

Appendix K

Noise Measurement Calculations



Roadway Traffic Noise - Existing

Street	Existing Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
		Existing	Existing with Project	Increase over Existing	
Avalon Blvd n/o Carson St	Commercial/Mixed Use	70.9	70.9	0.0	No
Avalon Blvd s/o Carson St	Commercial/Mixed Use	71.1	71.1	0.0	No
Carson St between Avalon Blvd and I-405 SB Ramps	Commercial	73.0	73.0	0.0	No
Carson St between I-405 NB Ramps and Perry St	Manufacturing	71.9	71.9	0.1	No
Carson St between I-405 SB Ramps and I-405 NB Ramps	Commercial	72.7	72.7	0.0	No
Carson St between Perry St and Wilmington Ave	Commercial/Residential	71.6	71.7	0.0	No
Carson St e/o Wilmington Ave	Manufacturing	71.0	71.0	0.0	No
Carson St w/o Avalon Blvd	Commercial/Mixed Use	72.0	72.0	0.0	No
I-405 NB Ramps n/o Carson St	Commercial/OpenSpace	68.8	68.9	0.0	No
I-405 NB Ramps s/o Carson St	Commercial/OpenSpace	61.0	61.0	0.0	No
I-405 SB Ramps n/o Carson St	Commercial/OpenSpace	47.3	47.3	0.0	No
I-405 SB Ramps s/o Carson St	Commercial/OpenSpace	69.1	69.1	0.0	No
Perry St between Project Driveway and Carson St	Commercial/Mixed Use	58.4	59.0	0.6	No
Perry St n/o Project Driveway	Residential/Open Space	58.3	58.4	0.1	No
Wilmington Ave n/o Carson St	Manufacturing/Commercial/Residential	71.1	71.1	0.0	No
Wilmington Ave s/o Carson St	Manufacturing/Commercial/Residential	69.3	69.3	0.0	No

Roadway Traffic Noise - Future

Street	Existing Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
		Future Year (2029)	Future Year (2029) with Project	Increase over Existing	
Avalon Blvd n/o Carson St	Commercial/Mixed Use	72.3	72.3	0.0	No
Avalon Blvd s/o Carson St	Commercial/Mixed Use	71.7	71.7	0.0	No
Carson St between Avalon Blvd and I-405 SB Ramps	Commercial	73.6	73.6	0.0	No
Carson St between I-405 NB Ramps and Perry St	Manufacturing	72.5	72.5	0.1	No
Carson St between I-405 SB Ramps and I-405 NB Ramps	Commercial	73.3	73.3	0.0	No
Carson St between Perry St and Wilmington Ave	Commercial/Residential	72.2	72.2	0.0	No
Carson St e/o Wilmington Ave	Manufacturing	71.7	71.7	0.0	No
Carson St w/o Avalon Blvd	Commercial/Mixed Use	72.9	72.9	0.0	No
I-405 NB Ramps n/o Carson St	Commercial/OpenSpace	69.1	69.2	0.0	No
I-405 NB Ramps s/o Carson St	Commercial/OpenSpace	61.1	61.1	0.0	No
I-405 SB Ramps n/o Carson St	Commercial/OpenSpace	47.4	47.4	0.0	No
I-405 SB Ramps s/o Carson St	Commercial/OpenSpace	69.3	69.4	0.0	No
Perry St between Project Driveway and Carson St	Commercial/Mixed Use	58.5	59.0	0.6	No
Perry St n/o Project Driveway	Residential/Open Space	58.4	58.5	0.1	No
Wilmington Ave n/o Carson St	Manufacturing/Commercial/Residential	71.2	71.2	0.0	No
Wilmington Ave s/o Carson St	Manufacturing/Commercial/Residential	69.4	69.4	0.0	No

TRAFFIC NOISE ANALYSIS TOOL



Project Name: 21611 Perry Street
Analysis Scenario: Existing
Source of Traffic Volumes: Fehr Peers

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Avalon Blvd n/o Carson St	Hard	30	35	35	30	2202	45	23	70.6	70.9
Avalon Blvd s/o Carson St	Hard	30	35	35	30	2312	48	24	70.8	71.1
Carson St between Avalon Blvd and I-405 SB Ramps	Hard	30	40	40	35	2486	51	26	72.7	73.0
Carson St between I-405 NB Ramps and Perry St	Hard	30	40	40	35	1926	40	20	71.6	71.9
Carson St between I-405 SB Ramps and I-405 NB Ramps	Hard	30	40	40	35	2316	48	24	72.4	72.7
Carson St between Perry St and Wilmington Ave	Hard	30	40	40	35	1831	38	19	71.3	71.6
Carson St e/o Wilmington Ave	Hard	30	40	40	35	1593	33	16	70.7	71.0
Carson St w/o Avalon Blvd	Hard	30	40	40	35	2003	41	21	71.7	72.0
I-405 NB Ramps n/o Carson St	Hard	30	40	40	35	965	20	10	68.5	68.8
I-405 NB Ramps s/o Carson St	Hard	30	40	40	35	157	3	2	60.7	61.0
I-405 SB Ramps n/o Carson St	Hard	30	40	40	35	7	0	0	47.0	47.3
I-405 SB Ramps s/o Carson St	Hard	30	40	40	35	1022	21	11	68.8	69.1
Perry St between Project Driveway and Carson St	Hard	30	25	25	25	251	5	3	58.1	58.4
Perry St n/o Project Driveway	Hard	30	25	25	25	246	5	3	58.0	58.3
Wilmington Ave n/o Carson St	Hard	30	40	40	35	1632	34	17	70.8	71.1
Wilmington Ave s/o Carson St	Hard	30	40	40	35	1060	22	11	69.0	69.3

TRAFFIC NOISE ANALYSIS TOOL



Project Name: 21611 Perry Street
Analysis Scenario: Existing +Project
Source of Traffic Volumes: Fehr Peers

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Avalon Blvd n/o Carson St	Hard	30	35	35	30	2204	45	23	70.6	70.9
Avalon Blvd s/o Carson St	Hard	30	35	35	30	2314	48	24	70.8	71.1
Carson St between Avalon Blvd and I-405 SB Ramps	Hard	30	40	40	35	2496	51	26	72.7	73.0
Carson St between I-405 NB Ramps and Perry St	Hard	30	40	40	35	1955	40	20	71.6	71.9
Carson St between I-405 SB Ramps and I-405 NB Ramps	Hard	30	40	40	35	2336	48	24	72.4	72.7
Carson St between Perry St and Wilmington Ave	Hard	30	40	40	35	1841	38	19	71.4	71.7
Carson St e/o Wilmington Ave	Hard	30	40	40	35	1596	33	16	70.7	71.0
Carson St w/o Avalon Blvd	Hard	30	40	40	35	2007	41	21	71.7	72.0
I-405 NB Ramps n/o Carson St	Hard	30	40	40	35	974	20	10	68.6	68.9
I-405 NB Ramps s/o Carson St	Hard	30	40	40	35	157	3	2	60.7	61.0
I-405 SB Ramps n/o Carson St	Hard	30	40	40	35	7	0	0	47.0	47.3
I-405 SB Ramps s/o Carson St	Hard	30	40	40	35	1031	21	11	68.8	69.1
Perry St between Project Driveway and Carson St	Hard	30	25	25	25	288	6	3	58.7	59.0
Perry St n/o Project Driveway	Hard	30	25	25	25	253	5	3	58.1	58.4
Wilmington Ave n/o Carson St	Hard	30	40	40	35	1636	34	17	70.8	71.1
Wilmington Ave s/o Carson St	Hard	30	40	40	35	1065	22	11	69.0	69.3

TRAFFIC NOISE ANALYSIS TOOL



Project Name: 21611 Perry Street
Analysis Scenario: Future
Source of Traffic Volumes: Fehr Peers

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Avalon Blvd n/o Carson St	Hard	30	35	35	30	3046	63	31	72.0	72.3
Avalon Blvd s/o Carson St	Hard	30	35	35	30	2655	55	27	71.4	71.7
Carson St between Avalon Blvd and I-405 SB Ramps	Hard	30	40	40	35	2871	59	30	73.3	73.6
Carson St between I-405 NB Ramps and Perry St	Hard	30	40	40	35	2219	46	23	72.2	72.5
Carson St between I-405 SB Ramps and I-405 NB Ramps	Hard	30	40	40	35	2659	55	27	73.0	73.3
Carson St between Perry St and Wilmington Ave	Hard	30	40	40	35	2101	43	22	71.9	72.2
Carson St e/o Wilmington Ave	Hard	30	40	40	35	1854	38	19	71.4	71.7
Carson St w/o Avalon Blvd	Hard	30	40	40	35	2434	50	25	72.6	72.9
I-405 NB Ramps n/o Carson St	Hard	30	40	40	35	1027	21	11	68.8	69.1
I-405 NB Ramps s/o Carson St	Hard	30	40	40	35	160	3	2	60.8	61.1
I-405 SB Ramps n/o Carson St	Hard	30	40	40	35	7	0	0	47.1	47.4
I-405 SB Ramps s/o Carson St	Hard	30	40	40	35	1082	22	11	69.0	69.3
Perry St between Project Driveway and Carson St	Hard	30	25	25	25	256	5	3	58.2	58.5
Perry St n/o Project Driveway	Hard	30	25	25	25	251	5	3	58.1	58.4
Wilmington Ave n/o Carson St	Hard	30	40	40	35	1664	34	17	70.9	71.2
Wilmington Ave s/o Carson St	Hard	30	40	40	35	1085	22	11	69.1	69.4

TRAFFIC NOISE ANALYSIS TOOL



Project Name: 21611 Perry Street
Analysis Scenario: Future+Project
Source of Traffic Volumes: Fehr Peers

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Avalon Blvd n/o Carson St	Hard	30	35	35	30	3048	63	31	72.0	72.3
Avalon Blvd s/o Carson St	Hard	30	35	35	30	2657	55	27	71.4	71.7
Carson St between Avalon Blvd and I-405 SB Ramps	Hard	30	40	40	35	2881	59	30	73.3	73.6
Carson St between I-405 NB Ramps and Perry St	Hard	30	40	40	35	2247	46	23	72.2	72.5
Carson St between I-405 SB Ramps and I-405 NB Ramps	Hard	30	40	40	35	2678	55	28	73.0	73.3
Carson St between Perry St and Wilmington Ave	Hard	30	40	40	35	2111	44	22	71.9	72.2
Carson St e/o Wilmington Ave	Hard	30	40	40	35	1858	38	19	71.4	71.7
Carson St w/o Avalon Blvd	Hard	30	40	40	35	2438	50	25	72.6	72.9
I-405 NB Ramps n/o Carson St	Hard	30	40	40	35	1035	21	11	68.9	69.2
I-405 NB Ramps s/o Carson St	Hard	30	40	40	35	160	3	2	60.8	61.1
I-405 SB Ramps n/o Carson St	Hard	30	40	40	35	7	0	0	47.1	47.4
I-405 SB Ramps s/o Carson St	Hard	30	40	40	35	1091	22	11	69.1	69.4
Perry St between Project Driveway and Carson St	Hard	30	25	25	25	293	6	3	58.7	59.0
Perry St n/o Project Driveway	Hard	30	25	25	25	258	5	3	58.2	58.5
Wilmington Ave n/o Carson St	Hard	30	40	40	35	1669	34	17	70.9	71.2
Wilmington Ave s/o Carson St	Hard	30	40	40	35	1089	22	11	69.1	69.4

