

Guidance on the Level of Effort Required to Conduct Traffic Analysis Using Microsimulation

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City of
Rocklin-93
(Cont.)



U.S. Department of Transportation
Federal Highway Administration

Research, Development, and Technology
Turner-Fairbank Highway Research Center
6300 Georgetown Pike
McLean, VA 22101-2296

ANALYSIS AND RESULTS

Development of Analysis Scenarios

Respondents indicated that analysis scenarios are developed in close coordination with project stakeholders. Scenarios are usually driven by the planning needs of the project and by the availability of resources. The types and numbers of scenarios to be modeled are usually dependent on the geometric design and operational solutions being considered.

Analysis of Different Operational Conditions

Most interviewees' agencies conduct their analyses for the typical day. Some agencies use the 30th highest hour of the year to help establish morning and afternoon average day peak period analyses. It is not standard practice to model nonrecurring congestion (e.g., incidents, weather events, fluctuations in demand, and construction activities), and there are no model calibration criteria associated with these operational conditions.

Presentation of Analysis Results

Survey responses indicated that analysis results are presented through memoranda/reports, screen shots from the simulation, and video clips. Reports usually contain summary tables and charts for network measures, graphs, and maps for location-specific LOS. Reports also contain time-space diagrams for freeway corridor queues/congestion.

Decision Development from Analysis Results

Results of the analysis (including the comparison between performance measures for different analysis scenarios) provide useful information for decisionmaking on various projects and for prioritization and staging of programmed and planned projects. Interviewees stated that decisions are made based on a collaborative process involving the project development team, the management team, local jurisdictions, and stakeholders. In general, the charge of the analysts is to provide unbiased technical information for the clients/decisionmakers to review and take appropriate action.

Funding Level Specification

Specifying funding levels for the analysis is done on a project-by-project basis, and no general guidance is available. Microsimulation is recommended for facilities with significant congestion and/or operational problems, whereas simpler tools, such as deterministic methods and macrosimulation, are recommended for less complex projects. Factors influencing the project costs include the length of the corridor, presence/inclusion of parallel streets, existing level of congestion, time period of the simulation, routing assignment used, number and types of analysis scenarios desired, availability of existing data, and comprehensiveness and internal consistency of calibration data.

Baseline Model Calibration

Calibration of the baseline model is crucial to the validity of the model to replicate existing observed conditions as well as its stability to forecast future operations. Calibration requires two steps: (1) calibration for capacity and (2) calibration for route choice. This methodology is described in *Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software*.⁽¹⁾ Prior to calibration, criteria must be developed for the models that are being calibrated. Model calibration targets should be set after taking into account the performance measures developed and the quality of field data. The performance measures should be measurable in terms of the field data collected and can be calculated for real-life conditions and compared to the model outputs.

Development of the Future Baseline Model

A future baseline microsimulation model (or future no-build alternative) is an essential part of the analysis process; it is the basis for comparison between alternatives. Many microsimulation models are used because the macroscopic deterministic analytical techniques do not fully capture the extent of congestion.

A common methodology for developing future demand forecasts is using a regional TDM. TDMs take into account regional growth due to land use, demographics, and socioeconomic activity. In cases where a TDM does not exist, it is acceptable to utilize a trend projection of travel demand. As with the development of the existing base-year model, the future baseline (i.e., no build) microsimulation model and future baseline subarea TDM should have zone and link/node structures that ensure correspondence between the models.

The amount of further refinement to the zonal layers within the demand and simulation models depends on the type of growth anticipated in the study area and the future no-build transportation system. The zones need to be refined if there is a large shift in land use within the study area or if transportation improvements cause a shift in land use or become barriers to access to the transportation system from certain zones. Otherwise, the future baseline scenario zones for the simulation model and the demand model can remain the same as the existing baseline zonal systems.

Alternatives Analysis

The alternatives analysis consists of the following steps:

- **Development of project alternatives for analysis:** Alternatives are usually developed by the project team and are shaped through the stakeholder involvement process.
- **Model application:** Microsimulation models operate based on randomly generated numbers, and results can often vary from model run to model run of the same scenario. Therefore, it is necessary to run each scenario multiple times with different random number seeds to determine mean, minimum, and maximum conditions. Multiple model runs are also useful in estimating the reliability of travel time associated with particular alternatives.

EDUCATION

Master of Science, Civil and Environmental Engineering
University of California, Davis, 1994

Bachelor of Science, Mathematics
University of California, Davis, 1992

EMPLOYMENT / ROLES

- Employed at Fehr & Peers since 1995.
- Currently serves as firm-wide Land Use & Transportation Discipline Group leader.

REGISTRATIONS

Traffic Engineer, California (TR 2016)

AFFILIATIONS

Institute of Transportation Engineers (ITE)

EXPERTISE

- Long-Range Transportation Planning
- Transportation Studies for EIRs
- Traffic Impact/Parking Assessments
- Traffic Engineering Studies
- Freeway/Corridor Studies
- Expert Witness

RELEVANT EXPERIENCE ON RETAIL CENTER TRAFFIC STUDIES (PARTIAL LIST)

- | | |
|-------------------------------------|--|
| - Costco Store, Citrus Heights | - Costco Store, Folsom |
| - Creekside Center, Roseville | - Palladio Place Shopping, Folsom |
| - The Fountains, Roseville | - Broadstone Power Center, Folsom |
| - Sunrise Mall, Citrus Heights | - Golden 1 Center, Sacramento |
| - 99 Bond Retail Center, Elk Grove | - Lincoln Crossing Marketplace, Lincoln |
| - Fountains Retail, Sacramento | - Sam's Club, Citrus Heights |
| - Renaissance Creek, Roseville | - Folsom Gateway Retail Center, Folsom |
| - Target Shopping Center, Folsom | - Campus Oaks Retail Center, Roseville |
| - Target Shopping Center, Roseville | - Highland Crossing Retail Center, Roseville |

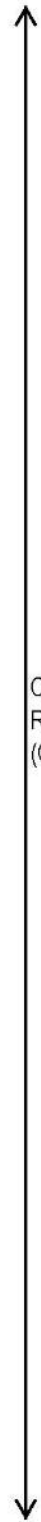
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WORK EXPERIENCE IN CITY OF ROCKLIN

- City of Rocklin Travel Demand Model Update and General Plan Circulation Element Update (ongoing)
- Sierra College – Rocklin Campus Facilities Master Plan (FMP)
- Northwest Rocklin Annexation Area (Whitney Ranch) Master Plan
- Whitney Oaks Master Plan



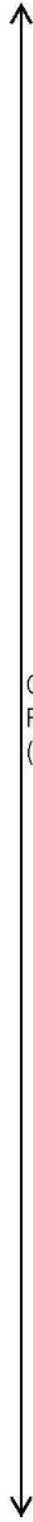
Attachment B



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FEHR  PEERS

Existing Conditions



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Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	116	117	100.5%	58.1	6.1	E
	Through	667	617	92.4%	32.3	7.1	C
	Right Turn	240	228	94.9%	11.8	3.8	B
	Subtotal	1,023	961	93.9%	30.6	5.4	C
SB	Left Turn	23	20	85.0%	67.6	17.8	E
	Through	431	425	98.7%	42.4	7.9	D
	Right Turn	96	100	104.6%	12.0	3.7	B
	Subtotal	550	545	99.1%	37.5	6.8	D
EB	Left Turn	113	110	97.2%	43.6	6.2	D
	Through	265	279	105.4%	37.9	6.2	D
	Right Turn	148	146	98.8%	11.4	2.2	B
	Subtotal	526	535	101.8%	32.0	4.4	C
WB	Left Turn	266	261	98.1%	42.6	4.8	D
	Through	273	273	100.1%	32.2	2.9	C
	Right Turn	44	49	111.1%	8.0	3.0	A
	Subtotal	583	583	100.0%	34.7	2.0	C
Total		2,682	2,625	97.9%	33.3	2.5	C

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	919	852	92.7%	15.0	1.6	B
	Right Turn	116	112	96.9%	7.3	1.4	A
	Subtotal	1,035	964	93.2%	14.1	1.5	B
SB	Left Turn	99	98	99.1%	30.8	5.4	C
	Through	746	732	98.1%	7.6	1.3	A
	Right Turn						
	Subtotal	845	830	98.2%	10.4	2.0	B
EB	Left Turn						
	Through						
	Right Turn	142	147	103.5%	11.4	2.5	B
	Subtotal	142	147	103.5%	11.4	2.5	B
WB	Left Turn	112	105	93.3%	26.0	6.2	C
	Through						
	Right Turn	106	113	106.8%	9.7	1.7	A
	Subtotal	218	218	99.9%	17.5	3.2	B
Total		2,240	2,159	96.4%	12.9	1.1	B

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Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	218	204	93.7%	41.4	4.4	D
	Through	858	797	92.9%	17.0	2.2	B
	Right Turn	69	70	101.4%	5.7	1.9	A
	Subtotal	1,145	1,072	93.6%	20.9	2.3	C
SB	Left Turn	61	68	112.2%	40.1	5.2	D
	Through	878	847	96.4%	21.9	5.0	C
	Right Turn	80	77	95.9%	5.9	1.5	A
	Subtotal	1,019	992	97.3%	21.9	4.3	C
EB	Left Turn	167	161	96.6%	32.0	6.4	C
	Through	26	20	75.2%	29.2	8.0	C
	Right Turn	288	274	95.2%	15.8	2.7	B
	Subtotal	481	455	94.6%	22.1	3.1	C
WB	Left Turn	107	100	93.1%	34.2	6.1	C
	Through	24	21	87.7%	30.1	13.2	C
	Right Turn	33	38	116.2%	7.7	3.1	A
	Subtotal	164	159	97.0%	27.7	4.7	C
Total		2,809	2,677	95.3%	21.9	2.7	C

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	272	272	100.1%	34.7	4.1	C
	Through	913	867	94.9%	11.7	2.4	B
	Right Turn	262	256	97.9%	5.2	0.7	A
	Subtotal	1,447	1,395	96.4%	15.0	2.0	B
SB	Left Turn						
	Through	1,169	1,108	94.8%	27.3	4.2	C
	Right Turn	94	88	93.2%	11.4	2.4	B
	Subtotal	1,263	1,196	94.7%	26.1	4.2	C
EB	Left Turn	77	64	83.5%	35.9	4.5	D
	Through						
	Right Turn	113	129	114.5%	9.9	3.2	A
	Subtotal	190	194	101.9%	18.6	1.8	B
WB	Left Turn	456	437	95.7%	27.9	2.8	C
	Through	104	101	97.3%	35.9	4.6	D
	Right Turn	196	195	99.4%	18.8	2.4	B
	Subtotal	756	732	96.9%	26.7	1.3	C
Total		3,656	3,517	96.2%	21.4	2.1	C

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Intersection 10 **Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,288	1,230	95.5%	25.8	3.4	C
	Right Turn	88	83	94.9%	10.7	2.0	B
	Subtotal	1,376	1,313	95.4%	24.8	3.4	C
SB	Left Turn	280	268	95.6%	34.5	3.2	C
	Through	770	757	98.2%	10.7	1.8	B
	Right Turn	348	336	96.5%	4.2	0.2	A
	Subtotal	1,398	1,360	97.3%	13.8	0.9	B
EB	Left Turn	389	378	97.0%	30.7	3.4	C
	Through	225	221	98.1%	31.3	5.0	C
	Right Turn	60	66	110.3%	10.2	1.8	B
	Subtotal	674	664	98.6%	28.8	3.2	C
WB	Left Turn	105	104	99.2%	35.7	4.7	D
	Through						
	Right Turn	311	290	93.3%	18.4	4.6	B
	Subtotal	416	394	94.8%	22.9	3.9	C
Total		3,864	3,732	96.6%	21.3	1.7	C

Intersection 11 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,284	1,221	95.1%	2.1	0.4	A
	Right Turn	64	62	96.9%	0.7	0.6	A
	Subtotal	1,348	1,283	95.2%	2.0	0.4	A
SB	Left Turn						
	Through	935	928	99.2%	0.7	0.1	A
	Right Turn						
	Subtotal	935	928	99.2%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	94	92	98.4%	15.5	2.8	C
	Subtotal	94	92	98.4%	15.5	2.8	C
Total		2,377	2,303	96.9%	2.0	0.3	A

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Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	2	0	18.8%	0.6	2.0	A
	Through	1,332	1,267	95.2%	8.2	1.4	A
	Right Turn	56	50	88.6%	7.1	1.7	A
	Subtotal	1,390	1,318	94.8%	8.1	1.4	A
SB	Left Turn	26	26	98.3%	22.8	7.7	C
	Through	910	899	98.8%	1.8	0.7	A
	Right Turn	1	1	112.8%	0.0	0.0	A
	Subtotal	937	926	98.8%	2.4	0.6	A
EB	Left Turn	5	3	67.7%	11.1	16.7	B
	Through						
	Right Turn	1	1	112.8%	1.5	2.5	A
	Subtotal	6	5	75.2%	9.7	11.1	A
WB	Left Turn	75	67	89.7%	25.3	5.6	C
	Through						
	Right Turn	11	12	112.8%	10.1	5.1	B
	Subtotal	86	80	92.7%	23.1	4.8	C
Total		2,419	2,328	96.2%	6.4	1.0	A

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	26	30	117.1%	27.0	7.5	C
	Through	1,182	1,114	94.2%	7.3	1.2	A
	Right Turn						
	Subtotal	1,208	1,144	94.7%	7.8	1.3	A
SB	Left Turn						
	Through	873	854	97.8%	5.5	0.7	A
	Right Turn	67	57	84.7%	3.6	1.5	A
	Subtotal	940	910	96.8%	5.4	0.7	A
EB	Left Turn	119	124	104.0%	22.8	2.6	C
	Through						
	Right Turn	74	73	98.6%	7.0	1.6	A
	Subtotal	193	197	101.9%	17.0	2.5	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,341	2,251	96.2%	7.6	0.8	A

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Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	307	280	91.4%	76.5	25.6	E
	Through	902	873	96.8%	72.3	28.6	E
	Right Turn	43	46	106.7%	71.2	30.0	E
	Subtotal	1,252	1,200	95.8%	73.3	27.5	E
SB	Left Turn	143	132	92.3%	56.9	13.5	E
	Through	658	637	96.7%	35.7	4.9	D
	Right Turn	161	166	103.2%	8.3	1.6	A
	Subtotal	962	935	97.2%	33.8	3.8	C
EB	Left Turn	224	221	98.5%	57.2	15.0	E
	Through	301	287	95.4%	32.5	11.5	C
	Right Turn	343	344	100.4%	11.6	3.3	B
	Subtotal	868	852	98.2%	30.5	7.5	C
WB	Left Turn	51	55	106.9%	65.4	21.4	E
	Through	221	217	98.0%	47.7	15.2	D
	Right Turn	130	120	92.3%	28.0	20.4	C
	Subtotal	402	391	97.3%	44.1	16.8	D
Total		3,484	3,378	97.0%	48.2	13.3	D

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	5	105.3%	4.8	4.9	A
	Through	1,035	962	92.9%	2.7	0.5	A
	Right Turn						
	Subtotal	1,040	967	93.0%	2.7	0.5	A
SB	Left Turn						
	Through	999	979	98.0%	1.5	0.3	A
	Right Turn	2	3	131.6%	0.7	1.0	A
	Subtotal	1,001	981	98.0%	1.5	0.3	A
EB	Left Turn						
	Through						
	Right Turn	20	19	95.9%	5.9	3.0	A
	Subtotal	20	19	95.9%	5.9	3.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,061	1,968	95.5%	2.2	0.2	A

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Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	123	108	87.7%	42.6	5.4	D
	Through	311	300	96.6%	20.0	5.3	B
	Right Turn	214	209	97.8%	7.4	2.4	A
	Subtotal	648	617	95.3%	19.7	2.9	B
SB	Left Turn	29	29	100.6%	49.8	15.6	D
	Through	337	330	97.9%	25.2	3.7	C
	Right Turn	59	56	95.0%	5.6	1.8	A
	Subtotal	425	415	97.7%	24.3	3.6	C
EB	Left Turn	70	62	88.9%	42.6	5.6	D
	Through	195	201	103.0%	34.8	5.5	C
	Right Turn	120	104	86.7%	8.1	2.7	A
	Subtotal	385	367	95.4%	28.9	3.8	C
WB	Left Turn	222	217	97.6%	34.8	2.9	C
	Through	168	190	112.9%	23.5	5.6	C
	Right Turn	24	29	121.6%	4.7	2.0	A
	Subtotal	414	435	105.2%	27.8	2.1	C
Total		1,872	1,835	98.0%	24.5	2.3	C

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	582	563	96.8%	6.6	0.8	A
	Right Turn	89	86	97.1%	4.2	1.4	A
	Subtotal	671	650	96.8%	6.3	0.9	A
SB	Left Turn	76	63	82.4%	24.3	8.2	C
	Through	602	586	97.3%	5.3	0.7	A
	Right Turn						
	Subtotal	678	649	95.7%	7.3	1.1	A
EB	Left Turn						
	Through						
	Right Turn	69	66	95.2%	7.3	1.4	A
	Subtotal	69	66	95.2%	7.3	1.4	A
WB	Left Turn	113	114	100.9%	18.7	2.4	B
	Through						
	Right Turn	55	48	87.3%	6.4	1.4	A
	Subtotal	168	162	96.5%	15.0	1.5	B
Total		1,586	1,526	96.2%	7.7	0.8	A

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Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	198	192	96.8%	28.0	4.4	C
	Through	490	467	95.4%	12.7	1.6	B
	Right Turn	98	90	91.7%	4.1	1.2	A
	Subtotal	786	749	95.3%	15.7	2.0	B
SB	Left Turn	64	70	109.2%	31.5	6.8	C
	Through	621	590	95.0%	16.5	3.2	B
	Right Turn	99	100	100.8%	4.5	1.0	A
	Subtotal	784	760	96.9%	16.3	2.6	B
EB	Left Turn	117	114	97.5%	26.1	3.4	C
	Through	23	22	96.8%	34.9	10.8	C
	Right Turn	204	219	107.3%	9.7	2.3	A
	Subtotal	344	355	103.3%	16.5	2.1	B
WB	Left Turn	118	127	108.0%	27.9	4.6	C
	Through	24	23	94.4%	26.7	7.3	C
	Right Turn	23	28	123.5%	5.7	2.2	A
	Subtotal	165	179	108.2%	24.5	5.3	C
Total		2,079	2,042	98.2%	16.8	1.9	B

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	340	351	103.1%	39.6	7.7	D
	Through	558	535	95.9%	12.5	2.7	B
	Right Turn	245	263	107.5%	6.2	1.2	A
	Subtotal	1,143	1,149	100.5%	19.4	3.8	B
SB	Left Turn						
	Through	880	859	97.6%	32.8	6.4	C
	Right Turn	82	78	94.6%	10.2	1.5	B
	Subtotal	962	937	97.4%	31.0	6.2	C
EB	Left Turn	80	78	97.4%	40.2	6.4	D
	Through						
	Right Turn	290	296	102.0%	11.5	2.4	B
	Subtotal	370	374	101.0%	17.6	2.6	B
WB	Left Turn	407	402	98.9%	27.1	3.9	C
	Through	149	164	110.3%	36.7	4.1	D
	Right Turn	169	170	100.9%	19.6	3.9	B
	Subtotal	725	737	101.7%	27.5	3.3	C
Total		3,200	3,196	99.9%	24.4	3.6	C

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Intersection 10 **Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	683	694	101.5%	24.5	2.4	C
	Right Turn	90	105	116.5%	10.0	2.0	A
	Subtotal	773	798	103.3%	22.5	2.3	C
SB	Left Turn	432	422	97.6%	29.1	5.3	C
	Through	494	457	92.4%	10.5	1.8	B
	Right Turn	219	222	101.3%	3.9	0.2	A
	Subtotal	1,145	1,100	96.1%	16.3	2.4	B
EB	Left Turn	373	370	99.1%	24.6	3.4	C
	Through	281	309	110.0%	25.9	2.7	C
	Right Turn	50	52	104.4%	6.6	1.7	A
	Subtotal	704	731	103.9%	23.8	1.8	C
WB	Left Turn	107	106	99.4%	25.9	5.3	C
	Through						
	Right Turn	335	319	95.4%	10.6	2.3	B
	Subtotal	442	426	96.3%	14.5	2.2	B
Total		3,064	3,055	99.7%	19.5	1.5	B

Intersection 11 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	669	692	103.4%	1.5	0.1	A
	Right Turn	72	68	93.9%	0.3	0.1	A
	Subtotal	741	759	102.5%	1.4	0.1	A
SB	Left Turn						
	Through	651	614	94.3%	0.5	0.1	A
	Right Turn						
	Subtotal	651	614	94.3%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	106	105	98.9%	7.5	2.4	A
	Subtotal	106	105	98.9%	7.5	2.4	A
Total		1,498	1,478	98.7%	1.4	0.2	A

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Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	1	0	38.4%	0.7	2.1	A
	Through	720	733	101.8%	5.9	0.5	A
	Right Turn	77	84	109.7%	3.4	0.6	A
	Subtotal	798	818	102.4%	5.7	0.5	A
SB	Left Turn	31	38	121.4%	18.3	4.9	B
	Through	614	576	93.9%	1.5	0.5	A
	Right Turn	5	5	92.2%	0.2	0.5	A
	Subtotal	650	619	95.2%	2.5	0.6	A
EB	Left Turn	3	2	51.2%	7.7	11.5	A
	Through						
	Right Turn	3	3	115.2%	3.6	3.8	A
	Subtotal	6	5	83.2%	8.3	7.6	A
WB	Left Turn	70	65	92.7%	17.6	4.2	B
	Through	1	0	38.4%	3.7	11.7	A
	Right Turn	18	23	125.9%	6.0	1.7	A
	Subtotal	89	88	98.8%	14.7	3.6	B
Total		1,543	1,529	99.1%	4.9	0.5	A

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	15	10	66.6%	9.2	6.2	A
	Through	761	786	103.3%	2.9	0.8	A
	Right Turn						
	Subtotal	776	796	102.6%	3.0	0.8	A
SB	Left Turn						
	Through	660	627	95.0%	2.2	0.6	A
	Right Turn	27	23	86.8%	1.2	1.1	A
	Subtotal	687	650	94.7%	2.2	0.6	A
EB	Left Turn	37	31	84.1%	10.7	3.5	B
	Through						
	Right Turn	20	16	78.7%	4.3	1.9	A
	Subtotal	57	47	82.2%	8.7	2.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,520	1,493	98.2%	2.8	0.6	A

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(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	165	156	94.3%	41.8	5.1	D
	Through	544	566	104.0%	24.0	3.3	C
	Right Turn	29	27	92.7%	16.4	8.9	B
	Subtotal	738	748	101.4%	27.4	3.1	C
SB	Left Turn	103	92	89.5%	40.4	11.6	D
	Through	452	409	90.4%	21.3	2.2	C
	Right Turn	90	89	98.6%	4.3	1.2	A
	Subtotal	645	589	91.4%	21.9	2.3	C
EB	Left Turn	125	126	100.5%	40.4	8.9	D
	Through	184	200	108.5%	25.9	3.2	C
	Right Turn	185	191	103.4%	5.2	0.8	A
	Subtotal	494	516	104.6%	21.8	3.5	C
WB	Left Turn	40	33	82.6%	46.4	17.5	D
	Through	158	149	94.5%	33.1	2.5	C
	Right Turn	112	113	101.1%	11.2	1.9	B
	Subtotal	310	296	95.4%	26.0	1.9	C
Total		2,187	2,150	98.3%	24.4	2.3	C

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	7	4	60.3%	3.1	4.7	A
	Through	671	649	96.7%	1.0	0.2	A
	Right Turn						
	Subtotal	678	653	96.3%	1.0	0.2	A
SB	Left Turn						
	Through	784	764	97.5%	1.1	0.2	A
	Right Turn						
	Subtotal	784	764	97.5%	1.1	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,462	1,417	96.9%	1.0	0.1	A

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 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	100	18	175	61	200	83	0%	0%
	Through	4,650	200	29	300	51	325	64	20%	0%
	Right Turn	200	100	24	200	89	225	113	0%	0%
NB	Left Turn	225	150	29	300	52	275	37	0%	0%
	Through	575	425	72	525	90	525	72	24%	1%
	Right Turn	575	125	18	175	36	175	38	0%	0%
SB	Left Turn	200	50	13	100	55	100	82	0%	0%
	Through	4,975	300	50	400	76	425	74	25%	0%
	Right Turn	375	75	12	125	28	125	33	0%	0%
WB	Left Turn	225	175	18	250	42	275	54	2%	0%
	Through	4,850	175	22	275	49	300	62	5%	0%
	Right Turn	225	50	16	75	51	75	71	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	875	75	11	100	22	100	21	0%	0%
	Through	1,275	250	23	300	29	325	23	1%	0%
NB	Through/Right	1,275	125	15	225	40	225	58	0%	0%
	Through	575	75	17	150	32	150	39	0%	0%
SB	Left Turn	175	75	17	125	27	125	26	0%	0%
	Through/Right	575	100	15	150	27	150	29	0%	0%
WB	Left Turn	100	75	17	125	24	125	23	4%	0%
	Right Turn	5,000	75	8	100	24	125	36	0%	0%



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(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	125	16	175	23	175	28	1%	0%
	Through	2,575	25	8	50	14	75	59	0%	0%
	Right Turn	2,575	100	13	150	34	150	33	0%	0%
NB	Left Turn	175	150	23	225	27	200	20	4%	0%
	Through	400	225	37	325	68	325	60	6%	0%
	Right Turn	400	75	14	150	61	175	77	0%	0%
SB	Left Turn	300	75	15	125	26	125	33	0%	0%
	Through	1,275	225	49	350	81	325	82	15%	0%
	Right Turn	200	50	30	150	99	150	125	0%	0%
WB	Left Turn	175	75	11	125	20	125	24	0%	0%
	Through	225	25	8	50	15	50	16	0%	0%
	Right Turn	175	25	7	50	13	50	17	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	750	50	9	100	15	100	20	0%	0%
	Right Turn	750	50	10	100	26	125	38	0%	0%
NB	Left Turn	150	175	12	250	22	250	19	0%	10%
	Through	1,500	175	19	225	40	225	38	0%	0%
	Right Turn	300	50	10	75	13	75	19	0%	0%
SB	Through	400	225	26	350	40	325	39	0%	0%
	Right Turn	150	50	5	75	10	75	11	0%	0%
WB	Left Turn	750	150	30	225	46	225	54	1%	0%
	Through/Right	1,300	125	16	200	29	175	31	2%	0%
	Right Turn	200	50	24	125	51	150	46	0%	0%

City of
Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	175	32	250	67	275	69	0%	0%
	Through	1,300	75	13	150	20	150	27	0%	0%
	Right Turn	225	50	5	75	13	75	21	0%	0%
NB	Through	725	250	36	325	59	375	66	0%	0%
	Right Turn	125	25	4	50	14	50	17	0%	0%
SB	Left Turn	225	125	13	175	36	175	35	0%	0%
	Through	1,500	150	17	225	41	200	49	0%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	75	15	125	29	150	34	0%	0%
	Right Turn	500	125	25	200	40	200	44	0%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through/Right	200	25	6	50	24	75	57	0%	0%
	Right Turn	575	50	9	100	22	100	30	0%	0%
WB										
SB	Through	200	25	0	25	0	25	0	0%	0%
0										



City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	4	25	13	25	14	0%	0%
	Through/Right	375	25	1	25	8	25	11	0%	0%
NB	Left Turn	100	25	0	25	2	25	3	0%	0%
	Through	1,700	100	55	250	122	300	121	11%	0%
	Right Turn	75	25	8	75	21	75	19	0%	0%
SB	Left Turn	225	25	14	50	22	50	26	0%	0%
	Through	625	50	13	100	31	100	32	0%	0%
	Right Turn	200	25	0	25	0	25	0	0%	0%
WB	Left Turn	250	50	10	100	19	100	25	0%	0%
	Through	750	25	0	25	0	25	0	0%	0%
	Right Turn	175	25	6	50	13	50	10	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	75	11	125	21	125	22	13%	0%
	Right Turn	100	50	7	75	22	75	28	0%	0%
NB	Left Turn	225	50	13	75	23	75	28	0%	0%
	Through	1,600	100	24	150	50	150	50	0%	0%
SB	Through	1,700	50	11	100	20	100	29	0%	0%
	Through/Right	725	75	14	125	24	125	31	0%	0%
0										



City of Rocklin-93 (Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	200	13	300	33	275	21	10%	0%
	Through	950	150	66	250	151	275	139	0%	0%
	Right Turn	950	125	26	175	54	200	55	0%	0%
NB	Left Turn	225	250	24	350	45	300	37	5%	0%
	Through	1,650	475	167	700	219	675	188	33%	2%
	Through/Right	1,650	525	157	725	207	700	164	0%	3%
SB	Left Turn	250	125	21	225	38	225	47	2%	0%
	Through	1,700	150	20	225	26	225	34	7%	0%
	Right Turn	175	50	11	100	25	100	29	0%	0%
WB	Left Turn	225	75	24	125	55	125	73	0%	0%
	Through	5,000	175	66	275	175	275	199	3%	0%
	Through/Right	250	125	34	200	62	200	53	2%	0%

Intersection 21 Sierra College Blvd/Office Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	525	25	6	50	6	50	8	0%	0%
NB	Left Turn	125	25	5	25	17	25	17	0%	0%
	Through	400	25	9	75	39	100	53	1%	0%
SB	Through	275	25	0	25	0	25	0	0%	0%
	Through/Right	275	25	0	25	0	25	0	0%	0%
0										

City of Rocklin-93 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	50	8	100	19	100	15	0%	0%
	Through	4,650	150	25	225	58	225	52	9%	0%
	Right Turn	200	50	9	100	32	100	33	0%	0%
NB	Left Turn	225	100	22	150	51	150	61	0%	0%
	Through	575	125	33	200	54	200	72	1%	1%
	Right Turn	575	50	15	100	30	100	33	0%	0%
SB	Left Turn	200	50	11	75	21	75	24	0%	0%
	Through	4,975	150	14	250	36	250	37	4%	2%
	Right Turn	375	25	7	50	12	50	11	0%	0%
WB	Left Turn	225	125	21	175	39	175	44	1%	0%
	Through	4,850	100	18	175	30	175	22	0%	0%
	Right Turn	225	25	9	50	12	50	16	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	875	50	3	75	8	75	6	0%	0%
	Through	1,275	75	21	150	48	150	49	0%	0%
NB	Through/Right	1,275	75	13	125	31	125	35	0%	0%
	Through	1,275	75	13	125	31	125	35	0%	0%
SB	Left Turn	175	50	14	100	36	100	46	0%	0%
	Through	575	50	9	75	18	75	23	0%	0%
	Through/Right	575	75	17	125	38	125	36	0%	0%
WB	Left Turn	100	75	10	100	16	100	16	1%	0%
	Right Turn	1,000	50	5	75	12	75	20	0%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	75	12	125	21	125	23	0%	0%
	Through	2,575	25	8	50	14	50	14	0%	0%
	Right Turn	2,575	75	15	100	32	100	35	0%	0%
NB	Left Turn	175	125	23	175	40	175	37	1%	0%
	Through	400	125	18	200	41	200	43	1%	0%
	Right Turn	400	25	9	50	36	75	48	0%	0%
SB	Left Turn	300	75	13	100	22	125	25	0%	0%
	Through	1,275	150	20	225	47	225	59	2%	0%
	Right Turn	200	50	13	75	55	100	77	0%	0%
WB	Left Turn	175	75	10	100	11	100	7	27%	0%
	Through	350	50	16	125	38	150	60	2%	0%
	Right Turn	175	25	8	50	14	50	16	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	750	75	9	100	17	125	19	0%	0%
	Right Turn	750	100	24	150	34	150	47	0%	0%
NB	Left Turn	150	200	24	275	19	250	9	0%	25%
	Through	1,500	125	29	225	49	225	53	0%	0%
	Right Turn	300	50	8	100	11	100	12	0%	0%
SB	Through	400	200	28	275	39	275	42	0%	0%
	Right Turn	150	100	9	125	22	125	27	0%	0%
WB	Left Turn	750	125	26	175	45	175	49	0%	0%
	Through/Right	1,300	200	28	275	59	275	56	4%	0%
	Right Turn	200	75	27	175	55	175	55	0%	0%

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	125	19	200	30	200	38	0%	0%
	Through	1,000	100	13	150	25	150	30	0%	0%
	Right Turn	225	50	6	75	10	50	13	0%	0%
NB	Through	725	200	19	225	38	250	39	0%	0%
	Right Turn	125	25	9	75	16	75	21	0%	0%
SB	Left Turn	225	150	19	200	29	200	31	0%	0%
	Through	1,500	100	26	150	49	150	58	0%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	75	14	125	28	125	29	0%	0%
	Right Turn	500	100	17	175	29	175	29	0%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through/Right	200	25	3	25	16	25	24	0%	0%
	Right Turn	575	50	8	75	19	100	27	0%	0%
WB	Through	200	25	0	25	0	25	0	0%	0%
SB	Through	200	25	0	25	0	25	0	0%	0%
0										



City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	3	25	10	25	14	0%	0%
	Through/Right	375	25	3	25	10	25	11	0%	0%
NB	Left Turn	100	25	1	25	4	25	6	0%	0%
	Through	1,700	75	12	100	47	100	61	4%	0%
	Right Turn	75	25	12	75	20	75	7	0%	0%
SB	Left Turn	225	50	7	75	11	75	18	0%	0%
	Through	625	25	9	75	25	75	32	0%	0%
	Right Turn	200	25	1	25	6	25	8	0%	0%
WB	Left Turn	250	50	8	75	11	75	14	0%	0%
	Through	750	25	2	25	7	25	9	0%	0%
	Right Turn	175	25	7	50	8	50	7	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	25	11	50	26	50	25	1%	0%
	Right Turn	100	25	6	50	8	50	6	0%	0%
NB	Left Turn	225	25	7	25	15	50	16	0%	0%
	Through	1,600	50	11	100	25	100	30	0%	0%
SB	Through	1,700	25	7	50	16	50	18	0%	0%
	Through/Right	725	25	12	75	31	75	37	0%	0%
0										

City of Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	100	15	150	25	150	18	0%	0%
	Through	950	75	12	150	33	150	44	0%	0%
	Right Turn	950	75	8	100	17	100	20	0%	0%
NB	Left Turn	225	100	20	150	34	150	46	0%	0%
	Through	1,650	125	25	175	50	175	45	0%	0%
	Through/Right	1,650	150	27	250	36	225	39	0%	0%
SB	Left Turn	250	75	25	150	51	150	47	0%	0%
	Through	1,700	75	10	125	23	125	27	0%	0%
	Right Turn	175	25	8	50	19	50	23	0%	0%
WB	Left Turn	225	50	12	75	14	75	11	0%	0%
	Through	5,000	100	12	150	28	150	31	0%	0%
	Through/Right	250	75	8	125	19	125	20	0%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	4	25	15	25	16	0%	0%
	Through	125	25	0	25	0	25	0	0%	0%
SB	Through	275	25	0	25	0	25	0	0%	0%
	Through/Right	275	25	0	25	0	25	0	0%	0%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										



City of
 Rocklin-93
 (Cont.)

Existing Plus Project Conditions



City of
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(Cont.)

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Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	137	120	87.8%	67.3	7.4	E
	Through	687	638	92.9%	37.1	7.6	D
	Right Turn	264	271	102.5%	15.4	3.9	B
	Subtotal	1,088	1,029	94.6%	35.0	6.2	C
SB	Left Turn	23	27	117.7%	63.5	24.7	E
	Through	450	437	97.0%	46.0	14.6	D
	Right Turn	96	101	105.4%	15.5	8.0	B
	Subtotal	569	565	99.3%	41.4	14.1	D
EB	Left Turn	113	120	106.5%	51.6	6.5	D
	Through	265	270	102.0%	44.1	5.8	D
	Right Turn	168	169	100.5%	14.1	4.4	B
	Subtotal	546	559	102.5%	36.8	5.5	D
WB	Left Turn	290	286	98.7%	47.1	8.2	D
	Through	273	260	95.3%	33.5	3.5	C
	Right Turn	44	50	112.8%	12.5	4.8	B
	Subtotal	607	596	98.2%	38.3	4.9	D
Total		2,810	2,750	97.9%	37.6	4.5	D

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	981	939	95.7%	23.3	5.2	C
	Right Turn	116	109	94.3%	11.4	2.5	B
	Subtotal	1,097	1,049	95.6%	22.0	4.8	C
SB	Left Turn	106	105	99.3%	34.8	9.2	C
	Through	802	773	96.3%	10.4	5.2	B
	Right Turn						
	Subtotal	908	878	96.7%	13.4	5.0	B
EB	Left Turn						
	Through						
	Right Turn	142	141	99.3%	13.1	5.2	B
	Subtotal	142	141	99.3%	13.1	5.2	B
WB	Left Turn	112	103	92.0%	29.3	10.8	C
	Through						
	Right Turn	109	105	95.9%	10.9	3.8	B
	Subtotal	221	208	93.9%	20.4	7.0	C
Total		2,368	2,275	96.1%	18.0	4.4	B

City of Rocklin-93 (Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	218	214	98.3%	77.3	11.2	E
	Through	1,143	1,136	99.3%	26.7	6.0	C
	Right Turn	69	67	96.5%	13.3	5.1	B
	Subtotal	1,430	1,416	99.0%	33.7	5.8	C
SB	Left Turn	61	61	99.2%	71.6	17.7	E
	Through	1,179	1,096	92.9%	57.1	17.1	E
	Right Turn	89	65	73.5%	37.6	12.1	D
	Subtotal	1,329	1,222	91.9%	56.7	16.7	E
EB	Left Turn	176	178	101.1%	67.8	25.1	E
	Through	26	23	88.2%	53.5	22.0	D
	Right Turn	288	276	96.0%	31.5	9.0	C
	Subtotal	490	477	97.4%	45.8	12.1	D
WB	Left Turn	107	94	88.2%	66.2	23.0	E
	Through	24	23	97.1%	50.1	12.2	D
	Right Turn	33	38	115.1%	10.8	5.7	B
	Subtotal	164	156	94.9%	49.9	12.9	D
Total		3,413	3,271	95.8%	44.7	9.8	D

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	272	268	98.6%	43.5	5.9	D
	Through	1,046	1,048	100.2%	17.3	3.1	B
	Right Turn	262	241	92.1%	6.5	1.1	A
	Subtotal	1,580	1,557	98.6%	20.1	3.1	C
SB	Left Turn						
	Through	1,470	1,379	93.8%	49.5	10.5	D
	Right Turn	94	80	85.6%	25.8	8.5	C
	Subtotal	1,564	1,460	93.3%	48.2	10.5	D
EB	Left Turn	77	69	89.8%	50.0	11.7	D
	Through						
	Right Turn	113	116	102.5%	14.1	4.3	B
	Subtotal	190	185	97.4%	27.3	4.6	C
WB	Left Turn	456	461	101.2%	33.4	2.7	C
	Through	104	100	95.8%	47.3	11.0	D
	Right Turn	348	333	95.7%	29.2	6.2	C
	Subtotal	908	894	98.5%	33.5	4.1	C
Total		4,242	4,096	96.6%	33.3	5.2	C

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,317	1,217	92.4%	32.1	3.7	C
	Right Turn	88	86	98.3%	12.3	2.3	B
	Subtotal	1,405	1,303	92.8%	30.8	3.6	C
SB	Left Turn	280	264	94.3%	43.5	8.1	D
	Through	800	740	92.5%	15.2	3.7	B
	Right Turn	509	497	97.6%	4.8	0.2	A
	Subtotal	1,589	1,501	94.5%	16.9	2.7	B
EB	Left Turn	493	508	103.0%	29.4	1.8	C
	Through	225	240	106.8%	29.5	4.0	C
	Right Turn	60	53	88.4%	9.7	2.8	A
	Subtotal	778	801	103.0%	28.1	2.1	C
WB	Left Turn	105	100	95.6%	37.9	6.6	D
	Through						
	Right Turn	311	301	96.8%	21.8	5.8	C
	Subtotal	416	402	96.5%	25.9	4.1	C
Total		4,188	4,007	95.7%	24.6	1.8	C

Intersection 11 Sierra College Blvd/Schriber Wy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,313	1,259	95.9%	2.4	0.7	A
	Right Turn	64	64	100.5%	0.9	0.6	A
	Subtotal	1,377	1,323	96.1%	2.4	0.7	A
SB	Left Turn						
	Through	965	898	93.0%	0.8	0.1	A
	Right Turn						
	Subtotal	965	898	93.0%	0.8	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	94	90	95.6%	20.8	15.9	C
	Subtotal	94	90	95.6%	20.8	15.9	C
Total		2,436	2,311	94.8%	2.5	0.9	A

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	2	0	18.8%	0.8	2.6	A
	Through	1,361	1,307	96.1%	10.5	1.7	B
	Right Turn	56	51	90.6%	9.3	2.3	A
	Subtotal	1,419	1,358	95.7%	10.5	1.7	B
SB	Left Turn	26	25	96.9%	35.4	15.3	D
	Through	940	883	94.0%	2.6	1.2	A
	Right Turn	1	2	150.4%	0.1	0.2	A
	Subtotal	967	910	94.1%	3.5	1.0	A
EB	Left Turn	5	4	82.7%	11.7	16.4	B
	Through						
	Right Turn	1	1	75.2%	1.1	2.4	A
	Subtotal	6	5	81.5%	12.7	15.8	B
WB	Left Turn	75	81	107.8%	28.3	3.5	C
	Through						
	Right Turn	11	14	123.1%	7.4	4.3	A
	Subtotal	86	94	109.7%	25.3	2.6	C
Total		2,478	2,368	95.5%	8.4	1.2	A

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	26	23	88.2%	30.8	13.0	C
	Through	1,211	1,182	97.6%	7.0	0.8	A
	Right Turn						
	Subtotal	1,237	1,205	97.4%	7.4	0.8	A
SB	Left Turn						
	Through	903	851	94.2%	5.0	0.8	A
	Right Turn	67	67	99.9%	3.9	1.7	A
	Subtotal	970	917	94.6%	4.9	0.8	A
EB	Left Turn	119	107	89.7%	22.7	4.2	C
	Through						
	Right Turn	74	71	96.0%	6.8	1.0	A
	Subtotal	193	178	92.1%	16.3	3.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,400	2,300	95.8%	7.1	0.8	A

City of Rocklin-93 (Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	307	288	93.8%	90.5	21.4	F
	Through	921	867	94.1%	69.0	18.0	E
	Right Turn	43	44	102.3%	69.1	17.0	E
	Subtotal	1,271	1,199	94.3%	74.2	17.5	E
SB	Left Turn	147	129	87.5%	59.7	8.3	E
	Through	678	622	91.7%	38.4	4.5	D
	Right Turn	167	162	96.8%	8.9	2.7	A
	Subtotal	992	912	91.9%	36.1	3.8	D
EB	Left Turn	230	241	105.0%	53.7	6.1	D
	Through	301	293	97.3%	28.5	3.6	C
	Right Turn	343	344	100.4%	10.5	2.5	B
	Subtotal	874	879	100.5%	28.5	3.2	C
WB	Left Turn	51	47	92.9%	62.6	18.7	E
	Through	221	213	96.3%	45.7	7.9	D
	Right Turn	134	137	102.4%	23.4	4.7	C
	Subtotal	406	397	97.9%	39.8	6.2	D
Total		3,543	3,387	95.6%	48.1	5.2	D

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	7	142.9%	11.2	5.7	B
	Through	1,097	1,060	96.6%	8.2	2.5	A
	Right Turn						
	Subtotal	1,102	1,067	96.8%	8.2	2.5	A
SB	Left Turn						
	Through	1,055	1,007	95.4%	5.2	4.8	A
	Right Turn	2	2	75.2%	0.3	0.5	A
	Subtotal	1,057	1,008	95.4%	5.2	4.8	A
EB	Left Turn						
	Through						
	Right Turn	20	18	88.4%	51.2	91.0	F
	Subtotal	20	18	88.4%	51.2	91.0	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,179	2,093	96.0%	6.9	3.6	A

City of
 Rocklin-93
 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Existing Plus Project Conditions
 Weekday PM Peak Hour

Intersection 24 Sierra College Blvd/Project Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	947	896	94.6%	32.3	12.2	C
	Right Turn	387	375	97.0%	11.6	5.7	B
	Subtotal	1,334	1,271	95.3%	26.1	10.0	C
SB	Left Turn	142	129	90.8%	29.7	11.4	C
	Through	933	863	92.4%	24.0	14.7	C
	Right Turn						
	Subtotal	1,075	992	92.2%	24.8	13.8	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	402	384	95.5%	29.0	17.3	C
	Through						
	Right Turn	161	168	104.2%	8.1	4.8	A
	Subtotal	563	552	98.0%	22.5	13.2	C
Total		2,972	2,814	94.7%	24.8	10.4	C



City of Rocklin-93
(Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	162	149	91.7%	47.0	6.6	D
	Through	349	348	99.8%	25.1	4.3	C
	Right Turn	260	259	99.5%	9.4	2.4	A
	Subtotal	771	756	98.0%	24.1	3.1	C
SB	Left Turn	59	55	93.7%	51.9	7.9	D
	Through	376	367	97.7%	34.2	5.4	C
	Right Turn	29	25	86.1%	7.4	2.9	A
	Subtotal	464	448	96.5%	34.9	4.5	C
EB	Left Turn	70	68	96.5%	44.8	7.0	D
	Through	195	192	98.5%	34.7	5.8	C
	Right Turn	161	158	98.0%	9.9	2.4	A
	Subtotal	426	417	98.0%	26.9	3.5	C
WB	Left Turn	270	270	99.8%	39.8	5.3	D
	Through	168	178	105.8%	26.7	3.0	C
	Right Turn	24	23	96.0%	6.2	3.5	A
	Subtotal	462	470	101.8%	33.3	4.1	C
Total		2,123	2,091	98.5%	29.0	3.0	C

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	699	683	97.7%	9.6	2.5	A
	Right Turn	89	96	108.3%	5.8	0.7	A
	Subtotal	788	780	98.9%	9.1	2.3	A
SB	Left Turn	91	89	98.3%	24.1	3.3	C
	Through	716	709	99.0%	5.6	0.5	A
	Right Turn						
	Subtotal	807	798	98.9%	7.7	0.6	A
EB	Left Turn						
	Through						
	Right Turn	69	67	96.8%	7.7	1.3	A
	Subtotal	69	67	96.8%	7.7	1.3	A
WB	Left Turn	113	116	102.6%	20.6	5.7	C
	Through						
	Right Turn	61	61	100.7%	7.3	1.3	A
	Subtotal	174	177	102.0%	16.0	4.6	B
Total		1,838	1,822	99.1%	9.1	0.9	A

City of Rocklin-93 (Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	198	193	97.6%	58.6	21.8	E
	Through	884	884	100.0%	19.6	5.5	B
	Right Turn	98	90	92.1%	6.5	2.7	A
	Subtotal	1,180	1,167	98.9%	25.1	7.7	C
SB	Left Turn	64	58	90.6%	50.5	11.9	D
	Through	999	942	94.3%	35.5	13.8	D
	Right Turn	116	102	87.7%	20.7	13.9	C
	Subtotal	1,179	1,101	93.4%	35.0	13.7	C
EB	Left Turn	135	125	92.4%	67.7	60.4	E
	Through	23	22	93.5%	42.9	21.2	D
	Right Turn	204	208	102.0%	22.2	5.2	C
	Subtotal	362	354	97.9%	38.9	21.3	D
WB	Left Turn	118	116	98.6%	55.1	22.6	E
	Through	24	26	110.4%	52.7	23.4	D
	Right Turn	23	26	111.9%	15.5	9.6	B
	Subtotal	165	169	102.2%	48.8	20.3	D
Total		2,886	2,792	96.7%	32.2	11.6	C

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	340	339	99.7%	57.2	7.2	E
	Through	735	732	99.6%	19.9	2.1	B
	Right Turn	245	248	101.4%	8.5	1.8	A
	Subtotal	1,320	1,320	100.0%	27.4	3.3	C
SB	Left Turn						
	Through	1,258	1,175	93.4%	54.1	6.9	D
	Right Turn	82	84	102.6%	24.2	3.8	C
	Subtotal	1,340	1,260	94.0%	52.1	6.7	D
EB	Left Turn	80	78	97.9%	51.8	8.0	D
	Through						
	Right Turn	290	295	101.7%	20.6	2.4	C
	Subtotal	370	373	100.9%	27.4	1.8	C
WB	Left Turn	407	419	102.8%	32.1	2.7	C
	Through	149	162	108.5%	51.9	6.7	D
	Right Turn	386	393	101.9%	30.5	6.1	C
	Subtotal	942	973	103.3%	34.8	4.1	C
Total		3,972	3,926	98.8%	37.1	3.4	D

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	742	727	98.0%	28.7	2.9	C
	Right Turn	90	74	81.9%	9.0	1.4	A
	Subtotal	832	801	96.2%	26.9	2.6	C
SB	Left Turn	432	421	97.5%	39.3	8.1	D
	Through	550	546	99.3%	13.9	2.3	B
	Right Turn	426	404	94.9%	4.6	0.2	A
	Subtotal	1,408	1,372	97.4%	19.0	3.0	B
EB	Left Turn	492	503	102.2%	24.4	2.0	C
	Through	281	271	96.3%	24.4	3.7	C
	Right Turn	50	50	99.1%	6.8	1.6	A
	Subtotal	823	823	100.0%	23.4	1.4	C
WB	Left Turn	107	107	100.1%	32.2	7.6	C
	Through						
	Right Turn	335	327	97.5%	16.1	8.7	B
	Subtotal	442	434	98.2%	20.4	7.4	C
Total		3,505	3,429	97.8%	22.0	2.2	C

Intersection 11 Sierra College Blvd/Schriber Wy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	728	703	96.5%	1.5	0.1	A
	Right Turn	72	74	102.9%	0.4	0.2	A
	Subtotal	800	777	97.1%	1.4	0.1	A
SB	Left Turn						
	Through	707	702	99.3%	0.6	0.1	A
	Right Turn						
	Subtotal	707	702	99.3%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	106	96	90.2%	6.5	3.5	A
	Subtotal	106	96	90.2%	6.5	3.5	A
Total		1,613	1,575	97.6%	1.4	0.2	A

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	1	1	76.8%	11.7	25.0	B
	Through	779	752	96.5%	7.0	1.2	A
	Right Turn	77	79	103.2%	4.8	1.0	A
	Subtotal	857	832	97.1%	6.8	1.2	A
SB	Left Turn	31	35	111.5%	22.8	6.2	C
	Through	670	661	98.6%	2.2	0.6	A
	Right Turn	5	2	38.4%	0.3	0.8	A
	Subtotal	706	697	98.8%	3.3	0.7	A
EB	Left Turn	3	2	64.0%	22.6	37.7	C
	Through						
	Right Turn	3	2	64.0%	1.7	2.8	A
	Subtotal	6	4	64.0%	9.1	12.7	A
WB	Left Turn	70	73	104.2%	18.6	3.5	B
	Through	1	2	192.0%	4.6	10.3	A
	Right Turn	18	21	117.3%	6.1	2.0	A
	Subtotal	89	96	107.9%	15.7	2.5	B
Total		1,658	1,629	98.3%	5.9	0.8	A

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	15	17	112.6%	19.2	18.8	B
	Through	820	798	97.3%	2.8	0.6	A
	Right Turn						
	Subtotal	835	815	97.6%	3.0	0.5	A
SB	Left Turn						
	Through	716	703	98.1%	2.4	0.5	A
	Right Turn	27	31	113.8%	1.9	0.5	A
	Subtotal	743	733	98.7%	2.4	0.4	A
EB	Left Turn	37	36	97.6%	12.1	2.4	B
	Through						
	Right Turn	20	23	115.2%	4.6	1.2	A
	Subtotal	57	59	103.7%	9.2	1.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,635	1,607	98.3%	3.0	0.3	A

City of Rocklin-93 (Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	165	160	97.0%	39.0	5.7	D
	Through	584	596	102.0%	25.8	2.4	C
	Right Turn	29	29	100.6%	20.3	5.9	C
	Subtotal	778	785	100.9%	28.2	2.3	C
SB	Left Turn	110	104	94.3%	44.6	5.5	D
	Through	490	502	102.5%	21.9	4.1	C
	Right Turn	101	103	101.5%	4.7	0.8	A
	Subtotal	701	708	101.1%	22.7	2.7	C
EB	Left Turn	137	130	95.0%	43.5	4.5	D
	Through	184	182	98.7%	25.2	3.7	C
	Right Turn	185	187	100.9%	5.5	1.1	A
	Subtotal	506	498	98.5%	22.7	2.0	C
WB	Left Turn	40	42	104.6%	48.0	12.3	D
	Through	158	148	93.6%	32.4	3.5	C
	Right Turn	120	113	94.4%	11.8	2.5	B
	Subtotal	318	303	95.3%	26.8	4.2	C
Total		2,303	2,295	99.6%	25.1	1.2	C

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	7	8	109.7%	5.6	3.5	A
	Through	788	785	99.7%	3.3	0.4	A
	Right Turn						
	Subtotal	795	793	99.7%	3.3	0.4	A
SB	Left Turn						
	Through	898	887	98.8%	1.4	0.4	A
	Right Turn						
	Subtotal	898	887	98.8%	1.4	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,693	1,680	99.2%	2.3	0.3	A

City of Rocklin-93
(Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Existing Plus Project Conditions
 Weekend MD Peak Hour

Intersection 24 Sierra College Blvd/Project Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	562	549	97.7%	20.3	5.3	C
	Right Turn	528	524	99.3%	9.4	1.8	A
	Subtotal	1,090	1,073	98.5%	15.0	3.5	B
SB	Left Turn	221	228	103.0%	26.9	5.7	C
	Through	677	646	95.4%	10.2	6.4	B
	Right Turn						
	Subtotal	898	874	97.3%	14.6	6.0	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	499	481	96.3%	20.1	6.7	C
	Through						
	Right Turn	229	245	107.0%	7.2	1.9	A
	Subtotal	728	726	99.7%	15.8	4.9	B
Total		2,716	2,673	98.4%	15.1	4.2	B

City of Rocklin-93 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	12	200	21	175	1	2%	0%
	Through	4,650	250	78	375	105	375	103	21%	0%
	Right Turn	200	125	23	225	33	225	0	0%	0%
NB	Left Turn	225	175	23	300	18	250	1	0%	0%
	Through	575	475	74	625	85	600	79	29%	4%
	Right Turn	575	100	21	175	44	150	40	0%	0%
SB	Left Turn	200	50	33	125	89	125	86	0%	0%
	Through	4,975	350	101	450	125	475	120	29%	1%
	Right Turn	375	75	29	150	50	150	52	0%	0%
WB	Left Turn	225	175	30	250	37	225	22	3%	0%
	Through	4,850	200	35	325	99	350	124	5%	0%
	Right Turn	225	50	23	100	67	100	75	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	875	75	9	125	13	125	15	0%	0%
	Through	625	325	69	475	101	475	96	0%	0%
NB	Right Turn	625	50	11	75	21	100	19	0%	0%
	Through	175	75	17	150	27	150	35	0%	0%
SB	Through	575	150	32	225	70	225	66	1%	0%
	Through/Right	575	125	34	200	62	200	58	0%	3%
WB	Left Turn	100	75	13	125	17	100	15	7%	0%
	Right Turn	5,000	50	16	100	46	125	59	1%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	175	18	225	27	200	15	17%	0%
	Through	2,575	100	90	250	210	250	211	0%	0%
	Right Turn	2,575	150	39	250	91	250	109	6%	0%
NB	Left Turn	175	175	12	225	11	200	0	25%	0%
	Through	400	325	46	400	42	425	35	14%	3%
	Right Turn	400	175	69	375	45	325	4	0%	10%
SB	Left Turn	300	100	36	225	107	225	102	0%	0%
	Through	575	550	93	700	100	675	70	51%	24%
	Right Turn	200	75	32	200	74	200	59	0%	0%
WB	Left Turn	175	100	24	175	35	175	31	5%	0%
	Through	800	50	20	100	62	100	93	0%	0%
	Right Turn	175	25	9	50	9	50	11	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
FB	Left Turn	750	75	12	100	18	125	19	0%	0%
	Right Turn	750	50	11	100	25	100	32	0%	0%
NB	Left Turn	150	200	24	275	28	250	16	0%	18%
	Through	1,500	200	34	250	56	250	48	0%	0%
	Right Turn	300	50	8	100	20	100	28	0%	0%
SB	Through	400	375	79	500	69	475	65	0%	11%
	Right Turn	150	50	8	75	14	75	19	0%	0%
WB	Left Turn	750	225	24	325	41	350	53	3%	0%
	Through/Right	1,300	225	33	325	48	325	52	10%	0%
	Right Turn	200	125	22	225	40	200	25	1%	0%

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	225	23	300	40	300	36	0%	0%
	Through	1,300	100	15	150	26	150	26	0%	0%
	Right Turn	225	50	10	75	15	75	15	0%	0%
NB	Through	725	250	63	350	95	400	92	0%	0%
	Right Turn	125	25	4	50	9	50	14	0%	0%
SB	Left Turn	225	125	21	200	45	200	36	0%	0%
	Through	1,500	175	34	275	57	250	42	2%	2%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	75	17	150	34	150	33	0%	0%
	Right Turn	500	150	33	225	64	250	79	0%	0%

Intersection 11 Sierra College Blvd/Scriber Wy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	200	25	7	25	34	25	48	0%	0%
	Through/Right	200	25	21	75	68	75	73	0%	0%
WB	Right Turn	575	75	20	100	54	125	65	0%	0%
SB	Through	200	25	0	25	0	25	0	0%	0%
0										

City of
Rocklin-93
(Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	5	25	17	25	18	0%	0%
	Through/Right	375	25	1	25	7	25	10	0%	0%
NB	Left Turn	100	25	1	25	4	25	6	0%	0%
	Through	1,700	150	55	300	79	325	87	13%	0%
	Right Turn	75	50	6	75	6	75	3	1%	0%
SB	Left Turn	225	25	9	75	17	50	16	0%	0%
	Through	625	50	15	125	39	125	47	0%	1%
	Right Turn	200	25	0	25	0	25	0	0%	0%
WB	Left Turn	250	50	20	100	39	100	44	0%	0%
	Through	750	25	0	25	0	25	0	0%	0%
	Right Turn	175	25	5	50	7	50	8	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	50	32	75	51	75	56	7%	0%
	Right Turn	100	50	9	75	26	75	30	0%	0%
NB	Left Turn	225	25	8	50	14	50	15	0%	0%
	Through	1,600	100	19	175	42	175	46	0%	0%
SB	Through	1,700	50	9	100	21	100	26	0%	0%
	Through/Right	725	50	12	125	27	125	36	0%	0%
0										

City of Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd

Signal ↑

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	200	15	275	13	250	2	11%	0%
	Through	950	150	31	300	77	350	102	0%	0%
	Right Turn	950	100	24	175	50	175	54	0%	0%
NB	Left Turn	225	225	18	275	28	250	13	9%	0%
	Through	1,650	500	129	750	165	725	149	32%	2%
	Through/Right	1,650	525	129	725	176	675	154	0%	1%
SB	Left Turn	250	125	26	225	39	225	35	2%	0%
	Through	1,700	150	19	225	48	250	62	9%	0%
	Right Turn	175	100	28	200	52	175	32	0%	0%
WB	Left Turn	225	50	14	100	33	100	35	0%	0%
	Through	5,000	150	18	225	23	200	30	1%	0%
	Through/Right	250	125	15	200	24	200	32	0%	0%

Intersection 21 Sierra College Blvd/Office Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	525	50	12	75	22	75	34	0%	0%
NB	Left Turn	125	25	4	25	11	50	11	0%	0%
	Through	375	75	51	225	143	225	140	7%	0%
SB	Through	225	25	31	75	90	100	93	0%	0%
	Through/Right	225	50	47	100	120	100	109	0%	6%
0										

City of
Rocklin-93
(Cont.)

↓
1/16/2020

Fehr & Peers

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Existing Plus Project Conditions
Weekday PM Peak Hour

Intersection 24

Sierra College Blvd/Project Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	575	225	31	300	59	250	39	2%	29%
	Right Turn	150	100	19	150	33	150	21	2%	0%
SB	Left Turn	175	100	25	175	46	175	34	1%	0%
	Through	625	225	76	375	149	325	125	6%	11%
WB	Left Turn	1,075	200	78	300	171	325	177	7%	0%
	Right Turn	225	75	25	150	70	175	80	0%	0%
0										

City of
Rocklin-93
(Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	75	17	100	28	125	39	0%	0%
	Through	4,650	125	13	200	36	225	30	6%	0%
	Right Turn	200	75	11	125	33	150	58	0%	0%
NB	Left Turn	225	125	25	200	44	225	46	1%	0%
	Through	575	200	38	325	54	350	66	3%	0%
	Right Turn	575	75	17	150	37	150	48	0%	0%
SB	Left Turn	200	75	23	150	60	175	67	0%	0%
	Through	4,975	250	38	325	44	325	39	12%	0%
	Right Turn	375	25	4	50	10	50	14	0%	0%
WB	Left Turn	225	125	25	175	37	175	29	0%	0%
	Through	4,850	100	12	175	24	175	17	0%	0%
	Right Turn	225	25	12	50	17	50	16	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	875	50	8	75	16	75	16	0%	0%
	Through	625	150	33	250	63	250	51	0%	0%
NB	Right Turn	625	50	9	75	17	75	17	0%	0%
	Through	575	75	14	125	32	125	36	0%	0%
SB	Through/Right	575	75	23	125	44	125	41	0%	0%
	Through/Right	575	75	11	100	17	100	20	0%	0%
WB	Left Turn	100	75	10	100	17	100	14	3%	0%
	Right Turn	1,000	50	9	75	40	75	57	0%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	125	32	200	36	200	27	10%	0%
	Through	2,575	50	78	125	161	125	137	0%	0%
	Right Turn	2,575	100	22	150	36	150	30	0%	0%
NB	Left Turn	175	150	27	200	22	200	11	13%	0%
	Through	400	250	52	350	70	350	48	3%	0%
	Right Turn	400	150	48	325	82	325	48	0%	0%
SB	Left Turn	300	75	12	100	20	100	27	0%	0%
	Through	575	450	85	575	106	600	96	31%	7%
	Right Turn	200	100	30	225	47	225	0	0%	0%
WB	Left Turn	175	75	4	100	5	75	1	45%	0%
	Through	800	100	42	200	70	225	69	7%	0%
	Right Turn	175	25	7	50	8	50	9	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	750	75	18	125	27	125	26	0%	0%
	Right Turn	750	125	17	225	32	225	38	0%	0%
NB	Left Turn	150	250	16	275	17	250	5	0%	44%
	Through	1,500	225	51	375	74	375	73	0%	0%
	Right Turn	300	50	4	75	7	75	14	0%	0%
SB	Through	400	300	55	425	67	425	68	0%	3%
	Right Turn	150	50	6	75	11	75	17	0%	0%
WB	Left Turn	750	200	37	325	60	325	65	1%	0%
	Through/Right	1,300	250	27	325	33	300	20	22%	9%
	Right Turn	200	175	21	250	12	225	0	1%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	175	28	250	47	250	35	0%	0%
	Through	1,300	75	17	125	23	125	29	0%	0%
	Right Turn	225	50	6	75	11	50	16	0%	0%
NB	Through	725	200	23	250	30	250	37	0%	0%
	Right Turn	125	25	3	50	9	50	15	0%	0%
SB	Left Turn	225	150	22	225	33	225	31	2%	0%
	Through	1,500	125	28	200	58	225	77	0%	1%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	75	17	150	66	150	88	0%	0%
	Right Turn	500	125	42	225	91	250	93	0%	0%

Intersection 11 Sierra College Blvd/Scriber Wy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through/Right	200	25	3	25	13	25	17	0%	0%
	Right Turn	575	50	7	75	23	75	25	0%	0%
WB	Through	200	25	0	25	0	25	0	0%	0%
	Right Turn	575	50	7	75	23	75	25	0%	0%
SB	Through	200	25	0	25	0	25	0	0%	0%
	Right Turn	575	50	7	75	23	75	25	0%	0%
0	Through	200	25	0	25	0	25	0	0%	0%
	Right Turn	575	50	7	75	23	75	25	0%	0%

City of
 Rocklin-93
 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	2	25	11	25	14	0%	0%
	Through/Right	375	25	3	25	11	25	11	0%	0%
NB	Left Turn	100	25	1	25	6	25	10	0%	0%
	Through	1,700	50	34	125	91	125	100	6%	0%
	Right Turn	75	50	7	75	8	75	3	1%	0%
SB	Left Turn	225	25	6	75	16	50	18	0%	0%
	Through	625	50	11	100	30	100	40	0%	0%
	Right Turn	200	25	1	25	4	25	6	0%	0%
WB	Left Turn	250	50	15	75	24	75	24	0%	0%
	Through	750	25	3	25	12	25	13	0%	0%
	Right Turn	175	25	7	50	7	50	8	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	25	13	50	25	50	23	0%	0%
	Right Turn	100	25	7	50	10	50	11	0%	0%
NB	Left Turn	225	25	7	50	12	50	12	0%	0%
	Through	1,600	50	15	100	33	100	31	0%	0%
SB	Through	1,700	25	7	50	12	75	14	0%	0%
	Through/Right	725	25	8	75	14	75	19	0%	0%
0										



City of Rocklin-93 (Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	100	14	175	25	175	37	0%	0%
	Through	950	75	13	125	23	125	32	0%	0%
	Right Turn	950	50	11	100	25	100	32	0%	0%
NB	Left Turn	225	100	14	150	38	150	58	0%	0%
	Through	1,650	125	16	200	32	200	26	0%	0%
	Through/Right	1,650	175	27	250	63	250	63	0%	0%
SB	Left Turn	250	75	15	125	22	150	27	0%	0%
	Through	1,700	75	18	125	26	125	28	0%	0%
	Right Turn	175	25	6	50	10	50	7	0%	0%
WB	Left Turn	225	50	10	75	16	75	17	0%	0%
	Through	5,000	100	18	150	27	150	27	0%	0%
	Through/Right	250	75	8	125	23	125	33	0%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	6	25	17	25	16	0%	0%
	Through	375	25	2	25	13	25	18	0%	0%
SB	Through	225	25	3	25	18	25	33	0%	0%
	Through/Right	225	25	0	25	0	25	31	0%	0%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										



City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Queue Length

Loomis Costco DEIR Peer Review
 Existing Plus Project Conditions
 Weekend MD Peak Hour

Intersection 24

Sierra College Blvd/Project Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	575	125	42	200	67	200	58	0%	3%
	Right Turn	150	125	21	175	14	175	11	4%	0%
SB	Left Turn	175	125	17	175	24	175	17	4%	0%
	Through	625	125	44	175	69	200	98	0%	0%
WB	Left Turn	1,075	175	41	275	91	300	136	3%	0%
	Right Turn	225	100	32	175	69	175	69	0%	0%
0										

City of
 Rocklin-93
 (Cont.)

Cumulative Short-Term Conditions



City of
Rocklin-93
(Cont.)

FEHR  PEERS



Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	140	109	78.2%	61.5	17.9	E
	Through	1,122	857	76.4%	26.8	7.2	C
	Right Turn	433	311	71.8%	10.5	4.5	B
	Subtotal	1,695	1,278	75.4%	25.8	5.2	C
SB	Left Turn	23	24	106.3%	49.6	15.2	D
	Through	751	689	91.7%	46.0	14.4	D
	Right Turn	161	157	97.4%	16.8	7.2	B
	Subtotal	935	870	93.1%	40.8	13.0	D
EB	Left Turn	189	198	104.8%	65.7	21.9	E
	Through	282	290	102.9%	43.2	13.1	D
	Right Turn	162	157	96.8%	20.2	12.8	C
	Subtotal	633	645	101.9%	44.7	14.9	D
WB	Left Turn	464	395	85.2%	79.7	27.0	E
	Through	303	268	88.6%	48.2	19.3	D
	Right Turn	44	38	87.2%	32.7	19.2	C
	Subtotal	811	702	86.6%	65.2	23.5	E
Total		4,074	3,495	85.8%	40.6	6.8	D

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,576	1,196	75.9%	20.6	2.3	C
	Right Turn	188	140	74.4%	19.2	3.3	B
	Subtotal	1,764	1,336	75.7%	20.5	2.4	C
SB	Left Turn	108	91	84.6%	105.9	30.7	F
	Through	1,269	1,070	84.4%	44.1	15.8	D
	Right Turn						
	Subtotal	1,377	1,162	84.4%	48.9	15.2	D
EB	Left Turn						
	Through						
	Right Turn	142	114	80.0%	76.4	33.4	E
	Subtotal	142	114	80.0%	76.4	33.4	E
WB	Left Turn	199	150	75.6%	111.9	83.8	F
	Through						
	Right Turn	121	103	85.5%	58.2	77.2	E
	Subtotal	320	254	79.3%	90.1	82.2	F
Total		3,603	2,865	79.5%	39.3	11.3	D

City of Rocklin-93
(Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	358	258	71.9%	116.9	20.2	F
	Through	1,566	1,182	75.5%	42.2	4.6	D
	Right Turn	69	54	77.9%	25.0	5.6	C
	Subtotal	1,993	1,493	74.9%	54.5	6.4	D
SB	Left Turn	61	39	63.5%	151.1	23.4	F
	Through	1,451	1,127	77.7%	128.6	20.2	F
	Right Turn	117	92	78.7%	105.3	21.8	F
	Subtotal	1,629	1,258	77.2%	127.5	20.2	F
EB	Left Turn	188	153	81.6%	197.1	89.1	F
	Through	26	23	88.2%	196.0	115.5	F
	Right Turn	368	293	79.6%	119.9	101.6	F
	Subtotal	582	469	80.6%	137.3	60.3	F
WB	Left Turn	107	54	50.3%	317.5	138.2	F
	Through	24	17	72.1%	188.2	146.3	F
	Right Turn	33	19	58.1%	158.5	127.5	F
	Subtotal	164	90	55.0%	249.7	134.9	F
Total		4,368	3,311	75.8%	98.5	15.7	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	418	299	71.6%	133.1	27.3	F
	Through	1,506	1,192	79.2%	74.9	34.6	E
	Right Turn	392	315	80.5%	46.0	28.2	D
	Subtotal	2,316	1,807	78.0%	79.2	31.8	E
SB	Left Turn						
	Through	1,707	1,285	75.3%	62.1	10.4	E
	Right Turn	209	153	73.4%	36.2	7.3	D
	Subtotal	1,916	1,439	75.1%	59.3	10.2	E
EB	Left Turn	200	82	41.0%	273.5	102.2	F
	Through						
	Right Turn	307	270	87.8%	44.9	51.3	D
	Subtotal	507	352	69.3%	91.8	51.6	F
WB	Left Turn	556	478	86.0%	103.3	58.4	F
	Through	137	113	82.6%	153.6	96.0	F
	Right Turn	328	282	86.0%	117.7	77.0	F
	Subtotal	1,021	873	85.5%	112.7	63.8	F
Total		5,760	4,471	77.6%	78.3	19.1	E

City of Rocklin-93 (Cont.)

Intersection 10 **Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,823	1,474	80.8%	30.2	4.1	C
	Right Turn	177	142	80.1%	13.2	2.5	B
	Subtotal	2,000	1,615	80.8%	28.7	3.9	C
SB	Left Turn	393	334	84.9%	64.4	5.3	E
	Through	1,207	985	81.6%	27.0	4.4	C
	Right Turn	460	344	74.9%	11.7	1.5	B
	Subtotal	2,060	1,663	80.7%	31.3	4.2	C
EB	Left Turn	624	629	100.9%	60.0	4.6	E
	Through	276	276	100.1%	59.7	6.3	E
	Right Turn	151	150	99.6%	31.9	3.2	C
	Subtotal	1,051	1,056	100.5%	56.0	2.9	E
WB	Left Turn	199	184	92.6%	130.5	34.6	F
	Through						
	Right Turn	464	420	90.4%	102.4	53.3	F
	Subtotal	663	604	91.1%	111.3	46.6	F
Total		5,774	4,939	85.5%	45.5	6.0	D

Intersection 11 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	48	37	77.6%	40.5	7.2	D
	Through	1,749	1,351	77.3%	14.1	2.9	B
	Right Turn	64	51	79.9%	13.5	5.3	B
	Subtotal	1,861	1,440	77.4%	14.8	2.9	B
SB	Left Turn						
	Through	1,360	1,161	85.4%	19.7	3.9	B
	Right Turn	90	70	77.3%	10.2	3.2	B
	Subtotal	1,450	1,231	84.9%	19.2	3.8	B
EB	Left Turn	97	99	101.9%	29.1	7.2	C
	Through						
	Right Turn	51	56	110.6%	10.4	2.1	B
	Subtotal	148	155	104.9%	22.4	4.8	C
WB	Left Turn	75	72	95.8%	24.0	4.5	C
	Through						
	Right Turn	94	108	114.4%	14.9	4.6	B
	Subtotal	169	179	106.1%	18.6	4.5	B
Total		3,628	3,005	82.8%	17.2	2.9	B

City of Rocklin-93 (Cont.)

Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	2	1	56.4%	22.2	26.5	C
	Through	1,916	1,479	77.2%	24.4	3.7	C
	Right Turn	85	63	74.3%	25.6	5.3	C
	Subtotal	2,003	1,543	77.1%	24.5	3.8	C
SB	Left Turn	80	70	87.9%	38.2	6.8	D
	Through	1,407	1,215	86.4%	9.7	2.0	A
	Right Turn	1	0	37.6%	4.5	0.7	A
	Subtotal	1,488	1,286	86.4%	11.3	2.2	B
EB	Left Turn	5	4	82.7%	17.2	20.0	B
	Through						
	Right Turn	1	1	112.8%	2.8	7.2	A
	Subtotal	6	5	87.7%	17.3	19.1	B
WB	Left Turn	107	115	107.2%	24.9	3.2	C
	Through						
	Right Turn	70	70	99.4%	13.7	5.3	B
	Subtotal	177	184	104.1%	20.8	3.1	C
Total		3,674	3,019	82.2%	18.6	2.4	B

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	26	21	82.4%	24.4	9.5	C
	Through	1,795	1,359	75.7%	7.8	1.0	A
	Right Turn						
	Subtotal	1,821	1,381	75.8%	8.1	1.1	A
SB	Left Turn						
	Through	1,402	1,237	88.3%	5.2	0.9	A
	Right Turn	67	53	79.1%	4.1	0.8	A
	Subtotal	1,469	1,290	87.8%	5.1	0.9	A
EB	Left Turn	119	106	89.1%	19.5	3.8	B
	Through						
	Right Turn	74	73	99.1%	8.9	3.0	A
	Subtotal	193	179	92.9%	15.2	3.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,483	2,850	81.8%	7.2	1.0	A

City of Rocklin-93
(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	406	282	69.4%	227.3	28.3	F
	Through	1,317	926	70.3%	221.0	23.2	F
	Right Turn	74	51	68.6%	227.4	19.7	F
	Subtotal	1,797	1,258	70.0%	222.6	23.3	F
SB	Left Turn	210	174	83.1%	131.6	58.3	F
	Through	994	869	87.4%	37.5	4.6	D
	Right Turn	281	251	89.4%	12.3	2.1	B
	Subtotal	1,485	1,295	87.2%	45.5	9.9	D
EB	Left Turn	380	305	80.2%	201.6	41.5	F
	Through	412	413	100.2%	42.6	3.4	D
	Right Turn	411	394	95.9%	17.0	2.5	B
	Subtotal	1,203	1,112	92.4%	77.0	10.7	E
WB	Left Turn	70	67	95.6%	64.0	15.9	E
	Through	340	339	99.8%	55.1	7.5	E
	Right Turn	220	226	102.9%	38.3	12.4	D
	Subtotal	630	632	100.4%	50.2	8.4	D
Total		5,115	4,297	84.0%	106.3	5.2	F

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	2	37.6%	9.0	24.9	A
	Through	1,764	1,349	76.5%	6.2	1.0	A
	Right Turn						
	Subtotal	1,769	1,351	76.4%	6.2	1.0	A
SB	Left Turn						
	Through	1,609	1,311	81.5%	13.3	3.9	B
	Right Turn	2	2	112.8%	3.0	5.1	A
	Subtotal	1,611	1,313	81.5%	13.3	3.9	B
EB	Left Turn						
	Through						
	Right Turn	20	12	62.0%	92.5	73.3	F
	Subtotal	20	12	62.0%	68.4	56.7	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,400	2,676	78.7%	9.9	2.1	A

City of Rocklin-93
(Cont.)

Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	141	113	80.1%	51.4	7.3	D
	Through	769	618	80.4%	25.8	2.8	C
	Right Turn	474	371	78.2%	13.8	1.6	B
	Subtotal	1,384	1,102	79.6%	24.3	1.7	C
SB	Left Turn	29	30	102.0%	57.6	13.2	E
	Through	762	702	92.1%	42.2	12.2	D
	Right Turn	123	120	97.7%	18.0	15.3	B
	Subtotal	914	851	93.1%	39.3	12.1	D
EB	Left Turn	139	155	111.6%	42.9	10.2	D
	Through	215	210	97.5%	36.0	7.0	D
	Right Turn	136	137	100.8%	27.2	11.4	C
	Subtotal	490	502	102.4%	35.6	7.0	D
WB	Left Turn	506	462	91.3%	59.8	15.0	E
	Through	192	174	90.6%	43.5	10.7	D
	Right Turn	24	23	96.0%	28.6	20.4	C
	Subtotal	722	659	91.3%	54.5	13.9	D
Total		3,510	3,114	88.7%	36.6	5.7	D

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,307	1,056	80.8%	22.5	4.2	C
	Right Turn	182	138	75.7%	22.1	4.5	C
	Subtotal	1,489	1,193	80.2%	22.4	4.2	C
SB	Left Turn	86	80	93.3%	57.6	6.9	E
	Through	1,317	1,159	88.0%	43.4	12.0	D
	Right Turn						
	Subtotal	1,403	1,239	88.3%	44.3	11.6	D
EB	Left Turn						
	Through						
	Right Turn	69	71	103.0%	35.7	15.0	D
	Subtotal	69	71	103.0%	35.7	15.0	D
WB	Left Turn	215	185	86.1%	75.9	42.2	E
	Through						
	Right Turn	66	65	98.9%	41.5	42.4	D
	Subtotal	281	250	89.1%	67.1	42.9	E
Total		3,242	2,754	84.9%	36.6	8.5	D

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(Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	301	230	76.5%	113.2	23.7	F
	Through	1,284	1,037	80.7%	38.5	5.4	D
	Right Turn	98	89	90.5%	22.1	6.9	C
	Subtotal	1,683	1,356	80.6%	49.9	7.8	D
SB	Left Turn	64	51	79.8%	133.2	25.1	F
	Through	1,411	1,111	78.7%	119.2	21.8	F
	Right Turn	126	92	73.1%	99.2	21.8	F
	Subtotal	1,601	1,254	78.3%	118.3	21.6	F
EB	Left Turn	141	105	74.6%	262.5	165.9	F
	Through	23	19	81.8%	225.2	180.8	F
	Right Turn	298	218	73.2%	134.9	70.3	F
	Subtotal	462	342	74.1%	159.5	65.8	F
WB	Left Turn	118	39	32.9%	388.4	135.1	F
	Through	24	15	62.4%	253.9	103.3	F
	Right Turn	23	12	51.8%	188.4	100.7	F
	Subtotal	165	66	39.8%	299.0	88.5	F
Total		3,911	3,018	77.2%	94.3	12.4	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	570	367	64.4%	144.7	17.3	F
	Through	1,186	1,011	85.3%	94.3	17.1	F
	Right Turn	418	373	89.3%	72.4	15.3	E
	Subtotal	2,174	1,751	80.6%	100.0	16.3	F
SB	Left Turn						
	Through	1,585	1,189	75.0%	77.0	9.5	E
	Right Turn	261	191	73.1%	46.6	5.8	D
	Subtotal	1,846	1,380	74.8%	72.8	9.0	E
EB	Left Turn	245	157	64.3%	268.4	42.5	F
	Through						
	Right Turn	550	486	88.3%	141.7	56.4	F
	Subtotal	795	643	80.9%	171.3	39.9	F
WB	Left Turn	603	584	96.9%	60.5	25.3	E
	Through	200	180	89.9%	96.5	39.9	F
	Right Turn	273	265	97.2%	70.0	34.0	E
	Subtotal	1,076	1,029	95.6%	69.3	29.9	E
Total		5,891	4,804	81.5%	94.9	12.3	F

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Intersection 10 **Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,342	1,202	89.6%	34.7	3.3	C
	Right Turn	231	180	78.1%	20.5	2.9	C
	Subtotal	1,573	1,382	87.9%	32.9	3.0	C
SB	Left Turn	612	529	86.5%	75.5	24.0	E
	Through	1,125	947	84.2%	32.8	16.7	C
	Right Turn	356	295	82.9%	17.2	14.6	B
	Subtotal	2,093	1,772	84.7%	43.1	18.3	D
EB	Left Turn	611	548	89.7%	74.3	26.1	E
	Through	362	341	94.3%	61.4	6.7	E
	Right Turn	160	155	97.0%	36.9	10.0	D
	Subtotal	1,133	1,045	92.2%	64.3	13.0	E
WB	Left Turn	238	203	85.2%	101.7	34.7	F
	Through						
	Right Turn	539	439	81.5%	93.9	44.5	F
	Subtotal	777	642	82.6%	96.5	40.5	F
Total		5,576	4,841	86.8%	51.8	8.2	D

Intersection 11 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	77	60	77.8%	41.6	10.7	D
	Through	1,368	1,167	85.3%	14.8	3.1	B
	Right Turn	177	157	88.5%	12.3	4.0	B
	Subtotal	1,622	1,383	85.3%	15.7	3.1	B
SB	Left Turn						
	Through	1,293	1,110	85.9%	22.1	5.2	C
	Right Turn	143	115	80.3%	11.8	2.7	B
	Subtotal	1,436	1,225	85.3%	21.1	4.9	C
EB	Left Turn	131	140	106.7%	31.6	3.4	C
	Through						
	Right Turn	73	66	90.0%	11.4	2.4	B
	Subtotal	204	205	100.7%	25.0	2.6	C
WB	Left Turn	90	89	99.4%	25.8	2.9	C
	Through						
	Right Turn	178	175	98.4%	11.3	2.1	B
	Subtotal	268	265	98.7%	16.3	2.2	B
Total		3,530	3,078	87.2%	18.5	3.4	B

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 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	1	0	38.4%	1.2	3.8	A
	Through	1,517	1,285	84.7%	22.0	6.2	C
	Right Turn	126	105	83.2%	24.1	8.4	C
	Subtotal	1,644	1,390	84.6%	22.2	6.3	C
SB	Left Turn	122	104	85.6%	31.1	5.9	C
	Through	1,328	1,140	85.9%	9.3	1.6	A
	Right Turn	5	2	46.1%	4.5	0.5	A
	Subtotal	1,455	1,247	85.7%	11.1	1.7	B
EB	Left Turn	3	2	64.0%	20.8	24.3	C
	Through						
	Right Turn	3	3	102.4%	3.8	6.6	A
	Subtotal	6	5	83.2%	15.6	19.7	B
WB	Left Turn	114	117	102.4%	23.2	3.3	C
	Through	1	1	115.2%	6.4	12.0	A
	Right Turn	102	101	99.4%	11.3	3.0	B
	Subtotal	217	219	101.0%	17.7	2.1	B
Total		3,322	2,862	86.1%	17.0	3.8	B

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	15	11	71.7%	13.1	7.8	B
	Through	1,607	1,374	85.5%	5.4	1.1	A
	Right Turn						
	Subtotal	1,622	1,385	85.4%	5.4	1.2	A
SB	Left Turn						
	Through	1,418	1,245	87.8%	3.5	0.7	A
	Right Turn	27	25	91.0%	2.2	1.4	A
	Subtotal	1,445	1,269	87.8%	3.5	0.7	A
EB	Left Turn	37	35	94.4%	11.0	4.9	B
	Through						
	Right Turn	20	18	90.2%	5.1	1.3	A
	Subtotal	57	53	93.0%	9.4	3.2	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,124	2,707	86.7%	4.6	0.9	A

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(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	352	280	79.4%	146.9	21.8	F
	Through	1,151	932	80.9%	153.6	30.5	F
	Right Turn	97	78	80.0%	158.8	32.9	F
	Subtotal	1,600	1,289	80.5%	152.6	28.5	F
SB	Left Turn	189	159	84.3%	71.6	20.8	E
	Through	983	873	88.8%	35.1	3.9	D
	Right Turn	243	224	92.3%	11.7	1.3	B
	Subtotal	1,415	1,257	88.8%	35.6	4.4	D
EB	Left Turn	300	282	94.0%	109.8	48.4	F
	Through	300	313	104.3%	35.4	4.8	D
	Right Turn	337	335	99.4%	14.3	3.3	B
	Subtotal	937	930	99.2%	50.7	17.0	D
WB	Left Turn	95	97	101.9%	61.8	7.1	E
	Through	278	258	92.8%	45.3	5.4	D
	Right Turn	207	217	104.8%	26.7	3.2	C
	Subtotal	580	572	98.6%	41.3	3.9	D
Total		4,532	4,047	89.3%	77.2	9.9	E

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	7	7	98.7%	10.0	8.7	A
	Through	1,489	1,205	80.9%	6.6	1.6	A
	Right Turn						
	Subtotal	1,496	1,212	81.0%	6.7	1.7	A
SB	Left Turn						
	Through	1,601	1,395	87.2%	12.3	3.2	B
	Right Turn						
	Subtotal	1,601	1,395	87.2%	12.3	3.2	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,097	2,607	84.2%	9.7	2.0	A

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 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	150	18	200	13	175	1	18%	0%
	Through	4,650	325	127	550	236	550	229	16%	3%
	Right Turn	200	125	32	225	69	225	2	0%	0%
NB	Left Turn	225	125	25	225	53	225	45	0%	0%
	Through	575	250	71	375	72	375	70	7%	0%
	Right Turn	575	100	38	175	67	175	68	0%	0%
SB	Left Turn	200	50	13	100	54	100	81	0%	0%
	Through	5,000	250	47	375	116	450	170	22%	1%
	Right Turn	225	100	39	225	67	225	2	0%	0%
WB	Left Turn	225	225	25	250	14	225	6	24%	0%
	Through	4,850	400	197	775	383	925	497	7%	0%
	Right Turn	225	50	15	100	50	100	73	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
FB	Right Turn	1,250	125	50	225	95	225	87	0%	0%
	Through	1,275	300	22	425	39	425	31	0%	0%
NB	Through/Right	1,275	250	15	350	22	300	11	0%	15%
	Through	1,275	250	15	350	22	300	11	0%	15%
SB	Left Turn	175	125	20	200	19	200	1	10%	0%
	Through	575	425	89	650	105	625	78	21%	9%
	Right Turn	575	25	0	25	0	25	0	0%	0%
WB	Left Turn	100	125	7	125	8	125	1	55%	0%
	Right Turn	5,000	300	240	525	377	575	334	1%	0%

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(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	13	225	11	225	1	65%	0%
	Through	2,575	425	197	800	289	775	362	0%	0%
	Right Turn	2,575	425	287	675	432	700	441	47%	0%
NB	Left Turn	175	200	3	200	4	200	0	62%	0%
	Through	400	450	39	575	50	525	30	21%	23%
	Right Turn	400	400	49	500	52	500	29	0%	11%
SB	Left Turn	300	100	37	250	105	250	92	0%	0%
	Through	1,275	1,025	86	1,325	74	1,300	50	59%	7%
	Right Turn	200	125	43	250	71	200	51	0%	0%
WB	Left Turn	175	175	23	200	12	200	6	70%	0%
	Through	1,325	375	225	700	280	675	242	0%	0%
	Right Turn	175	25	6	50	17	50	22	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	500	156	800	211	800	164	13%	0%
	Right Turn	3,125	375	378	875	880	1,025	866	1%	0%
NB	Left Turn	150	250	5	275	12	275	15	0%	76%
	Through	1,500	625	189	900	232	925	208	0%	2%
	Right Turn	300	125	28	225	48	225	47	10%	0%
SB	Through	400	450	39	525	43	525	32	0%	30%
	Right Turn	200	125	12	175	19	175	22	2%	0%
WB	Left Turn	800	425	193	575	228	600	198	23%	0%
	Through/Right	2,800	650	384	1,100	563	1,225	584	54%	1%
	Right Turn	200	200	19	250	20	225	0	8%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	300	32	375	37	375	20	4%	0%
	Through	1,625	150	50	275	136	300	150	0%	0%
	Right Turn	225	100	12	175	29	200	30	0%	0%
NB	Through	300	250	62	350	79	325	74	0%	11%
	Right Turn	125	50	8	75	13	100	15	0%	0%
SB	Left Turn	225	200	18	250	26	250	18	3%	1%
	Through	1,500	325	46	375	64	400	58	9%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	325	61	400	47	375	18	6%	0%
	Right Turn	3,175	725	396	1,125	637	1,100	621	43%	0%

Intersection 11 Sierra College Blvd/Scriber Wy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	75	15	125	27	125	29	0%	0%
	Through/Right	650	25	8	50	18	75	25	0%	0%
NB	Left Turn	125	50	7	75	12	75	13	0%	0%
	Through	350	150	20	200	32	200	37	3%	0%
	Through/Right	350	225	36	325	42	350	30	0%	1%
SB	Through	300	225	49	350	48	375	45	22%	6%
	Right Turn	100	50	19	100	35	125	24	0%	0%
WB	Left/Through	575	50	10	100	25	100	33	0%	0%
	Right Turn	225	75	10	100	25	100	34	0%	0%

City of Rocklin-93
(Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	6	25	18	25	20	0%	0%
	Through/Right	375	25	2	25	8	25	10	0%	0%
NB	Left Turn	100	25	5	25	24	25	33	0%	0%
	Through	1,700	325	66	450	93	450	98	29%	0%
	Right Turn	75	50	8	75	9	75	3	1%	0%
SB	Left Turn	225	75	10	100	28	125	32	0%	1%
	Through	350	175	39	200	47	225	45	0%	0%
	Right Turn	200	25	0	25	0	25	0	0%	0%
WB	Left Turn	250	75	11	100	12	100	11	0%	0%
	Through	750	25	0	25	0	25	0	0%	0%
	Right Turn	175	50	6	75	11	75	17	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	75	23	100	40	100	44	7%	0%
	Right Turn	100	50	9	75	21	100	26	1%	0%
NB	Left Turn	225	25	12	50	22	50	19	0%	0%
	Through	1,600	100	17	175	34	175	41	0%	0%
SB	Through	1,700	50	18	100	22	100	23	0%	0%
	Through/Right	725	75	15	125	30	125	34	0%	0%
0										

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(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	1	250	1	250	0	82%	0%
	Through	2,275	875	173	1,175	281	1,150	269	0%	0%
	Right Turn	2,275	150	19	250	38	250	77	0%	0%
NB	Left Turn	225	225	22	275	23	250	8	5%	0%
	Through	5,650	2,075	326	3,075	496	3,175	416	53%	0%
	Through/Right	5,650	2,100	320	3,075	481	3,175	427	0%	0%
SB	Left Turn	250	225	44	275	29	250	17	41%	0%
	Through	1,700	325	150	475	198	450	179	16%	3%
	Right Turn	175	150	28	225	13	200	0	0%	0%
WB	Left Turn	225	100	38	200	76	200	64	0%	0%
	Through	5,000	275	58	400	111	425	119	11%	0%
	Through/Right	250	225	24	275	9	275	0	7%	0%

Intersection 21 Sierra College Blvd/Office Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	525	25	14	75	34	75	45	0%	0%
NB	Left Turn	125	25	2	25	9	25	10	0%	0%
	Through	1,025	75	23	175	75	200	79	1%	0%
SB	Through	225	125	41	275	41	250	21	0%	7%
	Through/Right	225	150	38	300	27	225	5	0%	21%
0										

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Intersection 6 Sierra College Blvd/Taylor Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	22	175	28	175	14	6%	0%
	Through	4,650	175	67	275	115	325	122	9%	0%
	Right Turn	200	100	22	200	31	200	26	2%	0%
NB	Left Turn	225	100	23	175	23	175	33	0%	0%
	Through	575	150	21	250	36	250	63	1%	0%
	Right Turn	575	125	24	225	51	225	60	0%	0%
SB	Left Turn	200	50	25	125	76	150	86	0%	0%
	Through	5,000	250	64	400	161	425	167	18%	0%
	Right Turn	225	100	40	250	55	225	2	0%	0%
WB	Left Turn	225	200	22	250	13	225	2	17%	0%
	Through	4,850	275	119	600	311	725	453	2%	0%
	Right Turn	225	25	7	50	12	50	13	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	1,275	75	12	100	15	100	17	0%	0%
	Through	1,275	275	50	400	67	450	59	0%	0%
NB	Through/Right	1,275	250	27	325	28	300	12	0%	18%
	Through/Right	1,275	250	27	325	28	300	12	0%	18%
SB	Left Turn	175	100	24	175	36	175	28	0%	0%
	Through/Right	575	400	59	625	70	625	43	0%	9%
	Right Turn	575	50	0	50	0	50	0	0%	0%
WB	Left Turn	100	125	6	150	9	125	1	46%	0%
	Right Turn	5,000	225	128	425	244	425	258	1%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	28	225	18	225	1	57%	0%
	Through	2,575	375	215	725	255	700	207	1%	0%
	Right Turn	2,575	375	168	700	342	700	315	44%	0%
NB	Left Turn	175	200	5	225	9	200	1	54%	0%
	Through	400	400	46	525	65	500	40	16%	16%
	Right Turn	400	350	47	450	49	425	29	0%	6%
SB	Left Turn	300	125	46	250	108	250	106	0%	0%
	Through	1,275	1,100	96	1,350	95	1,325	45	59%	9%
	Right Turn	200	100	37	275	52	225	0	0%	0%
WB	Left Turn	175	175	15	200	19	200	5	81%	0%
	Through	1,325	450	165	850	257	825	256	2%	0%
	Right Turn	175	25	5	25	13	50	54	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	750	109	975	111	900	21	8%	0%
	Right Turn	3,125	1,100	399	1,700	542	1,725	519	34%	0%
NB	Left Turn	150	250	3	250	8	275	13	0%	78%
	Through	1,500	525	137	1,050	213	1,225	204	0%	0%
	Right Turn	300	125	16	200	33	225	39	9%	0%
SB	Through	400	450	38	525	37	500	37	0%	33%
	Right Turn	200	150	13	200	23	200	24	4%	0%
WB	Left Turn	800	325	115	475	165	475	137	10%	0%
	Through/Right	2,800	450	301	600	386	600	372	45%	0%
	Right Turn	200	200	21	250	23	225	0	2%	0%

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	300	46	375	52	375	30	8%	0%
	Through	2,450	250	181	425	399	550	484	3%	0%
	Right Turn	225	125	25	200	46	200	45	1%	0%
NB	Through	300	225	28	325	32	325	29	0%	4%
	Right Turn	125	75	21	125	39	125	31	0%	2%
SB	Left Turn	225	225	15	275	17	250	1	24%	8%
	Through	1,500	400	185	550	268	550	245	11%	1%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	325	47	425	56	375	23	1%	0%
	Right Turn	3,175	750	462	1,300	682	1,400	631	41%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	100	17	150	23	150	25	0%	0%
	Through/Right	650	50	7	75	16	75	21	0%	0%
NB	Left Turn	125	50	12	100	29	100	33	1%	0%
	Through	350	150	29	250	56	275	62	3%	1%
	Through/Right	350	175	26	275	47	275	39	0%	6%
SB	Through	300	225	43	300	57	300	55	25%	3%
	Right Turn	100	50	17	125	20	125	0	0%	0%
WB	Left/Through	575	75	16	100	23	100	26	0%	0%
	Right Turn	225	75	11	100	19	100	21	0%	0%

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(Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	2	25	8	25	13	0%	0%
	Through/Right	375	25	2	25	9	25	12	0%	0%
NB	Left Turn	100	25	2	25	5	25	7	0%	0%
	Through	1,700	350	100	500	165	500	140	35%	2%
	Right Turn	75	75	4	75	9	75	0	2%	0%
SB	Left Turn	225	75	13	125	24	125	29	0%	2%
	Through	350	150	24	200	48	225	41	0%	0%
	Right Turn	200	25	0	25	0	25	0	0%	0%
WB	Left Turn	250	75	7	100	13	100	16	0%	0%
	Through	750	25	2	25	9	25	13	0%	0%
	Right Turn	175	50	14	75	29	75	32	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	25	12	50	22	50	22	0%	0%
	Right Turn	100	25	4	50	5	50	1	0%	0%
NB	Left Turn	225	25	6	50	14	50	10	0%	0%
	Through	1,600	75	24	150	45	175	41	0%	0%
SB	Through	1,700	50	9	75	15	75	19	0%	0%
	Through/Right	725	50	8	100	15	100	16	0%	0%
0										



City of Rocklin-93 (Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	21	275	12	250	6	51%	0%
	Through	2,275	400	184	550	241	525	220	0%	0%
	Right Turn	2,275	125	22	200	46	200	51	0%	0%
NB	Left Turn	225	225	18	300	32	250	28	3%	0%
	Through	6,425	1,200	272	1,800	340	1,825	314	45%	0%
	Through/Right	6,425	1,225	258	1,825	316	1,825	302	0%	0%
SB	Left Turn	250	175	36	250	49	225	36	6%	0%
	Through	1,700	200	29	300	65	300	71	13%	0%
	Right Turn	175	125	25	225	28	200	3	0%	0%
WB	Left Turn	225	100	27	175	40	175	49	0%	0%
	Through	5,000	175	50	275	92	300	85	4%	0%
	Through/Right	250	175	19	250	29	250	30	1%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	7	25	18	25	16	0%	0%
	Through	625	75	36	175	86	200	81	1%	0%
SB	Through	225	125	40	300	37	275	27	0%	9%
	Through/Right	225	150	42	300	29	225	7	0%	20%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										



City of Rocklin-93 (Cont.)

Cumulative Short-Term Plus Project Conditions

City of
Rocklin-93
(Cont.)

FEHR  PEERS

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	161	97	60.5%	65.1	26.6	E
	Through	1,142	832	72.8%	26.7	3.4	C
	Right Turn	457	332	72.6%	11.1	2.1	B
	Subtotal	1,760	1,261	71.6%	25.5	4.0	C
SB	Left Turn	23	17	75.2%	99.8	30.0	F
	Through	770	538	69.8%	141.8	54.4	F
	Right Turn	161	114	70.5%	102.2	53.3	F
	Subtotal	954	669	70.1%	134.0	53.1	F
EB	Left Turn	189	168	88.9%	81.9	52.4	F
	Through	282	239	84.7%	77.7	46.1	E
	Right Turn	182	148	81.4%	58.7	36.6	E
	Subtotal	653	555	85.0%	74.0	44.1	E
WB	Left Turn	488	227	46.5%	222.8	61.1	F
	Through	303	173	57.0%	166.8	56.2	F
	Right Turn	44	29	64.9%	147.9	70.9	F
	Subtotal	835	428	51.2%	194.7	58.1	F
Total		4,202	2,912	69.3%	82.1	18.0	F

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,638	1,182	72.2%	15.3	6.2	B
	Right Turn	188	135	72.0%	7.2	1.5	A
	Subtotal	1,826	1,318	72.2%	14.4	5.7	B
SB	Left Turn	115	73	63.1%	113.3	19.4	F
	Through	1,325	759	57.3%	127.9	25.2	F
	Right Turn						
	Subtotal	1,440	832	57.8%	126.7	24.3	F
EB	Left Turn						
	Through						
	Right Turn	142	95	66.7%	129.3	83.2	F
	Subtotal	142	95	66.7%	129.3	83.2	F
WB	Left Turn	199	93	46.7%	240.4	110.1	F
	Through						
	Right Turn	124	75	60.3%	195.0	125.3	F
	Subtotal	323	168	51.9%	220.2	115.4	F
Total		3,731	2,412	64.6%	67.4	6.9	E



City of Rocklin-93 (Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	358	226	63.2%	113.5	18.4	F
	Through	1,851	1,266	68.4%	50.1	5.2	D
	Right Turn	69	53	76.8%	33.9	5.3	C
	Subtotal	2,278	1,545	67.8%	58.9	6.5	E
SB	Left Turn	61	41	66.6%	94.0	10.6	F
	Through	1,752	1,089	62.1%	78.7	8.5	E
	Right Turn	126	76	60.0%	56.2	6.6	E
	Subtotal	1,939	1,205	62.1%	77.7	8.1	E
EB	Left Turn	197	144	73.3%	232.3	112.3	F
	Through	26	20	76.6%	229.9	137.1	F
	Right Turn	368	231	62.7%	161.8	105.4	F
	Subtotal	591	395	66.9%	178.8	82.3	F
WB	Left Turn	107	38	35.5%	393.3	106.6	F
	Through	24	11	43.9%	204.3	120.5	F
	Right Turn	33	19	57.0%	222.2	110.2	F
	Subtotal	164	67	41.0%	299.7	112.8	F
Total		4,972	3,212	64.6%	84.1	13.4	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	418	307	73.4%	153.4	33.8	F
	Through	1,639	1,175	71.7%	108.9	44.6	F
	Right Turn	392	305	77.9%	70.0	34.0	E
	Subtotal	2,449	1,787	73.0%	109.8	41.3	F
SB	Left Turn						
	Through	2,008	1,227	61.1%	70.2	10.9	E
	Right Turn	209	123	59.0%	41.7	6.1	D
	Subtotal	2,217	1,351	60.9%	67.6	10.6	E
EB	Left Turn	200	60	29.9%	383.1	94.9	F
	Through						
	Right Turn	307	236	76.9%	78.8	54.6	E
	Subtotal	507	296	58.4%	136.3	67.6	F
WB	Left Turn	556	509	91.5%	110.8	53.6	F
	Through	137	102	74.4%	158.9	55.3	F
	Right Turn	480	385	80.1%	131.2	56.4	F
	Subtotal	1,173	995	84.8%	123.7	54.4	F
Total		6,346	4,429	69.8%	100.3	21.7	F

City of
Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,852	1,492	80.6%	35.8	4.4	D
	Right Turn	177	130	73.7%	16.9	3.2	B
	Subtotal	2,029	1,622	80.0%	34.3	4.4	C
SB	Left Turn	393	291	74.1%	60.1	8.3	E
	Through	1,237	904	73.1%	29.6	12.2	C
	Right Turn	621	438	70.5%	12.4	4.2	B
	Subtotal	2,251	1,633	72.6%	30.4	8.9	C
EB	Left Turn	728	706	97.0%	84.4	23.0	F
	Through	276	294	106.4%	60.8	7.3	E
	Right Turn	151	150	99.6%	34.1	10.4	C
	Subtotal	1,155	1,150	99.6%	71.9	15.3	E
WB	Left Turn	199	174	87.3%	155.7	54.4	F
	Through						
	Right Turn	464	408	87.8%	115.1	53.8	F
	Subtotal	663	581	87.7%	127.7	51.5	F
Total		6,098	4,987	81.8%	52.4	9.0	D

Intersection 11 Sierra College Blvd/Schriber Wy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	48	37	76.8%	52.0	18.6	D
	Through	1,778	1,383	77.8%	22.2	7.9	C
	Right Turn	194	138	70.9%	23.6	10.2	C
	Subtotal	2,020	1,557	77.1%	23.1	8.3	C
SB	Left Turn						
	Through	1,390	1,061	76.3%	25.4	10.0	C
	Right Turn	90	70	77.7%	14.9	8.9	B
	Subtotal	1,480	1,131	76.4%	24.8	9.8	C
EB	Left Turn	97	102	105.0%	39.6	16.0	D
	Through						
	Right Turn	51	42	82.6%	8.8	4.3	A
	Subtotal	148	144	97.3%	30.4	10.7	C
WB	Left Turn	75	74	98.8%	26.2	5.7	C
	Through						
	Right Turn	156	163	104.4%	22.2	8.3	C
	Subtotal	231	237	102.5%	23.5	6.9	C
Total		3,879	3,069	79.1%	24.1	8.5	C

City of Rocklin-93 (Cont.)

Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	2	2	112.8%	26.0	23.9	C
	Through	1,945	1,501	77.2%	32.3	10.8	C
	Right Turn	85	65	76.1%	36.5	16.3	D
	Subtotal	2,032	1,568	77.2%	32.5	11.0	C
SB	Left Turn	80	66	82.7%	40.7	17.7	D
	Through	1,437	1,119	77.8%	10.0	2.5	A
	Right Turn	1	1	112.8%	5.4	1.6	A
	Subtotal	1,518	1,186	78.1%	11.7	2.4	B
EB	Left Turn	5	4	75.2%	30.4	26.5	C
	Through						
	Right Turn	1	1	75.2%	1.8	3.3	A
	Subtotal	6	5	75.2%	28.8	23.9	C
WB	Left Turn	107	98	91.4%	34.7	15.2	C
	Through						
	Right Turn	70	70	99.9%	15.3	6.0	B
	Subtotal	177	168	94.7%	27.2	13.2	C
Total		3,733	2,926	78.4%	23.7	7.1	C

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	26	18	68.0%	23.1	5.8	C
	Through	1,824	1,395	76.5%	8.2	1.1	A
	Right Turn						
	Subtotal	1,850	1,413	76.4%	8.4	1.1	A
SB	Left Turn						
	Through	1,432	1,120	78.2%	5.1	0.6	A
	Right Turn	67	55	82.5%	4.5	1.4	A
	Subtotal	1,499	1,176	78.4%	5.1	0.6	A
EB	Left Turn	119	147	123.2%	23.0	4.3	C
	Through						
	Right Turn	74	77	104.7%	8.2	2.1	A
	Subtotal	193	224	116.1%	17.8	3.3	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,542	2,812	79.4%	7.7	0.9	A

City of Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	406	290	71.3%	229.6	33.9	F
	Through	1,336	942	70.5%	221.4	38.3	F
	Right Turn	74	45	61.5%	229.0	55.4	F
	Subtotal	1,816	1,277	70.3%	223.7	37.4	F
SB	Left Turn	214	161	75.0%	99.4	45.5	F
	Through	1,014	811	79.9%	35.6	4.2	D
	Right Turn	287	241	84.1%	12.8	2.8	B
	Subtotal	1,515	1,213	80.0%	39.6	7.4	D
EB	Left Turn	386	303	78.4%	165.3	42.6	F
	Through	412	412	100.0%	38.3	4.0	D
	Right Turn	411	412	100.3%	17.9	3.0	B
	Subtotal	1,209	1,127	93.2%	65.2	12.6	E
WB	Left Turn	70	68	96.7%	75.1	7.4	E
	Through	340	318	93.6%	55.8	4.0	E
	Right Turn	224	228	101.7%	37.2	6.0	D
	Subtotal	634	614	96.8%	51.1	4.1	D
Total		5,174	4,230	81.8%	103.3	10.7	F

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	3	67.7%	25.9	40.7	D
	Through	1,826	1,324	72.5%	4.5	0.4	A
	Right Turn						
	Subtotal	1,831	1,327	72.5%	4.5	0.3	A
SB	Left Turn						
	Through	1,665	947	56.9%	33.9	3.8	D
	Right Turn	2	1	56.4%	9.4	21.8	A
	Subtotal	1,667	948	56.9%	33.9	3.8	D
EB	Left Turn						
	Through						
	Right Turn	20	8	37.6%	366.2	196.2	F
	Subtotal	20	8	37.6%	192.8	173.4	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,518	2,283	64.9%	17.5	1.9	C

City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Cumulative Short Term Plus Project Conditions
 Weekday PM Peak Hour

Intersection 24 Sierra College Blvd/Project Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,676	1,175	70.1%	29.1	7.8	C
	Right Turn	387	268	69.2%	12.7	3.6	B
	Subtotal	2,063	1,443	70.0%	26.1	6.9	C
SB	Left Turn	142	90	63.5%	120.5	34.1	F
	Through	1,543	871	56.4%	104.5	8.4	F
	Right Turn						
	Subtotal	1,685	961	57.0%	106.4	9.8	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	402	380	94.5%	84.0	28.2	F
	Through						
	Right Turn	161	155	96.2%	34.7	22.2	C
	Subtotal	563	535	95.0%	69.3	25.3	E
Total		4,311	2,939	68.2%	60.3	8.0	E



City of Rocklin-93
(Cont.)

Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	180	112	62.3%	92.5	57.7	F
	Through	807	591	73.3%	29.4	5.3	C
	Right Turn	520	376	72.2%	15.4	3.1	B
	Subtotal	1,507	1,079	71.6%	31.9	8.2	C
SB	Left Turn	29	22	76.8%	163.2	30.6	F
	Through	801	455	56.9%	196.6	35.6	F
	Right Turn	123	72	58.7%	156.3	37.4	F
	Subtotal	953	550	57.7%	188.8	31.2	F
EB	Left Turn	139	123	88.7%	74.0	26.8	E
	Through	215	195	90.7%	80.4	16.8	F
	Right Turn	177	152	85.9%	106.5	43.0	F
	Subtotal	531	470	88.6%	86.8	24.4	F
WB	Left Turn	554	207	37.4%	307.7	87.8	F
	Through	192	83	43.0%	250.8	107.7	F
	Right Turn	24	13	56.0%	243.8	102.4	F
	Subtotal	770	303	39.4%	287.3	92.7	F
Total		3,761	2,403	63.9%	107.2	7.2	F

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,424	1,026	72.1%	13.7	1.7	B
	Right Turn	182	133	73.2%	7.0	1.2	A
	Subtotal	1,606	1,160	72.2%	13.0	1.6	B
SB	Left Turn	101	57	56.6%	123.2	17.9	F
	Through	1,431	729	50.9%	146.7	17.9	F
	Right Turn						
	Subtotal	1,532	786	51.3%	145.0	17.6	F
EB	Left Turn						
	Through						
	Right Turn	69	65	94.1%	67.6	25.8	E
	Subtotal	69	65	94.1%	67.6	25.8	E
WB	Left Turn	215	137	63.8%	164.5	74.5	F
	Through						
	Right Turn	72	52	72.5%	111.1	72.8	F
	Subtotal	287	189	66.0%	149.4	74.3	F
Total		3,494	2,200	63.0%	73.1	8.8	E

City of Rocklin-93
(Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	301	207	68.8%	122.3	40.1	F
	Through	1,678	1,150	68.5%	53.0	7.2	D
	Right Turn	98	80	81.5%	30.1	6.4	C
	Subtotal	2,077	1,437	69.2%	61.8	10.4	E
SB	Left Turn	64	45	69.6%	101.3	22.7	F
	Through	1,789	1,088	60.8%	79.9	5.9	E
	Right Turn	143	83	57.7%	56.0	6.8	E
	Subtotal	1,996	1,215	60.9%	79.1	5.8	E
EB	Left Turn	159	104	65.4%	253.5	161.1	F
	Through	23	19	81.8%	200.9	133.7	F
	Right Turn	298	224	75.3%	159.0	113.9	F
	Subtotal	480	347	72.3%	173.1	86.6	F
WB	Left Turn	118	39	32.9%	443.3	124.4	F
	Through	24	10	40.0%	325.2	196.5	F
	Right Turn	23	11	48.4%	312.6	174.5	F
	Subtotal	165	60	36.1%	377.1	139.9	F
Total		4,718	3,059	64.8%	84.7	12.3	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	570	351	61.5%	176.9	58.6	F
	Through	1,363	1,065	78.2%	138.5	63.6	F
	Right Turn	418	328	78.5%	102.2	50.4	F
	Subtotal	2,351	1,744	74.2%	139.3	59.9	F
SB	Left Turn						
	Through	1,963	1,207	61.5%	81.2	6.2	F
	Right Turn	261	158	60.6%	47.6	4.5	D
	Subtotal	2,224	1,366	61.4%	77.3	6.2	E
EB	Left Turn	245	66	26.8%	460.2	99.0	F
	Through						
	Right Turn	550	378	68.8%	190.4	69.2	F
	Subtotal	795	444	55.8%	230.9	74.2	F
WB	Left Turn	603	449	74.4%	211.8	129.7	F
	Through	200	131	65.3%	259.0	142.5	F
	Right Turn	490	336	68.5%	228.7	129.8	F
	Subtotal	1,293	915	70.8%	224.7	131.4	F
Total		6,663	4,468	67.1%	141.0	35.9	F

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,401	1,170	83.5%	36.7	5.8	D
	Right Turn	231	206	89.3%	19.4	3.5	B
	Subtotal	1,632	1,377	84.4%	34.1	5.3	C
SB	Left Turn	612	429	70.1%	50.8	8.8	D
	Through	1,181	807	68.3%	19.0	3.1	B
	Right Turn	563	369	65.5%	8.9	0.7	A
	Subtotal	2,356	1,604	68.1%	25.2	4.2	C
EB	Left Turn	730	622	85.3%	96.0	23.4	F
	Through	362	347	95.9%	64.7	4.3	E
	Right Turn	160	161	100.6%	31.9	5.4	C
	Subtotal	1,252	1,130	90.3%	76.9	11.8	E
WB	Left Turn	238	215	90.2%	108.2	37.7	F
	Through						
	Right Turn	539	443	82.1%	106.6	45.5	F
	Subtotal	777	657	84.6%	107.5	40.7	F
Total		6,017	4,769	79.3%	51.1	6.2	D

Intersection 11 Sierra College Blvd/Schriber Wy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	77	63	81.3%	42.3	8.0	D
	Through	1,427	1,181	82.8%	14.4	2.2	B
	Right Turn	177	149	84.0%	12.2	3.2	B
	Subtotal	1,681	1,392	82.8%	15.5	2.2	B
SB	Left Turn						
	Through	1,349	1,008	74.7%	19.2	3.0	B
	Right Turn	143	104	72.5%	9.5	2.0	A
	Subtotal	1,492	1,111	74.5%	18.3	2.9	B
EB	Left Turn	131	125	95.3%	28.6	2.2	C
	Through						
	Right Turn	73	68	93.6%	9.9	2.4	A
	Subtotal	204	193	94.7%	22.0	1.7	C
WB	Left Turn	90	88	97.7%	23.5	3.5	C
	Through						
	Right Turn	178	188	105.5%	11.4	1.7	B
	Subtotal	268	276	102.9%	15.3	1.8	B
Total		3,645	2,973	81.6%	16.9	1.9	B

City of Rocklin-93 (Cont.)

Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	1	1	76.8%	6.7	14.1	A
	Through	1,576	1,301	82.6%	17.2	4.2	B
	Right Turn	126	103	81.7%	17.9	5.9	B
	Subtotal	1,703	1,405	82.5%	17.3	4.3	B
SB	Left Turn	122	89	73.3%	32.3	9.4	C
	Through	1,384	1,067	77.1%	8.5	1.1	A
	Right Turn	5	5	99.8%	4.3	0.5	A
	Subtotal	1,511	1,161	76.9%	10.4	1.4	B
EB	Left Turn	3	3	115.2%	17.6	19.0	B
	Through						
	Right Turn	3	2	76.8%	3.3	5.3	A
	Subtotal	6	6	96.0%	14.5	12.8	B
WB	Left Turn	114	104	91.6%	22.9	4.2	C
	Through	1	2	192.0%	8.0	9.8	A
	Right Turn	102	100	97.9%	9.6	1.7	A
	Subtotal	217	206	95.0%	16.4	2.2	B
Total		3,437	2,778	80.8%	14.3	2.5	B

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	15	15	97.3%	12.4	5.9	B
	Through	1,666	1,337	80.3%	4.9	1.1	A
	Right Turn						
	Subtotal	1,681	1,352	80.4%	5.0	1.1	A
SB	Left Turn						
	Through	1,474	1,167	79.2%	3.0	0.6	A
	Right Turn	27	18	68.3%	1.9	0.9	A
	Subtotal	1,501	1,186	79.0%	3.0	0.5	A
EB	Left Turn	37	42	113.1%	12.2	3.5	B
	Through						
	Right Turn	20	18	92.2%	6.0	2.3	A
	Subtotal	57	60	105.8%	10.3	3.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,239	2,598	80.2%	4.2	0.8	A

City of Rocklin-93
(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	352	270	76.6%	167.2	29.7	F
	Through	1,191	926	77.8%	178.7	30.9	F
	Right Turn	97	82	84.7%	190.8	38.7	F
	Subtotal	1,640	1,278	77.9%	177.3	30.6	F
SB	Left Turn	196	162	82.9%	75.7	16.1	E
	Through	1,021	845	82.8%	33.8	4.4	C
	Right Turn	254	201	79.1%	10.8	2.7	B
	Subtotal	1,471	1,208	82.2%	35.8	5.3	D
EB	Left Turn	312	271	86.9%	98.5	25.5	F
	Through	300	280	93.4%	32.5	4.5	C
	Right Turn	337	326	96.6%	11.7	1.8	B
	Subtotal	949	877	92.4%	45.3	8.9	D
WB	Left Turn	95	81	84.9%	58.9	8.7	E
	Through	278	280	100.6%	44.2	4.1	D
	Right Turn	215	200	92.9%	26.3	4.8	C
	Subtotal	588	560	95.2%	40.0	4.0	D
Total		4,648	3,923	84.4%	84.5	9.5	F

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	7	5	65.8%	4.3	4.7	A
	Through	1,606	1,165	72.6%	4.2	0.5	A
	Right Turn						
	Subtotal	1,613	1,170	72.5%	4.3	0.5	A
SB	Left Turn						
	Through	1,715	942	54.9%	35.5	3.4	E
	Right Turn						
	Subtotal	1,715	942	54.9%	35.5	3.4	E
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,328	2,112	63.5%	18.2	1.4	C

City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Cumulative Short Term Plus Project Conditions
 Weekend MD Peak Hour

Intersection 24 Sierra College Blvd/Project Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,380	972	70.4%	33.9	6.6	C
	Right Turn	528	380	72.0%	16.9	4.2	B
	Subtotal	1,908	1,352	70.9%	29.1	5.8	C
SB	Left Turn	221	138	62.6%	113.5	23.9	F
	Through	1,494	808	54.1%	109.1	7.7	F
	Right Turn						
	Subtotal	1,715	946	55.1%	110.0	9.8	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	499	437	87.6%	131.5	60.2	F
	Through						
	Right Turn	229	196	85.5%	91.7	63.3	F
	Subtotal	728	633	86.9%	119.2	61.7	F
Total		4,351	2,931	67.4%	74.1	12.1	E

City of
 Rocklin-93
 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	150	16	225	17	175	1	14%	0%
	Through	4,650	500	305	875	497	925	561	28%	0%
	Right Turn	200	125	28	250	29	225	0	4%	0%
NB	Left Turn	225	100	27	175	54	200	57	2%	0%
	Through	575	200	24	300	38	325	44	6%	1%
	Right Turn	575	100	20	200	38	200	41	0%	0%
SB	Left Turn	200	50	28	150	87	150	93	0%	0%
	Through	5,000	625	186	1,150	356	1,225	375	59%	0%
	Right Turn	225	150	35	300	41	250	0	0%	0%
WB	Left Turn	225	225	17	250	19	225	0	59%	0%
	Through	5,550	1,400	533	2,825	788	3,000	626	7%	0%
	Right Turn	225	50	25	100	80	125	97	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	1,250	200	105	350	191	375	201	0%	0%
	Through	625	175	73	275	92	275	92	0%	0%
NB	Right Turn	625	50	15	75	16	75	13	0%	0%
	Through	625	175	73	275	92	275	92	0%	0%
SB	Left Turn	175	125	29	225	30	200	1	0%	0%
	Through	575	575	29	725	46	650	33	43%	32%
	Right Turn	575	25	0	25	0	25	0	0%	0%
WB	Left Turn	100	125	6	125	6	125	1	78%	0%
	Right Turn	5,000	600	292	1,125	508	1,125	476	1%	0%



City of Rocklin-93 (Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	26	225	18	225	0	68%	0%
	Through	2,575	575	224	1,000	436	950	424	0%	1%
	Right Turn	2,575	550	296	975	532	1,050	473	60%	2%
NB	Left Turn	175	200	7	225	3	200	1	51%	0%
	Through	400	500	30	575	39	525	21	23%	37%
	Right Turn	400	450	32	550	46	525	28	0%	27%
SB	Left Turn	300	125	44	300	63	325	0	0%	0%
	Through	575	675	29	700	27	675	17	58%	53%
	Right Turn	200	100	34	250	49	225	0	0%	0%
WB	Left Turn	175	175	16	200	17	200	2	81%	0%
	Through	1,350	475	195	825	219	800	211	0%	0%
	Right Turn	175	25	10	75	22	75	22	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	650	126	950	133	850	110	25%	0%
	Right Turn	3,700	675	426	1,575	868	1,675	755	14%	0%
NB	Left Turn	150	250	2	275	11	275	14	0%	75%
	Through	1,500	775	238	1,200	304	1,200	301	0%	2%
	Right Turn	300	150	24	275	46	250	52	13%	0%
SB	Through	400	450	35	550	41	500	32	0%	34%
	Right Turn	200	125	10	150	17	150	20	2%	0%
WB	Left Turn	800	450	167	700	209	675	188	19%	0%
	Through/Right	4,600	850	451	1,375	605	1,550	668	66%	0%
	Right Turn	200	200	12	250	27	225	0	14%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	375	28	400	21	375	2	23%	0%
	Through	1,625	450	255	750	341	725	331	1%	0%
	Right Turn	225	100	23	200	43	200	48	1%	0%
NB	Through	300	325	28	375	34	375	21	0%	20%
	Right Turn	300	100	14	150	29	150	38	0%	0%
SB	Left Turn	225	175	22	250	32	250	28	0%	0%
	Through	1,500	325	70	375	102	400	108	9%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	325	52	425	55	375	0	12%	0%
	Right Turn	3,175	825	397	1,225	502	1,200	472	46%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	75	20	125	39	125	43	1%	0%
	Through/Right	650	25	7	50	15	50	21	0%	0%
NB	Left Turn	125	50	12	100	36	125	44	0%	0%
	Through	350	175	38	250	60	275	56	7%	0%
	Through/Right	350	325	72	450	85	425	74	0%	11%
SB	Through	300	250	56	350	60	350	56	28%	10%
	Right Turn	100	50	20	125	39	125	24	0%	0%
WB	Left/Through	575	50	6	100	17	100	22	0%	0%
	Right Turn	225	100	21	150	44	150	40	0%	0%

City of Rocklin-93
(Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	3	25	14	25	16	0%	0%
	Through/Right	375	25	1	25	7	25	11	0%	0%
NB	Left Turn	100	25	3	25	10	25	32	0%	0%
	Through	1,700	450	113	675	168	700	187	36%	0%
	Right Turn	75	75	4	75	9	75	1	1%	0%
SB	Left Turn	225	75	16	100	33	100	32	0%	2%
	Through	350	175	38	225	43	250	31	0%	0%
	Right Turn	200	25	1	25	7	25	10	0%	0%
WB	Left Turn	250	75	27	125	47	125	43	0%	0%
	Through	750	25	0	25	0	25	0	0%	0%
	Right Turn	175	50	6	75	14	75	19	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	75	34	100	54	100	51	12%	0%
	Right Turn	100	50	9	75	25	75	31	0%	0%
NB	Left Turn	225	25	3	50	6	50	11	0%	0%
	Through	1,600	125	22	175	31	175	31	0%	0%
SB	Through	1,700	50	11	100	26	100	28	0%	0%
	Through/Right	725	75	13	125	24	100	21	0%	0%
0										

City of Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	1	250	3	250	0	79%	0%
	Through	2,275	725	228	975	304	1,050	327	0%	0%
	Right Turn	2,275	175	26	250	52	250	49	0%	0%
NB	Left Turn	225	225	31	275	26	250	19	8%	0%
	Through	5,650	2,050	420	3,050	570	3,050	571	52%	0%
	Through/Right	5,650	2,075	412	3,025	558	3,050	571	0%	0%
SB	Left Turn	250	200	41	275	25	250	15	18%	0%
	Through	1,700	200	92	325	122	350	99	11%	0%
	Right Turn	175	125	24	225	35	200	0	0%	0%
WB	Left Turn	225	100	37	200	56	200	60	0%	0%
	Through	5,000	275	46	400	79	375	84	12%	0%
	Through/Right	250	225	20	275	25	275	12	7%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	525	50	24	100	39	100	46	0%	0%
NB	Left Turn	125	25	3	25	13	25	16	0%	0%
	Through	375	25	6	25	25	25	34	0%	0%
SB	Through	225	200	31	275	32	250	12	0%	24%
	Through/Right	225	225	4	225	5	225	6	0%	51%
0										

City of Rocklin-93
(Cont.)

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Cumulative Short Term Plus Project Conditions
Weekday PM Peak Hour

Intersection 24

Sierra College Blvd/Project Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	575	275	68	425	95	425	91	20%	0%
	Right Turn	150	125	12	225	9	175	0	0%	1%
SB	Left Turn	175	125	35	225	24	200	3	7%	0%
	Through	625	625	36	675	41	650	25	32%	24%
WB	Left Turn	1,075	425	161	650	257	675	228	43%	1%
	Right Turn	225	175	33	300	24	250	0	0%	0%
0										

City of
Rocklin-93
(Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	15	200	14	175	0	5%	0%
	Through	4,650	400	134	700	150	700	107	27%	4%
	Right Turn	200	175	35	250	36	225	2	27%	0%
NB	Left Turn	225	150	64	225	63	225	49	13%	0%
	Through	575	250	66	375	93	350	87	3%	0%
	Right Turn	575	150	30	250	50	250	55	0%	0%
SB	Left Turn	200	75	46	175	105	200	76	0%	0%
	Through	5,000	800	134	1,500	232	1,550	245	73%	0%
	Right Turn	225	150	25	325	14	250	0	0%	0%
WB	Left Turn	225	225	16	250	15	225	0	72%	0%
	Through	4,850	1,700	431	3,275	568	3,250	438	1%	6%
	Right Turn	225	25	9	50	24	50	26	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
FB	Right Turn	1,275	75	20	150	41	150	45	0%	0%
	Through	625	150	25	250	48	250	57	0%	0%
NB	Right Turn	625	50	9	75	21	75	25	0%	0%
	Through	625	150	25	250	48	250	57	0%	0%
SB	Left Turn	175	125	27	225	31	200	0	0%	0%
	Through	575	600	17	675	30	675	21	45%	39%
	Right Turn	575	25	0	25	0	25	0	0%	0%
WB	Left Turn	100	125	8	125	10	125	0	78%	0%
	Right Turn	5,000	400	186	700	267	725	283	2%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	40	225	23	225	6	62%	0%
	Through	2,575	450	301	775	392	775	388	2%	0%
	Right Turn	2,575	450	295	725	443	775	442	55%	0%
NB	Left Turn	175	200	5	225	9	200	0	46%	0%
	Through	400	500	47	550	48	525	18	13%	37%
	Right Turn	400	450	65	550	67	525	34	0%	24%
SB	Left Turn	300	100	46	225	123	200	114	0%	0%
	Through	575	675	39	700	26	700	16	59%	55%
	Right Turn	200	100	35	250	43	225	0	0%	0%
WB	Left Turn	175	175	10	200	17	200	2	87%	0%
	Through	1,350	650	262	1,075	331	1,025	338	0%	2%
	Right Turn	175	25	11	50	31	50	34	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	825	59	1,000	98	875	22	41%	0%
	Right Turn	3,150	1,675	454	2,900	609	2,950	333	31%	13%
NB	Left Turn	150	250	5	275	15	275	16	0%	77%
	Through	1,500	1,275	95	1,525	83	1,525	58	0%	13%
	Right Turn	300	150	36	250	57	250	50	14%	0%
SB	Through	400	450	49	525	37	500	25	0%	36%
	Right Turn	200	125	11	175	17	175	25	3%	0%
WB	Left Turn	800	600	162	900	156	825	27	17%	0%
	Through/Right	6,650	1,975	1,254	3,200	1,537	3,450	1,453	78%	2%
	Right Turn	200	200	19	225	34	225	0	5%	0%

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	375	32	400	23	375	2	26%	0%
	Through	2,450	450	205	800	339	1,000	529	5%	0%
	Right Turn	225	125	13	225	23	225	33	0%	0%
NB	Through	300	200	32	300	38	300	38	0%	5%
	Right Turn	125	75	17	125	42	125	41	0%	2%
SB	Left Turn	225	200	22	275	21	250	11	4%	1%
	Through	1,500	250	58	325	77	350	70	3%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	350	57	425	31	375	0	8%	0%
	Right Turn	3,175	800	364	1,350	734	1,475	821	47%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	75	9	125	24	150	31	0%	0%
	Through/Right	650	50	10	75	18	75	22	0%	0%
NB	Left Turn	125	50	16	100	32	125	33	1%	0%
	Through	350	125	19	200	41	200	49	2%	0%
	Through/Right	350	225	37	275	50	300	47	0%	1%
SB	Through	300	225	41	300	51	300	49	20%	3%
	Right Turn	100	75	26	125	35	125	16	0%	0%
WB	Left/Through	575	50	8	100	17	100	29	0%	0%
	Right Turn	225	75	14	125	38	125	38	0%	0%

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	3	25	11	25	14	0%	0%
	Through/Right	375	25	3	25	11	25	13	0%	0%
NB	Left Turn	100	25	1	25	7	25	10	0%	0%
	Through	1,700	275	65	425	101	400	90	29%	0%
	Right Turn	75	75	3	75	3	75	0	2%	0%
SB	Left Turn	225	75	21	125	40	125	37	0%	2%
	Through	350	150	23	175	41	200	40	0%	0%
	Right Turn	200	50	2	50	6	50	8	0%	0%
WB	Left Turn	250	50	18	75	31	75	31	0%	0%
	Through	750	25	3	25	11	25	15	0%	0%
	Right Turn	175	50	8	75	16	75	17	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	25	14	50	28	50	27	0%	0%
	Right Turn	100	25	7	50	7	50	1	0%	0%
NB	Left Turn	225	25	8	50	14	50	11	0%	0%
	Through	1,600	75	25	125	39	125	37	0%	0%
SB	Through	1,700	25	8	75	16	75	20	0%	0%
	Through/Right	725	50	10	75	10	75	15	0%	0%
0										

City of
Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	16	275	12	250	1	48%	0%
	Through	2,275	350	128	525	215	525	170	0%	0%
	Right Turn	2,275	125	13	175	25	175	30	0%	0%
NB	Left Turn	225	200	33	275	27	250	27	1%	0%
	Through	5,650	1,425	256	2,050	360	2,050	257	53%	0%
	Through/Right	5,650	1,450	258	2,050	356	2,050	276	0%	0%
SB	Left Turn	250	175	38	250	42	250	38	8%	0%
	Through	1,700	200	35	300	76	275	74	11%	0%
	Right Turn	175	100	26	225	27	200	0	0%	0%
WB	Left Turn	225	100	15	175	41	175	62	0%	0%
	Through	5,000	175	33	275	58	275	62	3%	0%
	Through/Right	250	175	29	250	38	250	28	1%	0%

Intersection 21 Sierra College Blvd/Office Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	4	25	14	25	17	0%	0%
	Through	375	25	2	25	9	25	46	0%	0%
SB	Through	225	200	35	275	33	250	14	0%	24%
	Through/Right	225	225	3	225	3	225	3	0%	53%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										

City of
Rocklin-93
(Cont.)

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Cumulative Short Term Plus Project Conditions
Weekend MD Peak Hour

Intersection 24

Sierra College Blvd/Project Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	575	325	72	525	99	525	89	25%	1%
	Right Turn	150	150	16	200	25	175	0	2%	1%
SB	Left Turn	175	150	24	225	14	200	4	12%	0%
	Through	625	600	43	700	50	650	26	25%	24%
WB	Left Turn	2,150	900	483	1,375	634	1,375	576	57%	1%
	Right Turn	225	200	24	300	18	250	0	1%	0%
0										



City of
Rocklin-93
(Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	15	200	14	175	0	5%	0%
	Through	4,650	400	134	700	150	700	107	27%	4%
	Right Turn	200	175	35	250	36	225	2	27%	0%
NB	Left Turn	225	150	64	225	63	225	49	13%	0%
	Through	575	250	66	375	93	350	87	3%	0%
	Right Turn	575	150	30	250	50	250	55	0%	0%
SB	Left Turn	200	75	46	175	105	200	76	0%	0%
	Through	5,000	800	134	1,500	232	1,550	245	73%	0%
	Right Turn	225	150	25	325	14	250	0	0%	0%
WB	Left Turn	225	225	16	250	15	225	0	72%	0%
	Through	4,850	1,700	431	3,275	568	3,250	438	1%	6%
	Right Turn	225	25	9	50	24	50	26	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
FB	Right Turn	1,275	75	20	150	41	150	45	0%	0%
	Through	625	150	25	250	48	250	57	0%	0%
NB	Right Turn	625	50	9	75	21	75	25	0%	0%
	Through	625	150	25	250	48	250	57	0%	0%
SB	Left Turn	175	125	27	225	31	200	0	0%	0%
	Through	575	600	17	675	30	675	21	45%	39%
	Right Turn	575	25	0	25	0	25	0	0%	0%
WB	Left Turn	100	125	8	125	10	125	0	78%	0%
	Right Turn	5,000	400	186	700	267	725	283	2%	0%

City of Rocklin-93 (Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	40	225	23	225	6	62%	0%
	Through	2,575	450	301	775	392	775	388	2%	0%
	Right Turn	2,575	450	295	725	443	775	442	55%	0%
NB	Left Turn	175	200	5	225	9	200	0	46%	0%
	Through	400	500	47	550	48	525	18	13%	37%
	Right Turn	400	450	65	550	67	525	34	0%	24%
SB	Left Turn	300	100	46	225	123	200	114	0%	0%
	Through	575	675	39	700	26	700	16	59%	55%
	Right Turn	200	100	35	250	43	225	0	0%	0%
WB	Left Turn	175	175	10	200	17	200	2	87%	0%
	Through	1,350	650	262	1,075	331	1,025	338	0%	2%
	Right Turn	175	25	11	50	31	50	34	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	825	59	1,000	98	875	22	41%	0%
	Right Turn	3,150	1,675	454	2,900	609	2,950	333	31%	13%
NB	Left Turn	150	250	5	275	15	275	16	0%	77%
	Through	1,500	1,275	95	1,525	83	1,525	58	0%	13%
	Right Turn	300	150	36	250	57	250	50	14%	0%
SB	Through	400	450	49	525	37	500	25	0%	36%
	Right Turn	200	125	11	175	17	175	25	3%	0%
WB	Left Turn	800	600	162	900	156	825	27	17%	0%
	Through/Right	6,650	1,975	1,254	3,200	1,537	3,450	1,453	78%	2%
	Right Turn	200	200	19	225	34	225	0	5%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	375	32	400	23	375	2	26%	0%
	Through	2,450	450	205	800	339	1,000	529	5%	0%
	Right Turn	225	125	13	225	23	225	33	0%	0%
NB	Through	300	200	32	300	38	300	38	0%	5%
	Right Turn	125	75	17	125	42	125	41	0%	2%
SB	Left Turn	225	200	22	275	21	250	11	4%	1%
	Through	1,500	250	58	325	77	350	70	3%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	350	57	425	31	375	0	8%	0%
	Right Turn	3,175	800	364	1,350	734	1,475	821	47%	0%

Intersection 11 Sierra College Blvd/Scriber Wy Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	75	9	125	24	150	31	0%	0%
	Through/Right	650	50	10	75	18	75	22	0%	0%
NB	Left Turn	125	50	16	100	32	125	33	1%	0%
	Through	350	125	19	200	41	200	49	2%	0%
	Through/Right	350	225	37	275	50	300	47	0%	1%
SB	Through	300	225	41	300	51	300	49	20%	3%
	Right Turn	100	75	26	125	35	125	16	0%	0%
WB	Left/Through	575	50	8	100	17	100	29	0%	0%
	Right Turn	225	75	14	125	38	125	38	0%	0%

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	25	3	25	11	25	14	0%	0%
	Through/Right	375	25	3	25	11	25	13	0%	0%
NB	Left Turn	100	25	1	25	7	25	10	0%	0%
	Through	1,700	275	65	425	101	400	90	29%	0%
	Right Turn	75	75	3	75	3	75	0	2%	0%
SB	Left Turn	225	75	21	125	40	125	37	0%	2%
	Through	350	150	23	175	41	200	40	0%	0%
	Right Turn	200	50	2	50	6	50	8	0%	0%
WB	Left Turn	250	50	18	75	31	75	31	0%	0%
	Through	750	25	3	25	11	25	15	0%	0%
	Right Turn	175	50	8	75	16	75	17	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	400	25	14	50	28	50	27	0%	0%
	Right Turn	100	25	7	50	7	50	1	0%	0%
NB	Left Turn	225	25	8	50	14	50	11	0%	0%
	Through	1,600	75	25	125	39	125	37	0%	0%
SB	Through	1,700	25	8	75	16	75	20	0%	0%
	Through/Right	725	50	10	75	10	75	15	0%	0%
0										

City of
Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	16	275	12	250	1	48%	0%
	Through	2,275	350	128	525	215	525	170	0%	0%
	Right Turn	2,275	125	13	175	25	175	30	0%	0%
NB	Left Turn	225	200	33	275	27	250	27	1%	0%
	Through	5,650	1,425	256	2,050	360	2,050	257	53%	0%
	Through/Right	5,650	1,450	258	2,050	356	2,050	276	0%	0%
SB	Left Turn	250	175	38	250	42	250	38	8%	0%
	Through	1,700	200	35	300	76	275	74	11%	0%
	Right Turn	175	100	26	225	27	200	0	0%	0%
WB	Left Turn	225	100	15	175	41	175	62	0%	0%
	Through	5,000	175	33	275	58	275	62	3%	0%
	Through/Right	250	175	29	250	38	250	28	1%	0%

Intersection 21 Sierra College Blvd/Office Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	4	25	14	25	17	0%	0%
	Through	375	25	2	25	9	25	46	0%	0%
SB	Through	225	200	35	275	33	250	14	0%	24%
	Through/Right	225	225	3	225	3	225	3	0%	53%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										

City of
Rocklin-93
(Cont.)

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Cumulative Short Term Plus Project Conditions
Weekend MD Peak Hour

Intersection 24

Sierra College Blvd/Project Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through	575	325	72	525	99	525	89	25%	1%
	Right Turn	150	150	16	200	25	175	0	2%	1%
SB	Left Turn	175	150	24	225	14	200	4	12%	0%
	Through	625	600	43	700	50	650	26	25%	24%
WB	Left Turn	2,150	900	483	1,375	634	1,375	576	57%	1%
	Right Turn	225	200	24	300	18	250	0	1%	0%
0										

City of Rocklin-93
(Cont.)

Cumulative Long-Term Conditions



City of
Rocklin-93
(Cont.)

FEHR  PEERS



Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	130	82	62.8%	54.9	14.3	D
	Through	1,470	907	61.7%	29.1	2.3	C
	Right Turn	550	326	59.3%	11.5	1.6	B
	Subtotal	2,150	1,314	61.1%	26.3	2.5	C
SB	Left Turn	35	21	61.2%	119.4	54.7	F
	Through	940	740	78.7%	108.8	42.8	F
	Right Turn	70	56	80.6%	63.3	39.9	E
	Subtotal	1,045	818	78.3%	106.0	42.6	F
EB	Left Turn	135	117	86.6%	75.2	29.6	E
	Through	320	285	89.1%	71.1	31.7	E
	Right Turn	240	211	87.7%	67.1	30.1	E
	Subtotal	695	613	88.1%	70.7	30.0	E
WB	Left Turn	495	331	66.9%	156.8	70.0	F
	Through	190	143	75.2%	103.1	55.6	F
	Right Turn	70	50	70.9%	90.8	49.5	F
	Subtotal	755	524	69.4%	136.8	65.5	F
Total		4,645	3,269	70.4%	70.2	21.2	E

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	2,045	1,195	58.4%	58.1	8.1	E
	Right Turn	375	219	58.4%	55.9	9.8	E
	Subtotal	2,420	1,413	58.4%	57.8	8.3	E
SB	Left Turn	315	189	60.0%	172.7	15.5	F
	Through	1,245	969	77.8%	39.2	5.5	D
	Right Turn	115	89	77.8%	35.0	5.5	D
	Subtotal	1,675	1,248	74.5%	59.3	8.0	E
EB	Left Turn						
	Through						
	Right Turn	545	485	89.0%	105.2	35.1	F
	Subtotal	545	485	89.0%	105.2	35.1	F
WB	Left Turn	105	82	77.7%	183.4	68.4	F
	Through						
	Right Turn	130	120	92.3%	86.9	83.0	F
	Subtotal	235	202	85.8%	125.7	78.6	F
Total		4,875	3,348	68.7%	68.9	9.2	E

City of Rocklin-93
(Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	220	144	65.5%	110.7	15.2	F
	Through	1,865	1,217	65.2%	58.3	9.0	E
	Right Turn	55	28	51.3%	37.7	10.2	D
	Subtotal	2,140	1,389	64.9%	63.4	9.2	E
SB	Left Turn	100	62	61.7%	119.8	55.6	F
	Through	1,560	1,201	77.0%	78.6	34.8	E
	Right Turn	185	128	69.1%	67.6	42.0	E
	Subtotal	1,845	1,390	75.3%	79.2	35.9	E
EB	Left Turn	415	179	43.1%	334.5	113.9	F
	Through	25	15	60.2%	310.7	129.1	F
	Right Turn	285	224	78.5%	114.1	57.8	F
	Subtotal	725	418	57.6%	200.3	65.9	F
WB	Left Turn	120	59	49.5%	283.5	132.8	F
	Through	30	21	70.2%	197.9	149.3	F
	Right Turn	90	55	61.4%	168.3	136.3	F
	Subtotal	240	136	56.6%	221.9	146.3	F
Total		4,950	3,332	67.3%	91.5	22.6	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	305	227	74.6%	69.0	8.3	E
	Through	1,835	1,195	65.1%	37.2	12.8	D
	Right Turn	255	174	68.3%	11.8	4.1	B
	Subtotal	2,395	1,596	66.7%	38.9	11.0	D
SB	Left Turn						
	Through	1,930	1,446	74.9%	48.2	6.6	D
	Right Turn	35	20	58.0%	26.6	4.9	C
	Subtotal	1,965	1,467	74.6%	47.9	6.6	D
EB	Left Turn	35	25	70.9%	100.7	45.2	F
	Through						
	Right Turn	120	119	99.0%	26.0	4.7	C
	Subtotal	155	144	92.7%	38.7	9.0	D
WB	Left Turn	1,035	669	64.7%	291.3	41.3	F
	Through	70	49	69.8%	294.1	39.3	F
	Right Turn	240	177	73.9%	271.5	36.0	F
	Subtotal	1,345	896	66.6%	287.5	40.1	F
Total		5,860	4,103	70.0%	95.9	9.0	F

City of Rocklin-93
(Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	2,430	1,316	54.2%	22.8	7.9	C
	Right Turn	160	86	54.1%	9.4	4.4	A
	Subtotal	2,590	1,403	54.2%	22.0	7.7	C
SB	Left Turn	270	199	73.7%	73.8	12.2	E
	Through	1,525	1,078	70.7%	14.8	4.5	B
	Right Turn	360	267	74.1%	8.4	0.8	A
	Subtotal	2,155	1,543	71.6%	21.2	3.5	C
EB	Left Turn	520	500	96.1%	62.8	13.7	E
	Through	180	175	97.1%	52.7	5.8	D
	Right Turn	100	96	95.9%	26.5	12.8	C
	Subtotal	800	770	96.3%	56.0	9.2	E
WB	Left Turn	125	105	84.2%	105.1	54.7	F
	Through						
	Right Turn	310	309	99.8%	38.8	21.1	D
	Subtotal	435	415	95.3%	56.6	28.7	E
Total		5,980	4,131	69.1%	31.5	6.8	C

Intersection 11 Sierra College Blvd/Schriber Wy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	55	29	53.3%	44.2	15.0	D
	Through	2,360	1,152	48.8%	14.1	5.2	B
	Right Turn	65	40	61.9%	11.6	7.1	B
	Subtotal	2,480	1,222	49.3%	14.7	5.1	B
SB	Left Turn						
	Through	1,560	1,119	71.8%	23.7	12.0	C
	Right Turn	190	147	77.2%	13.2	8.1	B
	Subtotal	1,750	1,266	72.3%	22.4	11.5	C
EB	Left Turn	155	155	99.7%	32.0	7.5	C
	Through	10	10	97.8%	47.3	48.2	D
	Right Turn	65	62	95.4%	16.1	5.9	B
	Subtotal	230	226	98.4%	27.9	5.9	C
WB	Left Turn	25	30	121.8%	31.8	9.7	C
	Through	5	3	67.7%	13.0	13.3	B
	Right Turn	75	72	96.3%	16.0	8.4	B
	Subtotal	105	106	101.0%	21.0	8.6	C
Total		4,565	2,820	61.8%	19.5	7.7	B

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	295	130	44.1%	284.5	45.0	F
	Through	2,260	1,023	45.3%	210.7	32.6	F
	Right Turn	185	90	48.8%	196.7	29.7	F
	Subtotal	2,740	1,243	45.4%	217.6	33.6	F
SB	Left Turn	100	71	71.1%	89.3	19.3	F
	Through	1,445	1,047	72.4%	36.9	8.9	D
	Right Turn	105	75	71.3%	18.3	5.6	B
	Subtotal	1,650	1,193	72.3%	38.9	8.6	D
EB	Left Turn	205	173	84.6%	108.3	40.6	F
	Through	55	46	83.4%	50.5	29.7	D
	Right Turn	485	479	98.7%	49.8	10.5	D
	Subtotal	745	698	93.7%	64.4	15.3	E
WB	Left Turn	155	151	97.3%	76.9	8.8	E
	Through	100	91	91.4%	43.5	5.5	D
	Right Turn	15	13	85.2%	8.4	4.5	A
	Subtotal	270	255	94.4%	62.0	7.2	E
Total		5,405	3,389	62.7%	111.0	14.4	F

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	60	37	62.0%	44.4	10.1	D
	Through	2,435	1,389	57.0%	27.0	16.3	C
	Right Turn						
	Subtotal	2,495	1,426	57.1%	27.5	16.0	C
SB	Left Turn						
	Through	1,945	1,583	81.4%	8.3	1.3	A
	Right Turn	175	141	80.8%	7.0	1.3	A
	Subtotal	2,120	1,725	81.4%	8.2	1.3	A
EB	Left Turn	285	141	49.3%	198.9	61.7	F
	Through						
	Right Turn	175	92	52.6%	157.4	62.1	F
	Subtotal	460	233	50.6%	182.5	60.8	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,075	3,383	66.7%	27.3	7.4	C

City of Rocklin-93
(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	485	282	58.2%	300.9	34.9	F
	Through	1,955	1,110	56.8%	292.8	27.7	F
	Right Turn	110	60	54.7%	304.3	43.3	F
	Subtotal	2,550	1,452	56.9%	295.0	28.5	F
SB	Left Turn	325	195	59.9%	211.6	52.3	F
	Through	1,600	1,242	77.6%	35.2	4.8	D
	Right Turn	225	175	77.7%	15.1	3.0	B
	Subtotal	2,150	1,611	74.9%	54.4	7.4	D
EB	Left Turn	330	195	59.0%	301.1	48.4	F
	Through	320	321	100.3%	46.3	5.9	D
	Right Turn	625	582	93.1%	84.2	17.1	F
	Subtotal	1,275	1,098	86.1%	111.6	14.5	F
WB	Left Turn	105	88	83.4%	239.3	56.3	F
	Through	240	235	97.9%	60.7	13.1	E
	Right Turn	210	217	103.5%	41.8	10.0	D
	Subtotal	555	540	97.3%	82.4	18.6	F
Total		6,530	4,701	72.0%	145.2	9.0	F

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	2	37.6%	19.2	18.3	C
	Through	2,420	1,425	58.9%	30.9	7.8	D
	Right Turn						
	Subtotal	2,425	1,427	58.8%	30.9	7.9	D
SB	Left Turn						
	Through	1,865	1,517	81.3%	3.4	3.2	A
	Right Turn	5	6	127.8%	2.6	4.8	A
	Subtotal	1,870	1,524	81.5%	3.4	3.2	A
EB	Left Turn						
	Through						
	Right Turn	20	15	75.2%	55.9	140.0	F
	Subtotal	20	15	75.2%	55.9	140.0	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,315	2,966	68.7%	17.0	4.1	C

City of
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 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Cumulative Long Term No Project Conditions
 Weekday PM Peak Hour

Intersection 24 Sierra College Blvd/Commercial Access Dwy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	48	23	47.8%	77.4	48.6	F
	Through	2,320	1,418	61.1%	8.9	3.6	A
	Right Turn						
	Subtotal	2,368	1,441	60.9%	10.0	3.7	A
SB	Left Turn						
	Through	1,825	1,425	78.1%	17.4	18.5	C
	Right Turn	60	50	84.0%	28.4	35.9	D
	Subtotal	1,885	1,475	78.3%	17.8	19.1	C
EB	Left Turn	105	10	9.3%	561.3	76.9	F
	Through						
	Right Turn	83	7	8.6%	405.8	86.3	F
	Subtotal	188	17	9.0%	321.2	234.7	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,441	2,933	66.0%	16.1	9.6	C

City of Rocklin-93
(Cont.)

Intersection 6 **Sierra College Blvd/Taylor Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	140	117	83.7%	58.7	20.9	E
	Through	715	578	80.9%	27.5	6.6	C
	Right Turn	500	411	82.2%	15.2	3.4	B
	Subtotal	1,355	1,106	81.6%	26.4	6.1	C
SB	Left Turn	40	37	93.1%	67.8	25.0	E
	Through	730	578	79.1%	80.0	27.8	E
	Right Turn	40	28	71.0%	55.4	36.0	E
	Subtotal	810	643	79.4%	78.1	27.8	E
EB	Left Turn	80	75	94.1%	48.5	17.9	D
	Through	220	196	89.0%	46.7	22.7	D
	Right Turn	225	189	84.1%	46.4	35.0	D
	Subtotal	525	460	87.7%	47.1	26.9	D
WB	Left Turn	485	309	63.7%	143.2	41.1	F
	Through	170	106	62.6%	99.1	34.4	F
	Right Turn	35	21	60.3%	101.4	62.3	F
	Subtotal	690	436	63.2%	130.4	39.9	F
Total		3,380	2,646	78.3%	58.7	11.6	E

Intersection 7 **Sierra College Blvd/Brace Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,253	1,054	84.1%	39.8	8.3	D
	Right Turn	280	237	84.5%	39.6	8.9	D
	Subtotal	1,533	1,290	84.2%	39.8	8.4	D
SB	Left Turn	235	186	79.3%	107.3	30.1	F
	Through	1,095	721	65.8%	98.8	24.0	F
	Right Turn	110	61	55.9%	133.0	43.7	F
	Subtotal	1,440	968	67.3%	102.7	25.3	F
EB	Left Turn						
	Through						
	Right Turn	270	117	43.2%	233.1	79.2	F
	Subtotal	270	117	43.2%	233.1	79.2	F
WB	Left Turn	115	31	27.4%	302.1	97.3	F
	Through						
	Right Turn	80	38	47.0%	155.2	88.0	F
	Subtotal	195	69	35.4%	218.0	92.9	F
Total		3,438	2,445	71.1%	77.2	12.5	E

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(Cont.)

Intersection 8 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	210	156	74.2%	112.8	39.2	F
	Through	1,120	957	85.4%	40.6	10.1	D
	Right Turn	85	72	84.5%	16.8	5.6	B
	Subtotal	1,415	1,184	83.7%	48.6	13.1	D
SB	Left Turn	100	83	82.6%	238.1	57.1	F
	Through	1,130	598	52.9%	244.4	34.8	F
	Right Turn	190	69	36.2%	234.5	38.5	F
	Subtotal	1,420	749	52.7%	242.8	37.2	F
EB	Left Turn	280	266	94.9%	99.7	52.3	F
	Through	20	20	97.9%	64.2	36.8	E
	Right Turn	210	206	98.2%	50.1	10.2	D
	Subtotal	510	492	96.4%	77.5	31.5	E
WB	Left Turn	140	130	92.7%	105.8	37.0	F
	Through	30	31	105.0%	54.7	15.1	D
	Right Turn	65	66	101.0%	34.1	18.1	C
	Subtotal	235	227	96.6%	78.7	29.6	E
Total		3,580	2,652	74.1%	110.8	17.8	F

Intersection 9 **Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	400	343	85.6%	66.2	10.6	E
	Through	1,280	1,134	88.6%	28.4	6.0	C
	Right Turn	240	243	101.1%	14.4	4.2	B
	Subtotal	1,920	1,719	89.5%	34.1	7.3	C
SB	Left Turn						
	Through	1,430	863	60.3%	59.4	7.5	E
	Right Turn	25	15	61.4%	31.8	4.4	C
	Subtotal	1,455	878	60.4%	58.9	7.7	E
EB	Left Turn	80	74	92.2%	122.3	75.7	F
	Through						
	Right Turn	290	309	106.5%	31.3	6.6	C
	Subtotal	370	382	103.4%	48.3	13.4	D
WB	Left Turn	1,090	776	71.2%	255.5	33.2	F
	Through	150	109	72.4%	257.3	31.7	F
	Right Turn	180	119	65.9%	227.7	29.5	F
	Subtotal	1,420	1,003	70.6%	252.4	32.1	F
Total		5,165	3,983	77.1%	95.5	8.6	F

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,350	1,025	75.9%	23.9	3.5	C
	Right Turn	100	78	78.0%	8.4	1.4	A
	Subtotal	1,450	1,103	76.1%	22.8	3.4	C
SB	Left Turn	435	351	80.6%	42.9	5.4	D
	Through	995	727	73.0%	11.0	1.3	B
	Right Turn	235	167	71.2%	6.5	0.3	A
	Subtotal	1,665	1,245	74.7%	19.4	2.4	B
EB	Left Turn	560	533	95.1%	55.5	3.8	E
	Through	285	273	95.9%	50.3	5.7	D
	Right Turn	85	83	98.0%	14.5	2.9	B
	Subtotal	930	889	95.6%	50.2	3.3	D
WB	Left Turn	125	120	96.2%	62.5	5.2	E
	Through						
	Right Turn	345	365	105.7%	22.7	2.5	C
	Subtotal	470	485	103.2%	32.5	2.6	C
Total		4,515	3,722	82.4%	29.5	1.3	C

Intersection 11 Sierra College Blvd/Schriber Wy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	46	25	53.4%	27.5	8.5	C
	Through	1,180	860	72.9%	9.0	1.7	A
	Right Turn	75	56	75.3%	6.0	3.0	A
	Subtotal	1,301	941	72.3%	9.4	1.7	A
SB	Left Turn						
	Through	1,180	931	78.9%	11.6	2.1	B
	Right Turn	201	162	80.6%	5.4	1.1	A
	Subtotal	1,381	1,093	79.1%	10.7	1.9	B
EB	Left Turn	170	159	93.5%	21.2	4.8	C
	Through	12	14	115.2%	15.0	10.3	B
	Right Turn	58	58	99.3%	8.5	2.8	A
	Subtotal	240	230	96.0%	18.0	3.8	B
WB	Left Turn	10	11	107.5%	24.8	12.0	C
	Through	14	13	96.0%	22.7	9.3	C
	Right Turn	100	103	103.3%	6.5	1.3	A
	Subtotal	124	127	102.8%	9.3	0.9	A
Total		3,046	2,392	78.5%	10.8	1.7	B

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Intersection 12 **Sierra College Blvd/Dominguez Rd-Bass Pro Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	515	229	44.4%	201.3	16.4	F
	Through	1,051	688	65.5%	79.7	10.1	E
	Right Turn	175	124	70.9%	48.8	9.5	D
	Subtotal	1,741	1,041	59.8%	102.7	8.9	F
SB	Left Turn	115	88	76.8%	70.1	7.4	E
	Through	845	692	81.9%	37.9	4.5	D
	Right Turn	255	206	80.9%	19.4	4.2	B
	Subtotal	1,215	986	81.2%	36.9	4.2	D
EB	Left Turn	245	240	98.1%	109.9	44.9	F
	Through	105	108	102.4%	53.2	37.1	D
	Right Turn	500	494	98.8%	23.5	3.3	C
	Subtotal	850	842	99.1%	51.9	16.8	D
WB	Left Turn	75	78	103.9%	64.4	12.0	E
	Through	205	200	97.4%	51.2	3.0	D
	Right Turn	5	7	145.9%	10.8	5.7	B
	Subtotal	285	285	100.0%	53.6	1.8	D
Total		4,091	3,155	77.1%	64.2	5.3	E

Intersection 13 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	35	28	80.1%	46.9	26.0	D
	Through	1,570	1,202	76.6%	46.9	15.8	D
	Right Turn						
	Subtotal	1,605	1,230	76.7%	46.8	15.7	D
SB	Left Turn						
	Through	1,405	1,257	89.5%	6.1	1.2	A
	Right Turn	70	63	89.4%	4.1	1.1	A
	Subtotal	1,475	1,319	89.5%	6.0	1.2	A
EB	Left Turn	90	47	52.1%	131.0	63.0	F
	Through						
	Right Turn	50	40	80.6%	46.1	37.1	D
	Subtotal	140	87	62.3%	86.2	38.1	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,220	2,637	81.9%	27.3	7.3	C

City of Rocklin-93
(Cont.)

Intersection 14 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	265	235	88.8%	116.0	25.2	F
	Through	1,250	1,117	89.4%	97.2	24.2	F
	Right Turn	75	72	95.7%	97.0	32.1	F
	Subtotal	1,590	1,425	89.6%	100.3	24.4	F
SB	Left Turn	230	203	88.3%	72.4	22.0	E
	Through	1,065	937	88.0%	26.9	6.3	C
	Right Turn	125	119	95.2%	7.6	2.3	A
	Subtotal	1,420	1,260	88.7%	32.7	3.8	C
EB	Left Turn	175	176	100.7%	79.2	13.2	E
	Through	285	299	105.0%	36.9	3.9	D
	Right Turn	320	318	99.5%	15.5	3.5	B
	Subtotal	780	794	101.8%	37.9	3.6	D
WB	Left Turn	80	86	107.5%	59.0	7.0	E
	Through	170	153	89.9%	39.9	5.6	D
	Right Turn	180	177	98.1%	20.7	3.1	C
	Subtotal	430	415	96.6%	35.8	4.0	D
Total		4,220	3,893	92.3%	58.7	10.3	E

Intersection 21 **Sierra College Blvd/Office Dwy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	8	80.6%	23.0	17.4	C
	Through	1,533	1,305	85.1%	18.4	7.5	C
	Right Turn						
	Subtotal	1,543	1,313	85.1%	18.4	7.6	C
SB	Left Turn						
	Through	1,480	842	56.9%	43.8	10.6	E
	Right Turn						
	Subtotal	1,480	842	56.9%	43.8	10.6	E
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,023	2,155	71.3%	28.1	6.9	D

City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
 Average Results from 10 Runs
 Volume and Delay by Movement

Loomis Costco DEIR Peer Review
 Cumulative Long Term No Project Conditions
 Weekend MD Peak Hour

Intersection 24 Sierra College Blvd/Commercial Access Dwy Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	52	49	93.8%	122.0	121.3	F
	Through	1,445	1,283	88.8%	8.3	6.6	A
	Right Turn						
	Subtotal	1,497	1,332	89.0%	12.5	10.6	B
SB	Left Turn						
	Through	1,424	791	55.5%	140.0	26.5	F
	Right Turn	56	21	37.7%	241.4	52.3	F
	Subtotal	1,480	812	54.8%	142.6	26.4	F
EB	Left Turn	98	39	40.0%	443.7	150.7	F
	Through						
	Right Turn	90	13	14.1%	433.5	96.3	F
	Subtotal	188	52	27.6%	414.7	98.5	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,165	2,195	69.4%	68.8	11.8	E

City of
 Rocklin-93
 (Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	25	200	35	175	12	1%	0%
	Through	2,600	500	239	850	381	825	401	32%	0%
	Right Turn	200	175	32	250	19	225	0	13%	0%
NB	Left Turn	225	100	32	200	68	200	66	0%	0%
	Through	575	300	37	400	59	425	50	9%	0%
	Right Turn	575	100	25	200	54	200	59	0%	0%
SB	Left Turn	200	75	43	175	95	175	77	0%	0%
	Through	5,000	575	213	975	392	1,075	443	61%	0%
	Right Turn	225	125	57	275	87	225	58	0%	0%
WB	Left Turn	225	225	20	250	24	225	2	48%	0%
	Through	5,325	875	490	1,675	858	1,875	950	2%	0%
	Right Turn	225	25	13	75	18	75	18	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	2,475	650	200	925	279	950	303	0%	0%
	Through	1,275	650	91	875	113	875	103	23%	0%
NB	Through/Right	1,275	725	95	875	129	875	125	0%	0%
	Through	1,275	650	91	875	113	875	103	23%	0%
SB	Left Turn	175	200	0	200	1	200	1	87%	0%
	Through	575	575	62	675	54	650	49	3%	37%
	Through/Right	575	225	41	325	41	325	42	0%	0%
WB	Left Turn	100	125	10	125	8	125	2	71%	0%
	Right Turn	5,000	325	188	500	248	500	215	5%	0%



City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	225	4	225	3	225	0	87%	0%
	Through	4,025	1,425	490	2,275	713	2,200	724	0%	0%
	Right Turn	4,025	525	467	1,200	1,249	1,400	1,278	18%	0%
NB	Left Turn	175	175	11	225	10	200	0	14%	0%
	Through	400	475	51	550	39	525	28	31%	35%
	Right Turn	400	425	68	525	73	525	36	0%	24%
SB	Left Turn	300	100	24	150	59	150	69	0%	0%
	Through	1,275	825	130	1,000	153	1,000	136	52%	2%
	Right Turn	200	125	34	250	46	225	2	0%	0%
WB	Left Turn	175	175	18	225	17	200	6	63%	0%
	Through	3,150	525	417	1,025	495	1,025	434	0%	0%
	Right Turn	175	50	13	100	31	100	33	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
FB	Left Turn	875	50	20	100	33	100	42	0%	0%
	Right Turn	875	75	23	150	49	150	50	0%	0%
NB	Left Turn	150	225	25	275	23	250	1	0%	31%
	Through	1,500	250	57	350	83	375	84	0%	0%
	Right Turn	300	100	18	175	29	175	31	8%	0%
SB	Through	400	450	58	550	47	525	30	0%	40%
	Right Turn	200	75	10	100	20	100	18	0%	0%
WB	Left Turn	800	825	5	825	14	825	12	61%	0%
	Through/Right	6,375	3,475	506	5,325	646	5,325	622	3%	0%
	Right Turn	200	100	24	200	31	200	33	1%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	250	24	350	43	325	37	3%	0%
	Through	1,625	100	48	200	167	250	218	0%	0%
	Right Turn	225	75	21	100	34	125	44	0%	0%
NB	Through	300	225	77	275	99	275	94	0%	6%
	Right Turn	125	25	9	50	21	75	28	0%	0%
SB	Left Turn	225	125	20	200	47	200	40	1%	0%
	Through	1,500	225	50	300	69	325	63	2%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	175	81	250	107	250	91	5%	0%
	Right Turn	3,175	225	134	375	287	350	231	3%	0%

Intersection 11 Sierra College Blvd/Scriber Wy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	100	16	175	32	175	38	1%	0%
	Through/Right	650	50	15	100	49	100	67	0%	0%
NB	Left Turn	125	50	16	100	35	100	45	0%	0%
	Through	350	100	32	175	64	175	67	3%	1%
	Through/Right	350	200	50	300	65	300	65	0%	0%
SB	Through	300	250	69	350	87	350	79	25%	11%
	Right Turn	100	75	28	150	15	125	0	0%	1%
WB	Left/Through	575	25	10	75	21	75	23	0%	0%
	Right Turn	225	50	15	100	36	100	39	0%	0%

City of Rocklin-93 (Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	31	250	16	225	1	43%	0%
	Through	1,350	250	169	450	210	450	220	0%	0%
	Right Turn	1,350	375	80	500	54	500	59	0%	0%
NB	Left Turn	100	125	1	125	2	125	1	76%	0%
	Through	1,700	1,550	137	1,975	135	1,825	50	40%	35%
	Right Turn	75	75	5	75	9	75	2	2%	0%
SB	Left Turn	225	100	16	150	36	150	34	0%	10%
	Through	350	350	69	450	78	425	62	0%	12%
	Right Turn	200	100	13	150	18	150	22	0%	0%
WB	Left Turn	250	150	27	200	39	200	24	0%	0%
	Through	750	100	22	150	45	150	42	2%	0%
	Right Turn	175	25	10	50	34	50	46	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	2,400	750	220	1,400	470	1,650	464	87%	0%
	Right Turn	100	75	17	175	12	125	0	4%	0%
NB	Left Turn	225	50	16	125	55	125	65	0%	0%
	Through	1,625	275	130	575	292	600	275	14%	2%
SB	Through	1,700	100	14	175	30	175	31	0%	0%
	Through/Right	725	125	21	200	45	200	46	0%	0%
0										

City of Rocklin-93 (Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	250	1	250	3	250	0	89%	0%
	Through	2,275	1,025	182	1,425	266	1,475	285	2%	0%
	Right Turn	2,275	650	114	925	189	975	239	0%	0%
NB	Left Turn	225	225	23	300	26	250	26	5%	0%
	Through	9,150	4,200	560	6,200	633	6,375	569	51%	0%
	Through/Right	9,150	4,225	558	6,250	627	6,350	491	0%	0%
SB	Left Turn	250	275	6	275	14	275	0	79%	0%
	Through	1,700	550	134	750	161	725	154	25%	20%
	Right Turn	175	125	29	250	20	200	0	0%	0%
WB	Left Turn	225	225	32	250	12	250	14	60%	0%
	Through	5,000	325	114	475	152	450	140	2%	0%
	Through/Right	5,000	275	89	425	127	425	124	0%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	525	25	22	75	33	50	28	0%	0%
NB	Left Turn	125	25	4	25	14	25	17	0%	0%
	Through	1,400	475	89	625	114	650	101	23%	0%
SB	Through	225	25	47	75	97	75	89	0%	0%
	Through/Right	225	50	58	100	114	100	115	0%	2%
0										



City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Cumulative Long Term No Project Conditions
Weekday PM Peak Hour

Intersection 24

Sierra College Blvd/Commercial Access Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	225	4	250	10	225	6	98%	0%
	Right Turn	1,675	900	148	1,400	111	1,400	145	0%	0%
NB	Left Turn	175	50	14	75	25	75	23	0%	0%
	Through	575	100	66	225	124	225	112	2%	0%
SB	Through	625	175	154	275	213	325	200	0%	0%
	Through/Right	625	225	165	400	207	400	190	0%	2%
0										

City of
Rocklin-93
(Cont.)

Intersection 6 Sierra College Blvd/Taylor Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	75	17	150	30	175	35	0%	0%
	Through	2,600	225	126	475	360	525	363	8%	0%
	Right Turn	200	125	24	225	34	200	17	9%	0%
NB	Left Turn	225	125	27	200	34	200	38	1%	0%
	Through	550	150	32	225	56	225	77	2%	1%
	Right Turn	550	125	34	200	56	200	57	0%	0%
SB	Left Turn	200	50	13	125	46	125	70	0%	0%
	Through	5,275	375	113	700	271	825	251	47%	0%
	Right Turn	225	50	32	175	96	175	96	0%	0%
WB	Left Turn	225	225	17	275	24	225	1	54%	0%
	Through	3,550	725	228	1,600	522	1,925	504	1%	0%
	Right Turn	225	25	6	50	13	50	13	0%	0%

Intersection 7 Sierra College Blvd/Brace Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Right Turn	2,475	575	171	1,075	283	1,150	264	0%	0%
	Through	1,275	475	84	725	116	725	105	7%	0%
NB	Through/Right	1,275	400	81	575	106	575	103	0%	1%
	Left Turn	175	150	19	225	17	200	2	18%	0%
SB	Through	575	375	73	575	80	575	50	10%	6%
	Through/Right	575	475	58	700	52	625	39	0%	24%
WB	Left Turn	100	100	8	125	10	125	1	73%	0%
	Right Turn	5,000	350	185	750	324	800	282	0%	0%

City of Rocklin-93
(Cont.)

Intersection 8 Sierra College Blvd/Granite Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	200	22	250	12	225	1	48%	0%
	Through	4,025	325	183	600	231	550	168	0%	0%
	Right Turn	4,025	125	21	250	51	275	68	7%	0%
NB	Left Turn	175	175	20	225	18	200	0	31%	0%
	Through	400	350	63	425	75	425	62	20%	9%
	Right Turn	400	250	51	375	50	400	38	0%	1%
SB	Left Turn	300	125	42	250	75	275	79	0%	0%
	Through	1,275	1,225	76	1,325	100	1,275	59	77%	32%
	Right Turn	200	150	26	300	25	225	0	0%	0%
WB	Left Turn	175	150	30	200	23	200	14	40%	0%
	Through	3,150	175	111	375	195	425	157	0%	0%
	Right Turn	175	50	16	75	20	75	23	0%	0%

Intersection 9 Sierra College Blvd/Rocklin Commons Dwy-I-80 WB Ramps Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	875	125	52	200	67	175	68	0%	0%
	Right Turn	875	175	34	275	62	250	60	0%	0%
NB	Left Turn	150	250	17	275	19	275	13	0%	47%
	Through	1,500	325	83	475	104	475	96	0%	0%
	Right Turn	300	100	10	150	22	150	24	10%	0%
SB	Through	400	300	162	325	176	325	174	0%	23%
	Right Turn	200	75	6	100	15	100	15	0%	0%
WB	Left Turn	800	825	5	825	12	825	16	51%	0%
	Through/Right	6,375	3,125	532	4,850	669	4,925	701	7%	0%
	Right Turn	200	75	20	150	58	175	54	0%	0%

City of Rocklin-93 (Cont.)

Intersection 10 Sierra College Blvd/I-80 EB Ramps-Rocklin Crossings Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	375	275	26	350	48	350	44	1%	0%
	Through	2,450	150	25	200	60	225	98	1%	0%
	Right Turn	225	50	12	100	36	100	52	0%	0%
NB	Through	300	175	25	200	41	225	36	0%	0%
	Right Turn	125	25	6	50	16	75	20	0%	0%
SB	Left Turn	225	150	25	200	36	200	28	0%	0%
	Through	1,500	125	21	200	40	175	48	0%	0%
	Right Turn	475	25	0	25	0	25	0	0%	0%
WB	Left Turn	375	125	17	200	24	200	28	0%	0%
	Right Turn	3,175	150	27	250	49	250	48	0%	0%

Intersection 11 Sierra College Blvd/Scriber Wy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	75	15	125	44	150	45	1%	0%
	Through/Right	650	50	7	75	11	75	11	0%	0%
NB	Left Turn	125	25	8	50	11	50	15	0%	0%
	Through	350	100	16	175	33	175	35	1%	0%
	Through/Right	350	75	22	150	59	150	71	0%	1%
SB	Through	300	175	26	200	40	225	39	10%	0%
	Right Turn	100	50	14	125	32	125	25	0%	0%
WB	Left/Through	575	25	4	50	12	50	20	0%	0%
	Right Turn	225	50	6	75	15	75	16	0%	0%

City of
Rocklin-93
(Cont.)

Intersection 12 Sierra College Blvd/Dominguez Rd-Bass Pro Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	200	225	17	225	7	225	1	52%	0%
	Through	1,350	375	218	575	248	575	237	0%	0%
	Right Turn	1,350	225	43	350	67	350	69	0%	0%
NB	Left Turn	100	125	1	125	2	125	0	81%	0%
	Through	1,700	625	35	775	75	650	15	37%	89%
	Right Turn	75	75	4	75	5	75	1	2%	0%
SB	Left Turn	225	100	13	150	20	150	25	0%	5%
	Through	350	250	29	350	44	350	44	0%	1%
	Right Turn	200	150	16	225	35	225	38	0%	0%
WB	Left Turn	250	100	35	150	77	150	80	0%	0%
	Through	750	200	33	275	51	275	50	17%	0%
	Right Turn	175	25	13	75	55	75	75	0%	0%

Intersection 13 Sierra College Blvd/Stadium Entrance Dr Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	2,400	125	74	325	197	425	192	30%	0%
	Right Turn	100	50	13	100	29	100	33	0%	0%
NB	Left Turn	225	75	26	175	75	200	79	0%	0%
	Through	1,625	325	100	750	206	825	160	39%	8%
SB	Through	1,700	75	15	100	31	125	34	0%	0%
	Through/Right	725	75	18	125	32	125	30	0%	0%
0										

City of Rocklin-93
(Cont.)

Intersection 14 Sierra College Blvd/Rocklin Rd Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	200	21	275	21	250	10	9%	0%
	Through	2,275	125	29	200	75	200	90	0%	0%
	Right Turn	2,275	125	25	200	37	200	40	0%	0%
NB	Left Turn	225	200	19	300	29	250	30	0%	0%
	Through	9,150	850	221	1,100	292	1,075	293	51%	0%
	Through/Right	9,150	825	222	1,100	318	1,075	308	0%	0%
SB	Left Turn	250	200	36	275	40	250	29	14%	0%
	Through	1,700	200	41	325	91	325	67	10%	0%
	Right Turn	175	75	41	175	61	175	42	0%	0%
WB	Left Turn	225	100	21	150	40	150	36	0%	0%
	Through	5,000	125	14	175	27	175	29	0%	0%
	Through/Right	5,000	100	18	175	32	175	33	0%	0%

Intersection 21 Sierra College Blvd/Office Dwy Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	125	25	2	25	10	25	13	0%	0%
	Through	1,400	150	79	325	138	350	131	2%	1%
SB	Through	225	200	28	300	48	250	19	0%	32%
	Through/Right	225	225	18	275	41	250	20	0%	58%
EB	Right Turn	575	25	0	25	0	25	0	0%	0%
0										



City of Rocklin-93 (Cont.)

SimTraffic Post-Processor
Average Results from 10 Runs
Queue Length

Loomis Costco DEIR Peer Review
Cumulative Long Term No Project Conditions
Weekend MD Peak Hour

Intersection 24

Sierra College Blvd/Commercial Access Dwy

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	200	38	250	20	225	7	71%	0%
	Right Turn	1,675	675	200	1,075	290	1,100	245	31%	0%
NB	Left Turn	175	75	38	125	48	125	41	6%	0%
	Through	575	150	111	250	176	225	152	7%	0%
SB	Through	625	625	66	700	87	675	44	0%	32%
	Through/Right	625	625	23	700	49	675	24	0%	58%
0										

City of
Rocklin-93
(Cont.)