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## Appendix F Noise Data

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File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Santa Ana Blvd E of Ross St  
 Note 1: Road Traffic  
 Note 2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 10:39:27  
 Elapsed Time: 00:15:00.0  
 Leq: 65.3 dBA  
 SEL: 94.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.33 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 10:39:27  
 Elapsed Time: 00:15:00.0  
 Leq: 65.3 dBA  
 SEL: 94.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.33 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 47.3 dBA 05-Jan-2010 10:50:54  
 Max: 78.8 dBA 05-Jan-2010 10:42:30  
 Peak-1: 97.3 dB 05-Jan-2010 10:50:25  
 Peak-2: 94.5 dBA 05-Jan-2010 10:49:50

L 1.67 74.7 dBA L 50.00 55.3 dBA  
 L 8.33 70.9 dBA L 66.67 52.7 dBA  
 L 33.33 61.6 dBA L 90.00 49.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free

Battery Level: 94% Source: INT

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Main St and Third St  
 Note 1: Road Traffic  
 Note 2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 11:04:32  
 Elapsed Time: 00:15:00.0  
 Leq: 71.9 dBA  
 SEL: 101.5 dBA  
 Dose: 0.00 %  
 Proj. Dose: 1.57 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 11:04:32  
 Elapsed Time: 00:15:00.0  
 Leq: 71.9 dBA  
 SEL: 101.5 dBA  
 Dose: 0.00 %  
 Proj. Dose: 1.57 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 54.8 dBA 05-Jan-2010 11:13:44  
 Max: 90.2 dBA 05-Jan-2010 11:04:58  
 Peak-1: 113.1 dB 05-Jan-2010 11:04:58  
 Peak-2: 100.3 dBA 05-Jan-2010 11:04:58

L 1.67 78.9 dBA L 50.00 68.6 dBA  
 L 8.33 75.4 dBA L 66.67 65.2 dBA  
 L 33.33 70.7 dBA L 90.00 60.3 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free

Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Spurgeon St, between Santa Ana Blvd and Civic Center Dr  
 Note1: Road Traffic  
 Note2:  
 Octave Filters: None

**Overall Measurement**  
 Start Time: 05-Jan-2010 11:27:27  
 Elapsed Time: 00:15:00.0  
 Leq: 59.0 dBA  
 SEL: 88.5 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.07 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

**Current Measurement**  
 Start Time: 05-Jan-2010 11:27:27  
 Elapsed Time: 00:15:00.0  
 Leq: 59.0 dBA  
 SEL: 88.5 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.07 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 49.2 dBA 05-Jan-2010 11:32:04  
 Max: 70.9 dBA 05-Jan-2010 11:34:41  
 Peak-1: 95.2 dBF 05-Jan-2010 11:33:47  
 Peak-2: 85.5 dBA 05-Jan-2010 11:41:57

L 1.67 66.5 dBA L 50.00 56.8 dBA  
 L 8.33 62.4 dBA L 66.67 55.0 dBA  
 L 33.33 58.4 dBA L 90.00 51.5 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:53  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free

Battery Level: 94% Source: INT

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 1200 Block French St  
 Note1: Road Traffic  
 Note2:  
 Octave Filters: None

**Overall Measurement**  
 Start Time: 05-Jan-2010 12:23:27  
 Elapsed Time: 00:15:00.0  
 Leq: 57.5 dBA  
 SEL: 87.1 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

**Current Measurement**  
 Start Time: 05-Jan-2010 12:23:27  
 Elapsed Time: 00:15:00.0  
 Leq: 57.5 dBA  
 SEL: 87.1 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 39.9 dBA 05-Jan-2010 12:32:41  
 Max: 77.6 dBA 05-Jan-2010 12:26:08  
 Peak-1: 105.1 dBF 05-Jan-2010 12:26:08  
 Peak-2: 103.3 dBA 05-Jan-2010 12:26:08

L 1.67 69.1 dBA L 50.00 45.1 dBA  
 L 8.33 60.2 dBA L 66.67 43.7 dBA  
 L 33.33 48.0 dBA L 90.00 42.1 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:53  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free

Battery Level: 95% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 700 Block, 2nd St  
 Note1: Road Traffic  
 Note2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 12:47:44  
 Elapsed Time: 00:15:00.0  
 Leq: 54.2 dBA  
 SEL: 83.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 12:47:44  
 Elapsed Time: 00:15:00.0  
 Leq: 54.2 dBA  
 SEL: 83.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 44.2 dBA 05-Jan-2010 12:57:21  
 Max: 71.7 dBA 05-Jan-2010 12:52:23  
 Peak-1: 100.2 dBF 05-Jan-2010 12:52:22  
 Peak-2: 86.2 dBA 05-Jan-2010 12:53:14

L 1.67 62.3 dBA L 50.00 49.6 dBA  
 L 8.33 58.3 dBA L 66.67 48.6 dBA  
 L 33.33 51.4 dBA L 90.00 46.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:53  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Number Interval Records: 1  
 Number History Records: 18

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Lacy St and 5th St  
 Note1: Music  
 Note2: Road Traffic  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 13:09:46  
 Elapsed Time: 00:15:00.0  
 Leq: 56.2 dBA  
 SEL: 85.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 13:09:46  
 Elapsed Time: 00:15:00.0  
 Leq: 56.2 dBA  
 SEL: 85.8 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 44.8 dBA 05-Jan-2010 13:22:23  
 Max: 66.1 dBA 05-Jan-2010 13:17:39  
 Peak-1: 91.9 dBF 05-Jan-2010 13:14:53  
 Peak-2: 83.9 dBA 05-Jan-2010 13:14:53

L 1.67 63.0 dBA L 50.00 54.6 dBA  
 L 8.33 60.1 dBA L 66.67 52.7 dBA  
 L 33.33 56.0 dBA L 90.00 48.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:53  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 95% Source: INT

Number Interval Records: 1  
 Number History Records: 18

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 6th St and Santiago St  
 Note1: Road Traffic  
 Note2: Truck Yard  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 13:30:27  
 Elapsed Time: 00:15:00.0  
 Leq: 68.5 dBA  
 SEL: 98.1 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.71 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 13:30:27  
 Elapsed Time: 00:15:00.0  
 Leq: 68.5 dBA  
 SEL: 98.1 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.71 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 55.3 dBA 05-Jan-2010 13:35:24  
 Max: 85.4 dBA 05-Jan-2010 13:30:27  
 Peak-1: 105.8 dBF 05-Jan-2010 13:40:11  
 Peak-2: 97.5 dBA 05-Jan-2010 13:43:55

L 1.67 77.3 dBA L 50.00 64.7 dBA  
 L 8.33 72.3 dBA L 66.67 63.5 dBA  
 L 33.33 66.4 dBA L 90.00 60.8 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Rail Station Platform  
 Note1: Trains  
 Note2: Road Traffic  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 13:55:34  
 Elapsed Time: 00:15:00.0  
 Leq: 77.0 dBA  
 SEL: 106.5 dBA  
 Dose: 0.15 %  
 Proj. Dose: 4.96 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 13:55:34  
 Elapsed Time: 00:15:00.0  
 Leq: 77.0 dBA  
 SEL: 106.5 dBA  
 Dose: 0.15 %  
 Proj. Dose: 4.96 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 49.3 dBA 05-Jan-2010 14:09:49  
 Max: 98.3 dBA 05-Jan-2010 13:57:54  
 Peak-1: 115.0 dBF 05-Jan-2010 13:57:54  
 Peak-2: 113.5 dBA 05-Jan-2010 13:57:54

L 1.67 88.7 dBA L 50.00 55.4 dBA  
 L 8.33 77.8 dBA L 66.67 53.5 dBA  
 L 33.33 60.7 dBA L 90.00 51.4 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 700 Block Eastwood Ave  
 Note1: Road Traffic  
 Note2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 14:19:05  
 Elapsed Time: 00:15:00.0  
 Leq: 52.9 dBA  
 SEL: 82.4 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 14:19:05  
 Elapsed Time: 00:15:00.0  
 Leq: 52.9 dBA  
 SEL: 82.4 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.00 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 46.1 dBA 05-Jan-2010 14:21:18  
 Max: 63.7 dBA 05-Jan-2010 14:23:25  
 Peak-1: 92.7 dBF 05-Jan-2010 14:23:44  
 Peak-2: 90.6 dBA 05-Jan-2010 14:19:43

L 1.67 60.6 dBA L 50.00 50.7 dBA  
 L 8.33 56.2 dBA L 66.67 49.8 dBA  
 L 33.33 51.8 dBA L 90.00 48.4 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

Number Interval Records: 1  
 Number History Records: 18

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 2nd St between Grand Ave and Hathaway St  
 Note1: Road Traffic  
 Note2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 14:52:27  
 Elapsed Time: 00:15:00.0  
 Leq: 58.8 dBA  
 SEL: 88.4 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.07 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 14:52:27  
 Elapsed Time: 00:15:00.0  
 Leq: 58.8 dBA  
 SEL: 88.4 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.07 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 48.4 dBA 05-Jan-2010 15:06:52  
 Max: 77.3 dBA 05-Jan-2010 14:58:37  
 Peak-1: 99.6 dBF 05-Jan-2010 14:58:37  
 Peak-2: 100.5 dBA 05-Jan-2010 14:58:37

L 1.67 66.7 dBA L 50.00 56.1 dBA  
 L 8.33 61.7 dBA L 66.67 54.3 dBA  
 L 33.33 57.7 dBA L 90.00 51.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

Number Interval Records: 1  
 Number History Records: 18

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: Logan St south of I-5 Freeway  
 Note1: Freeway Traffic  
 Note2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 15:18:13  
 Elapsed Time: 00:15:00.0  
 Leq: 74.0 dBA  
 SEL: 103.6 dBA  
 Dose: 0.07 %  
 Proj. Dose: 2.52 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 15:18:13  
 Elapsed Time: 00:15:00.0  
 Leq: 74.0 dBA  
 SEL: 103.6 dBA  
 Dose: 0.07 %  
 Proj. Dose: 2.52 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 71.0 dBA 05-Jan-2010 15:19:38  
 Max: 77.6 dBA 05-Jan-2010 15:25:44  
 Peak-1: 98.7 dBF 05-Jan-2010 15:25:43  
 Peak-2: 94.1 dBA 05-Jan-2010 15:25:43

L 1.67 76.0 dBA L 50.00 73.8 dBA  
 L 8.33 75.1 dBA L 66.67 73.5 dBA  
 L 33.33 74.2 dBA L 90.00 72.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB

File Translated: P:\Projects - All Users\0D21200004\0D2136700 Santa Ana Renaissance SP EIR\Noise\Monitoring Results\1-5-1  
 Model/Serial Number: 814 / A0174  
 Firmware/Software Revs: 1.026 / 1.07  
 Name: PBS&J/EJP  
 Descr1: 12301 Wilshire Blvd., Ste. 430  
 Descr2: Los Angeles, CA 90025  
 Setup/Setup Descr: 15minute.slm / 15 Minute  
 Location: 1400 Block Hathaway St  
 Note1: Freeway Noise  
 Note2:  
 Octave Filters: None

Overall Measurement  
 Start Time: 05-Jan-2010 15:39:51  
 Elapsed Time: 00:15:00.0  
 Leq: 60.8 dBA  
 SEL: 90.3 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.11 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Current Measurement  
 Start Time: 05-Jan-2010 15:39:51  
 Elapsed Time: 00:15:00.0  
 Leq: 60.8 dBA  
 SEL: 90.3 dBA  
 Dose: 0.00 %  
 Proj. Dose: 0.11 %  
 Threshold: 0 dB  
 Criterion: 90 dB  
 Exchange Rate: 3 dB

Min: 58.3 dBA 05-Jan-2010 15:49:04  
 Max: 65.9 dBA 05-Jan-2010 15:50:42  
 Peak-1: 98.4 dBF 05-Jan-2010 15:53:32  
 Peak-2: 94.5 dBA 05-Jan-2010 15:50:42

L 1.67 62.4 dBA L 50.00 60.6 dBA  
 L 8.33 61.6 dBA L 66.67 60.3 dBA  
 L 33.33 60.9 dBA L 90.00 59.7 dBA

Detector: Slow  
 Weighting: A  
 SPL Exceedance Level 1: 115.00 Exceeded: 0 times  
 SPL Exceedance level 2: 120 Exceeded: 0 times  
 Peak-1 Exceedance Level: 140 Exceeded: 0 times  
 Peak-2 Exceedance Level: 140 Exceeded: 0 times  
 Hysteresis: 2  
 Overloaded: 0 times(s)  
 Paused: 0 times for 00:00:00.0

Calibrated: 08-Oct-2009 12:23:33  
 Checked: 05-Jan-2010 09:49:14  
 Calibrator LD 0504  
 Cal Records Count: 0

Interval Records: Enabled  
 History Records: Disabled  
 Number Interval Records: 1  
 Number History Records: 18

814 Memory: 524288 bytes  
 Free Memory: 418207 bytes 79.77% free  
 Battery Level: 94% Source: INT

Offset: 8.8 dB  
 Level: 113.80 dB  
 Level: 114.0 dB



1/5/10 Santa Ana Noise Monitoring

Clear, sunny

- ① Santa Ana Blvd East of Ross St  
Start: 9:58 am 10:40 am  
Stop: 10:13 am 11:55 am  
Primary: Traffic on Santa Ana Blvd
- ② Main St and Thiers St  
Start: 11:05 am  
Stop: 11:20 am  
Primary: Traffic on Main St
- ③ Ferguson St between Santa Ana Blvd + Civil Center Dr  
Start: 11:38 am  
Stop: 11:43  
Primary: Street traffic
- ④ 1200 Block French St  
Start: 12:24 pm  
Stop: 12:39 pm  
Primary: Traffic on French
- ⑤ 700 Block East St  
Start: 12:48 pm  
Stop: 1:03 pm  
Primary: Road traffic
- ⑥ Lucy St + 5th St  
Start: 1:10 pm  
Stop: 1:25 pm  
Primary: Music, Road traffic
- ⑦ 6th St + Santiago St  
Start: 1:31 pm  
Stop: 1:46 pm  
Primary: Traffic, Truck yard <sup>on 6th</sup>
- ⑧ Rail Station Parking lot Platform  
Start: 1:56 pm  
Stop: 2:11 pm  
Primary: Trains, Road traffic
- ⑨ 700 Block Eastwood Ave  
Start: 2:19 pm  
Stop: 2:34 pm  
Primary: Traffic on Eastwood

- ⑩ 2nd ~~14th~~ St between Canal Street + ~~French St~~ <sup>Hathaway</sup>  
Start: 2:53 pm  
Stop: 3:09 pm  
Primary: Traffic on Canal
- ⑪ Logan St, South of I-5 Freeway  
Start: 3:18 pm  
Stop: 3:33 pm  
Primary: Freeway Traffic
- ⑫ 1400 Block Hathaway St  
Start: 3:40 pm  
Stop: 3:55 pm  
Primary: Freeway Traffic

**TRAFFIC NOISE LEVELS**

**Project Number:** 0D2136700  
**Project Name:** Santa Ana Renaissance SP EIR

**Background Information**

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): Existing Daily Traffic Volumes  
 Source of Traffic Volumes: KOA  
 Community Noise Descriptor:  $L_{50}$ : \_\_\_\_\_ CNEL:  X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

**Traffic Noise Levels**

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) $L_{50}$	24-Hour dB(A) CNEL
<b>Analysis Condition</b>													
Flower Street - Santa Ana Blvd to Civic Center Dr		4	0	0	17,950	35	50	0	0	1.8%	0.7%	0.0	67.6
Flower Street - 17th St to Civic Center Dr		4	0	0	17,470	35	50	0	0	1.8%	0.7%	0.0	67.5
Civic Center Dr - West of Flower St		4	0	0	17,912	35	50	0	0	1.8%	0.7%	0.0	67.6
Civic Center Dr - Flower St to Ross St		4	0	0	16,943	35	50	0	0	1.8%	0.7%	0.0	67.3
Flower Street - Santa Ana Blvd to 1st St		4	0	0	18,152	35	50	0	0	1.8%	0.7%	0.0	67.6
Santa Ana Blvd - West of Flower St		4	0	0	10,068	30	50	0	0	1.8%	0.7%	0.0	63.8
Santa Ana Blvd - Flower St to Parton St		4	0	0	12,363	30	50	0	0	1.8%	0.7%	0.0	64.7
Santa Ana Blvd - Parton St to Ross St		4	0	0	12,363	30	50	0	0	1.8%	0.7%	0.0	64.7
Civic Center Dr - Ross St to Broadway		4	0	0	15,024	35	50	0	0	1.8%	0.7%	0.0	66.8
Santa Ana Blvd - Ross St to Broadway		3	0	0	12,000	30	50	0	0	1.8%	0.7%	0.0	64.4
Broadway - Civic Center Dr to Santa Ana Blvd		4	0	0	18,453	35	50	0	0	1.8%	0.7%	0.0	67.7
Broadway - Civic Center Dr to Washington Ave		4	0	0	23,755	35	50	0	0	1.8%	0.7%	0.0	68.8
Civic Center Dr - Broadway to Sycamore St		4	0	0	14,602	35	50	0	0	1.8%	0.7%	0.0	66.7
Broadway - Santa Ana Blvd to 5th St		4	0	0	15,994	35	50	0	0	1.8%	0.7%	0.0	67.1
Santa Ana Blvd - Broadway to Sycamore St		3	0	0	10,055	30	50	0	0	1.8%	0.7%	0.0	63.6
Broadway - 5th St to 4th St		4	0	0	15,755	35	50	0	0	1.8%	0.7%	0.0	67.0
5th St - Broadway to Ross St		3	0	0	8,166	25	50	0	0	1.8%	0.7%	0.0	61.0
5th St - Broadway to Main St		3	0	0	8,166	25	50	0	0	1.8%	0.7%	0.0	61.0
Broadway - 3rd St to 4th St		4	0	0	15,755	35	50	0	0	1.8%	0.7%	0.0	67.0

Traffic Noise Levels\_Existing.xls

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1/21/2010

Broadway - 3rd St to 1st St		4	0	0	15,755	35	50	0	0	1.8%	0.7%	0.0	67.0
Broadway - South of 1st St		4	0	0	11,180	35	50	0	0	1.8%	0.7%	0.0	65.5
1st St - Broadway to Ross St		6	14	0	38,541	40	50	0	0	1.8%	0.7%	0.0	73.8
1st St - Main St to Broadway		6	14	0	37,162	40	50	0	0	1.8%	0.7%	0.0	73.6
Civic Center Dr - Sycamore St to Main St		4	0	0	14,602	35	50	0	0	1.8%	0.7%	0.0	66.7
Santa Ana Blvd - Sycamore St to Main St		3	0	0	10,055	30	50	0	0	1.8%	0.7%	0.0	63.6
5th St - Sycamore St to Broadway		3	0	0	8,166	25	50	0	0	1.8%	0.7%	0.0	61.0
5th St - Sycamore St to Main St		3	0	0	8,166	25	50	0	0	1.8%	0.7%	0.0	61.0
Main St - Civic Center Dr to Santa Ana Blvd		4	0	0	31,571	30	50	0	0	1.8%	0.7%	0.0	68.7
Main St - Civic Center Dr to Washington Ave		4	0	0	32,104	30	50	0	0	1.8%	0.7%	0.0	68.8
Civic Center Dr - Main St to Bush St		4	0	0	11,483	35	50	0	0	1.8%	0.7%	0.0	65.6
Main St - Santa Ana Blvd to 5th St		4	0	0	31,571	30	50	0	0	1.8%	0.7%	0.0	68.7
Santa Ana Blvd - Main St to Bush St		3	0	0	10,094	30	50	0	0	1.8%	0.7%	0.0	63.6
Main St - 5th St to 4th St		4	0	0	31,571	30	50	0	0	1.8%	0.7%	0.0	68.7
5th St - Main St to Bush St		3	0	0	5,881	25	50	0	0	1.8%	0.7%	0.0	59.5
Main St - 3rd St to 4th St		4	0	0	27,791	30	50	0	0	1.8%	0.7%	0.0	68.2
Main St - 1st St to 3rd St		4	0	0	27,791	30	50	0	0	1.8%	0.7%	0.0	68.2
Santa Ana Blvd - Bush St to Spurgeon St		3	0	0	10,094	30	50	0	0	1.8%	0.7%	0.0	63.6
5th St - Bush St to French St		2	0	0	5,881	25	50	0	0	1.8%	0.7%	0.0	59.4
1st St - Spurgeon St to Main St		6	14	0	37,667	40	50	0	0	1.8%	0.7%	0.0	73.7
Santa Ana Blvd - Lacy St to Standard Ave		4	0	0	14,350	30	50	0	0	1.8%	0.7%	0.0	65.3
Civic Center Dr - French St to Lacy St		4	0	0	11,483	35	50	0	0	1.8%	0.7%	0.0	65.6
Santa Ana Blvd - Lacy St to French St		2	0	0	14,350	30	50	0	0	1.8%	0.7%	0.0	65.0
4th St - Lacy St to French St		2	0	0	11,974	25	50	0	0	1.8%	0.7%	0.0	62.5
1st St - Lacy St to Spurgeon St		6	14	0	37,667	40	50	0	0	1.8%	0.7%	0.0	73.7
1st St - Lacy St to Standard Ave		6	14	0	37,667	40	50	0	0	1.8%	0.7%	0.0	73.7
Santiago St - Washington Ave to Civic Center Dr		2	0	0	9,931	35	50	0	0	1.8%	0.7%	0.0	64.7
Santiago St - Washington Ave to 17th St		2	0	0	9,527	35	50	0	0	1.8%	0.7%	0.0	64.6
Santiago St - Santa Ana Blvd to Civic Center Dr		2	0	0	9,044	35	50	0	0	1.8%	0.7%	0.0	64.3
Civic Center Dr - Santiago St to Lacy St		2	0	0	11,910	35	50	0	0	1.8%	0.7%	0.0	65.5
Civic Center Dr - Lincoln Ave to Santiago St		2	0	0	11,483	35	50	0	0	1.8%	0.7%	0.0	65.4
Santiago St - Santa Ana Blvd to Brown St		2	0	0	6,751	35	50	0	0	1.8%	0.7%	0.0	63.1
Santa Ana Blvd - Santiago St to Lacy St		4	0	0	14,350	30	50	0	0	1.8%	0.7%	0.0	65.3
Santa Ana Blvd - Santiago St to U-24		6	14	0	19,413	30	50	0	0	1.8%	0.7%	0.0	68.0
4th St - Santiago St to Lacy St		4	0	0	17,626	25	50	0	0	1.8%	0.7%	0.0	64.5
Grand Ave - 4th St to Santa Ana Blvd		4	0	0	36,377	40	50	0	0	1.8%	0.7%	0.0	72.1
Grand Ave - Santa Ana Blvd to 17th St		4	0	0	31,111	40	50	0	0	1.8%	0.7%	0.0	71.4
Santa Ana Blvd - East of Grand Ave		4	10	0	7,660	30	50	0	0	1.8%	0.7%	0.0	62.8
Grand Ave - 1st St to 4th St		4	0	0	31,391	40	50	0	0	1.8%	0.7%	0.0	71.5
4th St - Grand Ave to Santiago St		4	0	0	17,626	25	50	0	0	1.8%	0.7%	0.0	64.5
4th St - East of Grand Ave		4	0	0	19,984	25	50	0	0	1.8%	0.7%	0.0	65.0
Grand Ave - South of 1st St		4	0	0	39,273	40	50	0	0	1.8%	0.7%	0.0	72.4
1st St - Standard Ave to Grand Ave		6	14	0	39,273	40	50	0	0	1.8%	0.7%	0.0	73.8
1st St - East of Grand Ave		6	14	0	36,393	40	50	0	0	1.8%	0.7%	0.0	73.5
Penn Way - South of I-5 SB Ramps		2	0	0	8,000	35	50	0	0	1.8%	0.7%	0.0	63.8

Traffic Noise Levels\_Existing.xls

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1/21/2010

Penn Way - North of I-5 SB Ramps	4	0	0	14,000	35	50	0	0	1.8%	0.7%	0.0	66.5
Santa Ana Blvd - West of I-5 SB Ramps	4	14	0	36,200	30	50	0	0	1.8%	0.7%	0.0	69.7
Santa Ana Blvd - East of I-5 SB Ramps	4	14	0	23,000	30	50	0	0	1.8%	0.7%	0.0	67.7
17th St - West of I-5 NB Ramps	6	14	0	44,504	40	50	0	0	1.8%	0.7%	0.0	74.4
17th St - East of I-5 NB Ramps	6	14	0	35,341	40	50	0	0	1.8%	0.7%	0.0	73.4
Grand Ave - South of I-5 NB Ramps	4	0	0	45,235	40	50	0	0	1.8%	0.7%	0.0	73.0
Grand Ave - North of I-5 NB Ramps	4	0	0	42,211	40	50	0	0	1.8%	0.7%	0.0	72.7

<sup>1</sup> Distance is from the centerline of the roadway segment to the receptor location.

## TRAFFIC NOISE LEVELS

**Project Number:** 0D2136700  
**Project Name:** Santa Ana Renaissance SP EIR

### Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): 2030 Without Project Daily Traffic Volumes  
 Source of Traffic Volumes: KOA  
 Community Noise Descriptor:  $L_{95}$ : \_\_\_\_\_ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

### Traffic Noise Levels

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor <sup>1</sup>	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour $L_{95}$ dB(A)	24-Hour CNEL dB(A)
Flower Street - Santa Ana Blvd to Civic Center Dr		4	0	0	20,606	35	50	0	0	1.8%	0.7%	0.0	68.2
Flower Street - 17th St to Civic Center Dr		4	0	0	19,312	35	50	0	0	1.8%	0.7%	0.0	67.9
Civic Center Dr - West of Flower St		4	0	0	20,065	35	50	0	0	1.8%	0.7%	0.0	68.1
Civic Center Dr - Flower St to Ross St		4	0	0	18,993	35	50	0	0	1.8%	0.7%	0.0	67.8
Flower Street - Santa Ana Blvd to 1st St		4	0	0	20,739	35	50	0	0	1.8%	0.7%	0.0	68.2
Santa Ana Blvd - West of Flower St		4	0	0	11,075	30	50	0	0	1.8%	0.7%	0.0	64.2
Santa Ana Blvd - Flower St to Parton St		4	0	0	13,704	30	50	0	0	1.8%	0.7%	0.0	65.1
Santa Ana Blvd - Parton St to Ross St		4	0	0	13,704	30	50	0	0	1.8%	0.7%	0.0	65.1
Civic Center Dr - Ross St to Broadway		4	0	0	17,380	35	50	0	0	1.8%	0.7%	0.0	67.4
Santa Ana Blvd - Ross St to Broadway		3	0	0	13,704	30	50	0	0	1.8%	0.7%	0.0	64.9
Broadway - Civic Center Dr to Santa Ana Blvd		4	0	0	21,230	35	50	0	0	1.8%	0.7%	0.0	68.3
Broadway - Civic Center Dr to Washington Ave		4	0	0	27,580	35	50	0	0	1.8%	0.7%	0.0	69.4
Civic Center Dr - Broadway to Sycamore St		4	0	0	16,974	35	50	0	0	1.8%	0.7%	0.0	67.3
Broadway - Santa Ana Blvd to 5th St		4	0	0	18,029	35	50	0	0	1.8%	0.7%	0.0	67.6
Santa Ana Blvd - Broadway to Sycamore St		3	0	0	11,716	30	50	0	0	1.8%	0.7%	0.0	64.3
Broadway - 5th St to 4th St		4	0	0	17,916	35	50	0	0	1.8%	0.7%	0.0	67.6
5th St - Broadway to Ross St		3	0	0	9,017	25	50	0	0	1.8%	0.7%	0.0	61.4
5th St - Broadway to Main St		3	0	0	9,017	25	50	0	0	1.8%	0.7%	0.0	61.4
Broadway - 3rd St to 4th St		4	0	0	17,537	35	50	0	0	1.8%	0.7%	0.0	67.5

Broadway - 3rd St to 1st St	4	0	0	17,799	35	50	0	0	1.8%	0.7%	0.0	67.5
Broadway - South of 1st St	4	0	0	13,732	35	50	0	0	1.8%	0.7%	0.0	66.4
1st St - Broadway to Ross St	6	14	0	44,751	40	50	0	0	1.8%	0.7%	0.0	74.4
1st St - Main St to Broadway	6	14	0	46,020	40	50	0	0	1.8%	0.7%	0.0	74.5
Civic Center Dr - Sycamore St to Main St	4	0	0	16,142	35	50	0	0	1.8%	0.7%	0.0	67.1
Santa Ana Blvd - Sycamore St to Main St	3	0	0	11,342	30	50	0	0	1.8%	0.7%	0.0	64.1
5th St - Sycamore St to Broadway	3	0	0	9,023	25	50	0	0	1.8%	0.7%	0.0	61.4
5th St - Sycamore St to Main St	3	0	0	9,229	25	50	0	0	1.8%	0.7%	0.0	61.5
Main St - Civic Center Dr to Santa Ana Blvd	4	0	0	35,475	30	50	0	0	1.8%	0.7%	0.0	69.2
Main St - Civic Center Dr to Washington Ave	4	0	0	36,653	30	50	0	0	1.8%	0.7%	0.0	69.4
Civic Center Dr - Main St to Bush St	4	0	0	12,756	35	50	0	0	1.8%	0.7%	0.0	66.1
Main St - Santa Ana Blvd to 5th St	4	0	0	37,204	30	50	0	0	1.8%	0.7%	0.0	69.4
Santa Ana Blvd - Main St to Bush St	3	0	0	11,378	30	50	0	0	1.8%	0.7%	0.0	64.1
Main St - 5th St to 4th St	4	0	0	37,179	30	50	0	0	1.8%	0.7%	0.0	69.4
5th St - Main St to Bush St	3	0	0	6,729	25	50	0	0	1.8%	0.7%	0.0	60.1
Main St - 3rd St to 4th St	4	0	0	32,491	30	50	0	0	1.8%	0.7%	0.0	68.9
Main St - 1st St to 3rd St	4	0	0	32,491	30	50	0	0	1.8%	0.7%	0.0	68.9
Santa Ana Blvd - Bush St to Spurgeon St	3	0	0	11,294	30	50	0	0	1.8%	0.7%	0.0	64.1
5th St - Bush St to French St	2	0	0	6,538	25	50	0	0	1.8%	0.7%	0.0	59.9
1st St - Spurgeon St to Main St	6	14	0	42,436	40	50	0	0	1.8%	0.7%	0.0	74.2
Santa Ana Blvd - Lacy St to Standard Ave	4	0	0	16,188	30	50	0	0	1.8%	0.7%	0.0	65.8
Civic Center Dr - French St to Lacy St	4	0	0	14,027	35	50	0	0	1.8%	0.7%	0.0	66.5
Santa Ana Blvd - Lacy St to French St	2	0	0	16,199	30	50	0	0	1.8%	0.7%	0.0	65.6
4th St - Lacy St to French St	2	0	0	13,171	25	50	0	0	1.8%	0.7%	0.0	62.9
1st St - Lacy St to Spurgeon St	6	14	0	42,984	40	50	0	0	1.8%	0.7%	0.0	74.2
1st St - Lacy St to Standard Ave	6	14	0	42,984	40	50	0	0	1.8%	0.7%	0.0	74.2
Santiago St - Washington Ave to Civic Center Dr	2	0	0	11,475	35	50	0	0	1.8%	0.7%	0.0	65.4
Santiago St - Washington Ave to 17th St	2	0	0	11,031	35	50	0	0	1.8%	0.7%	0.0	65.2
Santiago St - Santa Ana Blvd to Civic Center Dr	2	0	0	11,126	35	50	0	0	1.8%	0.7%	0.0	65.2
Civic Center Dr - Santiago St to Lacy St	2	0	0	13,373	35	50	0	0	1.8%	0.7%	0.0	66.0
Civic Center Dr - Lincoln Ave to Santiago St	2	0	0	13,320	35	50	0	0	1.8%	0.7%	0.0	66.0
Santiago St - Santa Ana Blvd to Brown St	2	0	0	7,426	35	50	0	0	1.8%	0.7%	0.0	63.5
Santa Ana Blvd - Santiago St to Lacy St	4	0	0	16,429	30	50	0	0	1.8%	0.7%	0.0	65.9
Santa Ana Blvd - Santiago St to U-24	6	14	0	22,625	30	50	0	0	1.8%	0.7%	0.0	68.7
4th St - Santiago St to Lacy St	4	0	0	19,389	25	50	0	0	1.8%	0.7%	0.0	64.9
Grand Ave - 4th St to Santa Ana Blvd	4	0	0	41,729	40	50	0	0	1.8%	0.7%	0.0	72.7
Grand Ave - Santa Ana Blvd to 17th St	4	0	0	36,191	40	50	0	0	1.8%	0.7%	0.0	72.1
Santa Ana Blvd - East of Grand Ave	4	10	0	8,908	30	50	0	0	1.8%	0.7%	0.0	63.5
Grand Ave - 1st St to 4th St	4	0	0	35,290	40	50	0	0	1.8%	0.7%	0.0	72.0
4th St - Grand Ave to Santiago St	4	0	0	19,769	25	50	0	0	1.8%	0.7%	0.0	65.0
4th St - East of Grand Ave	4	0	0	22,742	25	50	0	0	1.8%	0.7%	0.0	65.6
Grand Ave - South of 1st St	4	0	0	45,394	40	50	0	0	1.8%	0.7%	0.0	73.1
1st St - Standard Ave to Grand Ave	6	14	0	44,898	40	50	0	0	1.8%	0.7%	0.0	74.4
1st St - East of Grand Ave	6	14	0	40,076	40	50	0	0	1.8%	0.7%	0.0	73.9
Penn Way - South of I-5 SB Ramps	2	0	0	9,489	35	50	0	0	1.8%	0.7%	0.0	64.5

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Penn Way - North of I-5 SB Ramps	4	0	0	15,452	35	50	0	0	1.8%	0.7%	0.0	66.9
Santa Ana Blvd - West of I-5 SB Ramps	4	14	0	40,061	30	50	0	0	1.8%	0.7%	0.0	70.1
Santa Ana Blvd - East of I-5 SB Ramps	4	14	0	25,782	30	50	0	0	1.8%	0.7%	0.0	68.2
17th St - West of I-5 NB Ramps	6	14	0	48,954	40	50	0	0	1.8%	0.7%	0.0	74.8
17th St - East of I-5 NB Ramps	6	14	0	38,875	40	50	0	0	1.8%	0.7%	0.0	73.8
Grand Ave - South of I-5 NB Ramps	4	0	0	50,241	40	50	0	0	1.8%	0.7%	0.0	73.5
Grand Ave - North of I-5 NB Ramps	4	0	0	46,432	40	50	0	0	1.8%	0.7%	0.0	73.2

<sup>1</sup> Distance is from the centerline of the roadway segment to the receptor location.

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**TRAFFIC NOISE LEVELS**

Project Number: OD2136700  
 Project Name: Santa Ana Renaissance SP EIR

**Background Information**

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): 2030 With Project Daily Traffic Volumes  
 Source of Traffic Volumes: KOA  
 Community Noise Descriptor: L<sub>dn</sub>: \_\_\_\_\_ CNEL:  X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

**Traffic Noise Levels**

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor'	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Heavy Trucks	Peak Hou d(B(A) L <sub>eq</sub>	24-Hour d(B(A) CNEL
Flower Street - Santa Ana Blvd to Civic Center Dr		4	0	0	20,656	35	50	0	0	1.8%	0.7%	0.0	68.2
Flower Street - 17th St to Civic Center Dr		4	0	0	19,784	35	50	0	0	1.8%	0.7%	0.0	68.0
Civic Center Dr - West of Flower St		4	0	0	21,075	35	50	0	0	1.8%	0.7%	0.0	68.3
Civic Center Dr - Flower St to Ross St		4	0	0	20,429	35	50	0	0	1.8%	0.7%	0.0	68.1
Flower Street - Santa Ana Blvd to 1st St		4	0	0	20,983	35	50	0	0	1.8%	0.7%	0.0	68.3
Santa Ana Blvd - West of Flower St		4	0	0	12,272	30	50	0	0	1.8%	0.7%	0.0	64.6
Santa Ana Blvd - Flower St to Parton St		4	0	0	15,193	30	50	0	0	1.8%	0.7%	0.0	65.6
Santa Ana Blvd - Parton St to Ross St		4	0	0	15,193	30	50	0	0	1.8%	0.7%	0.0	65.6
Civic Center Dr - Ross St to Broadway		4	0	0	18,870	35	50	0	0	1.8%	0.7%	0.0	67.8
Santa Ana Blvd - Ross St to Broadway		3	0	0	15,336	30	50	0	0	1.8%	0.7%	0.0	65.4
Broadway - Civic Center Dr to Santa Ana Blvd		4	0	0	21,422	35	50	0	0	1.8%	0.7%	0.0	68.3
Broadway - Civic Center Dr to Washington Ave		4	0	0	27,818	35	50	0	0	1.8%	0.7%	0.0	69.5
Civic Center Dr - Broadway to Sycamore St		4	0	0	18,484	35	50	0	0	1.8%	0.7%	0.0	67.7
Broadway - Santa Ana Blvd to 5th St		4	0	0	18,467	35	50	0	0	1.8%	0.7%	0.0	67.7
Santa Ana Blvd - Broadway to Sycamore St		3	0	0	12,455	30	50	0	0	1.8%	0.7%	0.0	64.5
Broadway - 5th St to 4th St		4	0	0	18,547	35	50	0	0	1.8%	0.7%	0.0	67.7
5th St - Broadway to Ross St		3	0	0	9,834	25	50	0	0	1.8%	0.7%	0.0	61.8
5th St - Broadway to Main St		3	0	0	9,756	25	50	0	0	1.8%	0.7%	0.0	61.7
Broadway - 3rd St to 4th St		4	0	0	18,409	35	50	0	0	1.8%	0.7%	0.0	67.7
Broadway - 3rd St to 1st St		4	0	0	18,671	35	50	0	0	1.8%	0.7%	0.0	67.8
Broadway - South of 1st St		4	0	0	13,880	35	50	0	0	1.8%	0.7%	0.0	66.5

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1st St - Broadway to Ross St		6	14	0	46,088	40	50	0	0	1.8%	0.7%	0.0	74.5
1st St - Main St to Broadway		6	14	0	46,942	40	50	0	0	1.8%	0.7%	0.0	74.6
Civic Center Dr - Sycamore St to Main St		4	0	0	17,546	35	50	0	0	1.8%	0.7%	0.0	67.5
Santa Ana Blvd - Sycamore St to Main St		3	0	0	12,125	30	50	0	0	1.8%	0.7%	0.0	64.4
5th St - Sycamore St to Broadway		3	0	0	9,762	25	50	0	0	1.8%	0.7%	0.0	61.7
5th St - Sycamore St to Main St		3	0	0	10,012	25	50	0	0	1.8%	0.7%	0.0	61.8
Main St - Civic Center Dr to Santa Ana Blvd		4	0	0	37,084	30	50	0	0	1.8%	0.7%	0.0	69.4
Main St - Civic Center Dr to Washington Ave		4	0	0	37,826	30	50	0	0	1.8%	0.7%	0.0	69.5
Civic Center Dr - Main St to Bush St		4	0	0	13,967	35	50	0	0	1.8%	0.7%	0.0	66.5
Main St - Santa Ana Blvd to 5th St		4	0	0	38,872	30	50	0	0	1.8%	0.7%	0.0	69.6
Santa Ana Blvd - Main St to Bush St		3	0	0	12,022	30	50	0	0	1.8%	0.7%	0.0	64.4
Main St - 5th St to 4th St		4	0	0	38,907	30	50	0	0	1.8%	0.7%	0.0	69.6
5th St - Main St to Bush St		3	0	0	7,373	25	50	0	0	1.8%	0.7%	0.0	60.5
Main St - 3rd St to 4th St		4	0	0	35,539	30	50	0	0	1.8%	0.7%	0.0	69.2
Main St - 1st St to 3rd St		4	0	0	35,506	30	50	0	0	1.8%	0.7%	0.0	69.2
Santa Ana Blvd - Bush St to Spurgeon St		3	0	0	11,816	30	50	0	0	1.8%	0.7%	0.0	64.3
5th St - Bush St to French St		2	0	0	7,232	25	50	0	0	1.8%	0.7%	0.0	60.3
1st St - Spurgeon St to Main St		6	14	0	44,886	40	50	0	0	1.8%	0.7%	0.0	74.4
Santa Ana Blvd - Lacy St to Standard Ave		4	0	0	16,213	30	50	0	0	1.8%	0.7%	0.0	65.8
Civic Center Dr - French St to Lacy St		4	0	0	15,137	35	50	0	0	1.8%	0.7%	0.0	66.8
Santa Ana Blvd - Lacy St to French St		2	0	0	18,215	30	50	0	0	1.8%	0.7%	0.0	66.1
4th St - Lacy St to French St		2	0	0	13,486	25	50	0	0	1.8%	0.7%	0.0	63.0
1st St - Lacy St to Spurgeon St		6	14	0	44,892	40	50	0	0	1.8%	0.7%	0.0	74.4
1st St - Lacy St to Standard Ave		6	14	0	44,892	40	50	0	0	1.8%	0.7%	0.0	74.4
Santiago St - Washington Ave to Civic Center Dr		2	0	0	13,005	35	50	0	0	1.8%	0.7%	0.0	65.9
Santiago St - Washington Ave to 17th St		2	0	0	12,193	35	50	0	0	1.8%	0.7%	0.0	65.6
Santiago St - Santa Ana Blvd to Civic Center Dr		2	0	0	12,970	35	50	0	0	1.8%	0.7%	0.0	65.9
Civic Center Dr - Santiago St to Lacy St		2	0	0	14,041	35	50	0	0	1.8%	0.7%	0.0	66.2
Civic Center Dr - Lincoln Ave to Santiago St		2	0	0	13,418	35	50	0	0	1.8%	0.7%	0.0	66.0
Santiago St - Santa Ana Blvd to Brown St		2	0	0	9,774	35	50	0	0	1.8%	0.7%	0.0	64.7
Santa Ana Blvd - Santiago St to Lacy St		4	0	0	19,431	30	50	0	0	1.8%	0.7%	0.0	66.6
Santa Ana Blvd - Santiago St to U-24		6	14	0	24,363	30	50	0	0	1.8%	0.7%	0.0	69.0
4th St - Santiago St to Lacy St		4	0	0	19,855	25	50	0	0	1.8%	0.7%	0.0	65.0
Grand Ave - 4th St to Santa Ana Blvd		4	0	0	42,417	40	50	0	0	1.8%	0.7%	0.0	72.8
Grand Ave - Santa Ana Blvd to 17th St		4	0	0	40,394	40	50	0	0	1.8%	0.7%	0.0	72.5
Santa Ana Blvd - East of Grand Ave		4	10	0	8,998	30	50	0	0	1.8%	0.7%	0.0	63.5
Grand Ave - 1st St to 4th St		4	0	0	37,502	40	50	0	0	1.8%	0.7%	0.0	72.2
4th St - Grand Ave to Santiago St		4	0	0	22,231	25	50	0	0	1.8%	0.7%	0.0	65.5
4th St - East of Grand Ave		4	0	0	23,792	25	50	0	0	1.8%	0.7%	0.0	65.8
Grand Ave - South of 1st St		4	0	0	47,852	40	50	0	0	1.8%	0.7%	0.0	73.3
1st St - Standard Ave to Grand Ave		6	14	0	46,427	40	50	0	0	1.8%	0.7%	0.0	74.6
1st St - East of Grand Ave		6	14	0	41,245	40	50	0	0	1.8%	0.7%	0.0	74.1
Penn Way - South of I-5 SB Ramps		2	0	0	10,651	35	50	0	0	1.8%	0.7%	0.0	65.0
Penn Way - North of I-5 SB Ramps		4	0	0	16,619	35	50	0	0	1.8%	0.7%	0.0	67.2
Santa Ana Blvd - West of I-5 SB Ramps		4	14	0	46,866	30	50	0	0	1.8%	0.7%	0.0	70.8
Santa Ana Blvd - East of I-5 SB Ramps		4	14	0	30,762	30	50	0	0	1.8%	0.7%	0.0	68.9
17th St - West of I-5 NB Ramps		6	14	0	48,939	40	50	0	0	1.8%	0.7%	0.0	74.8

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17th St - East of I-5 NB Ramps	6	14	0	38,865	40	50	0	0	1.8%	0.7%	0.0	73.8
Grand Ave - South of I-5 NB Ramps	4	0	0	54,445	40	50	0	0	1.8%	0.7%	0.0	73.8
Grand Ave - North of I-5 NB Ramps	4	0	0	48,570	40	50	0	0	1.8%	0.7%	0.0	73.3

<sup>1</sup> Distance is from the centerline of the roadway segment to the receptor location.

## TRAFFIC NOISE LEVELS

**Project Number:** 0D2136700  
**Project Name:** Santa Ana Renaissance SP EIR

### Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): 2035 Without Project Daily Traffic Volumes  
 Source of Traffic Volumes: KOA  
 Community Noise Descriptor:  $L_{50}$ : \_\_\_\_\_ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

### Traffic Noise Levels

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour $L_{50}$ dB(A)	24-Hour CNEL dB(A)
<b>Analysis Condition</b>													
Flower Street - Santa Ana Blvd to Civic Center Dr		4	0	0	23,899	35	50	0	0	1.8%	0.7%	0.0	68.8
Flower Street - 17th St to Civic Center Dr		4	0	0	22,362	35	50	0	0	1.8%	0.7%	0.0	68.5
Civic Center Dr - West of Flower St		4	0	0	22,865	35	50	0	0	1.8%	0.7%	0.0	68.6
Civic Center Dr - Flower St to Ross St		4	0	0	21,628	35	50	0	0	1.8%	0.7%	0.0	68.4
Flower Street - Santa Ana Blvd to 1st St		4	0	0	25,802	35	50	0	0	1.8%	0.7%	0.0	69.2
Santa Ana Blvd - West of Flower St		4	0	0	13,071	30	50	0	0	1.8%	0.7%	0.0	64.9
Santa Ana Blvd - Flower St to Parton St		4	0	0	15,823	30	50	0	0	1.8%	0.7%	0.0	65.7
Santa Ana Blvd - Parton St to Ross St		4	0	0	17,917	30	50	0	0	1.8%	0.7%	0.0	66.3
Civic Center Dr - Ross St to Broadway		4	0	0	19,769	35	50	0	0	1.8%	0.7%	0.0	68.0
Santa Ana Blvd - Ross St to Broadway		3	0	0	15,823	30	50	0	0	1.8%	0.7%	0.0	65.6
Broadway - Civic Center Dr to Santa Ana Blvd		4	0	0	23,770	35	50	0	0	1.8%	0.7%	0.0	68.8
Broadway - Civic Center Dr to Washington Ave		4	0	0	30,191	35	50	0	0	1.8%	0.7%	0.0	69.8
Civic Center Dr - Broadway to Sycamore St		4	0	0	19,827	35	50	0	0	1.8%	0.7%	0.0	68.0
Broadway - Santa Ana Blvd to 5th St		4	0	0	20,416	35	50	0	0	1.8%	0.7%	0.0	68.1
Santa Ana Blvd - Broadway to Sycamore St		3	0	0	13,769	30	50	0	0	1.8%	0.7%	0.0	65.0
Broadway - 5th St to 4th St		4	0	0	20,416	35	50	0	0	1.8%	0.7%	0.0	68.1
5th St - Broadway to Ross St		3	0	0	10,424	25	50	0	0	1.8%	0.7%	0.0	62.0
5th St - Broadway to Main St		3	0	0	13,844	25	50	0	0	1.8%	0.7%	0.0	63.2

Broadway - 3rd St to 4th St	4	0	0	20,111	35	50	0	0	1.8%	0.7%	0.0	68.1
Broadway - 3rd St to 1st St	4	0	0	25,856	35	50	0	0	1.8%	0.7%	0.0	69.2
Broadway - South of 1st St	4	0	0	14,281	35	50	0	0	1.8%	0.7%	0.0	66.6
1st St - Broadway to Ross St	6	14	0	49,198	40	50	0	0	1.8%	0.7%	0.0	74.8
1st St - Main St to Broadway	6	14	0	49,245	40	50	0	0	1.8%	0.7%	0.0	74.8
Civic Center Dr - Sycamore St to Main St	4	0	0	18,639	35	50	0	0	1.8%	0.7%	0.0	67.7
Santa Ana Blvd - Sycamore St to Main St	3	0	0	12,835	30	50	0	0	1.8%	0.7%	0.0	64.7
5th St - Sycamore St to Broadway	3	0	0	10,424	25	50	0	0	1.8%	0.7%	0.0	62.0
5th St - Sycamore St to Main St	3	0	0	10,424	25	50	0	0	1.8%	0.7%	0.0	62.0
Main St - Civic Center Dr to Santa Ana Blvd	4	0	0	40,300	30	50	0	0	1.8%	0.7%	0.0	69.8
Main St - Civic Center Dr to Washington Ave	4	0	0	41,588	30	50	0	0	1.8%	0.7%	0.0	69.9
Civic Center Dr - Main St to Bush St	4	0	0	14,658	35	50	0	0	1.8%	0.7%	0.0	66.7
Main St - Santa Ana Blvd to 5th St	4	0	0	42,313	30	50	0	0	1.8%	0.7%	0.0	70.0
Santa Ana Blvd - Main St to Bush St	3	0	0	13,859	30	50	0	0	1.8%	0.7%	0.0	65.0
Main St - 5th St to 4th St	4	0	0	42,313	30	50	0	0	1.8%	0.7%	0.0	70.0
5th St - Main St to Bush St	3	0	0	9,622	25	50	0	0	1.8%	0.7%	0.0	61.7
Main St - 3rd St to 4th St	4	0	0	36,873	30	50	0	0	1.8%	0.7%	0.0	69.4
Main St - 1st St to 3rd St	4	0	0	36,873	30	50	0	0	1.8%	0.7%	0.0	69.4
Santa Ana Blvd - Bush St to Spurgeon St	3	0	0	12,885	30	50	0	0	1.8%	0.7%	0.0	64.7
5th St - Bush St to French St	2	0	0	7,507	25	50	0	0	1.8%	0.7%	0.0	60.5
1st St - Spurgeon St to Main St	6	14	0	49,245	40	50	0	0	1.8%	0.7%	0.0	74.8
Santa Ana Blvd - Lacy St to Standard Ave	4	0	0	18,785	30	50	0	0	1.8%	0.7%	0.0	66.5
Civic Center Dr - French St to Lacy St	4	0	0	15,359	35	50	0	0	1.8%	0.7%	0.0	66.9
Santa Ana Blvd - Lacy St to French St	2	0	0	18,798	30	50	0	0	1.8%	0.7%	0.0	66.2
4th St - Lacy St to French St	2	0	0	15,285	25	50	0	0	1.8%	0.7%	0.0	63.6
1st St - Lacy St to Spurgeon St	6	14	0	49,881	40	50	0	0	1.8%	0.7%	0.0	74.9
1st St - Lacy St to Standard Ave	6	14	0	49,881	40	50	0	0	1.8%	0.7%	0.0	74.9
Santiago St - Washington Ave to Civic Center Dr	2	0	0	19,851	35	50	0	0	1.8%	0.7%	0.0	67.7
Santiago St - Washington Ave to 17th St	2	0	0	17,204	35	50	0	0	1.8%	0.7%	0.0	67.1
Santiago St - Santa Ana Blvd to Civic Center Dr	2	0	0	20,771	35	50	0	0	1.8%	0.7%	0.0	67.9
Civic Center Dr - Santiago St to Lacy St	2	0	0	15,359	35	50	0	0	1.8%	0.7%	0.0	66.6
Civic Center Dr - Lincoln Ave to Santiago St	2	0	0	14,658	35	50	0	0	1.8%	0.7%	0.0	66.4
Santiago St - Santa Ana Blvd to Brown St	2	0	0	8,618	35	50	0	0	1.8%	0.7%	0.0	64.1
Santa Ana Blvd - Santiago St to Lacy St	4	0	0	24,852	30	50	0	0	1.8%	0.7%	0.0	67.7
Santa Ana Blvd - Santiago St to U-24	6	14	0	29,178	30	50	0	0	1.8%	0.7%	0.0	69.8
4th St - Santiago St to Lacy St	4	0	0	22,500	25	50	0	0	1.8%	0.7%	0.0	65.5
Grand Ave - 4th St to Santa Ana Blvd	4	0	0	48,424	40	50	0	0	1.8%	0.7%	0.0	73.3
Grand Ave - Santa Ana Blvd to 17th St	4	0	0	47,112	40	50	0	0	1.8%	0.7%	0.0	73.2
Santa Ana Blvd - East of Grand Ave	4	10	0	9,779	30	50	0	0	1.8%	0.7%	0.0	63.9
Grand Ave - 1st St to 4th St	4	0	0	40,071	40	50	0	0	1.8%	0.7%	0.0	72.5
4th St - Grand Ave to Santiago St	4	0	0	22,500	25	50	0	0	1.8%	0.7%	0.0	65.5
4th St - East of Grand Ave	4	0	0	25,510	25	50	0	0	1.8%	0.7%	0.0	66.1
Grand Ave - South of 1st St	4	0	0	53,061	40	50	0	0	1.8%	0.7%	0.0	73.7
1st St - Standard Ave to Grand Ave	6	14	0	52,076	40	50	0	0	1.8%	0.7%	0.0	75.1

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1st St - East of Grand Ave	6	14	0	46,456	40	50	0	0	1.8%	0.7%	0.0	74.6
Penn Way - South of I-5 SB Ramps	2	0	0	15,508	35	50	0	0	1.8%	0.7%	0.0	66.7
Penn Way - North of I-5 SB Ramps	4	0	0	17,871	35	50	0	0	1.8%	0.7%	0.0	67.6
Santa Ana Blvd - West of I-5 SB Ramps	4	14	0	46,209	30	50	0	0	1.8%	0.7%	0.0	70.7
Santa Ana Blvd - East of I-5 SB Ramps	4	14	0	29,984	30	50	0	0	1.8%	0.7%	0.0	68.8
17th St - West of I-5 NB Ramps	6	14	0	56,809	40	50	0	0	1.8%	0.7%	0.0	75.4
17th St - East of I-5 NB Ramps	6	14	0	45,113	40	50	0	0	1.8%	0.7%	0.0	74.4
Grand Ave - South of I-5 NB Ramps	4	0	0	61,046	40	50	0	0	1.8%	0.7%	0.0	74.3
Grand Ave - North of I-5 NB Ramps	4	0	0	57,596	40	50	0	0	1.8%	0.7%	0.0	74.1

<sup>1</sup> Distance is from the centerline of the roadway segment to the receptor location.

**TRAFFIC NOISE LEVELS**

**Project Number:** 0D2136700  
**Project Name:** Santa Ana Renaissance SP EIR

**Background Information**

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): 2035 With Project Daily Traffic Volumes  
 Source of Traffic Volumes: KOA  
 Community Noise Descriptor: L<sub>dn</sub>: \_\_\_\_\_ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

**Traffic Noise Levels**

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor'	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour L <sub>eq</sub> dB(A)	24-Hour CNEL dB(A)
<b>Analysis Condition</b>													
Flower Street - Santa Ana Blvd to Civic Center Dr		4	0	0	23,949	35	50	0	0	1.8%	0.7%	0.0	68.8
Flower Street - 17th St to Civic Center Dr		4	0	0	22,834	35	50	0	0	1.8%	0.7%	0.0	68.6
Civic Center Dr - West of Flower St		4	0	0	23,875	35	50	0	0	1.8%	0.7%	0.0	68.8
Civic Center Dr - Flower St to Ross St		4	0	0	23,064	35	50	0	0	1.8%	0.7%	0.0	68.7
Flower Street - Santa Ana Blvd to 1st St		4	0	0	26,046	35	50	0	0	1.8%	0.7%	0.0	69.2
Santa Ana Blvd - West of Flower St		4	0	0	14,268	30	50	0	0	1.8%	0.7%	0.0	65.3
Santa Ana Blvd - Flower St to Parton St		4	0	0	17,312	30	50	0	0	1.8%	0.7%	0.0	66.1
Santa Ana Blvd - Parton St to Ross St		4	0	0	19,406	30	50	0	0	1.8%	0.7%	0.0	66.6
Civic Center Dr - Ross St to Broadway		4	0	0	21,259	35	50	0	0	1.8%	0.7%	0.0	68.3
Santa Ana Blvd - Ross St to Broadway		3	0	0	17,455	30	50	0	0	1.8%	0.7%	0.0	66.0
Broadway - Civic Center Dr to Santa Ana Blvd		4	0	0	23,962	35	50	0	0	1.8%	0.7%	0.0	68.8
Broadway - Civic Center Dr to Washington Ave		4	0	0	30,429	35	50	0	0	1.8%	0.7%	0.0	69.9
Civic Center Dr - Broadway to Sycamore St		4	0	0	21,337	35	50	0	0	1.8%	0.7%	0.0	68.3
Broadway - Santa Ana Blvd to 5th St		4	0	0	20,854	35	50	0	0	1.8%	0.7%	0.0	68.2
Santa Ana Blvd - Broadway to Sycamore St		3	0	0	14,508	30	50	0	0	1.8%	0.7%	0.0	65.2
Broadway - 5th St to 4th St		4	0	0	21,002	35	50	0	0	1.8%	0.7%	0.0	68.3
5th St - Broadway to Ross St		3	0	0	11,241	25	50	0	0	1.8%	0.7%	0.0	62.3
5th St - Broadway to Main St		3	0	0	14,583	25	50	0	0	1.8%	0.7%	0.0	63.5

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Broadway - 3rd St to 4th St		4	0	0	20,983	35	50	0	0	1.8%	0.7%	0.0	68.3
Broadway - 3rd St to 1st St		4	0	0	26,728	35	50	0	0	1.8%	0.7%	0.0	69.3
Broadway - South of 1st St		4	0	0	14,429	35	50	0	0	1.8%	0.7%	0.0	66.6
1st St - Broadway to Ross St		6	14	0	50,535	40	50	0	0	1.8%	0.7%	0.0	74.9
1st St - Main St to Broadway		6	14	0	50,187	40	50	0	0	1.8%	0.7%	0.0	74.9
Civic Center Dr - Sycamore St to Main St		4	0	0	20,043	35	50	0	0	1.8%	0.7%	0.0	68.1
Santa Ana Blvd - Sycamore St to Main St		3	0	0	13,618	30	50	0	0	1.8%	0.7%	0.0	64.9
5th St - Sycamore St to Broadway		3	0	0	11,163	25	50	0	0	1.8%	0.7%	0.0	62.3
5th St - Sycamore St to Main St		3	0	0	11,207	25	50	0	0	1.8%	0.7%	0.0	62.3
Main St - Civic Center Dr to Santa Ana Blvd		4	0	0	41,909	30	50	0	0	1.8%	0.7%	0.0	70.0
Main St - Civic Center Dr to Washington Ave		4	0	0	42,761	30	50	0	0	1.8%	0.7%	0.0	70.1
Civic Center Dr - Main St to Bush St		4	0	0	15,878	35	50	0	0	1.8%	0.7%	0.0	67.0
Main St - Santa Ana Blvd to 5th St		4	0	0	43,981	30	50	0	0	1.8%	0.7%	0.0	70.2
Santa Ana Blvd - Main St to Bush St		3	0	0	14,503	30	50	0	0	1.8%	0.7%	0.0	65.2
Main St - 5th St to 4th St		4	0	0	44,041	30	50	0	0	1.8%	0.7%	0.0	70.2
5th St - Main St to Bush St		3	0	0	10,266	25	50	0	0	1.8%	0.7%	0.0	61.9
Main St - 3rd St to 4th St		4	0	0	39,921	30	50	0	0	1.8%	0.7%	0.0	69.8
Main St - 1st St to 3rd St		4	0	0	39,888	30	50	0	0	1.8%	0.7%	0.0	69.7
Santa Ana Blvd - Bush St to Spurgeon St		3	0	0	13,579	30	50	0	0	1.8%	0.7%	0.0	64.9
5th St - Bush St to French St		2	0	0	8,201	25	50	0	0	1.8%	0.7%	0.0	60.9
1st St - Spurgeon St to Main St		6	14	0	51,695	40	50	0	0	1.8%	0.7%	0.0	75.0
Santa Ana Blvd - Lacy St to Standard Ave		4	0	0	18,810	30	50	0	0	1.8%	0.7%	0.0	66.5
Civic Center Dr - French St to Lacy St		4	0	0	16,469	35	50	0	0	1.8%	0.7%	0.0	67.2
Santa Ana Blvd - Lacy St to French St		2	0	0	20,814	30	50	0	0	1.8%	0.7%	0.0	66.7
4th St - Lacy St to French St		2	0	0	15,600	25	50	0	0	1.8%	0.7%	0.0	63.7
1st St - Lacy St to Spurgeon St		6	14	0	51,789	40	50	0	0	1.8%	0.7%	0.0	75.0
1st St - Lacy St to Standard Ave		6	14	0	51,789	40	50	0	0	1.8%	0.7%	0.0	75.0
Santiago St - Washington Ave to Civic Center Dr		2	0	0	21,381	35	50	0	0	1.8%	0.7%	0.0	68.1
Santiago St - Washington Ave to 17th St		2	0	0	18,366	35	50	0	0	1.8%	0.7%	0.0	67.4
Santiago St - Santa Ana Blvd to Civic Center Dr		2	0	0	22,615	35	50	0	0	1.8%	0.7%	0.0	68.3
Civic Center Dr - Santiago St to Lacy St		2	0	0	16,027	35	50	0	0	1.8%	0.7%	0.0	66.8
Civic Center Dr - Lincoln Ave to Santiago St		2	0	0	14,756	35	50	0	0	1.8%	0.7%	0.0	66.5
Santiago St - Santa Ana Blvd to Brown St		2	0	0	10,966	35	50	0	0	1.8%	0.7%	0.0	65.2
Santa Ana Blvd - Santiago St to Lacy St		4	0	0	27,854	30	50	0	0	1.8%	0.7%	0.0	68.2
Santa Ana Blvd - Santiago St to U-24		6	14	0	30,916	30	50	0	0	1.8%	0.7%	0.0	70.1
4th St - Santiago St to Lacy St		4	0	0	22,966	25	50	0	0	1.8%	0.7%	0.0	65.6
Grand Ave - 4th St to Santa Ana Blvd		4	0	0	49,122	40	50	0	0	1.8%	0.7%	0.0	73.4
Grand Ave - Santa Ana Blvd to 17th St		4	0	0	51,315	40	50	0	0	1.8%	0.7%	0.0	73.6
Santa Ana Blvd - East of Grand Ave		4	10	0	9,869	30	50	0	0	1.8%	0.7%	0.0	63.9
Grand Ave - 1st St to 4th St		4	0	0	42,283	40	50	0	0	1.8%	0.7%	0.0	72.7
4th St - Grand Ave to Santiago St		4	0	0	24,962	25	50	0	0	1.8%	0.7%	0.0	66.0
4th St - East of Grand Ave		4	0	0	26,560	25	50	0	0	1.8%	0.7%	0.0	66.2
Grand Ave - South of 1st St		4	0	0	55,519	40	50	0	0	1.8%	0.7%	0.0	73.9
1st St - Standard Ave to Grand Ave		6	14	0	53,605	40	50	0	0	1.8%	0.7%	0.0	75.2

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1st St - East of Grand Ave	6	14	0	47,625	40	50	0	0	1.8%	0.7%	0.0	74.7
Penn Way - South of I-5 SB Ramps	2	0	0	16,671	35	50	0	0	1.8%	0.7%	0.0	67.0
Penn Way - North of I-5 SB Ramps	4	0	0	19,038	35	50	0	0	1.8%	0.7%	0.0	67.8
Santa Ana Blvd - West of I-5 SB Ramps	4	14	0	53,014	30	50	0	0	1.8%	0.7%	0.0	71.3
Santa Ana Blvd - East of I-5 SB Ramps	4	14	0	34,964	30	50	0	0	1.8%	0.7%	0.0	69.5
17th St - West of I-5 NB Ramps	6	14	0	56,794	40	50	0	0	1.8%	0.7%	0.0	75.4
17th St - East of I-5 NB Ramps	6	14	0	45,103	40	50	0	0	1.8%	0.7%	0.0	74.4
Grand Ave - South of I-5 NB Ramps	4	0	0	65,250	40	50	0	0	1.8%	0.7%	0.0	74.6
Grand Ave - North of I-5 NB Ramps	4	0	0	59,734	40	50	0	0	1.8%	0.7%	0.0	74.2

<sup>1</sup> Distance is from the centerline of the roadway segment to the receptor location.

