_{IW}), pc/h		3867
Volume Ratio (VR)	0.905	Weaving Segment Capacity (c_W), veh/h		3493
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3868
Maximum Weaving Length (L_{MAX}), ft	11365	Volume-to-Capacity Ratio (v/c)		1.21

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1840	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	763
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4620	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1802
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	27.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	720	790	0	540
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	17.00	17.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.855	0.855	0.855
Flow Rate (v_i), pc/h	896	983	0	672
Weaving Flow Rate (v_w), pc/h	1655	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	896	Density-Based Capacity (c_{IWL}), pc/h/ln		1791
Total Flow Rate (v), pc/h	2551	Demand Flow-Based Capacity (c_{IW}), pc/h		5393
Volume Ratio (VR)	0.649	Weaving Segment Capacity (c_W), veh/h		4594
Minimum Lane Change Rate (LC_{MIN}), lc/h	1655	Adjusted Weaving Area Capacity, pc/h		5373
Maximum Weaving Length (L_{MAX}), ft	8053	Volume-to-Capacity Ratio (v/c)		0.47

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	125	Average Weaving Speed (S_W), mi/h	48.9
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	366	Average Non-Weaving Speed (S_{NW}), mi/h	44.0
Weaving Lane Change Rate (LC_W), lc/h	1858	Average Speed (S), mi/h	47.1
Weaving Lane Change Rate (LC_{All}), lc/h	2224	Density (D), pc/mi/ln	18.1
Weaving Intensity Factor (W)	0.326	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1000	800	0	690
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	10.00	10.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.909	0.909	0.909
Flow Rate (v_i), pc/h	1170	936	0	808
Weaving Flow Rate (v_w), pc/h	1744	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1170	Density-Based Capacity (c_{IWL}), pc/h/ln		1839
Total Flow Rate (v), pc/h	2914	Demand Flow-Based Capacity (c_{IW}), pc/h		5853
Volume Ratio (VR)	0.598	Weaving Segment Capacity (c_W), veh/h		5015
Minimum Lane Change Rate (LC_{MIN}), lc/h	1744	Adjusted Weaving Area Capacity, pc/h		5517
Maximum Weaving Length (L_{MAX}), ft	7428	Volume-to-Capacity Ratio (v/c)		0.53

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	164	Average Weaving Speed (S_W), mi/h	48.5
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	422	Average Non-Weaving Speed (S_{NW}), mi/h	42.8
Weaving Lane Change Rate (LC_W), lc/h	1947	Average Speed (S), mi/h	46.0
Weaving Lane Change Rate (LC_{All}), lc/h	2369	Density (D), pc/mi/ln	21.1
Weaving Intensity Factor (W)	0.342	Level of Service (LOS)	C

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	475	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6880	420	0	730
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	7688	456	0	792
Weaving Flow Rate (v_w), pc/h	1248	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	7688	Density-Based Capacity (c_{IWL}), pc/h/ln		2036
Total Flow Rate (v), pc/h	8936	Demand Flow-Based Capacity (c_{IW}), pc/h		17143
Volume Ratio (VR)	0.140	Weaving Segment Capacity (c_W), veh/h		7785
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		8144
Maximum Weaving Length (L_{MAX}), ft	3932	Volume-to-Capacity Ratio (v/c)		1.10

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	475	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3210	520	0	870
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3652	564	0	944
Weaving Flow Rate (v_w), pc/h	1508	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3652	Density-Based Capacity (c_{IWL}), pc/h/ln		1916
Total Flow Rate (v), pc/h	5160	Demand Flow-Based Capacity (c_{IW}), pc/h		8219
Volume Ratio (VR)	0.292	Weaving Segment Capacity (c_W), veh/h		7267
Minimum Lane Change Rate (LC_{MIN}), lc/h	1508	Adjusted Weaving Area Capacity, pc/h		7664
Maximum Weaving Length (L_{MAX}), ft	5498	Volume-to-Capacity Ratio (v/c)		0.67

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	173	Average Weaving Speed (S_W), mi/h	41.9
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	239	Average Non-Weaving Speed (S_{NW}), mi/h	43.0
Weaving Lane Change Rate (LC_W), lc/h	1652	Average Speed (S), mi/h	42.7
Weaving Lane Change Rate (LC_{All}), lc/h	1891	Density (D), pc/mi/ln	30.2
Weaving Intensity Factor (W)	0.672	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Project Information

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1322
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.5
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3430	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1301
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.2
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1510	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	940
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.7
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Project Information

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Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1800	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1054
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5060	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1957
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2330	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	901
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.1.1.5 Alternative 2A

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1140	440
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	7.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.935	0.980
Flow Rate (vi),pc/h	1297	478
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.24

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	300.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.257
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	507
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	790	Ramp Junction Speed (S), mi/h	56.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	1268	Average Density (D), pc/mi/ln	10.5
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	8.3

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (1)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	60.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1108
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1985	1010
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	5.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.952	0.980
Flow Rate (vi),pc/h	2218	1096
Capacity (c), pc/h	6900	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.55

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	629.4	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	962	Speed Index (MS)	0.288
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	867
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	54.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.609	Outer Lanes Freeway Speed (SO), mi/h	58.7
Flow in Lanes 1 and 2 (v12), pc/h	1351	Ramp Junction Speed (S), mi/h	55.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	2447	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.2

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HCS7 Basic Freeway Report

Project Information

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Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	West Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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Project Information

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Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3300	2680	630	250
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3688	2909	684	271
Weaving Flow Rate (v_w), pc/h	3180	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4372	Density-Based Capacity (c_{IWL}), pc/h/ln		2091
Total Flow Rate (v), pc/h	7552	Demand Flow-Based Capacity (c_{IW}), pc/h		8314
Volume Ratio (VR)	0.421	Weaving Segment Capacity (c_W), veh/h		8034
Minimum Lane Change Rate (LC_{MIN}), lc/h	271	Adjusted Weaving Area Capacity, pc/h		8314
Maximum Weaving Length (L_{MAX}), ft	5352	Volume-to-Capacity Ratio (v/c)		0.91

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1143	Average Weaving Speed (S_W), mi/h	52.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1355	Average Non-Weaving Speed (S_{NW}), mi/h	50.8
Weaving Lane Change Rate (LC_W), lc/h	1088	Average Speed (S), mi/h	51.3
Weaving Lane Change Rate (LC_{All}), lc/h	2443	Density (D), pc/mi/ln	29.4
Weaving Intensity Factor (W)	0.214	Level of Service (LOS)	D

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Project Description	West Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	5	Segment Type	Freeway
Segment Length (L_S), ft	2615	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	0
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3270	2080	360	160
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3654	2258	391	174
Weaving Flow Rate (v_w), pc/h	2432	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4045	Density-Based Capacity (c_{IWL}), pc/h/ln		2130
Total Flow Rate (v), pc/h	6477	Demand Flow-Based Capacity (c_{IW}), pc/h		9333
Volume Ratio (VR)	0.375	Weaving Segment Capacity (c_W), veh/h		8999
Minimum Lane Change Rate (LC_{MIN}), lc/h	174	Adjusted Weaving Area Capacity, pc/h		9333
Maximum Weaving Length (L_{MAX}), ft	4836	Volume-to-Capacity Ratio (v/c)		0.69

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	1058	Average Weaving Speed (S_W), mi/h	52.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1288	Average Non-Weaving Speed (S_{NW}), mi/h	52.5
Weaving Lane Change Rate (LC_W), lc/h	991	Average Speed (S), mi/h	52.5
Weaving Lane Change Rate (LC_{All}), lc/h	2279	Density (D), pc/mi/ln	24.7
Weaving Intensity Factor (W)	0.203	Level of Service (LOS)	C

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Project Description	East Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	930	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.70	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1200	140	180	2350
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	13.00	13.00	13.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.885	0.885	0.885
Flow Rate (v_i), pc/h	1442	168	216	2825
Weaving Flow Rate (v_W), pc/h	2993	Freeway Max Capacity (c_{IFL}), pc/h/ln		2250
Non-Weaving Flow Rate (v_{NW}), pc/h	1658	Density-Based Capacity (c_{IWL}), pc/h/ln		1590
Total Flow Rate (v), pc/h	4651	Demand Flow-Based Capacity (c_{IW}), pc/h		3727
Volume Ratio (VR)	0.644	Weaving Segment Capacity (c_W), veh/h		3298
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		3727
Maximum Weaving Length (L_{MAX}), ft	9558	Volume-to-Capacity Ratio (v/c)		1.25

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Project Description	East Leg | Enter	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	930	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.70	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1030	60	270	2655
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	11.00	11.00	11.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.901	0.901	0.901
Flow Rate (v_i), pc/h	1216	71	319	3135

Weaving Flow Rate (v_w), pc/h	3206	Freeway Max Capacity (c_{IFL}), pc/h/ln	2250
Non-Weaving Flow Rate (v_{NW}), pc/h	1535	Density-Based Capacity (c_{IWL}), pc/h/ln	1560
Total Flow Rate (v), pc/h	4741	Demand Flow-Based Capacity (c_{IW}), pc/h	3550
Volume Ratio (VR)	0.676	Weaving Segment Capacity (c_W), veh/h	3199
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h	3550
Maximum Weaving Length (L_{MAX}), ft	9955	Volume-to-Capacity Ratio (v/c)	1.34

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3200	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1924
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.4
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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Project Description	East Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	68.8
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2920	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1724
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2388
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2388
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	26.1
Total Ramp Density Adjustment	6.6	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	68.8		

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Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1280	350	0	300
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	7.00	7.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.935	0.935
Flow Rate (v_i), pc/h	1456	380	0	341
Weaving Flow Rate (v_w), pc/h	721	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1456	Density-Based Capacity (c_{IWL}), pc/h/ln		2031
Total Flow Rate (v), pc/h	2177	Demand Flow-Based Capacity (c_{IW}), pc/h		7251
Volume Ratio (VR)	0.331	Weaving Segment Capacity (c_W), veh/h		5745
Minimum Lane Change Rate (LC_{MIN}), lc/h	721	Adjusted Weaving Area Capacity, pc/h		6093
Maximum Weaving Length (L_{MAX}), ft	5919	Volume-to-Capacity Ratio (v/c)		0.36

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	349	Average Weaving Speed (S_W), mi/h	52.6
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1023	Average Non-Weaving Speed (S_{NW}), mi/h	51.3
Weaving Lane Change Rate (LC_W), lc/h	1001	Average Speed (S), mi/h	51.7
Weaving Lane Change Rate (LC_{All}), lc/h	2024	Density (D), pc/mi/ln	14.0
Weaving Intensity Factor (W)	0.198	Level of Service (LOS)	B

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Project Description	East Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	2400	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2045	320	0	950
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	5.00	5.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.952	0.952
Flow Rate (v_i), pc/h	2285	347	0	1062
Weaving Flow Rate (v_w), pc/h	1409	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	2285	Density-Based Capacity (c_{IWL}), pc/h/ln		1989
Total Flow Rate (v), pc/h	3694	Demand Flow-Based Capacity (c_{IW}), pc/h		6299
Volume Ratio (VR)	0.381	Weaving Segment Capacity (c_W), veh/h		5696
Minimum Lane Change Rate (LC_{MIN}), lc/h	1409	Adjusted Weaving Area Capacity, pc/h		5967
Maximum Weaving Length (L_{MAX}), ft	6469	Volume-to-Capacity Ratio (v/c)		0.62

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	548	Average Weaving Speed (S_W), mi/h	50.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1194	Average Non-Weaving Speed (S_{NW}), mi/h	43.9
Weaving Lane Change Rate (LC_W), lc/h	1689	Average Speed (S), mi/h	46.3
Weaving Lane Change Rate (LC_{All}), lc/h	2883	Density (D), pc/mi/ln	26.6
Weaving Intensity Factor (W)	0.261	Level of Service (LOS)	C

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Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2840	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1648
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	East Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3000	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1692
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5120	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1980
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	54.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	36.5
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	55.0
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3660	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1415
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2250
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2250
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	55.0		

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	6890	1830
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	7993	2123
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.87	0.97

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.359
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1656
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	63.3
Flow in Lanes 1 and 2 (v12), pc/h	4682	Ramp Junction Speed (S), mi/h	57.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.0

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Enter (2)	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	60.0	55.0
Segment Length (L) / Deceleration Length (LA),ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	4360	2030
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.943
Flow Rate (vi),pc/h	5058	2290
Capacity (c), pc/h	9200	2200
Volume-to-Capacity Ratio (v/c)	0.55	1.04

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.374
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	781
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3497	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	3497	Average Density (D), pc/mi/ln	45.0
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	20.8

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3450	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1000
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	71.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.9
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.17
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6980	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2005
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	31.8
Total Ramp Density Adjustment	3.7	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.7		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2440	310	820	90
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	13.00	13.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.885	0.885	0.855
Flow Rate (v_i), pc/h	3036	373	986	112
Weaving Flow Rate (v_w), pc/h	485	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4022	Density-Based Capacity (c_{IWL}), pc/h/ln		2273
Total Flow Rate (v), pc/h	4507	Demand Flow-Based Capacity (c_{IW}), pc/h		32407
Volume Ratio (VR)	0.108	Weaving Segment Capacity (c_W), veh/h		5892
Minimum Lane Change Rate (LC_{MIN}), lc/h	485	Adjusted Weaving Area Capacity, pc/h		6819
Maximum Weaving Length (L_{MAX}), ft	2051	Volume-to-Capacity Ratio (v/c)		0.66

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	684	Average Weaving Speed (S_W), mi/h	51.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1172	Average Non-Weaving Speed (S_{NW}), mi/h	49.3
Weaving Lane Change Rate (LC_W), lc/h	714	Average Speed (S), mi/h	49.5
Weaving Lane Change Rate (LC_{All}), lc/h	1886	Density (D), pc/mi/ln	30.4
Weaving Intensity Factor (W)	0.245	Level of Service (LOS)	D

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	North Leg | Exit (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2845	300	740	80
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	11.00	11.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.901	0.901	0.909
Flow Rate (v_i), pc/h	3330	354	874	94
Weaving Flow Rate (v_w), pc/h	448	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4204	Density-Based Capacity (c_{IWL}), pc/h/ln		2282
Total Flow Rate (v), pc/h	4652	Demand Flow-Based Capacity (c_{IW}), pc/h		36458
Volume Ratio (VR)	0.096	Weaving Segment Capacity (c_W), veh/h		6209
Minimum Lane Change Rate (LC_{MIN}), lc/h	448	Adjusted Weaving Area Capacity, pc/h		6846
Maximum Weaving Length (L_{MAX}), ft	1935	Volume-to-Capacity Ratio (v/c)		0.68

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	715	Average Weaving Speed (S_W), mi/h	51.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	1210	Average Non-Weaving Speed (S_{NW}), mi/h	49.3
Weaving Lane Change Rate (LC_W), lc/h	677	Average Speed (S), mi/h	49.5
Weaving Lane Change Rate (LC_{All}), lc/h	1887	Density (D), pc/mi/ln	31.3
Weaving Intensity Factor (W)	0.245	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1840	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	763
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (1)	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4620	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1802
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	27.2
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Weaving Report

Project Information

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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	720	790	0	540
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	17.00	17.00	17.00	17.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.855	0.855	0.855	0.855
Flow Rate (v_i), pc/h	896	983	0	672
Weaving Flow Rate (v_w), pc/h	1655	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	896	Density-Based Capacity (c_{IWL}), pc/h/ln		1791
Total Flow Rate (v), pc/h	2551	Demand Flow-Based Capacity (c_{IW}), pc/h		5393
Volume Ratio (VR)	0.649	Weaving Segment Capacity (c_W), veh/h		4594
Minimum Lane Change Rate (LC_{MIN}), lc/h	1655	Adjusted Weaving Area Capacity, pc/h		5373
Maximum Weaving Length (L_{MAX}), ft	8053	Volume-to-Capacity Ratio (v/c)		0.47

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	125	Average Weaving Speed (S_W), mi/h	48.9
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	366	Average Non-Weaving Speed (S_{NW}), mi/h	44.0
Weaving Lane Change Rate (LC_W), lc/h	1858	Average Speed (S), mi/h	47.1
Weaving Lane Change Rate (LC_{All}), lc/h	2224	Density (D), pc/mi/ln	18.1
Weaving Intensity Factor (W)	0.326	Level of Service (LOS)	B

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	South Leg | Enter (2)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1400	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1000	800	0	690
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	10.00	10.00	10.00	10.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.909	0.909	0.909	0.909
Flow Rate (v_i), pc/h	1170	936	0	808
Weaving Flow Rate (v_w), pc/h	1744	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	1170	Density-Based Capacity (c_{IWL}), pc/h/ln		1839
Total Flow Rate (v), pc/h	2914	Demand Flow-Based Capacity (c_{IW}), pc/h		5853
Volume Ratio (VR)	0.598	Weaving Segment Capacity (c_W), veh/h		5015
Minimum Lane Change Rate (LC_{MIN}), lc/h	1744	Adjusted Weaving Area Capacity, pc/h		5517
Maximum Weaving Length (L_{MAX}), ft	7428	Volume-to-Capacity Ratio (v/c)		0.53

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	164	Average Weaving Speed (S_W), mi/h	48.5
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	422	Average Non-Weaving Speed (S_{NW}), mi/h	42.8
Weaving Lane Change Rate (LC_W), lc/h	1947	Average Speed (S), mi/h	46.0
Weaving Lane Change Rate (LC_{All}), lc/h	2369	Density (D), pc/mi/ln	21.1
Weaving Intensity Factor (W)	0.342	Level of Service (LOS)	C

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	475	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	6880	420	0	730
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	5.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.952	0.980	0.980	0.980
Flow Rate (v_i), pc/h	7688	456	0	792
Weaving Flow Rate (v_w), pc/h	1248	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	7688	Density-Based Capacity (c_{IWL}), pc/h/ln		2036
Total Flow Rate (v), pc/h	8936	Demand Flow-Based Capacity (c_{IW}), pc/h		17143
Volume Ratio (VR)	0.140	Weaving Segment Capacity (c_W), veh/h		7785
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		8144
Maximum Weaving Length (L_{MAX}), ft	3932	Volume-to-Capacity Ratio (v/c)		1.10

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Project Description	South Leg | Exit	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	475	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.00	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3210	520	0	870
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	2.00	2.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.980	0.980
Flow Rate (v_i), pc/h	3652	564	0	944
Weaving Flow Rate (v_w), pc/h	1508	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3652	Density-Based Capacity (c_{IWL}), pc/h/ln		1916
Total Flow Rate (v), pc/h	5160	Demand Flow-Based Capacity (c_{IW}), pc/h		8219
Volume Ratio (VR)	0.292	Weaving Segment Capacity (c_W), veh/h		7267
Minimum Lane Change Rate (LC_{MIN}), lc/h	1508	Adjusted Weaving Area Capacity, pc/h		7664
Maximum Weaving Length (L_{MAX}), ft	5498	Volume-to-Capacity Ratio (v/c)		0.67

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	173	Average Weaving Speed (S_W), mi/h	41.9
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	239	Average Non-Weaving Speed (S_{NW}), mi/h	43.0
Weaving Lane Change Rate (LC_W), lc/h	1652	Average Speed (S), mi/h	42.7
Weaving Lane Change Rate (LC_{All}), lc/h	1891	Density (D), pc/mi/ln	30.2
Weaving Intensity Factor (W)	0.672	Level of Service (LOS)	D

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1580	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	899
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	69.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

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Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2995	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1674
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.9
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1322
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.5
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

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Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	67.7
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3430	Heavy Vehicle Adjustment Factor (f_{HV})	0.935
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1301
Total Trucks, %	7.00	Capacity (c), pc/h/ln	2377
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2377
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	19.2
Total Ramp Density Adjustment	7.7	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	67.7		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1510	Heavy Vehicle Adjustment Factor (f_{HV})	0.855
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	940
Total Trucks, %	17.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.7
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Project Information

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Project Description	Through | Northbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1800	Heavy Vehicle Adjustment Factor (f_{HV})	0.909
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1054
Total Trucks, %	10.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	74.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5060	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1957
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	63.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	30.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Southbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2330	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	901
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	12.8
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.2 I-526 & N. RHETT INTERCHANGE

5.2.1 HCS Analysis Results

5.2.1.1 No Build

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett (Eastbound)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	5250	590
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	6091	684
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	1.32	0.33

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	6091	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	6091	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett (Eastbound)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	4330	780
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	4885	880
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	1.06	0.42

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	4885	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	4885	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett (Westbound)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Acceleration Length (LA),ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	4190	1050
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.980
Flow Rate (vi),pc/h	5037	1140
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	1.34	0.54

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	1539.7	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	5037	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	6177	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett (Westbound)	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Acceleration Length (LA),ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	4380	880
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.980
Flow Rate (vi),pc/h	5172	955
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	1.33	0.45

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	1529.0	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	5172	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	6127	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia (Eastbound)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1050	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	4350	2360	310	310
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	3.00	3.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.971	0.971
Flow Rate (v_i), pc/h	4949	2562	340	340
Weaving Flow Rate (v_w), pc/h	2902	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	5289	Density-Based Capacity (c_{IWL}), pc/h/ln		1908
Total Flow Rate (v), pc/h	8191	Demand Flow-Based Capacity (c_{IW}), pc/h		6780
Volume Ratio (VR)	0.354	Weaving Segment Capacity (c_W), veh/h		5450
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		5724
Maximum Weaving Length (L_{MAX}), ft	6170	Volume-to-Capacity Ratio (v/c)		1.43

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia (Eastbound)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1050	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3470	1500	80	80
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	6.00	2.00	3.00	3.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.980	0.971	0.971
Flow Rate (v_i), pc/h	3915	1628	88	88
Weaving Flow Rate (v_w), pc/h	1716	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4003	Density-Based Capacity (c_{IWL}), pc/h/ln		1953
Total Flow Rate (v), pc/h	5719	Demand Flow-Based Capacity (c_{IW}), pc/h		8000
Volume Ratio (VR)	0.300	Weaving Segment Capacity (c_W), veh/h		5592
Minimum Lane Change Rate (LC_{MIN}), lc/h	1716	Adjusted Weaving Area Capacity, pc/h		5859
Maximum Weaving Length (L_{MAX}), ft	5584	Volume-to-Capacity Ratio (v/c)		0.98

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	630	Average Weaving Speed (S_W), mi/h	45.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	816	Average Non-Weaving Speed (S_{NW}), mi/h	38.5
Weaving Lane Change Rate (LC_W), lc/h	1916	Average Speed (S), mi/h	40.3
Weaving Lane Change Rate (LC_{All}), lc/h	2732	Density (D), pc/mi/ln	47.3
Weaving Intensity Factor (W)	0.481	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia (Westbound)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3985	205	215	1715
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	7.00	2.00	3.00	3.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.935	0.980	0.971	0.971
Flow Rate (v_i), pc/h	4534	223	236	1879
Weaving Flow Rate (v_w), pc/h	2102	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4770	Density-Based Capacity (c_{IWL}), pc/h/ln		1983
Total Flow Rate (v), pc/h	6872	Demand Flow-Based Capacity (c_{IW}), pc/h		7843
Volume Ratio (VR)	0.306	Weaving Segment Capacity (c_W), veh/h		5637
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		5949
Maximum Weaving Length (L_{MAX}), ft	5648	Volume-to-Capacity Ratio (v/c)		1.16

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia (Westbound)	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (L_S), ft	1500	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3805	575	185	1465
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	2.00	3.00	3.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.980	0.971	0.971
Flow Rate (v_i), pc/h	4493	624	203	1605
Weaving Flow Rate (v_w), pc/h	2229	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	4696	Density-Based Capacity (c_{IWL}), pc/h/ln		1969
Total Flow Rate (v), pc/h	6925	Demand Flow-Based Capacity (c_{IW}), pc/h		7453
Volume Ratio (VR)	0.322	Weaving Segment Capacity (c_W), veh/h		5472
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		5907
Maximum Weaving Length (L_{MAX}), ft	5821	Volume-to-Capacity Ratio (v/c)		1.17

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4660	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2703
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3550	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2002
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	62.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	31.9
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4190	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2518
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.05
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	2.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	69.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4380	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2586
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2396
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2396
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.08
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	5.8	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	69.6		

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5.2.1.2 Alternative 1

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3075	70
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3567	81
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.78	0.04

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.305
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3567	Ramp Junction Speed (S), mi/h	54.5
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	32.7
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.0

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2975	50
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3356	56
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.03

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.303
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3356	Ramp Junction Speed (S), mi/h	54.5
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.8
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.2

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HCS7 Freeway Diverge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2840	920
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3295	1067
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.51

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.394
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	52.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3295	Ramp Junction Speed (S), mi/h	52.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.1
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3000	890
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3384	1004
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.74	0.48

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.388
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3384	Ramp Junction Speed (S), mi/h	53.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.4

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3020	530
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3630	592
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.30

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.523
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3630	Ramp Junction Speed (S), mi/h	50.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	4222	Average Density (D), pc/mi/ln	41.7
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.2

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HCS7 Freeway Merge Report

Project Information

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Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3055	630
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3607	704
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.94	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.548
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3607	Ramp Junction Speed (S), mi/h	50.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	4311	Average Density (D), pc/mi/ln	43.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.8

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2530	390
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3041	436
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.76	0.22

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.408
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	52.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3041	Ramp Junction Speed (S), mi/h	52.7
Flow Entering Ramp-Infl. Area (vR12), pc/h	3477	Average Density (D), pc/mi/ln	33.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	29.4

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2820	610
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3330	682
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.87	0.34

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.497
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3330	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	4012	Average Density (D), pc/mi/ln	39.3
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.5

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2784
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.16
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2709
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	7300	1750
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.901
Flow Rate (vi),pc/h	8619	2066
Capacity (c), pc/h	7200	2100
Volume-to-Capacity Ratio (v/c)	1.20	0.98

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.449	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	5919	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	5919	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	7675	1800
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.901
Flow Rate (vi),pc/h	9062	2125
Capacity (c), pc/h	7200	2100
Volume-to-Capacity Ratio (v/c)	1.26	1.01

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	6362	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	6362	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3005	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1743
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.9
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2925	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1650
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3770	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2324
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.97
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	41.8
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3850	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2309
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	56.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	41.2
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5550	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2224
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	57.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	38.4
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5875	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2312
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	41.5
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.2.1.3 Alternative 2

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/7/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3075	70
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3567	81
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.78	0.04

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.305
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3567	Ramp Junction Speed (S), mi/h	54.5
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	32.7
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.0

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2975	50
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3356	56
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.03

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.303
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3356	Ramp Junction Speed (S), mi/h	54.5
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.8
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.2

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2840	920
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3295	1067
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.51

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.394
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	52.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3295	Ramp Junction Speed (S), mi/h	52.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.1
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3000	890
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3384	1004
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.74	0.48

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.388
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3384	Ramp Junction Speed (S), mi/h	53.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.4

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3020	530
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3630	592
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.30

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.523
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3630	Ramp Junction Speed (S), mi/h	50.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	4222	Average Density (D), pc/mi/ln	41.7
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.2

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3055	630
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3607	704
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.94	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.548
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3607	Ramp Junction Speed (S), mi/h	50.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	4311	Average Density (D), pc/mi/ln	43.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.8

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2530	390
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3041	436
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.76	0.22

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.408
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	52.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3041	Ramp Junction Speed (S), mi/h	52.7
Flow Entering Ramp-Infl. Area (vR12), pc/h	3477	Average Density (D), pc/mi/ln	33.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	29.4

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	2820	610
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3330	682
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.87	0.34

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.497
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3330	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	4012	Average Density (D), pc/mi/ln	39.3
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.5

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2784
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.16
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2709
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Agency		Analysis Year	2050
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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	7300	1750
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.901
Flow Rate (vi),pc/h	8619	2066
Capacity (c), pc/h	7200	2100
Volume-to-Capacity Ratio (v/c)	1.20	0.98

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.449	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	5919	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	5919	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	7675	1800
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.901
Flow Rate (vi),pc/h	9062	2125
Capacity (c), pc/h	7200	2100
Volume-to-Capacity Ratio (v/c)	1.26	1.01

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	0.0	Number of Outer Lanes on Freeway (NO)	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	0.0	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.436	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v12), pc/h	6362	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (vR12), pc/h	6362	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (DR), pc/mi/ln	-

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	4925	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2857
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.19
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5035	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2840
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.18
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	0.0	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

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Project Description	Eastbound | Through	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1850	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1073
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1740	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	982
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.3
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5550	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2224
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	57.9
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	38.4
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5875	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2312
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	55.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	41.5
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.2.1.4 Alternative 2A

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/8/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3005	140
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3486	162
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.76	0.08

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.313
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3486	Ramp Junction Speed (S), mi/h	54.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	32.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.3

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2925	40
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3300	45
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.302
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3300	Ramp Junction Speed (S), mi/h	54.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.2
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2840	640
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3295	742
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.365
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3295	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3000	810
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3384	914
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.74	0.44

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.380
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3384	Ramp Junction Speed (S), mi/h	53.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.4

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HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3090	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3714	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.26

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.508
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3714	Ramp Junction Speed (S), mi/h	50.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	4228	Average Density (D), pc/mi/ln	41.5
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.0

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3225	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3808	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.94	0.26

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.535
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3808	Ramp Junction Speed (S), mi/h	50.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	4322	Average Density (D), pc/mi/ln	42.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.8

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HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2630	290
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3161	324
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.76	0.16

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.409
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	52.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3161	Ramp Junction Speed (S), mi/h	52.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	3485	Average Density (D), pc/mi/ln	33.1
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	29.5

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3000	430
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3542	481
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.87	0.24

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.500
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3542	Ramp Junction Speed (S), mi/h	51.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	4023	Average Density (D), pc/mi/ln	39.4
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.6

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2784
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.16
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2709
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7300	Heavy Vehicle Adjustment Factor (f_{HV})	0.878
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2211
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.072		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7675	Heavy Vehicle Adjustment Factor (f_{HV})	0.892
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2288
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.104		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	56.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	40.5
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3005	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1743
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.9
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2925	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1650
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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HCS7 Basic Freeway Report

Project Information

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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1920	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1114
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	15.1
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2110	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1190
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1850	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1073
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Information

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1740	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	982
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.3
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Freeway Weaving Report

Project Information

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	2100	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2570	60	110	2980
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	13.00	13.00	13.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.885	0.885	0.885
Flow Rate (v_i), pc/h	3089	72	132	3582
Weaving Flow Rate (v_w), pc/h	3654	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3221	Density-Based Capacity (c_{IWL}), pc/h/ln		1954
Total Flow Rate (v), pc/h	6875	Demand Flow-Based Capacity (c_{IW}), pc/h		6591
Volume Ratio (VR)	0.531	Weaving Segment Capacity (c_W), veh/h		5833
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		6591
Maximum Weaving Length (L_{MAX}), ft	6625	Volume-to-Capacity Ratio (v/c)		1.04

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	2100	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2880	120	230	2995
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	11.00	11.00	11.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.901	0.901	0.901
Flow Rate (v_i), pc/h	3400	142	272	3536

Weaving Flow Rate (v_w), pc/h	3678	Freeway Max Capacity (c_{IFL}), pc/h/ln	2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3672	Density-Based Capacity (c_{IWL}), pc/h/ln	1982
Total Flow Rate (v), pc/h	7350	Demand Flow-Based Capacity (c_{IW}), pc/h	7000
Volume Ratio (VR)	0.500	Weaving Segment Capacity (c_W), veh/h	6307
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h	7000
Maximum Weaving Length (L_{MAX}), ft	6260	Volume-to-Capacity Ratio (v/c)	1.05

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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5.2.1.5 Alternative 5

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/8/2020
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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3005	140
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3486	162
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.76	0.08

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.313
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3486	Ramp Junction Speed (S), mi/h	54.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	32.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.3

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2925	40
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3300	45
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.302
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3300	Ramp Junction Speed (S), mi/h	54.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.2
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2840	640
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3295	742
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.365
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3295	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3000	810
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3384	914
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.74	0.44

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.380
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3384	Ramp Junction Speed (S), mi/h	53.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.4

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3090	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3714	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.26

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.508
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3714	Ramp Junction Speed (S), mi/h	50.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	4228	Average Density (D), pc/mi/ln	41.5
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.0

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Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3225	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3808	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.94	0.26

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.535
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3808	Ramp Junction Speed (S), mi/h	50.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	4322	Average Density (D), pc/mi/ln	42.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.8

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2630	290
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3161	324
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.76	0.16

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.409
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	52.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3161	Ramp Junction Speed (S), mi/h	52.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	3485	Average Density (D), pc/mi/ln	33.1
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	29.5

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3000	430
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3542	481
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.87	0.24

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.500
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3542	Ramp Junction Speed (S), mi/h	51.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	4023	Average Density (D), pc/mi/ln	39.4
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.6

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/7/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2784
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.16
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2709
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Information

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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7300	Heavy Vehicle Adjustment Factor (f_{HV})	0.878
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2211
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.072		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7675	Heavy Vehicle Adjustment Factor (f_{HV})	0.892
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2288
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.104		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	56.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	40.5
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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Project Information

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2865	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1662
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.3
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.3
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2885	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1628
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.7
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.7
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3910	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2268
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	57.1
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	39.7
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2055	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1192
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3090	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1857
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.77
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	27.9
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	74.1
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3225	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1938
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	29.8
Total Ramp Density Adjustment	1.3	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	74.1		

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Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2630	Heavy Vehicle Adjustment Factor (f_{HV})	0.885
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1580
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	23.0
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.67
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.4
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3000	Heavy Vehicle Adjustment Factor (f_{HV})	0.901
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1771
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.74
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	26.7
Total Ramp Density Adjustment	5.0	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.4		

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5.2.1.6 Alternative 6

HCS7 Freeway Diverge Report

Project Information

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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3005	140
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3486	162
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.76	0.08

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.313
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3486	Ramp Junction Speed (S), mi/h	54.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	32.0
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.3

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HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2925	40
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3300	45
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.302
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3300	Ramp Junction Speed (S), mi/h	54.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.2
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2840	640
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	9.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.917	0.917
Flow Rate (vi),pc/h	3295	742
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.365
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3295	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	30.7

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Analyst		Date	5/8/2020
Agency		Analysis Year	2050
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Project Description	Between Rivers & Rhett | Eastbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1500	215
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3000	810
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	6.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.943	0.943
Flow Rate (vi),pc/h	3384	914
Capacity (c), pc/h	4600	2100
Volume-to-Capacity Ratio (v/c)	0.74	0.44

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.380
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.8
Flow in Lanes 1 and 2 (v12), pc/h	3384	Ramp Junction Speed (S), mi/h	53.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	31.4

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HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3090	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3714	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.26

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.508
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3714	Ramp Junction Speed (S), mi/h	50.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	4228	Average Density (D), pc/mi/ln	41.5
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.0

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	1000
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3225	460
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3808	514
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.94	0.26

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.535
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	50.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3808	Ramp Junction Speed (S), mi/h	50.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	4322	Average Density (D), pc/mi/ln	42.9
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	32.8

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Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2630	290
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	13.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.885	0.952
Flow Rate (vi),pc/h	3161	324
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.76	0.16

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.409
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	52.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3161	Ramp Junction Speed (S), mi/h	52.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	3485	Average Density (D), pc/mi/ln	33.1
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	29.5

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HCS7 Freeway Merge Report

Project Information			
Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Between Rivers & Rhett | Westbound	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	60.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	1500	490
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	3000	430
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	11.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.901	0.952
Flow Rate (vi),pc/h	3542	481
Capacity (c), pc/h	4600	2000
Volume-to-Capacity Ratio (v/c)	0.87	0.24

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.500
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	51.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	60.0
Flow in Lanes 1 and 2 (v12), pc/h	3542	Ramp Junction Speed (S), mi/h	51.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	4023	Average Density (D), pc/mi/ln	39.4
Level of Service (LOS)	D	Density in Ramp Influence Area (DR), pc/mi/ln	33.6

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HCS7 Basic Freeway Report

Project Information

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Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.863
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2784
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.16
Passenger Car Equivalent (E_T)	2.769		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Description	Between Rhett & Virginia | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	3	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6775	Heavy Vehicle Adjustment Factor (f_{HV})	0.887
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2709
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	1.13
Passenger Car Equivalent (E_T)	3.130		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	4.5	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.9		

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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7300	Heavy Vehicle Adjustment Factor (f_{HV})	0.878
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2211
Total Trucks, %	13.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.072		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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Project Description	Between Rhett & Virginia | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	4	Terrain Type	Specific Grade
Segment Length (L), ft	-	Percent Grade, %	-3.00
Measured or Base Free-Flow Speed	Base	Grade Length, mi	0.50
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.83
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	72.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7675	Heavy Vehicle Adjustment Factor (f_{HV})	0.892
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	2288
Total Trucks, %	11.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	30	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	70	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.104		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	56.5
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	40.5
Total Ramp Density Adjustment	2.8	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	72.6		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	3005	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1743
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	25.9
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	1.33
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	71.3
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2925	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1650
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	4.1	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	71.3		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1920	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1114
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	15.1
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	2110	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1190
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.4
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1850	Heavy Vehicle Adjustment Factor (f_{HV})	0.917
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1073
Total Trucks, %	9.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	14.6
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Eastbound	Unit	United States Customary

Geometric Data

Number of Lanes, ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	75.4	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	12	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	6		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	1740	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	982
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	73.6
Right-Side Lateral Clearance Adj. (f_{RLC})	0.0	Density (D), pc/mi/ln	13.3
Total Ramp Density Adjustment	1.8	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.6		

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	AM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	2100	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2570	60	110	2980
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	13.00	13.00	13.00	13.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.885	0.885	0.885	0.885
Flow Rate (v_i), pc/h	3089	72	132	3582
Weaving Flow Rate (v_w), pc/h	3654	Freeway Max Capacity (c_{IFL}), pc/h/ln		2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3221	Density-Based Capacity (c_{IWL}), pc/h/ln		1954
Total Flow Rate (v), pc/h	6875	Demand Flow-Based Capacity (c_{IW}), pc/h		6591
Volume Ratio (VR)	0.531	Weaving Segment Capacity (c_W), veh/h		5833
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h		6591
Maximum Weaving Length (L_{MAX}), ft	6625	Volume-to-Capacity Ratio (v/c)		1.04

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/8/2020
Agency		Analysis Year	2050
Jurisdiction		Time Period Analyzed	PM Peak Hour
Project Description	Through | Westbound	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	2100	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	2
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	0
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	1.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2880	120	230	2995
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	11.00	11.00	11.00	11.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.901	0.901	0.901	0.901
Flow Rate (v_i), pc/h	3400	142	272	3536

Weaving Flow Rate (v_w), pc/h	3678	Freeway Max Capacity (c_{IFL}), pc/h/ln	2300
Non-Weaving Flow Rate (v_{NW}), pc/h	3672	Density-Based Capacity (c_{IWL}), pc/h/ln	1982
Total Flow Rate (v), pc/h	7350	Demand Flow-Based Capacity (c_{IW}), pc/h	7000
Volume Ratio (VR)	0.500	Weaving Segment Capacity (c_W), veh/h	6307
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity, pc/h	7000
Maximum Weaving Length (L_{MAX}), ft	6260	Volume-to-Capacity Ratio (v/c)	1.05

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

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5.2.2 Synchro Analysis Results

5.2.2.1 No Build

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	940	560	220	1030	2400	830
Future Volume (veh/h)	940	560	220	1030	2400	830
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1786	1900	1810	1792	1845	1810
Adj Flow Rate, veh/h	989	0	244	1144	2526	874
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.95	0.95	0.90	0.90	0.95	0.95
Percent Heavy Veh, %	9	0	5	6	3	5
Cap, veh/h	1062	504	206	2152	1764	774
Arrive On Green	0.31	0.00	0.20	1.00	0.50	0.50
Sat Flow, veh/h	3402	1615	1723	3495	3597	1538
Grp Volume(v), veh/h	989	0	244	1144	2526	874
Grp Sat Flow(s),veh/h/ln	1701	1615	1723	1703	1752	1538
Q Serve(g_s), s	62.0	0.0	22.1	0.0	110.7	110.7
Cycle Q Clear(g_c), s	62.0	0.0	22.1	0.0	110.7	110.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1062	504	206	2152	1764	774
V/C Ratio(X)	0.93	0.00	1.18	0.53	1.43	1.13
Avail Cap(c_a), veh/h	1067	507	206	2152	1764	774
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.55	0.55	1.00	1.00
Uniform Delay (d), s/veh	73.4	0.0	72.6	0.0	54.7	54.6
Incr Delay (d2), s/veh	14.1	0.0	107.2	0.5	197.9	74.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.3	0.0	18.6	0.2	101.9	62.8
LnGrp Delay(d),s/veh	87.4	0.0	179.8	0.5	252.5	128.8
LnGrp LOS	F		F	A	F	F
Approach Vol, veh/h	989			1388	3400	
Approach Delay, s/veh	87.4			32.0	220.7	
Approach LOS	F			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	28.3	117.0				145.3		74.7
Change Period (Y+Rc), s	* 6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	* 22	110.7				138.7		69.0
Max Q Clear Time (g_c+I1), s	24.1	112.7				2.0		64.0
Green Ext Time (p_c), s	0.0	0.0				13.8		4.7

Intersection Summary	
HCM 2010 Ctrl Delay	152.6
HCM 2010 LOS	F

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	530	60	580	720	1280	1680
Future Volume (veh/h)	530	60	580	720	1280	1680
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1758	1900	1863	1827	1881	1827
Adj Flow Rate, veh/h	652	0	644	800	1422	1867
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	0	2	4	1	4
Cap, veh/h	502	242	332	2756	2205	958
Arrive On Green	0.15	0.00	0.31	1.00	0.62	0.62
Sat Flow, veh/h	3348	1615	1774	3563	3668	1553
Grp Volume(v), veh/h	652	0	644	800	1422	1867
Grp Sat Flow(s),veh/h/ln	1674	1615	1774	1736	1787	1553
Q Serve(g_s), s	33.0	0.0	34.5	0.0	55.7	135.7
Cycle Q Clear(g_c), s	33.0	0.0	34.5	0.0	55.7	135.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	502	242	332	2756	2205	958
V/C Ratio(X)	1.30	0.00	1.94	0.29	0.64	1.95
Avail Cap(c_a), veh/h	502	242	332	2756	2205	958
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.89	0.89	0.09	0.09
Uniform Delay (d), s/veh	93.5	0.0	62.3	0.0	26.8	42.1
Incr Delay (d2), s/veh	148.3	0.0	431.8	0.1	0.1	427.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.6	0.0	60.0	0.0	27.5	171.7
LnGrp Delay(d),s/veh	241.8	0.0	494.1	0.1	26.9	469.6
LnGrp LOS	F		F	A	C	F
Approach Vol, veh/h	652			1444	3289	
Approach Delay, s/veh	241.8			220.4	278.2	
Approach LOS	F			F	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	39.0	142.0				181.0		39.0
Change Period (Y+Rc), s	4.5	6.3				6.3		6.0
Max Green Setting (Gmax), s	34.5	135.7				174.7		33.0
Max Q Clear Time (g_c+I1), s	36.5	137.7				2.0		35.0
Green Ext Time (p_c), s	0.0	0.0				6.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	258.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1030	250	110	1510	1540	770
Future Volume (veh/h)	1030	250	110	1510	1540	770
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1762	1900	1863	1827	1810	1827
Adj Flow Rate, veh/h	1132	0	121	1659	1656	828
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.93	0.93
Percent Heavy Veh, %	9	0	2	4	5	4
Cap, veh/h	1310	630	153	1922	1574	711
Arrive On Green	0.39	0.00	0.14	1.00	0.46	0.46
Sat Flow, veh/h	3356	1615	1774	3563	3529	1553
Grp Volume(v), veh/h	1132	0	121	1659	1656	828
Grp Sat Flow(s),veh/h/ln	1678	1615	1774	1736	1719	1553
Q Serve(g_s), s	68.3	0.0	10.3	0.0	100.7	100.7
Cycle Q Clear(g_c), s	68.3	0.0	10.3	0.0	100.7	100.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1310	630	153	1922	1574	711
V/C Ratio(X)	0.86	0.00	0.79	0.86	1.05	1.16
Avail Cap(c_a), veh/h	1327	639	153	1922	1574	711
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.73	0.73	1.00	1.00
Uniform Delay (d), s/veh	61.7	0.0	64.0	0.0	59.6	59.7
Incr Delay (d2), s/veh	6.2	0.0	17.7	4.0	37.8	89.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	32.7	0.0	7.8	1.1	56.1	60.8
LnGrp Delay(d),s/veh	67.9	0.0	81.7	4.0	97.5	148.7
LnGrp LOS	E		F	A	F	F
Approach Vol, veh/h	1132			1780	2484	
Approach Delay, s/veh	67.9			9.3	114.6	
Approach LOS	E			A	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	21.1	107.0				128.1		91.9
Change Period (Y+Rc), s	* 6.2	6.3				6.3		6.0
Max Green Setting (Gmax), s	* 14	100.7				120.7		87.0
Max Q Clear Time (g_c+I1), s	12.3	102.7				2.0		70.3
Green Ext Time (p_c), s	0.0	0.0				30.1		15.6

Intersection Summary	
HCM 2010 Ctrl Delay	70.1
HCM 2010 LOS	E

Notes

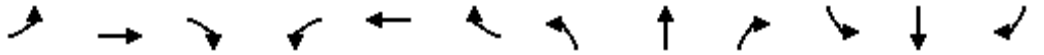
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	660	120	340	960	920	870
Future Volume (veh/h)	660	120	340	960	920	870
Number	3	18	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1803	1900	1900	1863	1863	1712
Adj Flow Rate, veh/h	857	0	378	1067	1011	956
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.91	0.91
Percent Heavy Veh, %	6	0	0	2	2	11
Cap, veh/h	968	455	371	2373	1733	712
Arrive On Green	0.28	0.00	0.10	0.45	0.49	0.49
Sat Flow, veh/h	3434	1615	1810	3632	3632	1455
Grp Volume(v), veh/h	857	0	378	1067	1011	956
Grp Sat Flow(s),veh/h/ln	1717	1615	1810	1770	1770	1455
Q Serve(g_s), s	52.5	0.0	33.5	45.8	44.9	107.7
Cycle Q Clear(g_c), s	52.5	0.0	33.5	45.8	44.9	107.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	968	455	371	2373	1733	712
V/C Ratio(X)	0.89	0.00	1.02	0.45	0.58	1.34
Avail Cap(c_a), veh/h	968	455	371	2373	1733	712
HCM Platoon Ratio	1.00	1.00	0.67	0.67	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.91	0.91	0.09	0.09
Uniform Delay (d), s/veh	75.6	0.0	89.4	32.6	40.1	56.1
Incr Delay (d2), s/veh	11.7	0.0	49.6	0.1	0.1	154.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.6	0.0	27.7	22.5	21.9	74.0
LnGrp Delay(d),s/veh	87.3	0.0	139.0	32.7	40.2	211.0
LnGrp LOS	F		F	C	D	F
Approach Vol, veh/h	857			1445	1967	
Approach Delay, s/veh	87.3			60.5	123.2	
Approach LOS	F			E	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	39.8	114.0				153.8		68.0
Change Period (Y+Rc), s	6.3	* 6.3				6.3		6.0
Max Green Setting (Gmax), s	33.5	* 1.1E2				145.7		62.0
Max Q Clear Time (g_c+I1), s	35.5	109.7				47.8		54.5
Green Ext Time (p_c), s	0.0	0.0				9.5		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	94.8
HCM 2010 LOS	F

Notes

5.2.2.2 Alternative 1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	625	0	1125	835	1115	0	0	670	1935
Future Volume (veh/h)	0	0	0	625	0	1125	835	1115	0	0	670	1935
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				679	0	0	908	1239	0	0	744	2103
Adj No. of Lanes				2	0	1	2	2	0	0	2	2
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				588	0	270	849	2616	0	0	1557	1226
Arrive On Green				0.17	0.00	0.00	0.49	1.00	0.00	0.00	0.44	0.44
Sat Flow, veh/h				3442	0	1583	3442	3632	0	0	3632	2787
Grp Volume(v), veh/h				679	0	0	908	1239	0	0	744	2103
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1721	1770	0	0	1770	1393
Q Serve(g_s), s				20.5	0.0	0.0	29.6	0.0	0.0	0.0	17.9	28.2
Cycle Q Clear(g_c), s				20.5	0.0	0.0	29.6	0.0	0.0	0.0	17.9	28.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				588	0	270	849	2616	0	0	1557	1226
V/C Ratio(X)				1.15	0.00	0.00	1.07	0.47	0.00	0.00	0.48	1.72
Avail Cap(c_a), veh/h				588	0	270	849	2616	0	0	1702	1340
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.55	0.55	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.7	0.0	0.0	30.4	0.0	0.0	0.0	23.8	9.6
Incr Delay (d2), s/veh				87.8	0.0	0.0	44.0	0.3	0.0	0.0	1.1	325.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				16.9	0.0	0.0	19.1	0.1	0.0	0.0	8.9	66.6
LnGrp Delay(d),s/veh				137.6	0.0	0.0	74.4	0.3	0.0	0.0	24.9	334.9
LnGrp LOS				F			F	A			C	F
Approach Vol, veh/h					679			2147			2847	
Approach Delay, s/veh					137.6			31.6			253.9	
Approach LOS					F			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	35.9	59.1				95.0		25.0
Change Period (Y+Rc), s	6.3	* 6.3				6.3		4.5
Max Green Setting (Gmax), s	26.5	* 58				88.7		20.5
Max Q Clear Time (g_c+I1), s	31.6	30.2				2.0		22.5
Green Ext Time (p_c), s	0.0	22.6				15.7		0.0

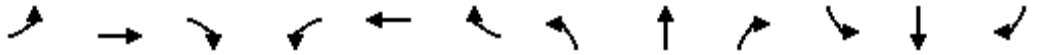
Intersection Summary	
HCM 2010 Ctrl Delay	155.8
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	280	50	35	0	250	0	1040	100	190	1105	0
Future Volume (veh/h)	660	280	50	35	0	250	0	1040	100	190	1105	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	0	1863	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	702	304	0	38	0	0	0	1106	0	207	1176	0
Adj No. of Lanes	2	1	0	1	0	1	0	2	0	1	2	0
Peak Hour Factor	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	857	361	0	53	0	0	0	1908	0	355	2295	0
Arrive On Green	0.25	0.19	0.00	0.03	0.00	0.00	0.00	0.54	0.00	0.14	1.00	0.00
Sat Flow, veh/h	3442	1863	0	1774	38		0	3725	0	1774	3632	0
Grp Volume(v), veh/h	702	304	0	38	74.1		0	1106	0	207	1176	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0	1774	E		0	1770	0	1774	1770	0
Q Serve(g_s), s	23.1	18.9	0.0	2.5			0.0	25.1	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	23.1	18.9	0.0	2.5			0.0	25.1	0.0	6.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00			0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	857	361	0	53			0	1908	0	355	2295	0
V/C Ratio(X)	0.82	0.84	0.00	0.72			0.00	0.58	0.00	0.58	0.51	0.00
Avail Cap(c_a), veh/h	1061	442	0	81			0	1908	0	486	2295	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00			0.00	1.00	0.00	0.53	0.53	0.00
Uniform Delay (d), s/veh	42.5	46.6	0.0	57.7			0.0	18.5	0.0	13.3	0.0	0.0
Incr Delay (d2), s/veh	6.4	11.6	0.0	16.4			0.0	1.3	0.0	0.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	10.9	0.0	1.5			0.0	12.6	0.0	3.1	0.1	0.0
LnGrp Delay(d),s/veh	48.9	58.1	0.0	74.1			0.0	19.8	0.0	14.1	0.4	0.0
LnGrp LOS	D	E		E				B		B	A	
Approach Vol, veh/h		1006						1106			1383	
Approach Delay, s/veh		51.7						19.8			2.5	
Approach LOS		D						B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	
Phs Duration (G+Y+Rc), s		84.1	8.1	27.8	13.1	71.0	35.9	
Change Period (Y+Rc), s		6.3	4.5	4.5	4.5	6.3	6.0	
Max Green Setting (Gmax), s		70.7	5.5	28.5	17.5	48.7	37.0	
Max Q Clear Time (g_c+I1), s		2.0	4.5	20.9	8.3	27.1	25.1	
Green Ext Time (p_c), s		29.1	0.0	0.9	0.4	7.9	4.8	

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	570	0	1230	810	1670	0	0	210	2170
Future Volume (veh/h)	0	0	0	570	0	1230	810	1670	0	0	210	2170
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				620	0	0	880	1856	0	0	233	2359
Adj No. of Lanes				2	0	1	2	2	0	0	2	2
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				539	0	248	925	2730	0	0	1630	1284
Arrive On Green				0.16	0.00	0.00	0.09	0.25	0.00	0.00	0.46	0.46
Sat Flow, veh/h				3442	0	1583	3442	3632	0	0	3632	2787
Grp Volume(v), veh/h				620	0	0	880	1856	0	0	233	2359
Grp Sat Flow(s),veh/h/ln				1721	0	1583	1721	1770	0	0	1770	1393
Q Serve(g_s), s				23.5	0.0	0.0	38.2	70.9	0.0	0.0	5.7	39.8
Cycle Q Clear(g_c), s				23.5	0.0	0.0	38.2	70.9	0.0	0.0	5.7	39.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				539	0	248	925	2730	0	0	1630	1284
V/C Ratio(X)				1.15	0.00	0.00	0.95	0.68	0.00	0.00	0.14	1.84
Avail Cap(c_a), veh/h				539	0	248	925	2730	0	0	1881	1481
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				63.3	0.0	0.0	67.4	39.2	0.0	0.0	23.4	13.4
Incr Delay (d2), s/veh				87.2	0.0	0.0	2.8	0.1	0.0	0.0	0.2	380.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				17.7	0.0	0.0	18.6	35.0	0.0	0.0	2.8	82.8
LnGrp Delay(d),s/veh				150.5	0.0	0.0	70.2	39.3	0.0	0.0	23.5	393.4
LnGrp LOS				F			E	D			C	F
Approach Vol, veh/h					620			2736			2592	
Approach Delay, s/veh					150.5			49.3			360.2	
Approach LOS					F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	46.6	75.4				122.0		28.0
Change Period (Y+Rc), s	6.3	* 6.3				6.3		4.5
Max Green Setting (Gmax), s	31.5	* 80				115.7		23.5
Max Q Clear Time (g_c+I1), s	40.2	41.8				72.9		25.5
Green Ext Time (p_c), s	0.0	27.3				26.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	195.3
HCM 2010 LOS	F

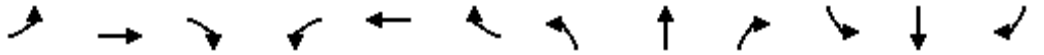
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	760	80	100	90	0	600	0	1120	40	40	740	0
Future Volume (veh/h)	760	80	100	90	0	600	0	1120	40	40	740	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	0	1863	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	809	87	0	98	0	0	0	1191	0	43	787	0
Adj No. of Lanes	2	1	0	1	0	1	0	2	0	1	2	0
Peak Hour Factor	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	792	252	0	115	0	0	0	2266	0	312	2470	0
Arrive On Green	0.23	0.14	0.00	0.06	0.00	0.00	0.00	0.64	0.00	0.06	1.00	0.00
Sat Flow, veh/h	3442	1863	0	1774	98		0	3725	0	1774	3632	0
Grp Volume(v), veh/h	809	87	0	98	112.3		0	1191	0	43	787	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0	1774	F		0	1770	0	1774	1770	0
Q Serve(g_s), s	34.5	6.4	0.0	8.2			0.0	27.4	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	34.5	6.4	0.0	8.2			0.0	27.4	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00			0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	792	252	0	115			0	2266	0	312	2470	0
V/C Ratio(X)	1.02	0.35	0.00	0.85			0.00	0.53	0.00	0.14	0.32	0.00
Avail Cap(c_a), veh/h	792	252	0	115			0	2266	0	812	2470	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00			0.00	1.00	0.00	0.37	0.37	0.00
Uniform Delay (d), s/veh	57.8	58.8	0.0	69.5			0.0	14.6	0.0	10.6	0.0	0.0
Incr Delay (d2), s/veh	37.7	0.8	0.0	42.9			0.0	0.9	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.5	3.3	0.0	5.4			0.0	13.5	0.0	0.6	0.0	0.0
LnGrp Delay(d),s/veh	95.4	59.6	0.0	112.3			0.0	15.5	0.0	10.7	0.1	0.0
LnGrp LOS	F	E		F				B		B	A	
Approach Vol, veh/h		896						1191			830	
Approach Delay, s/veh		91.9						15.5			0.7	
Approach LOS		F						B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	
Phs Duration (G+Y+Rc), s		111.0	14.2	24.8	8.7	102.3	39.0	
Change Period (Y+Rc), s		6.3	4.5	4.5	4.5	6.3	4.5	
Max Green Setting (Gmax), s		104.7	9.7	20.3	46.5	53.7	34.5	
Max Q Clear Time (g_c+I1), s		2.0	10.2	8.4	3.2	29.4	36.5	
Green Ext Time (p_c), s		16.1	0.0	0.2	0.1	9.1	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	37.3
HCM 2010 LOS	D

5.2.2.3 Alternative 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	670	170	1195	200	1045	0	0	2055	550
Future Volume (veh/h)	0	0	0	670	170	1195	200	1045	0	0	2055	550
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				456	565	0	217	1161	0	0	2283	0
Adj No. of Lanes				1	1	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				508	533	453	244	2178	0	0	2436	759
Arrive On Green				0.29	0.29	0.00	0.03	0.20	0.00	0.00	0.48	0.00
Sat Flow, veh/h				1774	1863	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				456	565	0	217	1161	0	0	2283	0
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				27.2	31.5	0.0	8.8	32.2	0.0	0.0	46.7	0.0
Cycle Q Clear(g_c), s				27.2	31.5	0.0	8.8	32.2	0.0	0.0	46.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				508	533	453	244	2178	0	0	2436	759
V/C Ratio(X)				0.90	1.06	0.00	0.89	0.53	0.00	0.00	0.94	0.00
Avail Cap(c_a), veh/h				508	533	453	244	2178	0	0	2436	759
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	0.26	0.26	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				37.7	39.3	0.0	35.5	29.7	0.0	0.0	27.1	0.0
Incr Delay (d2), s/veh				18.6	55.6	0.0	10.7	0.2	0.0	0.0	8.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.9	24.4	0.0	7.3	15.9	0.0	0.0	23.7	0.0
LnGrp Delay(d),s/veh				56.3	94.8	0.0	46.2	29.9	0.0	0.0	35.6	0.0
LnGrp LOS				E	F		D	C			D	
Approach Vol, veh/h					1021			1378			2283	
Approach Delay, s/veh					77.6			32.5			35.6	
Approach LOS					E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	15.0	59.0				74.0		36.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	52.7				67.7		31.5
Max Q Clear Time (g_c+I1), s	10.8	48.7				34.2		33.5
Green Ext Time (p_c), s	0.0	3.8				11.9		0.0

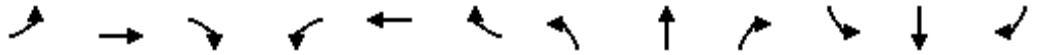
Intersection Summary	
HCM 2010 Ctrl Delay	43.8
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	280	50	0	0	0	0	585	555	1585	1140	0
Future Volume (veh/h)	660	280	50	0	0	0	0	585	555	1585	1140	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	702	304	0				0	622	0	1723	1213	0
Adj No. of Lanes	2	1	0				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	594	322	0				0	988	442	1361	2532	0
Arrive On Green	0.17	0.17	0.00				0.00	0.28	0.00	0.13	0.24	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	702	304	0				0	622	0	1723	1213	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1721	1770	0
Q Serve(g_s), s	19.0	17.7	0.0				0.0	16.9	0.0	43.5	32.5	0.0
Cycle Q Clear(g_c), s	19.0	17.7	0.0				0.0	16.9	0.0	43.5	32.5	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	594	322	0				0	988	442	1361	2532	0
V/C Ratio(X)	1.18	0.94	0.00				0.00	0.63	0.00	1.27	0.48	0.00
Avail Cap(c_a), veh/h	594	322	0				0	988	442	1361	2532	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	0.00	0.24	0.24	0.00
Uniform Delay (d), s/veh	45.5	45.0	0.0				0.0	34.7	0.0	47.8	24.4	0.0
Incr Delay (d2), s/veh	97.8	36.9	0.0				0.0	3.0	0.0	121.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	12.4	0.0				0.0	8.6	0.0	43.6	16.0	0.0
LnGrp Delay(d),s/veh	143.3	81.8	0.0				0.0	37.7	0.0	169.0	24.5	0.0
LnGrp LOS	F	F						D		F	C	
Approach Vol, veh/h		1006						622			2936	
Approach Delay, s/veh		124.8						37.7			109.3	
Approach LOS		F						D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		85.0			48.0	37.0		25.0
Change Period (Y+Rc), s		6.3			4.5	6.3		6.0
Max Green Setting (Gmax), s		78.7			43.5	30.7		19.0
Max Q Clear Time (g_c+I1), s		34.5			45.5	18.9		21.0
Green Ext Time (p_c), s		24.7			0.0	3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	102.9
HCM 2010 LOS	F

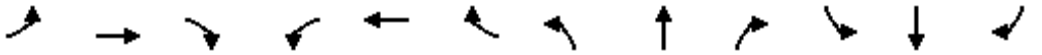


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	680	350	1460	100	1440	0	0	1590	790
Future Volume (veh/h)	0	0	0	680	350	1460	100	1440	0	0	1590	790
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				560	631	0	109	1600	0	0	1767	0
Adj No. of Lanes				1	1	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				643	675	574	194	1910	0	0	2289	713
Arrive On Green				0.36	0.36	0.00	0.02	0.18	0.00	0.00	0.45	0.00
Sat Flow, veh/h				1774	1863	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				560	631	0	109	1600	0	0	1767	0
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				32.4	35.9	0.0	3.4	48.0	0.0	0.0	32.2	0.0
Cycle Q Clear(g_c), s				32.4	35.9	0.0	3.4	48.0	0.0	0.0	32.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				643	675	574	194	1910	0	0	2289	713
V/C Ratio(X)				0.87	0.94	0.00	0.56	0.84	0.00	0.00	0.77	0.00
Avail Cap(c_a), veh/h				669	703	597	277	1910	0	0	2289	713
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	0.09	0.09	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				32.7	33.8	0.0	23.3	40.6	0.0	0.0	25.5	0.0
Incr Delay (d2), s/veh				11.7	19.4	0.0	0.2	0.4	0.0	0.0	2.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				18.0	22.0	0.0	1.7	23.7	0.0	0.0	15.6	0.0
LnGrp Delay(d),s/veh				44.4	53.2	0.0	23.5	41.0	0.0	0.0	28.1	0.0
LnGrp LOS				D	D		C	D			C	
Approach Vol, veh/h					1191			1709			1767	
Approach Delay, s/veh					49.1			39.9			28.1	
Approach LOS					D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.8	55.8				65.7		44.3
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	42.7				57.7		41.5
Max Q Clear Time (g_c+I1), s	5.4	34.2				50.0		37.9
Green Ext Time (p_c), s	0.1	6.9				6.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Notes

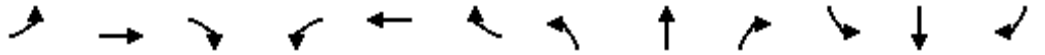


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	760	80	100	0	0	0	0	780	380	1440	830	0
Future Volume (veh/h)	760	80	100	0	0	0	0	780	380	1440	830	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	809	87	0				0	830	0	1565	883	0
Adj No. of Lanes	2	1	0				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	782	423	0				0	827	370	1461	2339	0
Arrive On Green	0.23	0.23	0.00				0.00	0.23	0.00	0.13	0.22	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	809	87	0				0	830	0	1565	883	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1721	1770	0
Q Serve(g_s), s	25.0	4.2	0.0				0.0	25.7	0.0	42.5	23.4	0.0
Cycle Q Clear(g_c), s	25.0	4.2	0.0				0.0	25.7	0.0	42.5	23.4	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	782	423	0				0	827	370	1461	2339	0
V/C Ratio(X)	1.03	0.21	0.00				0.00	1.00	0.00	1.07	0.38	0.00
Avail Cap(c_a), veh/h	782	423	0				0	827	370	1461	2339	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	0.00	0.39	0.39	0.00
Uniform Delay (d), s/veh	42.5	34.4	0.0				0.0	42.1	0.0	42.5	23.7	0.0
Incr Delay (d2), s/veh	41.3	0.7	0.0				0.0	32.2	0.0	38.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	2.2	0.0				0.0	16.2	0.0	30.0	11.6	0.0
LnGrp Delay(d),s/veh	83.8	35.1	0.0				0.0	74.4	0.0	80.8	23.9	0.0
LnGrp LOS	F	D						F		F	C	
Approach Vol, veh/h		896						830			2448	
Approach Delay, s/veh		79.1						74.4			60.3	
Approach LOS		E						E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		79.0			47.0	32.0		31.0
Change Period (Y+Rc), s		6.3			4.5	6.3		6.0
Max Green Setting (Gmax), s		72.7			42.5	25.7		25.0
Max Q Clear Time (g_c+I1), s		25.4			44.5	27.7		27.0
Green Ext Time (p_c), s		16.8			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.1
HCM 2010 LOS	E

5.2.2.4 Alternative 2A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Future Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				293	0	0	217	1161	0	0	2283	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				399	0	356	245	2361	0	0	2742	854
Arrive On Green				0.22	0.00	0.00	0.17	1.00	0.00	0.00	0.54	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				293	0	0	217	1161	0	0	2283	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Cycle Q Clear(g_c), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				399	0	356	245	2361	0	0	2742	854
V/C Ratio(X)				0.73	0.00	0.00	0.88	0.49	0.00	0.00	0.83	0.00
Avail Cap(c_a), veh/h				399	0	356	285	2361	0	0	2742	854
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.55	0.55	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				36.0	0.0	0.0	22.2	0.0	0.0	0.0	19.3	0.0
Incr Delay (d2), s/veh				11.4	0.0	0.0	14.9	0.4	0.0	0.0	3.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	0.0	0.0	6.7	0.1	0.0	0.0	18.1	0.0
LnGrp Delay(d),s/veh				47.3	0.0	0.0	37.1	0.4	0.0	0.0	22.4	0.0
LnGrp LOS				D			D	A			C	
Approach Vol, veh/h					293			1378			2283	
Approach Delay, s/veh					47.3			6.2			22.4	
Approach LOS					D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.8	60.2				73.0		27.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	51.7				66.7		22.5
Max Q Clear Time (g_c+I1), s	8.2	39.5				2.0		17.3
Green Ext Time (p_c), s	0.1	10.9				13.7		0.4

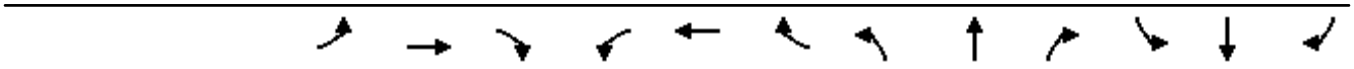
Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	280	50	0	0	0	0	585	555	1185	1140	0
Future Volume (veh/h)	660	280	50	0	0	0	0	585	555	1185	1140	0
Number	7	4	14				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	702	304	0				0	622	0	1288	1213	0
Adj No. of Lanes	2	1	0				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	757	410	0				0	766	343	1299	2325	0
Arrive On Green	0.22	0.22	0.00				0.00	0.22	0.00	0.63	1.00	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	702	304	0				0	622	0	1288	1213	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1721	1770	0
Q Serve(g_s), s	20.0	15.2	0.0				0.0	16.7	0.0	36.9	0.0	0.0
Cycle Q Clear(g_c), s	20.0	15.2	0.0				0.0	16.7	0.0	36.9	0.0	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	757	410	0				0	766	343	1299	2325	0
V/C Ratio(X)	0.93	0.74	0.00				0.00	0.81	0.00	0.99	0.52	0.00
Avail Cap(c_a), veh/h	757	410	0				0	1051	470	1299	2325	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	0.00	0.41	0.41	0.00
Uniform Delay (d), s/veh	38.2	36.4	0.0				0.0	37.2	0.0	18.3	0.0	0.0
Incr Delay (d2), s/veh	18.3	9.3	0.0				0.0	9.1	0.0	14.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	8.9	0.0				0.0	9.1	0.0	19.5	0.1	0.0
LnGrp Delay(d),s/veh	56.5	45.6	0.0				0.0	46.4	0.0	32.4	0.3	0.0
LnGrp LOS	E	D						D		C	A	
Approach Vol, veh/h		1006						622			2501	
Approach Delay, s/veh		53.2						46.4			16.8	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		72.0		28.0	44.1	28.0		
Change Period (Y+Rc), s		6.3		6.0	6.3	* 6.3		
Max Green Setting (Gmax), s		65.7		22.0	31.5	* 30		
Max Q Clear Time (g_c+I1), s		2.0		22.0	38.9	18.7		
Green Ext Time (p_c), s		29.6		0.0	0.0	2.9		

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

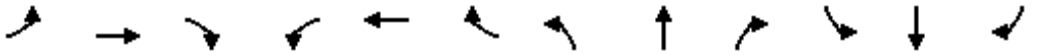
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Future Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				283	0	0	109	1600	0	0	1767	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				463	0	413	242	2190	0	0	2629	819
Arrive On Green				0.26	0.00	0.00	0.10	1.00	0.00	0.00	0.52	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				283	0	0	109	1600	0	0	1767	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Cycle Q Clear(g_c), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	0	413	242	2190	0	0	2629	819
V/C Ratio(X)				0.61	0.00	0.00	0.45	0.73	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h				463	0	413	357	2190	0	0	2629	819
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.37	0.37	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.2	0.0	0.0	13.0	0.0	0.0	0.0	16.1	0.0
Incr Delay (d2), s/veh				5.9	0.0	0.0	0.5	0.8	0.0	0.0	1.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	0.0	1.2	0.2	0.0	0.0	11.1	0.0
LnGrp Delay(d),s/veh				35.1	0.0	0.0	13.4	0.8	0.0	0.0	17.5	0.0
LnGrp LOS				D			B	A			B	
Approach Vol, veh/h					283			1709			1767	
Approach Delay, s/veh					35.1			1.6			17.5	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.2	52.8				62.0		28.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	40.7				55.7		23.5
Max Q Clear Time (g_c+I1), s	4.4	25.1				2.0		14.6
Green Ext Time (p_c), s	0.1	11.5				23.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B



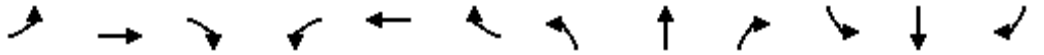
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	760	80	100	0	0	0	0	780	380	1020	830	0
Future Volume (veh/h)	760	80	100	0	0	0	0	780	380	1020	830	0
Number	7	4	14				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	809	85	0				0	830	0	1085	883	0
Adj No. of Lanes	2	1	0				0	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	898	486	0				0	926	414	1139	2163	0
Arrive On Green	0.26	0.26	0.00				0.00	0.26	0.00	0.47	1.00	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	809	85	0				0	830	0	1085	883	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1721	1770	0
Q Serve(g_s), s	20.4	3.2	0.0				0.0	20.4	0.0	22.2	0.0	0.0
Cycle Q Clear(g_c), s	20.4	3.2	0.0				0.0	20.4	0.0	22.2	0.0	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	898	486	0				0	926	414	1139	2163	0
V/C Ratio(X)	0.90	0.17	0.00				0.00	0.90	0.00	0.95	0.41	0.00
Avail Cap(c_a), veh/h	918	497	0				0	971	435	1139	2163	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	0.00	0.68	0.68	0.00
Uniform Delay (d), s/veh	32.1	25.8	0.0				0.0	32.0	0.0	21.4	0.0	0.0
Incr Delay (d2), s/veh	12.8	0.5	0.0				0.0	13.1	0.0	12.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	1.7	0.0				0.0	11.6	0.0	14.3	0.1	0.0
LnGrp Delay(d),s/veh	44.9	26.2	0.0				0.0	45.1	0.0	34.0	0.4	0.0
LnGrp LOS	D	C						D		C	A	
Approach Vol, veh/h		894						830			1968	
Approach Delay, s/veh		43.1						45.1			18.9	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		61.3		29.5	31.4	29.9		
Change Period (Y+Rc), s		6.3		6.0	6.3	* 6.3		
Max Green Setting (Gmax), s		53.7		24.0	24.5	* 25		
Max Q Clear Time (g_c+I1), s		2.0		22.4	24.2	22.4		
Green Ext Time (p_c), s		17.2		1.0	0.2	1.2		

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Notes

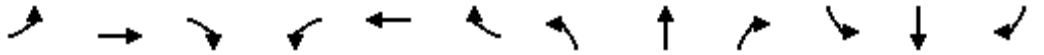
5.2.2.5 Alternative 5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Future Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				293	0	0	217	1161	0	0	2283	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				399	0	356	245	2361	0	0	2742	854
Arrive On Green				0.22	0.00	0.00	0.17	1.00	0.00	0.00	0.54	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				293	0	0	217	1161	0	0	2283	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Cycle Q Clear(g_c), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				399	0	356	245	2361	0	0	2742	854
V/C Ratio(X)				0.73	0.00	0.00	0.88	0.49	0.00	0.00	0.83	0.00
Avail Cap(c_a), veh/h				399	0	356	285	2361	0	0	2742	854
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.40	0.40	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				36.0	0.0	0.0	22.2	0.0	0.0	0.0	19.3	0.0
Incr Delay (d2), s/veh				11.4	0.0	0.0	11.6	0.3	0.0	0.0	3.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	0.0	0.0	6.5	0.1	0.0	0.0	18.1	0.0
LnGrp Delay(d),s/veh				47.3	0.0	0.0	33.8	0.3	0.0	0.0	22.4	0.0
LnGrp LOS				D			C	A			C	
Approach Vol, veh/h					293			1378			2283	
Approach Delay, s/veh					47.3			5.6			22.4	
Approach LOS					D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.8	60.2				73.0		27.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	51.7				66.7		22.5
Max Q Clear Time (g_c+I1), s	8.2	39.5				2.0		17.3
Green Ext Time (p_c), s	0.1	10.9				13.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	0	50	0	0	0	0	585	555	1185	1140	0
Future Volume (veh/h)	660	0	50	0	0	0	0	585	555	1185	1140	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	702	0	0				0	622	0	1288	1213	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	774	0	356				0	710	318	1337	2307	0
Arrive On Green	0.23	0.00	0.00				0.00	0.20	0.00	0.52	0.87	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	702	0	0				0	622	0	1288	1213	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1583	1721	1770	0
Q Serve(g_s), s	19.9	0.0	0.0				0.0	17.0	0.0	36.0	8.4	0.0
Cycle Q Clear(g_c), s	19.9	0.0	0.0				0.0	17.0	0.0	36.0	8.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	774	0	356				0	710	318	1337	2307	0
V/C Ratio(X)	0.91	0.00	0.00				0.00	0.88	0.00	0.96	0.53	0.00
Avail Cap(c_a), veh/h	792	0	364				0	768	344	1337	2307	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	0.41	0.41	0.00
Uniform Delay (d), s/veh	37.7	0.0	0.0				0.0	38.8	0.0	23.5	2.9	0.0
Incr Delay (d2), s/veh	15.1	0.0	0.0				0.0	14.3	0.0	9.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0				0.0	9.7	0.0	18.6	4.0	0.0
LnGrp Delay(d),s/veh	52.8	0.0	0.0				0.0	53.0	0.0	32.5	3.2	0.0
LnGrp LOS	D							D		C	A	
Approach Vol, veh/h		702						622			2501	
Approach Delay, s/veh		52.8						53.0			18.3	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		71.5			45.1	26.4		28.5
Change Period (Y+Rc), s		6.3			6.3	* 6.3		6.0
Max Green Setting (Gmax), s		64.7			38.5	* 22		23.0
Max Q Clear Time (g_c+I1), s		10.4			38.0	19.0		21.9
Green Ext Time (p_c), s		27.5			0.3	1.0		0.6

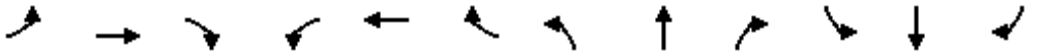
Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Future Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				283	0	0	109	1600	0	0	1767	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				463	0	413	242	2190	0	0	2629	819
Arrive On Green				0.26	0.00	0.00	0.10	1.00	0.00	0.00	0.52	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				283	0	0	109	1600	0	0	1767	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Cycle Q Clear(g_c), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	0	413	242	2190	0	0	2629	819
V/C Ratio(X)				0.61	0.00	0.00	0.45	0.73	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h				463	0	413	357	2190	0	0	2629	819
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.37	0.37	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.2	0.0	0.0	13.0	0.0	0.0	0.0	16.1	0.0
Incr Delay (d2), s/veh				5.9	0.0	0.0	0.5	0.8	0.0	0.0	1.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	0.0	1.2	0.2	0.0	0.0	11.1	0.0
LnGrp Delay(d),s/veh				35.1	0.0	0.0	13.4	0.8	0.0	0.0	17.5	0.0
LnGrp LOS				D			B	A			B	
Approach Vol, veh/h					283			1709			1767	
Approach Delay, s/veh					35.1			1.6			17.5	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.2	52.8				62.0		28.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	40.7				55.7		23.5
Max Q Clear Time (g_c+I1), s	4.4	25.1				2.0		14.6
Green Ext Time (p_c), s	0.1	11.5				23.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B



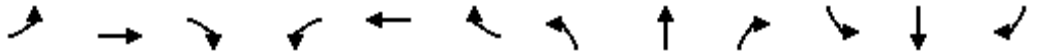
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	760	0	100	0	0	0	0	780	380	1020	830	0
Future Volume (veh/h)	760	0	100	0	0	0	0	780	380	1020	830	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	809	0	0				0	830	0	1085	883	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	896	0	412				0	926	414	1134	2158	0
Arrive On Green	0.26	0.00	0.00				0.00	0.26	0.00	0.46	1.00	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	809	0	0				0	830	0	1085	883	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1583	1721	1770	0
Q Serve(g_s), s	20.5	0.0	0.0				0.0	20.4	0.0	22.3	0.0	0.0
Cycle Q Clear(g_c), s	20.5	0.0	0.0				0.0	20.4	0.0	22.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	896	0	412				0	926	414	1134	2158	0
V/C Ratio(X)	0.90	0.00	0.00				0.00	0.90	0.00	0.96	0.41	0.00
Avail Cap(c_a), veh/h	918	0	422				0	971	435	1134	2158	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	0.68	0.68	0.00
Uniform Delay (d), s/veh	32.2	0.0	0.0				0.0	32.0	0.0	21.6	0.0	0.0
Incr Delay (d2), s/veh	13.1	0.0	0.0				0.0	13.1	0.0	13.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	0.0	0.0				0.0	11.6	0.0	14.6	0.1	0.0
LnGrp Delay(d),s/veh	45.3	0.0	0.0				0.0	45.1	0.0	34.8	0.4	0.0
LnGrp LOS	D							D		C	A	
Approach Vol, veh/h		809						830			1968	
Approach Delay, s/veh		45.3						45.1			19.4	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.2			31.3	29.9		29.4
Change Period (Y+Rc), s		6.3			6.3	* 6.3		6.0
Max Green Setting (Gmax), s		53.7			24.5	* 25		24.0
Max Q Clear Time (g_c+I1), s		2.0			24.3	22.4		22.5
Green Ext Time (p_c), s		17.2			0.1	1.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Notes

5.2.2.6 Alternative 6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Future Volume (veh/h)	0	0	0	270	0	1195	200	1045	0	0	2055	550
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				293	0	0	217	1161	0	0	2283	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				399	0	356	245	2361	0	0	2742	854
Arrive On Green				0.22	0.00	0.00	0.17	1.00	0.00	0.00	0.54	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				293	0	0	217	1161	0	0	2283	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Cycle Q Clear(g_c), s				15.3	0.0	0.0	6.2	0.0	0.0	0.0	37.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				399	0	356	245	2361	0	0	2742	854
V/C Ratio(X)				0.73	0.00	0.00	0.88	0.49	0.00	0.00	0.83	0.00
Avail Cap(c_a), veh/h				399	0	356	285	2361	0	0	2742	854
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.40	0.40	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				36.0	0.0	0.0	22.2	0.0	0.0	0.0	19.3	0.0
Incr Delay (d2), s/veh				11.4	0.0	0.0	11.6	0.3	0.0	0.0	3.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	0.0	0.0	6.5	0.1	0.0	0.0	18.1	0.0
LnGrp Delay(d),s/veh				47.3	0.0	0.0	33.8	0.3	0.0	0.0	22.4	0.0
LnGrp LOS				D			C	A			C	
Approach Vol, veh/h					293			1378			2283	
Approach Delay, s/veh					47.3			5.6			22.4	
Approach LOS					D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.8	60.2				73.0		27.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	51.7				66.7		22.5
Max Q Clear Time (g_c+I1), s	8.2	39.5				2.0		17.3
Green Ext Time (p_c), s	0.1	10.9				13.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	660	0	50	0	0	0	0	585	555	1185	1140	0
Future Volume (veh/h)	660	0	50	0	0	0	0	585	555	1185	1140	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	702	0	0				0	622	0	1288	1213	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	774	0	356				0	710	318	1337	2307	0
Arrive On Green	0.23	0.00	0.00				0.00	0.20	0.00	0.52	0.87	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	702	0	0				0	622	0	1288	1213	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1583	1721	1770	0
Q Serve(g_s), s	19.9	0.0	0.0				0.0	17.0	0.0	36.0	8.4	0.0
Cycle Q Clear(g_c), s	19.9	0.0	0.0				0.0	17.0	0.0	36.0	8.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	774	0	356				0	710	318	1337	2307	0
V/C Ratio(X)	0.91	0.00	0.00				0.00	0.88	0.00	0.96	0.53	0.00
Avail Cap(c_a), veh/h	792	0	364				0	768	344	1337	2307	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	0.41	0.41	0.00
Uniform Delay (d), s/veh	37.7	0.0	0.0				0.0	38.8	0.0	23.5	2.9	0.0
Incr Delay (d2), s/veh	15.1	0.0	0.0				0.0	14.3	0.0	9.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0				0.0	9.7	0.0	18.6	4.0	0.0
LnGrp Delay(d),s/veh	52.8	0.0	0.0				0.0	53.0	0.0	32.5	3.2	0.0
LnGrp LOS	D							D		C	A	
Approach Vol, veh/h		702						622			2501	
Approach Delay, s/veh		52.8						53.0			18.3	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		71.5			45.1	26.4		28.5
Change Period (Y+Rc), s		6.3			6.3	* 6.3		6.0
Max Green Setting (Gmax), s		64.7			38.5	* 22		23.0
Max Q Clear Time (g_c+I1), s		10.4			38.0	19.0		21.9
Green Ext Time (p_c), s		27.5			0.3	1.0		0.6

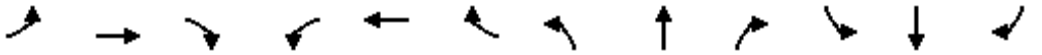
Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Future Volume (veh/h)	0	0	0	260	0	1460	100	1440	0	0	1590	790
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				283	0	0	109	1600	0	0	1767	0
Adj No. of Lanes				1	0	1	1	2	0	0	3	1
Peak Hour Factor				0.92	0.92	0.92	0.92	0.90	0.92	0.92	0.90	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				463	0	413	242	2190	0	0	2629	819
Arrive On Green				0.26	0.00	0.00	0.10	1.00	0.00	0.00	0.52	0.00
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	5253	1583
Grp Volume(v), veh/h				283	0	0	109	1600	0	0	1767	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1695	1583
Q Serve(g_s), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Cycle Q Clear(g_c), s				12.6	0.0	0.0	2.4	0.0	0.0	0.0	23.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	0	413	242	2190	0	0	2629	819
V/C Ratio(X)				0.61	0.00	0.00	0.45	0.73	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h				463	0	413	357	2190	0	0	2629	819
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.37	0.37	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.2	0.0	0.0	13.0	0.0	0.0	0.0	16.1	0.0
Incr Delay (d2), s/veh				5.9	0.0	0.0	0.5	0.8	0.0	0.0	1.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	0.0	1.2	0.2	0.0	0.0	11.1	0.0
LnGrp Delay(d),s/veh				35.1	0.0	0.0	13.4	0.8	0.0	0.0	17.5	0.0
LnGrp LOS				D			B	A			B	
Approach Vol, veh/h					283			1709			1767	
Approach Delay, s/veh					35.1			1.6			17.5	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.2	52.8				62.0		28.0
Change Period (Y+Rc), s	4.5	6.3				6.3		4.5
Max Green Setting (Gmax), s	10.5	40.7				55.7		23.5
Max Q Clear Time (g_c+I1), s	4.4	25.1				2.0		14.6
Green Ext Time (p_c), s	0.1	11.5				23.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	760	0	100	0	0	0	0	780	380	1020	830	0
Future Volume (veh/h)	760	0	100	0	0	0	0	780	380	1020	830	0
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	809	0	0				0	830	0	1085	883	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.94	0.92	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	896	0	412				0	926	414	1134	2158	0
Arrive On Green	0.26	0.00	0.00				0.00	0.26	0.00	0.46	1.00	0.00
Sat Flow, veh/h	3442	0	1583				0	3632	1583	3442	3632	0
Grp Volume(v), veh/h	809	0	0				0	830	0	1085	883	0
Grp Sat Flow(s),veh/h/ln	1721	0	1583				0	1770	1583	1721	1770	0
Q Serve(g_s), s	20.5	0.0	0.0				0.0	20.4	0.0	22.3	0.0	0.0
Cycle Q Clear(g_c), s	20.5	0.0	0.0				0.0	20.4	0.0	22.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	896	0	412				0	926	414	1134	2158	0
V/C Ratio(X)	0.90	0.00	0.00				0.00	0.90	0.00	0.96	0.41	0.00
Avail Cap(c_a), veh/h	918	0	422				0	971	435	1134	2158	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	0.68	0.68	0.00
Uniform Delay (d), s/veh	32.2	0.0	0.0				0.0	32.0	0.0	21.6	0.0	0.0
Incr Delay (d2), s/veh	13.1	0.0	0.0				0.0	13.1	0.0	13.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	0.0	0.0				0.0	11.6	0.0	14.6	0.1	0.0
LnGrp Delay(d),s/veh	45.3	0.0	0.0				0.0	45.1	0.0	34.8	0.4	0.0
LnGrp LOS	D							D		C	A	
Approach Vol, veh/h		809						830			1968	
Approach Delay, s/veh		45.3						45.1			19.4	
Approach LOS		D						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.2			31.3	29.9		29.4
Change Period (Y+Rc), s		6.3			6.3	* 6.3		6.0
Max Green Setting (Gmax), s		53.7			24.5	* 25		24.0
Max Q Clear Time (g_c+I1), s		2.0			24.3	22.4		22.5
Green Ext Time (p_c), s		17.2			0.1	1.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Notes