Appendix I

Noise Modeling Data

Long-Term Noise Measurement Raw Data

KEY: Orange cells are for input.

Measurement Site: LT1
Measurement Date: February 25, 12:00 p.m. to February 26, 12:00 p.m.
Project Name: El Dorado County - Costco

Number	Start Date	Start Time	End Time	I	Meas Mc	Input Rai	Input Typ	SPL Time Weight	LN% Freq Weig	Overload	UnderRange	Sensitivity	LZeq	LCeq	LAeq	LZSmax	LCSmax	LASmax	LZSmin	LCSmin	LASmin	LZE	LCE	LAE	LZpk	LCpk	LApk	LAS1%	LAS2%	LAS5%	LAS8%	LAS10%	LAS25%	LAS50%
174	2/25/2025	12:00:00 PM	1:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	76.5	69.2	53.7	94.6	85.3	63.9	59.8	57.7	47.4	112.1	104.8	89.3	107.9	100.8	78.3	59.7	58.6	57	56.1	55.7	54.1	52.8
175	2/25/2025	1:00:00 PM	2:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	75.8	68.8	52.8	95.1	86.6	71.2	60.5	57.6	47.6	111.4	104.4	88.4	107.7	98.6	85.6	57	56.1	55	54.5	54.3	53.4	52.3
176	2/25/2025	2:00:00 PM	3:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	73	66.7	54.2	88.9	80.6	64.8	61.5	58.9	48.4	108.6	102.3	89.8	102.7	94.1	79.4	60.1	58.8	56.9	56.2	56	54.8	53.5
177	2/25/2025	3:00:00 PM	4:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	72	66.8	54.1	89.9	82.4	67	61	58.3	48	107.6	102.4	89.7	102.4	97.1	85.7	58.7	57.7	56.7	56.2	55.9	54.7	53.6
178	2/25/2025	4:00:00 PM	5:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	66.9	63.3	54.7	81.7	73.8	64.6	60.6	58.4	48.5	102.5	98.9	90.3	94	86.5	83.3	58.5	57.8	57	56.6	56.4	55.4	54.3
179	2/25/2025	5:00:00 PM	6:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	66.7	64.3	57	81.6	74.9	66.4	61.3	59.4	51.2	102.3	99.9	92.6	96	86.8	80.2	63.2	61.6	59.7	59.1	58.9	57.7	56.4
180	2/25/2025	6:00:00 PM	7:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	63.7	62.4	57.8	75.3	71.4	64.7	58.8	57.4	50.7	99.3	98	93.4	86	83.9	82.1	61.7	61	60.3	59.9	59.7	58.7	57.4
181	2/25/2025	7:00:00 PM	8:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	64	62.7	58	76	73.5	66.4	57.7	55.9	49.6	99.6	98.3	93.6	90.5	89.1	87.5	62.6	62	61.2	60.6	60.3	58.9	57.4
182	2/25/2025	8:00:00 PM	9:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	62.9	62	57.5	73.2	72.7	67.4	55	53.8	46.7	98.5	97.6	93.1	88.4	87.5	85.5	63.3	62.3	61.1	60.5	60.1	58.5	56.5
183	2/25/2025	9:00:00 PM	10:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	61.9	60.6	56.2	76.5	72.4	66	52.5	50.4	42	97.5	96.2	91.8	85.1	85.7	82.6	62.5	61.7	60.6	59.9	59.5	57.3	54.7
184	2/25/2025	10:00:00 PM	11:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	59.5	58.4	53.5	75.7	75.5	68.4	50.4	48.6	41.8	95.1	94	89.1	90.4	90.2	89.4	60.4	59.4	58.2	57.4	56.9	54.5	51.5
185	2/25/2025	11:00:00 PM	12:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	59.4	58.4	53.8	74.1	74	68.6	48	46.5	38.6	95	94	89.4	84.6	84.7	83.7	61.6	60.2	58.6	57.8	57.3	54.8	51.7
186	2/26/2025	12:00:00 AM	1:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	58.3	57.3	53.2	72.8	72.7	65.5	46.5	44.6	35.3	93.9	92.9	88.8	86.3	86.3	85	61.8	60.5	58.8	57.7	57.2	54.2	49.7
187	2/26/2025	1:00:00 AM	2:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	56.3	54.7	50.1	72.5	68.4	63.8	45.1	42.9	33.8	91.9	90.3	85.7	91	88.9	87.4	60	59	57.2	55.8	55	49.4	42.8
188	2/26/2025	2:00:00 AM	3:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	57.4	56	51.3	74.7	73.6	67.1	45.9	44.3	34.4	93	91.6	86.9	88.9	88.7	85.1	59.9	58.9	57.4	56.3	55.7	51.8	46.4
189	2/26/2025	3:00:00 AM	4:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	60.1	58.8	55	71.4	70.9	67.6	45.6	43.4	34.9	95.7	94.4	90.6	89.1	89.4	86.3	63.5	62.7	61.2	60.3	59.6	56	50.4
190	2/26/2025	4:00:00 AM	5:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	63	61.6	57.4	74.5	73	69.9	51	49.1	40.1	98.6	97.2	93	86.8	86.4	84.2	64	63.2	61.9	61.2	60.8	58.7	56.1
191	2/26/2025	5:00:00 AM	6:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	67.1	66.3	62.6	79.1	79	75	58.1	56.5	49.5	102.7	101.9	98.2	93.2	93.6	90.8	67.7	67.1	66.1	65.6	65.4	63.9	61.7
192	2/26/2025	6:00:00 AM	7:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69.3	68.5	64.9	76.2	75.6	73.2	62	60.9	56.2	104.9	104.1	100.5	93.6	92.9	90.7	69.3	68.6	67.8	67.3	67	65.8	64.4
193	2/26/2025	7:00:00 AM	8:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69	68	64.2	76	75.8	69.9	62.9	61.4	56.9	104.6	103.6	99.8	87.7	87.3	87.2	67.9	67.4	66.6	66.2	66	65	63.8
194	2/26/2025	8:00:00 AM	9:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	68	66.5	62.1	75.9	75.4	70.6	63.5	61.9	54.8	103.6	102.1	97.7	91.4	91.3	87.7	65.6	65.1	64.4	63.9	63.7	62.8	61.8
195	2/26/2025	9:00:00 AM	10:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69	66.5	61.5	84.6	77	71.6	62.2	60.6	54.5	104.6	102.1	97.1	97.3	91.3	85.4	65.2	64.7	64	63.6	63.3	62.3	61.2
196	2/26/2025	10:00:00 AM	11:00:00 AM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69.3	66.5	60.8	81.8	75	66.2	62.6	61.2	53.7	104.9	102.1	96.4	92.7	88.6	87.4	64.4	64	63.4	63	62.8	61.7	60.5
197	2/26/2025	11:00:00 AM	12:00:00 PM		Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	67.6	65	58.8	79.8	74.6	66.1	61.2	59	50	103.2	100.6	94.4	92.6	87.1	85.4	63.2	62.7	61.9	61.4	61.2	59.9	58.4

Long-Term Noise Measurement Calculations

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Measurement Site: LT1
Measurement Date: February 25, 12:00 p.m. to February 26, 12:00 p.m.
Project Name: El Dorado County - Costco

Hour of Day 24-hr Format	L_{dn} Start	L_{dn} End	C_{NEL} Start	C_{NEL} End
Daytime	7	22	7	19
Evening	N/A	N/A	19	22
Nighttime	22	7	22	7

Hour of Day (24-hr Format)	Sound Levels Descriptors L_{eq}	L_{max}	L_{50}	L_{min}
12:00	54	64	53	47
13:00	53	71	52	48
14:00	54	65	54	48
15:00	54	67	54	48
16:00	55	65	54	49
17:00	57	66	56	51
18:00	58	65	57	51
19:00	58	66	57	50
20:00	58	67	57	47
21:00	56	66	55	42
22:00	54	68	52	42
23:00	54	69	52	39
0:00	53	66	50	35
1:00	50	64	43	34
2:00	51	67	46	34
3:00	55	68	50	35
4:00	57	70	56	40
5:00	63	75	62	50
6:00	65	73	64	56
7:00	64	70	64	57
8:00	62	71	62	55
9:00	62	72	61	55
10:00	61	66	61	54
11:00	59	66	58	50

Sound Power[1]
$=10*\text{Log}(L_{eq,\ 1hr}/10)$

Equivalent Noise Level (L_{eq})				
Day	Night	Day	Evening	Night
234422.8815		234422.8815		
190546.0718		190546.0718		
263026.7992		263026.7992		
257039.5783		257039.5783		
295120.9227		295120.9227		
501187.2336		501187.2336		
602559.5861		602559.5861		
630957.3445			630957.3445	
562341.3252			562341.3252	
416869.3835			416869.3835	
	223872.1139			223872.1139
	239883.2919			239883.2919
	208929.6131			208929.6131
	102329.2992			102329.2992
	134896.2883			134896.2883
	316227.766			316227.766
	549540.8739			549540.8739
	1819700.859			1819700.859
	3090295.433			3090295.433
2630267.992				
1621810.097		1621810.097		
1412537.545		1412537.545		
1202264.435		1202264.435		
758577.575		758577.575		

Day Night Average (L_{dn})[2]		Community Noise Equivalent Level (CNEL)[3]		
Day	Night	Day	Evening	Night
Sum of Sound Power during Period w/o Penalty				
11,579,529	6,685,676	7,339,093	1,610,168	6,685,676
Log Factor for CNEL Penalty (i.e., 10*log(x))[4]				
1	10	1	3	10
Sound Power during Period with penalty				
11,579,529	66,856,755	7,339,093	4,830,504	66,856,755
Number of Hours				
		24		
L_{dn}	65.1	**CNEL**	65.2	

Notes:
[1] Computation of Sound Power are based on equation 7-1 on pg. 7-9 of Caltrans 2013
[2] Computation of the L_{dn} based on 1-hour L_{eq} measurements for each hour of a day are based on equation 2-23 on pg. 2-52 of Caltrans 2013.
[3] Computation of the CNEL based on 1-hour L_{eq} measurements for each hour of a day are based on equation 2-24 on pg. 2-53 of Caltrans 2013.
[4] Log factors for the L_{dn} and CNEL penalties are provided in Table 2-11 on pg. 2-48 of Caltrans 2013.
[5] Average noise level descriptors were logarithmicly averaged over the total number of hours
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2013 (September). *Technical Noise Supplement to the Traffic Noise Analysis Protocol* . Sacramento, CA. Available: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>. Accessed Febuary 26, 2025.

Sound Power[1]
$=10*\text{Log}(L_{eq,\ 1hr}/10)$

Hour of Day	Maximum Noise Levels (L_{max})					Sound Pressure Level Exceeded 50% of a Specific Time Period (L_{50})					Mininum Noise Levels (L_{min})				
	Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
12:00	2454709		2454708.916			190546.0718		190546.0718			54954.08739		54954.08739		
13:00	13182567		13182567.39			169824.3652		169824.3652			57543.99373		57543.99373		
14:00	3019952		3019951.72			223872.1139		223872.1139			69183.09709		69183.09709		
15:00	5011872		5011872.336			229086.7653		229086.7653			63095.73445		63095.73445		
16:00	2884032		2884031.503			269153.4804		269153.4804			70794.57844		70794.57844		
17:00	4365158		4365158.322			436515.8322		436515.8322			131825.6739		131825.6739		
18:00	2951209		2951209.227			549540.8739		549540.8739			117489.7555		117489.7555		
19:00	4365158			4365158.322		549540.8739			549540.8739		91201.08394			91201.08394	
20:00	5495409			5495408.739		446683.5922			446683.5922		46773.51413			46773.51413	
21:00	3981072			3981071.706		295120.9227			295120.9227		15848.93192			15848.93192	
22:00		6918309.709			6918309.709		141253.7545			141253.7545		15135.61248			15135.61248
23:00		7244359.601			7244359.601		147910.8388			147910.8388		7244.359601			7244.359601
0:00		3548133.892			3548133.892		93325.43008			93325.43008		3388.441561			3388.441561
1:00		2398832.919			2398832.919		19054.60718			19054.60718		2398.832919			2398.832919
2:00		5128613.84			5128613.84		43651.58322			43651.58322		2754.228703			2754.228703
3:00		5754399.373			5754399.373		109647.8196			109647.8196		3090.295433			3090.295433
4:00		9772372.21			9772372.21		407380.2778			407380.2778		10232.92992			10232.92992
5:00		31622776.6			31622776.6		1479108.388			1479108.388		89125.09381			89125.09381
6:00		20892961.31			20892961.31		2754228.703			2754228.703		416869.3835			416869.3835
7:00	9772372		9772372.21			2398832.919		2398832.919			489778.8194		489778.8194		
8:00	11481536		11481536.21			1513561.248		1513561.248			301995.172		301995.172		
9:00	14454398		14454397.71			1318256.739		1318256.739			281838.2931		281838.2931		
10:00	4168694		4168693.835			1122018.454		1122018.454			234422.8815		234422.8815		
11:00	4073803		4073802.778			691830.9709		691830.9709			100000		100000		

Average Sound Level Descriptors[5]									
L_{eq}					L_{50}				
Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
59	59	58	57	59	58	58	59	56	58

L_{max}					L_{min}				
Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
68	70	68	67	70	52	48	52	47	48

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

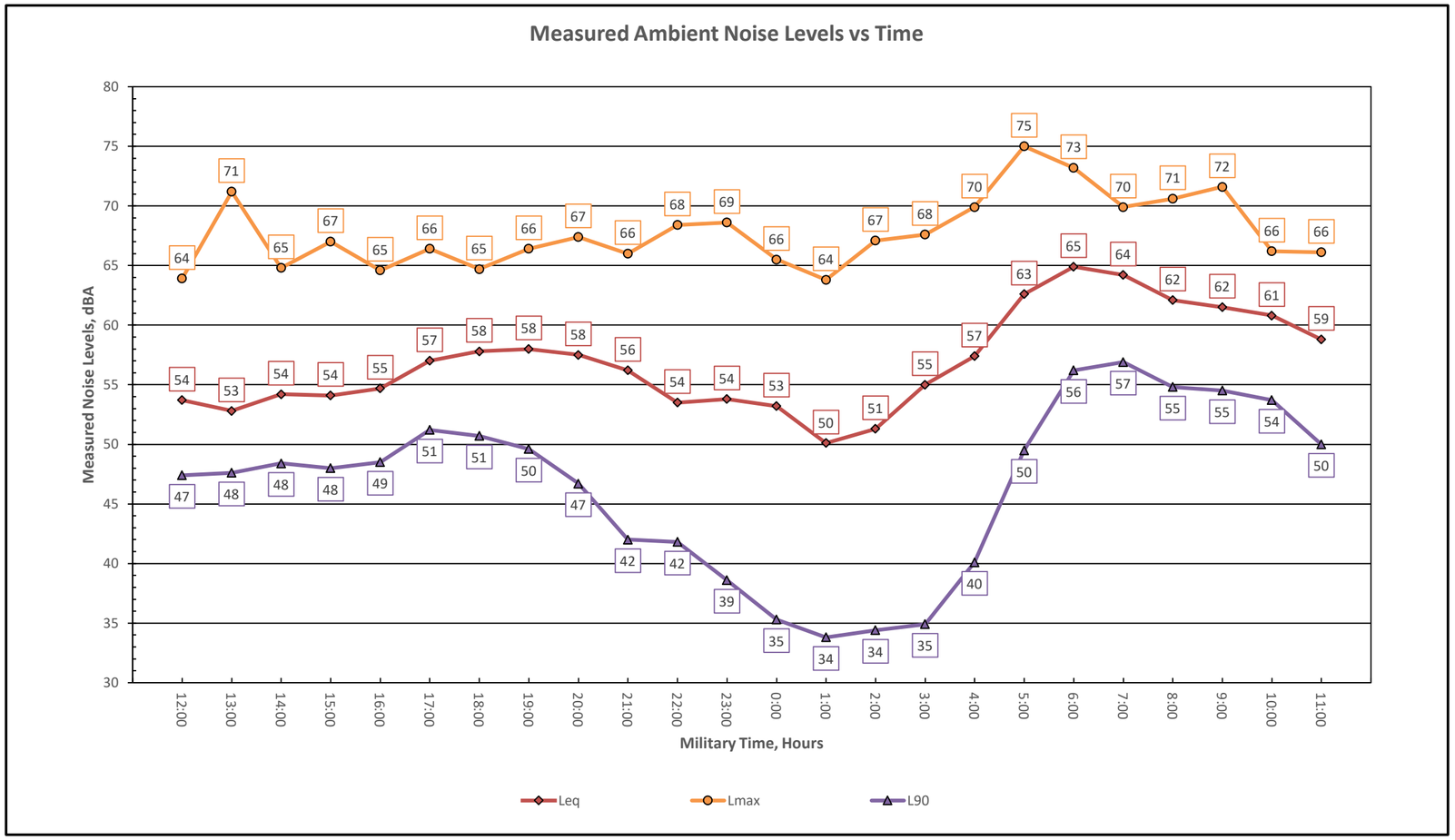
Green cells are data to present in a written analysis (output).

Measurement Site:	LT1
Measurement Date:	February 25, 12:00 p.m. to February 26, 12:00 p.m.
Project Name:	El Dorado County - Costco
Coordinates	38°28'35"N 121°48'08"W

Hour of Day (military time)	Measured Level, dBA L_{eq}	L_{max}	L_{50}	L_{min}
12:00	54	64	53	47
13:00	53	71	52	48
14:00	54	65	54	48
15:00	54	67	54	48
16:00	55	65	54	49
17:00	57	66	56	51
18:00	58	65	57	51
19:00	58	66	57	50
20:00	58	67	57	47
21:00	56	66	55	42
22:00	54	68	52	42
23:00	54	69	52	39
0:00	53	66	50	35
1:00	50	64	43	34
2:00	51	67	46	34
3:00	55	68	50	35
4:00	57	70	56	40
5:00	63	75	62	50
6:00	65	73	64	56
7:00	64	70	64	57
8:00	62	71	62	55
9:00	62	72	61	55
10:00	61	66	61	54
11:00	59	66	58	50

Metrics	L_{eq}	L_{max}	L_{50}	L_{min}
Day Average	58	68	59	52
Evening Average	57	67	56	47
Night Average	59	70	58	48

CNEL	65.2
Day %	63.4%
Night %	36.6%



Notes: Primary noises include traffic noise originating from US 50 and Silva Valley Parkway.

Long-Term Noise Measurement Raw Data

KEY: Orange cells are for input.

Measurement Site:	LT2
Measurement Date:	February 25, 1:00 p.m. to February 26, 1:00 p.m.
Project Name:	El Dorado County - Costco

Number	Start Date	Start Time	End Time	LAeq	LASmax	LASmin	LAS50%
308	2/25/2025	1:00:00 PM	2:00:00 PM	46.6	60.4	40	45.4
309	2/25/2025	2:00:00 PM	3:00:00 PM	46	56.2	39.2	45.1
310	2/25/2025	3:00:00 PM	4:00:00 PM	46.4	60.8	38.3	44.6
311	2/25/2025	4:00:00 PM	5:00:00 PM	46.9	69	40.2	45.7
312	2/25/2025	5:00:00 PM	6:00:00 PM	47.8	57.1	39.7	47
313	2/25/2025	6:00:00 PM	7:00:00 PM	48.1	58.6	36.9	46.8
314	2/25/2025	7:00:00 PM	8:00:00 PM	51	63	36.9	49.9
315	2/25/2025	8:00:00 PM	9:00:00 PM	51.5	65.8	38.5	50.2
316	2/25/2025	9:00:00 PM	10:00:00 PM	50.1	61.3	37.2	48.7
317	2/25/2025	10:00:00 PM	11:00:00 PM	46.1	59.7	33.1	42.8
318	2/25/2025	11:00:00 PM	12:00:00 AM	47	61.1	33.6	43.1
319	2/26/2025	12:00:00 AM	1:00:00 AM	46.9	63.5	35	44.9
320	2/26/2025	1:00:00 AM	2:00:00 AM	44.7	61.7	32.1	41.9
321	2/26/2025	2:00:00 AM	3:00:00 AM	44.3	63.3	33.4	41.7
322	2/26/2025	3:00:00 AM	4:00:00 AM	47.8	60.6	34.6	46
323	2/26/2025	4:00:00 AM	5:00:00 AM	51.3	63.9	38.7	49.5
324	2/26/2025	5:00:00 AM	6:00:00 AM	55.1	67.3	44.8	54.7
325	2/26/2025	6:00:00 AM	7:00:00 AM	59.1	71.1	53.4	58.6
326	2/26/2025	7:00:00 AM	8:00:00 AM	59.4	67.2	49.8	59.2
327	2/26/2025	8:00:00 AM	9:00:00 AM	54.6	64.6	46.1	54.2
328	2/26/2025	9:00:00 AM	10:00:00 AM	52.9	67.7	46.2	52.4
329	2/26/2025	10:00:00 AM	11:00:00 AM	52.7	63.4	46.3	52.2
330	2/26/2025	11:00:00 AM	12:00:00 PM	52.2	69.8	43.9	51.5
331	2/26/2025	12:00:00 PM	1:00:00 PM	50.3	60.1	43.4	49.5

Long-Term Noise Measurement Calculations

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Measurement Site: LT2
Measurement Date: February 25, 1:00 p.m. to February 26, 1:00 p.m.
Project Name: El Dorado County - Costco

Time of Day	L_{dn} Start	L_{dn} End	C_{NEL} Start	C_{NEL} End
Daytime	7	22	7	19
Evening	N/A	N/A	19	22
Nighttime	22	7	22	7

Hour of Day (military time)	Sound Levels Descriptors L_{eq}	L_{max}	L_{50}	L_{min}
13:00	47	60	45	40
14:00	46	56	45	39
15:00	46	61	45	38
16:00	47	69	46	40
17:00	48	57	47	40
18:00	48	59	47	37
19:00	51	63	50	37
20:00	52	66	50	39
21:00	50	61	49	37
22:00	46	60	43	33
23:00	47	61	43	34
0:00	47	64	45	35
1:00	45	62	42	32
2:00	44	63	42	33
3:00	48	61	46	35
4:00	51	64	50	39
5:00	55	67	55	45
6:00	59	71	59	53
7:00	59	67	59	50
8:00	55	65	54	46
9:00	53	68	52	46
10:00	53	63	52	46
11:00	52	70	52	44
12:00	50	60	50	43

Sound Power[1]
$=10*\text{Log}(L_{eq,\ 1hr}/10)$

Equivalent Noise Level (L_{eq})				
Day	Night	Day	Evening	Night
45708.81896		45708.81896		
39810.71706		39810.71706		
43651.58322		43651.58322		
48977.88194		48977.88194		
60255.95861		60255.95861		
64565.4229		64565.4229		
125892.5412			125892.5412	
141253.7545			141253.7545	
102329.2992			102329.2992	
	40738.02778			40738.02778
	50118.72336			50118.72336
	48977.88194			48977.88194
	29512.09227			29512.09227
	26915.34804			26915.34804
	60255.95861			60255.95861
	134896.2883			134896.2883
	323593.6569			323593.6569
	812830.5162			812830.5162
870963.59		870963.59		
288403.1503		288403.1503		
194984.46		194984.46		
186208.7137		186208.7137		
165958.6907		165958.6907		
107151.9305		107151.9305		

Day Night Average (L_{dn})[2]		Community Noise Equivalent Level (CNEL)[3]		
Day	Night	Day	Evening	Night
Sum of Sound Power during Period w/o Penalty				
2,486,117	1,527,838	2,116,641	369,476	1,527,838
Log Factor for CNEL Penalty (i.e., 10*log(x))[4]				
1	10	1	3	10
Sound Power during Period with penalty				
2,486,117	15,278,385	2,116,641	1,108,427	15,278,385
Number of Hours				
		24		
L_{dn}	58.7	**CNEL**	58.9	

Notes:
[1] Computation of Sound Power are based on equation 7-1 on pg. 7-9 of Caltrans 2013
[2] Computation of the L_{dn} based on 1-hour L_{eq} measurements for each hour of a day are based on equation 2-23 on pg. 2-52 of Caltrans 2013.
[3] Computation of the CNEL based on 1-hour L_{eq} measurements for each hour of a day are based on equation 2-24 on pg. 2-53 of Caltrans 2013.
[4] Log factors for the L_{dn} and CNEL penalties are provided in Table 2-11 on pg. 2-48 of Caltrans 2013.
[5] Average noise level descriptors were logarithmicly averaged over the total number of hours
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2013 (September). *Technical Noise Supplement to the Traffic Noise Analysis Protocol* . Sacramento, CA. Available: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>. Accessed Febuary 26, 2025.

Sound Power[1]
$=10*\text{Log}(L_{eq,\ 1hr}/10)$

Hour of Day	Maximum Noise Levels (L_{max})					Sound Pressure Level Exceeded 50% of a Specific Time Period (L_{50})					Mininum Noise Levels (L_{min})				
	Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
13:00	1096478		1096478.196			34673.68505		34673.68505			10000		10000		
14:00	416869		416869.3835			32359.36569		32359.36569			8317.637711		8317.637711		
15:00	1202264		1202264.435			28840.31503		28840.31503			6760.829754		6760.829754		
16:00	7943282		7943282.347			37153.52291		37153.52291			10471.28548		10471.28548		
17:00	512861		512861.384			50118.72336		50118.72336			9332.543008		9332.543008		
18:00	724436		724435.9601			47863.00923		47863.00923			4897.788194		4897.788194		
19:00	1995262			1995262.315		97723.7221			97723.7221		4897.788194			4897.788194	
20:00	3801894			3801893.963		104712.8548			104712.8548		7079.457844			7079.457844	
21:00	1348963			1348962.883		74131.02413			74131.02413		5248.074602			5248.074602	
22:00		933254.3008			933254.3008		19054.60718			19054.60718		2041.737945			2041.737945
23:00		1288249.552			1288249.552		20417.37945			20417.37945		2290.867653			2290.867653
0:00		2238721.139			2238721.139		30902.95433			30902.95433		3162.27766			3162.27766
1:00		1479108.388			1479108.388		15488.16619			15488.16619		1621.810097			1621.810097
2:00		2137962.09			2137962.09		14791.08388			14791.08388		2187.761624			2187.761624
3:00		1148153.621			1148153.621		39810.71706			39810.71706		2884.031503			2884.031503
4:00		2454708.916			2454708.916		89125.09381			89125.09381		7413.102413			7413.102413
5:00		5370317.964			5370317.964		295120.9227			295120.9227		30199.5172			30199.5172
6:00		12882495.52			12882495.52		724435.9601			724435.9601		218776.1624			218776.1624
7:00	5248075		5248074.602			831763.7711		831763.7711			95499.2586		95499.2586		
8:00	2884032		2884031.503			263026.7992		263026.7992			40738.02778		40738.02778		
9:00	5888437		5888436.554			173780.0829		173780.0829			41686.93835		41686.93835		
10:00	2187762		2187761.624			165958.6907		165958.6907			42657.95188		42657.95188		
11:00	9549926		9549925.86			141253.7545		141253.7545			24547.08916		24547.08916		
12:00	1023293		1023292.992			89125.09381		89125.09381			21877.61624		21877.61624		

Average Sound Level Descriptors[5]									
L_{eq}					L_{50}				
Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
52	52	52	51	52	52	51	52	50	51

L_{max}					L_{min}				
Day	Night	Day	Evening	Night	Day	Night	Day	Evening	Night
65	65	65	64	65	43	45	44	38	45

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

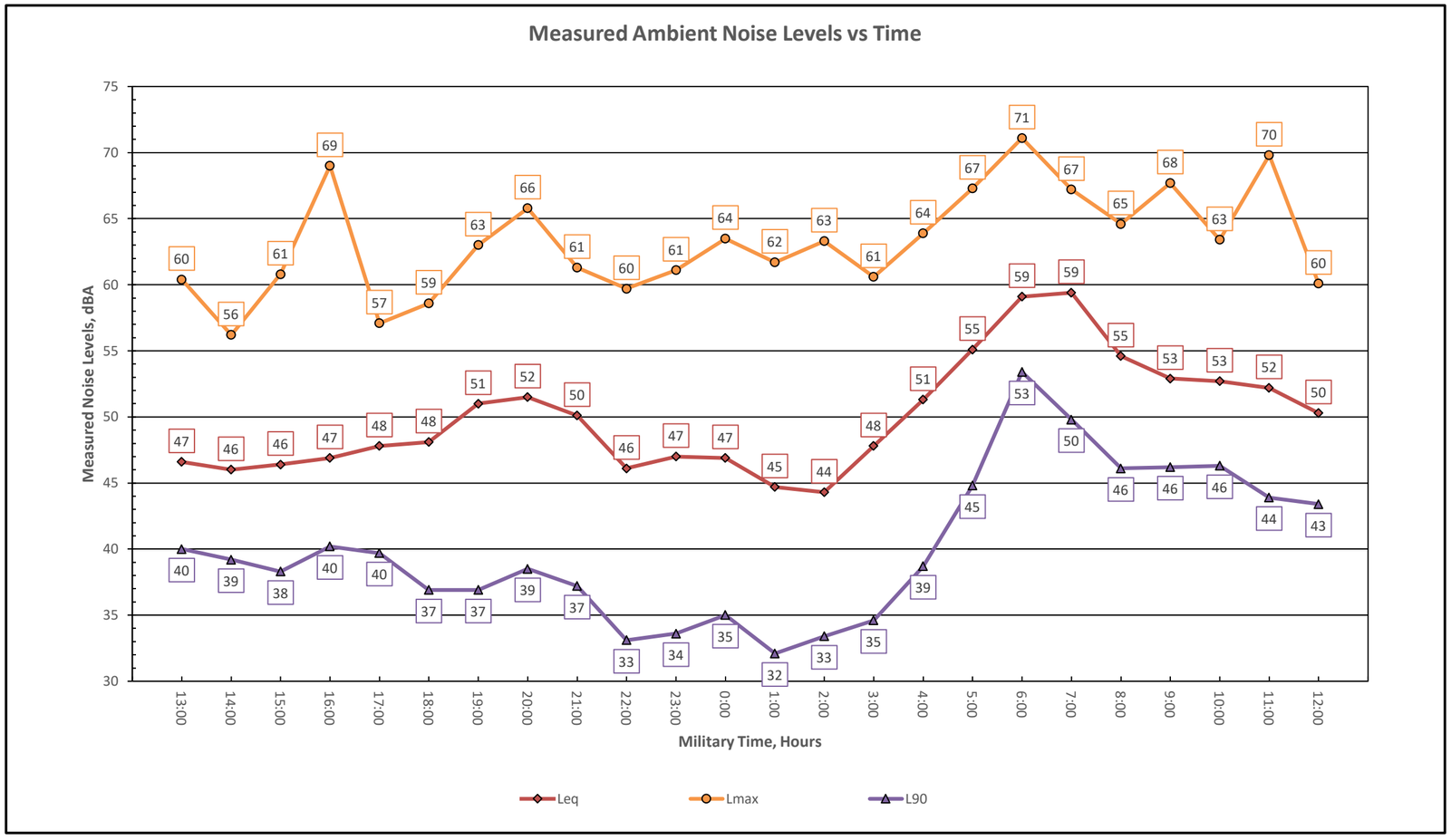
Green cells are data to present in a written analysis (output).

Measurement Site:	LT2
Measurement Date:	February 25, 1:00 p.m. to February 26, 1:00 p.m.
Project Name:	El Dorado County - Costco
Coordinates	38°28'35"N 121°48'08"W

Hour of Day (military time)	Measured Level, dBA L_{eq}	L_{max}	L_{50}	L_{min}
13:00	47	60	45	40
14:00	46	56	45	39
15:00	46	61	45	38
16:00	47	69	46	40
17:00	48	57	47	40
18:00	48	59	47	37
19:00	51	63	50	37
20:00	52	66	50	39
21:00	50	61	49	37
22:00	46	60	43	33
23:00	47	61	43	34
0:00	47	64	45	35
1:00	45	62	42	32
2:00	44	63	42	33
3:00	48	61	46	35
4:00	51	64	50	39
5:00	55	67	55	45
6:00	59	71	59	53
7:00	59	67	59	50
8:00	55	65	54	46
9:00	53	68	52	46
10:00	53	63	52	46
11:00	52	70	52	44
12:00	50	60	50	43

Metrics	L_{eq}	L_{max}	L_{50}	L_{min}
Day Average	52	65	52	44
Evening Average	51	64	50	38
Night Average	52	65	51	45

CNEL	58.9
Day %	62%
Night %	38%



Notes: Primary noises include traffic noise originating from US 50 and Silva Valley Parkway.

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	SPL Time W	LN% Freq W	Overload	UnderRang	Sensitivity	LZeq	LCeq	LAeq	LZSmax	LCSmax	LASmax	LZSmin	LCSmin	LASmin	LZE	LCE	LAE	LZpk	LCpk	LApk	LAS1%	LAS2%	LAS5%	LAS8%	LAS10%	LAS25%	LAS50%	LAS90%	LAS95%	LAS99%
174	2/25/2025	12:00:00 PM	1:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	76.5	69.2	53.7	94.6	85.3	63.9	59.8	57.7	47.4	112.1	104.8	89.3	107.9	100.8	78.3	59.7	58.6	57	56.1	55.7	54.1	52.8	50.8	50.2	48.8
175	2/25/2025	1:00:00 PM	2:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	75.8	68.8	52.8	95.1	86.6	71.2	60.5	57.6	47.6	111.4	104.4	88.4	107.7	98.6	85.6	57	56.1	55	54.5	54.3	53.4	52.3	50.2	49.8	48.8
176	2/25/2025	2:00:00 PM	3:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	73	66.7	54.2	88.9	80.6	64.8	61.5	58.9	48.4	108.6	102.3	89.8	102.7	94.1	79.4	60.1	58.8	56.9	56.2	56	54.8	53.5	51.4	50.9	50
177	2/25/2025	3:00:00 PM	4:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	72	66.8	54.1	89.9	82.4	67	61	58.3	48	107.6	102.4	89.7	102.4	97.1	85.7	58.7	57.7	56.7	56.2	55.9	54.7	53.6	51.2	50.6	49.4
178	2/25/2025	4:00:00 PM	5:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	66.9	63.3	54.7	81.7	73.8	64.6	60.6	58.4	48.5	102.5	98.9	90.3	94	86.5	83.3	58.5	57.8	57	56.6	56.4	55.4	54.3	52.3	51.6	50.2
179	2/25/2025	5:00:00 PM	6:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	66.7	64.3	57	81.6	74.9	66.4	61.3	59.4	51.2	102.3	99.9	92.6	96	86.8	80.2	63.2	61.6	59.7	59.1	58.9	57.7	56.4	54.1	53.5	52.5
180	2/25/2025	6:00:00 PM	7:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	63.7	62.4	57.8	75.3	71.4	64.7	58.8	57.4	50.7	99.3	98	93.4	86	83.9	82.1	61.7	61	60.3	59.9	59.7	58.7	57.4	55	54.3	52.8
181	2/25/2025	7:00:00 PM	8:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	64	62.7	58	76	73.5	66.4	57.7	55.9	49.6	99.6	98.3	93.6	90.5	89.1	87.5	62.6	62	61.2	60.6	60.3	58.9	57.4	54.4	53.5	52.1
182	2/25/2025	8:00:00 PM	9:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	62.9	62	57.5	73.2	72.7	67.4	55	53.8	46.7	98.5	97.6	93.1	88.4	87.5	85.5	63.3	62.3	61.1	60.5	60.1	58.5	56.5	52.8	51.8	49.9
183	2/25/2025	9:00:00 PM	10:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	61.9	60.6	56.2	76.5	72.4	66	52.5	50.4	42	97.5	96.2	91.8	85.1	85.7	82.6	62.5	61.7	60.6	59.9	59.5	57.3	54.7	50.5	49.1	46.4
184	2/25/2025	10:00:00 PM	11:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	59.5	58.4	53.5	75.7	75.5	68.4	50.4	48.6	41.8	95.1	94	89.1	90.4	90.2	89.4	60.4	59.4	58.2	57.4	56.9	54.5	51.5	46.9	45.5	43.7
185	2/25/2025	11:00:00 PM	12:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	59.4	58.4	53.8	74.1	74	68.6	48	46.5	38.6	95	94	89.4	84.6	84.7	83.7	61.6	60.2	58.6	57.8	57.3	54.8	51.7	46.2	44.7	42.2
186	2/26/2025	12:00:00 AM	1:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	58.3	57.3	53.2	72.8	72.7	65.5	46.5	44.6	35.3	93.9	92.9	88.8	86.3	86.3	85	61.8	60.5	58.8	57.7	57.2	54.2	49.7	41.2	39.6	36.8
187	2/26/2025	1:00:00 AM	2:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	56.3	54.7	50.1	72.5	68.4	63.8	45.1	42.9	33.8	91.9	90.3	85.7	91	88.9	87.4	60	59	57.2	55.8	55	49.4	42.8	36.7	35.9	34.8
188	2/26/2025	2:00:00 AM	3:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	57.4	56	51.3	74.7	73.6	67.1	45.9	44.3	34.4	93	91.6	86.9	88.9	88.7	85.1	59.9	58.9	57.4	56.3	55.7	51.8	46.4	39.2	38	36.4
189	2/26/2025	3:00:00 AM	4:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	60.1	58.8	55	71.4	70.9	67.6	45.6	43.4	34.9	95.7	94.4	90.6	89.1	89.4	86.3	63.5	62.7	61.2	60.3	59.6	56	50.4	41.3	39.5	36.3
190	2/26/2025	4:00:00 AM	5:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	63	61.6	57.4	74.5	73	69.9	51	49.1	40.1	98.6	97.2	93	86.8	86.4	84.2	64	63.2	61.9	61.2	60.8	58.7	56.1	47.9	45.9	43.3
191	2/26/2025	5:00:00 AM	6:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	67.1	66.3	62.6	79.1	79	75	58.1	56.5	49.5	102.7	101.9	98.2	93.2	93.6	90.8	67.7	67.1	66.1	65.6	65.4	63.9	61.7	57.3	55.8	52.6
192	2/26/2025	6:00:00 AM	7:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69.3	68.5	64.9	76.2	75.6	73.2	62	60.9	56.2	104.9	104.1	100.5	93.6	92.9	90.7	69.3	68.6	67.8	67.3	67	65.8	64.4	61.6	60.6	58.7
193	2/26/2025	7:00:00 AM	8:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69	68	64.2	76	75.8	69.9	62.9	61.4	56.9	104.6	103.6	99.8	87.7	87.3	87.2	67.9	67.4	66.6	66.2	66	65	63.8	61.7	61	59.7
194	2/26/2025	8:00:00 AM	9:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	68	66.5	62.1	75.9	75.4	70.6	63.5	61.9	54.8	103.6	102.1	97.7	91.4	91.3	87.7	65.6	65.1	64.4	63.9	63.7	62.8	61.8	59.5	58.8	57.6
195	2/26/2025	9:00:00 AM	10:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69	66.5	61.5	84.6	77	71.6	62.2	60.6	54.5	104.6	102.1	97.1	97.3	91.3	85.4	65.2	64.7	64	63.6	63.3	62.3	61.2	58.8	58.1	56.8
196	2/26/2025	10:00:00 AM	11:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	69.3	66.5	60.8	81.8	75	66.2	62.6	61.2	53.7	104.9	102.1	96.4	92.7	88.6	87.4	64.4	64	63.4	63	62.8	61.7	60.5	58.1	57.3	55.8
197	2/26/2025	11:00:00 AM	12:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	17.41mV/Pa	67.6	65	58.8	79.8	74.6	66.1	61.2	59	50	103.2	100.6	94.4	92.6	87.1	85.4	63.2	62.7	61.9	61.4	61.2	59.9	58.4	54.7	53.8	51.9

Number	Start Date	Start Time	End Time	Duration	Meas Mod	Input Rang	Input Type	SPL Time W	LN% Freq W	Overload	UnderRang	Sensitivity	LZeq	LCeq	LAeq	LZFmax	LCFmax	LAFmax	LZFmin	LCFmin	LAFmin	LZE	LCE	LAE	LZpk	LCpk	LApk	LAF1%	LAF2%	LAF5%	LAF8%	LAF10%	LAF25%	LAF50%	LAF90%	LAF95%	LAF99%
ST1																																					
300	2/25/2025	11:15:00 AM	11:30:00 AM	0:15:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	69.6	67.5	53.5	81.8	81.2	63.8	62.9	60.7	47.7	99.1	97	83	90.9	89.8	77.9	61.2	59	57.1	56.1	55.6	53.7	52.4	50.2	49.5	48.5
ST2																																					
303	2/25/2025	12:00:00 PM	12:15:00 PM	0:15:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	68.5	64.9	55.7	80.9	75.1	65.1	58.6	56.5	45.4	98	94.4	85.2	93.9	88.4	78.5	62.5	61.7	59.5	58.8	58.3	56.5	54.6	50.2	48.7	46.2
LT2																																					
308	2/25/2025	1:00:00 PM	2:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.2	60.5	46.6	74.1	71.4	60.4	53.7	51.3	40	98.8	96.1	82.2	86.9	83.3	85.1	53.8	52.3	49.9	49.1	48.7	47	45.4	43.1	42.4	41.3
309	2/25/2025	2:00:00 PM	3:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.2	60.8	46	78.3	74.4	56.2	52.8	50.2	39.2	98.8	96.4	81.6	92.3	87.6	77.3	52.3	50.9	49.4	48.5	48.1	46.6	45.1	42.9	42.2	40.7
310	2/25/2025	3:00:00 PM	4:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	67.2	63.9	46.4	85.5	81.6	60.8	53	50.4	38.3	102.8	99.5	82	93.8	89.8	80.2	57.3	52.5	49	48.2	47.7	46	44.6	42	41.4	40.2
311	2/25/2025	4:00:00 PM	5:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	61.9	60.1	46.9	78.7	78.2	69	53.6	51.2	40.2	97.5	95.7	82.5	92.7	93	91.2	51.9	51.1	49.8	49	48.7	47.3	45.7	43.2	42.7	41.6
312	2/25/2025	5:00:00 PM	6:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	61.8	60.3	47.8	74.8	74	57.1	53.1	51.1	39.7	97.4	95.9	83.4	84.4	82.8	75.7	53.6	52.5	51.2	50.6	50.2	48.6	47	44	43	40.9
313	2/25/2025	6:00:00 PM	7:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	60	58.6	48.1	70	68.7	58.6	52.4	49.5	36.9	95.6	94.2	83.7	84.2	84	76.6	54.9	54.1	52.5	51.6	51	48.8	46.8	42.7	41.4	39.4
314	2/25/2025	7:00:00 PM	8:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	60.9	59.3	51	77	75.5	63	52.5	50.2	36.9	96.5	94.9	86.6	83.9	82.7	76.4	56.8	56	55.1	54.4	54	52.3	49.9	44.7	43.3	40.8
315	2/25/2025	8:00:00 PM	9:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	60.9	59.8	51.5	77.9	77.4	65.8	51.4	49.4	38.5	96.5	95.4	87.1	87.9	87.2	85.2	58.1	57	55.6	54.6	54.2	52.3	50.2	45.8	44.4	41.4
316	2/25/2025	9:00:00 PM	10:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	59.9	57.9	50.1	77	72.8	61.3	51.2	49	37.2	95.5	93.5	85.7	84.3	82.1	76.8	56.6	55.7	54.5	53.7	53.3	51.3	48.7	43	41.4	39.4
317	2/25/2025	10:00:00 PM	11:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	56.9	55.3	46.1	68.9	67.9	59.7	45.4	43	33.1	92.5	90.9	81.7	80.7	78.6	73.9	54.6	53.3	51.4	50.4	49.8	46.7	42.8	37	35.8	34.2
318	2/25/2025	11:00:00 PM	12:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	54.7	52.9	47	65.4	64.9	61.1	45.2	42.8	33.6	90.3	88.5	82.6	77.1	76.9	76.5	56.3	55	52.8	51.5	50.8	47.1	43.1	37.9	36.8	35.2
319	2/26/2025	12:00:00 AM	1:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	55.4	53.4	46.9	68	67.7	63.5	46.4	44.2	35	91	89	82.5	79.1	78.7	76.7	54	53.1	51.5	50.6	50.2	47.8	44.9	40.2	38.9	37.2
320	2/26/2025	1:00:00 AM	2:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	52.9	50.9	44.7	67.2	64.5	61.7	45.1	43.2	32.1	88.5	86.5	80.3	89.9	89.9	86.6	53.5	51.7	49.8	48.7	48	45.1	41.9	36.9	35.9	34.1
321	2/26/2025	2:00:00 AM	3:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	53.2	51.1	44.3	68.7	68.7	63.3	45.9	44.1	33.4	88.8	86.7	79.9	80.8	80.1	75.9	53.7	51.3	48.8	47.5	47	44.4	41.7	37.4	36.6	35.4
322	2/26/2025	3:00:00 AM	4:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	55.7	53.8	47.8	65.8	63.6	60.6	47.2	45.3	34.6	91.3	89.4	83.4	76.9	75.3	74.1	55	54.1	52.5	51.5	51.2	48.7	46	40.1	38.3	36.1
323	2/26/2025	4:00:00 AM	5:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	59.2	57.2	51.3	71.6	70.3	63.9	50.9	48.5	38.7	94.8	92.8	86.9	85.9	84.4	78.7	58.5	57.6	56.2	55.1	54.6	51.9	49.5	45	43.6	41.4
324	2/26/2025	5:00:00 AM	6:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	62.9	61.6	55.1	75.7	75	67.3	54.2	52.3	44.8	98.5	97.2	90.7	87.5	87.9	84.7	60	59.1	57.8	57.3	57.1	56	54.7	51	49.6	47.5
325	2/26/2025	6:00:00 AM	7:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	65.5	64.3	59.1	75.5	75.4	71.1	59.9	58.7	53.4	101.1	99.9	94.7	89.9	89.8	86.8	63.3	62.6	61.8	61.4	61.1	59.9	58.6	56	55.5	54.6
326	2/26/2025	7:00:00 AM	8:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	67.1	65.6	59.4	75	73.9	67.2	60.3	58.3	49.8	102.7	101.2	95	86.3	85.5	83.5	63.5	62.9	62.1	61.7	61.5	60.4	59.2	56	54.7	52
327	2/26/2025	8:00:00 AM	9:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.7	61.9	54.6	72.2	71.4	64.6	58.2	55.9	46.1	99.3	97.5	90.2	85.3	86.3	84.8	58.6	58.1	57.3	56.8	56.6	55.5	54.2	51.2	50.3	49
328	2/26/2025	9:00:00 AM	10:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	62.7	60.7	52.9	75.1	72.8	67.7	57.6	55.1	46.2	98.3	96.3	88.5	86.8	84.6	85.5	56.6	56.1	55.3	55	54.8	53.7	52.4	50	49.3	48
329	2/26/2025	10:00:00 AM	11:00:00 AM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.4	61.2	52.7	74	73.4	63.4	57.5	55.4	46.3	99	96.8	88.3	84.5	84.8	80.2	57.4	56.7	55.6	55	54.7	53.4	52.2	49.7	49.1	48
330	2/26/2025	11:00:00 AM	12:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.1	60.7	52.2	78.4	72	69.8	56.9	54.6	43.9	98.7	96.3	87.8	90.4	87.7	89.1	57.3	56	55.1	54.6	54.3	52.9	51.5	48.3	47.4	45.9
331	2/26/2025	12:00:00 PM	1:00:00 PM	1:00:00	Auto	Low	Mic	Slow	dBA	No	No	20.22mV/F	63.3	61.2	50.3	74.8	74.3	60.1	56.4	54.3	43.4	98.9	96.8	85.9	89	87.4	86.7	55.3	54.6	53.5	52.9	52.6	51.2	49.5	46.8	46.1	45.1

El Dorado Costco Construction Noise Modeling Summary

Phase	Leq at 50 feet	Lmax at 50 feet
Site Preparation	88.5	92.5
Grading	87.7	92.8
Building Construction	88.3	92.8
Building Construction with Silent Blasting	88.5	92.8
Paving	88.1	92.5
Architectural Coating	82.0	86.0
Nighttime Construction	83.5	89.0

Temporary Increase in Noise Calculations - Daytime + Nighttime

	Noise Level dBA Leq	FT	Activity Noise at SR	Combined (Existing + Project)	Change	Substantial Noise Increase Threshold	Exceeds Threshold
Reference Daytime Noise Level (Silva Valley Parkway)[1]	52	555					
Calculated Daytime Noise level - North Site[1]	**62.5**	50					
NR-SR 2 - School	**60.0**	88	66	67.0	7.0	3	Yes
Reference Nighttime Noise Level (Silva Valley Parkway)[1]	52	555					
Calculated Nighttime Noise level - North Site[1]	**62.9**	45					
NR-SR 2 - School	**60.0**	88	54.4	61.1	1.1	3	No
R-SR 3 - Residences along Village Green	**51.5**	625	55.2	56.7	5.3	3	Yes
R-SR 4 - Residences along Village Green/Russi	**49.9**	890	55.4	56.5	6.5	3	Yes
NR-SR 5 - Church	**51.2**	660	55.5	56.9	5.6	3	Yes
Reference Nighttime Noise Level (Clarksville Road)[1]	59	590					
Calculated Daytime Noise level - North Site[1]	**62.5**	50					
NR-SR 2 - School - Loudest Construction Activity to result in substantial increase	**60.0**	88	60	63.0	3.0	3	No
Calculated Daytime Noise level - North Site[1]	**62.5**	50					
NR-SR 2 - School - Offsite construction noise increase	**60.0**	88	57.5	61.9	1.9	3	No
Calculated Nighttime Noise level - South Site[2]	**69.7**	50					
R-SR 1: Residential along Mertola Ave	**58.9**	600	57.9	61.5	2.5	3	No

Sources

Attenuation Formula (line source)

Lp(R2)=Lp(R1)-10*Log(R2/R1)

			8
Lp(R1)	=	reference noise level at known distance	5
Lp(R2)	=	noise level at second location	soft
R1	=	reference level distance	6.5
R2	=	distance to second location	
			0.6339286

1. 12-hour daytime and nighttime Leq measurement conducted approximately 555 feet from the centerline of Silva Valley Parkway
2. 12-hour daytime and nighttime Leq measurement conducted approximately 590 feet from the centerline of Clarksville Road

Costco - Site Preparation (L_{eq})

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Threshold	42	90.0
County Nighttime Threshold	7,476	45.0
R-SR 1: Residential along Mertola Ave	950	62.9
NR-SR 2: Oak Meadow Elementary	635	66.4
R-SR 3: Residential along Village Green Drive	500	68.5
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	985	62.6
NR-SR 5: Church	1,255	60.5

Equipment[4]	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	0.4
Scraper	85	0.4
Tractor	84	0.4
Grader	85	0.4
Scraper	85	0.4
Tractor	84	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	81.0
Scraper	81.0
Tractor	80.0
Grader	81.0
Scraper	81.0
Tractor	80.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
88.5

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

[4] Mounted impact hammer is used a substitute for rock crushing in this analysis. Extec Screens & Crushers Ltd. Novemer 2007. "C12+ Crusher Operationg and Maintenance Manual". (site accessed December 6, 2023).
$L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Grading (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Threshold	38	90.0
County Nighttime Threshold	6,806	45.0
R-SR 1: Residential along Mertola Ave	950	62.1
NR-SR 2: Oak Meadow Elementary	635	65.6
R-SR 3: Residential along Village Green Drive	500	67.7
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	985	61.8
NR-SR 5: Church	1,255	59.7

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	0.4
Excavator	85	0.4
Backhoe	80	0.4
Grader	85	0.4
Excavator	85	0.4
Backhoe	80	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	81.0
Excavator	81.0
Backhoe	76.0
Grader	81.0
Excavator	81.0
Backhoe	76.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
87.7

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Building Construction (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Thresho	41	90.0
County Nighttime Threshold	7,280	45.0
R-SR 1: Residential along Mertola Ave	950	62.7
NR-SR 2: Oak Meadow Elementary	635	66.2
R-SR 3: Residential along Village Green Drive	500	68.3
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	985	62.4
NR-SR 5: Church	1,255	60.3

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Crane	85	0.16
Dozer	85	0.4
Pneumatic Tools	85	0.5
Crane	85	0.16
Dozer	85	0.4
Pneumatic Tools	85	0.5

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Crane	77.0
Dozer	81.0
Pneumatic Tools	82.0
Crane	77.0
Dozer	81.0
Pneumatic Tools	82.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
88.3

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log (U.F.) - 20*\log (D/50) - 10*G*\log (D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Nighttime Construction (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Nighttime Residential Threshold	4,184	45.0
FTA Nighttime Industrial/Commercial Threshold	69	80.0
R-SR 1: Residential along Mertola Ave	950	57.9
NR-SR 2: Oak Meadow Elementary	1425	54.4
R-SR 3: Residential along Village Green Drive	1290	55.2
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	1265	55.4
NR-SR 5: Church	1,255	55.5

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Concrete Mixer Truck	85	0.4
Concrete Pump Truck	82	0.2
Roller	85	0.2

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [4]	L_{eq} dBA at 50 feet[3]
Concrete Mixer Truck	81.0
Concrete Pump Truck	75.0
Roller	78.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
83.5

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Building Construction with Silent Blasting (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Threshol	42	90.0
County Nighttime Threshold	7,471	45.0
R-SR 1: Residential along Mertola Ave[1]	950	62.9
NR-SR 2: Oak Meadow Elementary[2]	635	66.4
R-SR 3: Residential along Village Green Drive[2]	500	68.5
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive[2]	985	62.6
NR-SR 5: Church[1]	1,255	60.5
NR-SR 2: Oak Meadow Elementary Buildings	800	64.4

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Mounted Impact Hammer (hoe ram)	90	0.2
Dozer	85	0.4
Excavator	85	0.4
Dozer	85	0.4
Excavator	85	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Mounted Impact Hammer (hoe ram)	83.0
Dozer	81.0
Excavator	81.0
Dozer	81.0
Excavator	81.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
88.5

Notes:

[1] The nearest construction activity would be located on the South Site

[2] The nearest construction activity would be located on the North Site

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Paving (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Threshold	40	90.0
County Nighttime Threshold	7,133	45.0
R-SR 1: Residential along Mertola Ave	950	62.5
NR-SR 2: Oak Meadow Elementary	635	66.0
R-SR 3: Residential along Village Green Drive	500	68.1
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	985	62.2
NR-SR 5: Church	1,255	60.1

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Paver	85	0.5
Roller	85	0.2
Tractor	84	0.4
Paver	85	0.5
Roller	85	0.2
Tractor	84	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Paver	82.0
Roller	78.0
Tractor	80.0
Paver	82.0
Roller	78.0
Tractor	80.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
88.1

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado CostcoArchitectural Coating (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Residential Threshold	20	90.0
County Nighttime Threshold	3,557	45.0
R-SR 1: Residential along Mertola Ave	950	56.5
NR-SR 2: Oak Meadow Elementary	635	60.0
R-SR 3: Residential along Village Green Drive	500	62.0
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	985	56.2
NR-SR 5: Church	1,255	54.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Compressor (air)	80	0.4
Compressor (air)	80	0.4
Compressor (air)	80	0.4
Compressor (air)	80	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Compressor (air)	76.0
Compressor (air)	76.0
Compressor (air)	76.0
Compressor (air)	76.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
82.0

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log (U.F.) - 20*\log (D/50) - 10*G*\log (D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco - Off-site Construction (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
FTA Daytime Residential Threshold	27	90.0
Residences near Village Green Drive	877	59.7
NR-SR 2: Oak Meadow Elementary - Install Left turn lanes	1128	57.5
Residences near White Rock Road	193	72.8

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Paver	85	0.5
Grader	85	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Paver	82.0
Grader	81.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
84.5

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Costco - Site Preparation (L_{MAX})

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	66	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	1
Scraper	85	1
Tractor	84	1
Grader	85	1
Scraper	85	1
Tractor	84	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	85.0
Scraper	85.0
Tractor	84.0
Grader	85.0
Scraper	85.0
Tractor	84.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
92.5

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Nighttime Construction Maximum Noise Levels

Project Name:

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (dBA L_{max})
Thresholds		
Evening Standard	874	60.0
Nighttime Standard	1,554	55.0
Sensitive Receptors		
R-SR 1: Residential along Mertola Ave	950	59.3
NR-SR 2: Oak Meadow Elementary	1425	55.8
R-SR 3: Residential along Village Green Drive	1290	56.6
R-SR 4: Residential near Village Green Drive/Russi Ranch Drive	1265	56.8
NR-SR 5: Church	1,255	56.9

Equipment[1]	Reference Emission Noise Levels (dBA L_{max}) at 50 feet[2]
Concrete Mixer Truck	79
Concrete Pump Truck	81
Roller	80

Ground Type	Hard
Source Height	8
Receiver Height	5
Ground Factor[3]	0.00

Predicted Noise Level [3]	dBA L_{max} at 50 feet[3]
Concrete Mixer Truck	79.0
Concrete Pump Truck	81.0
Roller	80.0

Combined Predicted Noise Level (dBA L_{max} at 50 feet)
84.8

Sources:

[1] Where measured values are not available, noise levels based on the Construction Noise Control Specifiction 721.560 were used.

[2] Based on Figure 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor, assumed to be 1 for the purposes of the calculation of maximum noise levels;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

El Dorado Costco Grading (LMAX)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	69	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	1
Excavator	85	1
Dozer	85	1
Grader	85	1
Excavator	85	1
Dozer	85	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	85.0
Excavator	85.0
Dozer	85.0
Grader	85.0
Excavator	85.0
Dozer	85.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
92.8

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

El Dorado Costco Building (LMAX)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	69	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Crane	85	1
Dozer	85	1
Pneumatic Tools	85	1
Crane	85	1
Dozer	85	1
Pneumatic Tools	85	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Crane	85.0
Dozer	85.0
Pneumatic Tools	85.0
Crane	85.0
Dozer	85.0
Pneumatic Tools	85.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
92.8

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Construction (LMAX)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	138	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Impact Pile Driver	95	1
Dozer	85	1
Pneumatic Tools	85	1
Impact Pile Driver	95	1
Dozer	85	1
Pneumatic Tools	85	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Impact Pile Driver	95.0
Dozer	85.0
Pneumatic Tools	85.0
Impact Pile Driver	95.0
Dozer	85.0
Pneumatic Tools	85.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
98.8

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Construction (LMAX)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	66	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Paver	85	1
Roller	85	1
Tractor	84	1
Paver	85	1
Roller	85	1
Tractor	84	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Paver	85.0
Roller	85.0
Tractor	84.0
Paver	85.0
Roller	85.0
Tractor	84.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
92.5

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Construction (LMAX)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	32	90.0
Industrial/Commercial Threshold	100	100.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Compressor (air)	80	1
Compressor (air)	80	1
Compressor (air)	80	1
Compressor (air)	80	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Compressor (air)	80.0
Compressor (air)	80.0
Compressor (air)	80.0
Compressor (air)	80.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
86.0

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq
Auger Drill Rig	20	85	84	36	79.0	72.0	100	78.0	71.0
Backhoe	40	80	78	372	74.0	70.0	100	72.0	68.0
Bar Bender	20	80	na	0	74.0	67.0	100		
Blasting	na	94	na	0	88.0		100		
Boring Jack Power Unit	50	80	83	1	74.0	71.0	100	77.0	74.0
Chain Saw	20	85	84	46	79.0	72.0	100	78.0	71.0
Clam Shovel (dropping)	20	93	87	4	87.0	80.0	100	81.0	74.0
Compactor (ground)	20	80	83	57	74.0	67.0	100	77.0	70.0
Compressor (air)	40	80	78	18	74.0	70.0	100	72.0	68.0
Concrete Batch Plant	15	83	na	0	77.0	68.7	100		
Concrete Mixer Truck	40	85	79	40	79.0	75.0	100	73.0	69.0
Concrete Pump Truck	20	82	81	30	76.0	69.0	100	75.0	68.0
Concrete Saw	20	90	90	55	84.0	77.0	100	84.0	77.0
Crane	16	85	81	405	79.0	71.0	100	75.0	67.0
Dozer	40	85	82	55	79.0	75.0	100	76.0	72.0
Drill Rig Truck	20	84	79	22	78.0	71.0	100	73.0	66.0
Drum Mixer	50	80	80	1	74.0	71.0	100	74.0	71.0
Dump Truck	40	84	76	31	78.0	74.0	100	70.0	66.0
Excavator	40	85	81	170	79.0	75.0	100	75.0	71.0
Flat Bed Truck	40	84	74	4	78.0	74.0	100	68.0	64.0
Front End Loader	40	80	79	96	74.0	70.0	100	73.0	69.0
Generator	50	82	81	19	76.0	73.0	100	75.0	72.0
Generator (<25KVA, VMS s	50	70	73	74	64.0	61.0	100	67.0	64.0
Gradall	40	85	83	70	79.0	75.0	100	77.0	73.0
Grader	40	85	na	0	79.0	75.0	100		
Grapple (on Backhoe)	40	85	87	1	79.0	75.0	100	81.0	77.0
Horizontal Boring Hydr. Jac	25	80	82	6	74.0	68.0	100	76.0	70.0
Hydra Break Ram	10	90	na	0	84.0	74.0	100		
Impact Pile Driver	20	95	101	11	89.0	82.0	100	95.0	88.0
Jackhammer	20	85	89	133	79.0	72.0	100	83.0	76.0
Man Lift	20	85	75	23	79.0	72.0	100	69.0	62.0

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq
Mounted Impact Hammer	20	90	90	212	84.0	77.0	100	84.0	77.0
Pavement Scarafier	20	85	90	2	79.0	72.0	100	84.0	77.0
Paver	50	85	77	9	79.0	76.0	100	71.0	68.0
Pickup Truck	40	55	75	1	49.0	45.0	100	69.0	65.0
Pneumatic Tools	50	85	85	90	79.0	76.0	100	79.0	76.0
Pumps	50	77	81	17	71.0	68.0	100	75.0	72.0
Refrigerator Unit	100	82	73	3	76.0	76.0	100	67.0	67.0
Rivit Buster/chipping gun	20	85	79	19	79.0	72.0	100	73.0	66.0
Rock Drill	20	85	81	3	79.0	72.0	100	75.0	68.0
Roller	20	85	80	16	79.0	72.0	100	74.0	67.0
Sand Blasting (Single Nozzl	20	85	96	9	79.0	72.0	100	90.0	83.0
Scraper	40	85	84	12	79.0	75.0	100	78.0	74.0
Shears (on backhoe)	40	85	96	5	79.0	75.0	100	90.0	86.0
Slurry Plant	100	78	78	1	72.0	72.0	100	72.0	72.0
Slurry Trenching Machine	50	82	80	75	76.0	73.0	100	74.0	71.0
Soil Mix Drill Rig	50	80	na	0	74.0	71.0	100		
Tractor	40	84	na	0	78.0	74.0	100		
Tugboat	40	87	74	4	81.0	77.0	100	68.0	64.0
Vacuum Excavator (Vac-tru	40	85	85	149	79.0	75.0	100	79.0	75.0
Vacuum Street Sweeper	10	80	82	19	74.0	64.0	100	76.0	66.0
Ventilation Fan	100	85	79	13	79.0	79.0	100	73.0	73.0
Vibrating Hopper	50	85	87	1	79.0	76.0	100	81.0	78.0
Vibratory Concrete Mixer	20	80	80	1	74.0	67.0	100	74.0	67.0
Vibratory Pile Driver	20	95	101	44	89.0	82.0	100	95.0	88.0
Warning Horn	5	85	83	12	79.0	66.0	100	77.0	64.0
Workboat	40	72	74	4	66.0	62.0	100	68.0	64.0
Welder / Torch	40	73	74	5	67.0	63.0	100	68.0	64.0

Source:
FHWA Roadway Construction Noise Model, January 2006. Table 9.1

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq

U.S. Department of Transportation
CA/T Construction Spec. 721.560

Traffic Noise Spreadsheet Calculator - Costco Project Traffic Noise - Weekday Summary

Project: El Dorado Hills Project - Weekday Traffic Volumes

Number	Name	Segment Description and Location From	To	Existing Conditions	Existing + Project Conditions	Δ Existing – Existing + Project	Cumulative (Year 2034) Conditions	Cumulative +Project Conditions	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	El Dorado Hills Blvd/Latrobe Road	US 50 WB Ramps	US 50 EB Ramps	70.5	70.5	0.0	71.0	71.0	0.0
2	Latrobe Road	US 50 EB Ramps	White Rock Road	70.4	70.4	0.0	70.6	70.6	0.0
3	White Rock Road	Latrobe Road	Post Street	66.2	66.3	0.2	68.1	68.2	0.1
4	White Rock Road	Post Street	Valley View Parkway	65.9	66.0	0.2	67.6	67.7	0.1
5	White Rock Road	Valley View Parkway	Clarksville Crossing	65.2	65.4	0.2	67.0	67.1	0.1
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	66.2	66.3	0.1	68.2	68.3	0.1
7	White Rock Road/Silva Valley Parkwa	US 50 EB Ramps	US 50 WB Ramps	66.0	66.9	0.9	67.2	67.9	0.7
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	59.1	59.2	0.1	60.0	60.1	0.1
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	65.7	65.8	0.2	66.5	66.6	0.1
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	66.6	67.1	0.5	67.8	68.1	0.4
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary School	60.3	60.8	0.5	61.5	61.9	0.4
12	Silva Valley Parkway	Oak Meadow Elementary School	Clarksville Crossing	60.2	60.7	0.5	61.4	61.8	0.4
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	65.9	66.5	0.6	66.8	67.3	0.5
14	Silva Valley Parkway	North/South Site Access	Tong Road	66.0	67.5	1.5	66.8	68.1	1.3
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	66.0	67.5	1.5	66.7	68.1	1.3
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	58.4	58.9	0.5	60.9	61.2	0.3
17	Clarksville Crossing	South Site North Access	South Site Center Access	58.4	58.7	0.3	60.9	61.1	0.2
18	Clarksville Crossing	South Site Center Access	South Site South Access	58.4	58.7	0.3	60.9	61.1	0.2
19	Clarksville Crossing	South Site South Access	White Rock Road	58.3	59.2	0.9	60.8	61.4	0.5
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	65.6	65.8	0.2	66.3	66.5	0.2
21	Bass Lake Road	Serrano Parkway	Country Club Drive	65.2	65.2	0.1	66.4	66.5	0.0
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	67.7	67.8	0.1	69.5	69.5	0.1
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	65.4	65.5	0.1	67.1	67.2	0.1
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	59.9	61.8	1.9	58.5	61.0	2.5
25	US 50 Westbound	East of Silva Valley Parkway Interchange		58.8	60.1	1.3	61.2	62.0	0.8
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	58.7	59.3	0.7	62.6	62.9	0.3
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		57.6	58.5	0.8	57.7	58.5	0.8

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Existing Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																		
1	El Dorado Hills Blvd/Latrobe Road	US 50 WB Ramps	US 50 EB Ramps	51,221	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.5	40	125	397	1254
2	Latrobe Road	US 50 EB Ramps	White Rock Road	50,286	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.4	39	123	389	1231
3	White Rock Road	Latrobe Road	Post Street	18,943	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	15	46	147	464
4	White Rock Road	Post Street	Valley View Parkway	17,593	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	14	43	136	431
5	White Rock Road	Valley View Parkway	Clarksville Crossing	15,229	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	12	37	118	373
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	19,180	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	15	47	148	470
7	White Rock Road/Silva Valley Parkway	US 50 EB Ramps	US 50 WB Ramps	18,086	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	14	44	140	443
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	16,000	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.1	3	9	29	91
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	16,801	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	13	41	130	411
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	20,700	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	16	51	160	507
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Sch	20,986	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.3	4	12	38	119
12	Silva Valley Parkway	Oak Meadow Elementary Sch	Clarksville Crossing	20,814	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.2	4	12	37	118
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	17,914	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	14	44	139	439
14	Silva Valley Parkway	North/South Site Access	Tong Road	18,029	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	14	44	140	441
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	18,022	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	14	44	140	441
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,150	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	2	8	24	77
17	Clarksville Crossing	South Site North Access	South Site Center Access	3,157	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	2	8	24	77
18	Clarksville Crossing	South Site Center Access	South Site South Access	3,157	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	2	8	24	77
19	Clarksville Crossing	South Site South Access	White Rock Road	3,057	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.3	2	7	24	75
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	16,529	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	13	40	128	405
21	Bass Lake Road	Serrano Parkway	Country Club Drive	10,979	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	12	37	116	366
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	19,565	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	21	65	206	652
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	11,665	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	12	39	123	389
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	4,443	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.9	3	11	34	109
25	US 50 Westbound	East of Silva Valley Parkway Ir	0	7,014	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.8	3	9	27	85
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	6,757	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	3	8	26	82
27	US 50 Eastbound	East of Silva Valley Parkway Ir	0	5,343	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.6	2	6	21	65

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Existing + Project Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)$_4$		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)$_3$			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)$_{5,6,7}$	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project Conditions																		
1	El Dorado Hills Blvd/Latrobe Road	US 50 WB Ramps	US 50 EB Ramps	51,371	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.5	126	398	1258	3977
2	Latrobe Road	US 50 EB Ramps	White Rock Road	50,286	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.4	123	389	1231	3893
3	White Rock Road	Latrobe Road	Post Street	19,666	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	48	152	481	1523
4	White Rock Road	Post Street	Valley View Parkway	18,316	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	45	142	448	1418
5	White Rock Road	Valley View Parkway	Clarksville Crossing	15,771	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	39	122	386	1221
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	19,560	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	48	151	479	1514
7	White Rock Road/Silva Valley Parkwa	US 50 EB Ramps	US 50 WB Ramps	22,403	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	55	173	548	1734
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	16,477	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.2	9	30	94	296
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	17,452	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.8	43	135	427	1351
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	23,187	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	57	180	568	1795
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Sch	23,473	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.8	13	42	133	421
12	Silva Valley Parkway	Oak Meadow Elementary Sch	Clarksville Crossing	23,301	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.7	13	42	132	418
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	20,365	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	158	499	1577
14	Silva Valley Parkway	North/South Site Access	Tong Road	25,719	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.5	63	199	630	1991
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	25,712	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.5	63	199	629	1991
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,543	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.9	9	27	87	274
17	Clarksville Crossing	South Site North Access	South Site Center Access	3,386	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	8	26	83	262
18	Clarksville Crossing	South Site Center Access	South Site South Access	3,386	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	8	26	83	262
19	Clarksville Crossing	South Site South Access	White Rock Road	3,760	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.2	9	29	92	291
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	17,326	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.8	42	134	424	1341
21	Bass Lake Road	Serrano Parkway	Country Club Drive	11,124	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	37	117	371	1173
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	20,072	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	212	669	2117
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	11,917	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	40	126	397	1257
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	6,943	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.8	17	54	170	538
25	US 50 Westbound	East of Silva Valley Parkway Ir	0	9,514	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	12	37	116	366
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	7,895	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.3	10	30	96	304
27	US 50 Eastbound	East of Silva Valley Parkway Ir	0	6,481	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	249

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Cumulative Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative (Year 2034) Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	Latrobe Road	57,779	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.0	141	447	1415	4473
2	Latrobe Road	US 50	White Rock Road	52,814	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.6	129	409	1293	4089
3	White Rock Road	Latrobe Road	Post Street	29,407	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	72	228	720	2277
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	26,457	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.6	65	205	648	2048
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	22,650	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	55	175	555	1754
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	30,143	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	74	233	738	2334
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	23,757	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	58	184	582	1839
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	19,564	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	111	351
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	20,357	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	158	498	1576
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	27,243	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	211	667	2109
11	Silva Valley Parkway	Entrada Drive	School Driveway	27,700	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.5	16	50	157	497
12	Silva Valley Parkway	School Driveway	Clarksville Road	27,271	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	49	155	489
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	21,957	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	170	538	1700
14	Silva Valley Parkway	North/South Site Access	Tong Road	22,071	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	171	540	1709
15	Silva Valley Parkway	Tong Road	US 50 WB	21,479	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	53	166	526	1663
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	5,636	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	436
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	5,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	437
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	5,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	437
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	5,543	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.8	14	43	136	429
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	19,393	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	47	150	475	1501
21	Bass Lake Road	Serrano Parkway	Country Club Drive	14,714	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	155	491	1552
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	29,629	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	99	312	988	3125
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	17,264	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	58	182	576	1821
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	3,229	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	250
25	US 50 Westbound	East of Silva Valley Parkway	Interchange	12,029	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	46	146	463
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	16,586	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.6	20	64	202	638
27	US 50 Eastbound	East of Silva Valley Parkway	Interchange	5,357	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	7	21	65	206

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Cumulative + Project Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative +Project Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	Latrobe Road	57,929	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.0	142	448	1418	4485
2	Latrobe Road	US 50	White Rock Road	52,814	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.6	129	409	1293	4089
3	White Rock Road	Latrobe Road	Post Street	30,130	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	74	233	738	2333
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	27,180	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	67	210	665	2104
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	23,192	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	57	180	568	1795
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	30,523	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	75	236	747	2363
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	28,074	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.9	69	217	687	2173
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	20,041	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	360
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	21,008	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	51	163	514	1626
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	29,730	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	73	230	728	2302
11	Silva Valley Parkway	Entrada Drive	School Driveway	30,187	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	17	54	171	542
12	Silva Valley Parkway	School Driveway	Clarksville Road	29,758	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.8	17	53	169	534
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	24,408	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	60	189	598	1890
14	Silva Valley Parkway	North/South Site Access	Tong Road	29,761	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	73	230	729	2304
15	Silva Valley Parkway	Tong Road	US 50 WB	29,169	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	71	226	714	2258
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	6,029	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	47	148	467
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	5,872	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	144	455
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	5,872	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	144	455
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	6,246	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	48	153	484
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	20,190	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	49	156	494	1563
21	Bass Lake Road	Serrano Parkway	Country Club Drive	14,860	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	157	496	1567
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	30,136	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	100	318	1005	3178
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	17,516	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	58	185	584	1847
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	5,729	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	14	44	140	444
25	US 50 Westbound	East of Silva Valley Parkway	Interchange	14,529	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.0	18	56	177	559
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	17,724	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	22	68	216	682
27	US 50 Eastbound	East of Silva Valley Parkway	Interchange	6,495	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	250

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator

Project: El Dorado Hills Project - Weekend Traffic Volumes

Number	Name	Segment Description and Location From	To	Existing Conditions	Existing + Project Conditions	Δ Existing – Existing + Project	Cumulative (Year 2034) Conditions	Cumulative +Project Conditions	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	El Dorado Hills Blvd/Latrobe Ro	US 50 WB Ramps	US 50 EB Ramps						
2	Latrobe Road	US 50 EB Ramps	White Rock Road						
3	White Rock Road	Latrobe Road	Post Street						
4	White Rock Road	Post Street	Valley View Parkway						
5	White Rock Road	Valley View Parkway	Clarksville Crossing	62.6	62.9	0.4	64.5	64.7	0.2
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	64.8	64.9	0.1	66.7	66.8	0.1
7	White Rock Road/Silva Valley P	US 50 EB Ramps	US 50 WB Ramps	65.0	66.1	1.1	66.4	67.2	0.8
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane						
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	60.7	61.3	0.6	61.6	62.1	0.5
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	65.1	65.9	0.9	66.2	66.9	0.7
11	Silva Valley Parkway	Entrada Drive	Oak Meadows Elementary Schoo	59.2	60.0	0.8	60.5	61.1	0.6
12	Silva Valley Parkway	Oak Meadows Elementary Schoo	Clarksville Crossing	59.2	60.0	0.8	60.3	61.0	0.6
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	64.8	65.5	0.8	65.7	66.3	0.6
14	Silva Valley Parkway	North/South Site Access	Tong Road	64.8	66.9	2.1	65.7	67.4	1.8
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	64.7	66.9	2.1	65.5	67.3	1.8
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	57.6	58.5	0.8	59.8	60.4	0.5
17	Clarksville Crossing	South Site North Access	South Site Center Access	57.6	58.1	0.5	59.8	60.1	0.3
18	Clarksville Crossing	South Site Center Access	South Site South Access	57.6	58.1	0.5	59.8	60.1	0.3
19	Clarksville Crossing	South Site South Access	White Rock Road	57.7	59.1	1.4	60.0	60.9	0.9
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	61.3	62.0	0.7	61.8	62.4	0.6
21	Bass Lake Road	Serrano Parkway	Country Club Drive						
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps						
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps						
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	59.5	61.9	2.4	58.0	61.1	3.1
25	US 50 Westbound	East of Silva Valley Parkway Interchange		57.8	59.7	1.8	60.2	61.4	1.2
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	56.8	57.7	0.9	60.6	61.1	0.4
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		56.3	57.3	1.0	56.3	57.3	1.0

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Existing Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50 EB Ramps	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Valley View Parkway	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Valley View Parkway	Clarksville Crossing	8,271	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.6	6	20	64	202
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	13,793	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.8	11	34	107	338
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	14,471	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.0	11	35	112	354
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	5,386	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.7	4	13	42	132
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	14,693	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	11	36	114	360
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	16,514	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.2	3	9	30	94
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	16,293	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.2	3	9	29	92
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	13,650	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.8	11	33	106	334
14	Silva Valley Parkway	North/South Site Access	Tong Road	13,636	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.8	11	33	106	334
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	13,629	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.7	11	33	106	334
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	2,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.6	2	6	20	65
17	Clarksville Crossing	South Site North Access	South Site Center Access	2,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.6	2	6	20	65
18	Clarksville Crossing	South Site Center Access	South Site South Access	2,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.6	2	6	20	65
19	Clarksville Crossing	South Site South Access	White Rock Road	2,714	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	2	7	21	66
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	6,186	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.3	5	15	48	151
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	4,100	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.5	3	10	32	100
25	US 50 Westbound	East of Silva Valley Parkway In	0	5,586	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.8	2	7	21	68
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	4,357	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.8	2	5	17	53
27	US 50 Eastbound	East of Silva Valley Parkway In	0	3,929	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.3	2	5	15	48

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Existing + Project Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50 EB Ramps	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Valley View Parkway	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Valley View Parkway	Clarksville Crossing	8,989	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	22	70	220	696
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	14,197	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.9	35	110	348	1099
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	18,628	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	46	144	456	1442
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	6,222	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.3	15	48	152	482
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	17,928	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	44	139	439	1388
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	19,749	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	112	354
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	19,527	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	111	350
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	16,332	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	40	126	400	1264
14	Silva Valley Parkway	North/South Site Access	Tong Road	22,125	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	54	171	542	1713
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	22,119	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	54	171	542	1712
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,206	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	78	248
17	Clarksville Crossing	South Site North Access	South Site Center Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
18	Clarksville Crossing	South Site Center Access	South Site South Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
19	Clarksville Crossing	South Site South Access	White Rock Road	3,746	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.1	9	29	92	290
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	7,236	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.0	18	56	177	560
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	7,063	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	17	55	173	547
25	US 50 Westbound	East of Silva Valley Parkway In	0	8,549	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.7	10	33	104	329
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	5,410	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	7	21	66	208
27	US 50 Eastbound	East of Silva Valley Parkway In	0	4,982	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.3	6	19	61	192

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Cumulative Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative (Year 2034) Conditions																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	12,837	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.5	31	99	314	994
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	21,478	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	53	166	526	1663
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	19,895	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	154	487	1540
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	6,567	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.6	16	51	161	508
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	19,207	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	47	149	470	1487
11	Silva Valley Parkway	Entrada Drive	School Driveway	21,936	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.5	12	39	125	394
12	Silva Valley Parkway	School Driveway	Clarksville Road	21,307	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.3	12	38	121	382
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	16,814	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	41	130	412	1302
14	Silva Valley Parkway	North/South Site Access	Tong Road	16,777	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	41	130	411	1299
15	Silva Valley Parkway	Tong Road	US 50 WB	16,108	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	39	125	394	1247
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	4,395	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.8	11	34	108	340
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	4,341	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.8	11	34	106	336
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	4,341	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.8	11	34	106	336
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	4,526	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	111	350
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	6,881	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.8	17	53	168	533
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	2,880	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.0	7	22	71	223
25	US 50 Westbound	East of Silva Valley Parkway	Interchange	9,618	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.2	12	37	117	370
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	10,677	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.6	13	41	130	411
27	US 50 Eastbound	East of Silva Valley Parkway	Interchange	3,918	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.3	5	15	48	151

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Cumulative + Project Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	$(dBA)_{5,6,7}$	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative +Project Conditions																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	13,555	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.7	33	105	332	1049
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	21,882	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	169	536	1694
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	24,052	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	59	186	589	1862
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	7,403	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.1	18	57	181	573
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	22,442	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	55	174	549	1737
11	Silva Valley Parkway	Entrada Drive	School Driveway	25,171	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	452
12	Silva Valley Parkway	School Driveway	Clarksville Road	24,541	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	14	44	139	440
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	19,495	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	48	151	477	1509
14	Silva Valley Parkway	North/South Site Access	Tong Road	25,266	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.4	62	196	619	1956
15	Silva Valley Parkway	Tong Road	US 50 WB	24,598	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	60	190	602	1904
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	4,958	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.4	12	38	121	384
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	5,558	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	43	136	430
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	7,932	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.4	19	61	194	614
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	5,843	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	452
25	US 50 Westbound	East of Silva Valley Parkway Interchange		12,581	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	48	153	484
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	11,730	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	451
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		4,971	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.3	6	19	60	191

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday

Project: North Site Remainder Area- Weekday Traffic Volumes

Number	Segment Description and Location: Name	From	To	Existing Conditions	Existing + Project + North Site Remainder Area Conditions	Δ Existing – Existing + Project	Cumulative (Year 2034) Conditions	Cumulative + Project + North Site Remainder Area	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	70.5	70.5	0.0	71.0	71.0	0.0
2	Latrobe Road	US 50	White Rock Road	70.4	70.4	0.0	70.6	70.6	0.0
3	White Rock Road	Latrobe Road	Post Street	66.2	66.4	0.2	68.1	68.2	0.1
4	White Rock Road	Post Street	Vine Street/ Valley View Parkway	65.9	66.1	0.2	67.6	67.8	0.2
5	White Rock Road	Vine Street/Valley View Parkway	Clarksville Road/Old White Rock I	65.2	65.4	0.2	67.0	67.1	0.1
6	White Rock Road	Clarksville Road/Old White Rock I	US 50 EB Off-ramp	66.2	66.4	0.2	68.2	68.3	0.1
7	White Rock Road/Silva Valley Pa	US 50 EB Off-Ramp	US 50 WB	66.0	67.1	1.1	67.2	68.0	0.9
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Park D	59.1	59.3	0.2	60.0	60.1	0.1
9	Silva Valley Parkway	Golden Eagle Lane/Walker Park	Serrano Parkway	65.7	65.9	0.2	66.5	66.7	0.2
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	66.6	67.2	0.7	67.8	68.3	0.5
11	Silva Valley Parkway	Entrada Drive	School Driveway	60.3	60.9	0.6	61.5	62.0	0.5
12	Silva Valley Parkway	School Driveway	Clarksville Road	60.2	60.9	0.6	61.4	61.9	0.5
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	65.9	66.6	0.6	66.8	67.4	0.5
14	Silva Valley Parkway	North/South Site Access	Tong Road	66.0	67.8	1.8	66.8	68.4	1.5
15	Silva Valley Parkway	Tong Road	US 50 WB	66.0	67.8	1.8	66.7	68.3	1.6
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Clarksville Crossing	58.4	58.9	0.5	60.9	61.2	0.3
17	Clarksville Crossing	South Site North Access on Clarksville Crossing	South Site Center Access on Clark	58.4	58.7	0.3	60.9	61.1	0.2
18	Clarksville Crossing	South Site Center Access on Clark	South Site South Access on Clarks	58.4	58.7	0.3	60.9	61.1	0.2
19	Clarksville Crossing	South Site South Access on Clarks	White Rock Road	58.3	59.2	0.9	60.8	61.4	0.5
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	65.6	65.9	0.3	66.3	66.5	0.2
21	Bass Lake Road	Serrano Parkway	Country Club Drive	65.2	65.2	0.1	66.4	66.5	0.1
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	67.7	67.8	0.1	69.5	69.6	0.1
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	65.4	65.5	0.1	67.1	67.2	0.1
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	59.9	62.0	2.1	58.5	61.2	2.7
25	US 50 Westbound	East of Silva Valley Parkway Interchange		58.8	60.3	1.5	61.2	62.1	0.9
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	58.7	59.3	0.7	62.6	62.9	0.3
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		57.6	58.5	0.8	57.7	58.5	0.8

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Existing Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	51,423	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.5	126	398	1259	3981
2	Latrobe Road	US 50 EB Ramps	White Rock Road	50,286	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.4	123	389	1231	3893
3	White Rock Road	Latrobe Road	Post Street	18,943	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	46	147	464	1467
4	White Rock Road	Post Street	Valley View Parkway	17,593	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	43	136	431	1362
5	White Rock Road	Valley View Parkway	Clarksville Crossing	15,229	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	37	118	373	1179
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	19,180	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	47	148	470	1485
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	18,086	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	44	140	443	1400
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	16,000	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.1	9	29	91	287
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	16,801	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	41	130	411	1301
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	20,700	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	51	160	507	1603
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	20,986	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.3	12	38	119	377
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	20,814	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.2	12	37	118	374
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	17,914	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	44	139	439	1387
14	Silva Valley Parkway	North/South Site Access	Tong Road	18,029	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	44	140	441	1396
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	18,022	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	44	140	441	1395
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,150	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	8	24	77	244
17	Clarksville Crossing	South Site North Access	South Site Center Access	3,157	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	8	24	77	244
18	Clarksville Crossing	South Site Center Access	South Site South Access	3,157	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.4	8	24	77	244
19	Clarksville Crossing	South Site South Access	White Rock Road	3,057	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.3	7	24	75	237
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	16,529	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	40	128	405	1280
21	Bass Lake Road	Serrano Parkway	Country Club Drive	10,979	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	37	116	366	1158
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	19,565	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	65	206	652	2063
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	11,665	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	39	123	389	1230
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	4,443	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.9	11	34	109	344
25	US 50 Westbound	East of Silva Valley Parkway In	0	7,014	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.8	9	27	85	270
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	6,757	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	8	26	82	260
27	US 50 Eastbound	East of Silva Valley Parkway In	0	5,343	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.6	6	21	65	205

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Existing + Project + North Site Remainder Area Conditions

Project: El Dorado Hills Project - Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project + North Site Remainder Area Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	51,423	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.5	126	398	1259	3981
2	Latrobe Road	US 50 EB Ramps	White Rock Road	50,286	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.4	123	389	1231	3893
3	White Rock Road	Latrobe Road	Post Street	19,920	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	154	488	1542
4	White Rock Road	Post Street	Valley View Parkway	18,570	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	45	144	455	1438
5	White Rock Road	Valley View Parkway	Clarksville Crossing	15,961	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	39	124	391	1236
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	19,940	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	154	488	1544
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	23,427	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	57	181	574	1814
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	16,639	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.3	9	30	94	299
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	17,674	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	43	137	433	1368
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	24,043	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	59	186	589	1861
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	24,329	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	437
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	24,157	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	43	137	434
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	20,789	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	51	161	509	1609
14	Silva Valley Parkway	North/South Site Access	Tong Road	27,398	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	212	671	2121
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	27,391	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	212	671	2121
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,543	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.9	9	27	87	274
17	Clarksville Crossing	South Site North Access	South Site Center Access	3,386	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	8	26	83	262
18	Clarksville Crossing	South Site Center Access	South Site South Access	3,386	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	8	26	83	262
19	Clarksville Crossing	South Site South Access	White Rock Road	3,760	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.2	9	29	92	291
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	17,605	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	43	136	431	1363
21	Bass Lake Road	Serrano Parkway	Country Club Drive	11,176	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	37	118	373	1179
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	20,251	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	68	214	675	2136
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	12,006	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	40	127	400	1266
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	7,247	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.0	18	56	177	561
25	US 50 Westbound	East of Silva Valley Parkway In	0	9,818	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.3	12	38	119	378
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	7,908	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.3	10	30	96	304
27	US 50 Eastbound	East of Silva Valley Parkway In	0	6,494	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	250

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Cumulative

Project: North Site Remainder Area- Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

	Segment Description and Location			Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative (Year 2034) Conditions																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	57,779	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.0	141	447	1415	4473
2	Latrobe Road	US 50	White Rock Road	52,814	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.6	129	409	1293	4089
3	White Rock Road	Latrobe Road	Post Street	29,407	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	72	228	720	2277
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	26,457	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.6	65	205	648	2048
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	22,650	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	55	175	555	1754
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	30,143	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	74	233	738	2334
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	23,757	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	58	184	582	1839
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	19,564	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	111	351
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	20,357	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	158	498	1576
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	27,243	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	211	667	2109
11	Silva Valley Parkway	Entrada Drive	School Driveway	27,700	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.5	16	50	157	497
12	Silva Valley Parkway	School Driveway	Clarksville Road	27,271	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	49	155	489
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	21,957	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	170	538	1700
14	Silva Valley Parkway	North/South Site Access	Tong Road	22,071	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	171	540	1709
15	Silva Valley Parkway	Tong Road	US 50 WB	21,479	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	53	166	526	1663
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	5,636	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	436
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	5,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	437
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	5,643	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	44	138	437
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	5,543	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.8	14	43	136	429
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	19,393	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	47	150	475	1501
21	Bass Lake Road	Serrano Parkway	Country Club Drive	14,714	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	155	491	1552
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	29,629	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	99	312	988	3125
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	17,264	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	58	182	576	1821
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	3,229	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	250
25	US 50 Westbound	East of Silva Valley Parkway Interchange		12,029	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	46	146	463
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	16,586	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.6	20	64	202	638
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		5,357	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	7	21	65	206

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekday Cumulative + Remainder Area

Project: North Site Remainder Area- Weekday Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

Number	Segment Description and Location: Name	From	To	Input: ADT	Speed (mph)	Distance to Directional Centerline, (feet)[4]: Near	Far	Traffic Distribution Characteristics: % Auto	% Medium	% Heavy	% Day	% Eve	% Night	Output: Ldn, (dBA)[5,6,7]	Distance to Contour, (feet)[3]: 70 dBA	65 dBA	60 dBA	55 dBA
Cumulative + Project + North Site Remainder Area																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	57,981	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.0	142	449	1419	4489
2	Latrobe Road	US 50	White Rock Road	52,814	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.6	129	409	1293	4089
3	White Rock Road	Latrobe Road	Post Street	30,384	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	74	235	744	2352
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	27,434	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	67	212	672	2124
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	23,382	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	57	181	572	1810
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	30,903	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	76	239	757	2392
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	29,098	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.0	71	225	712	2253
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	20,203	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	115	363
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	21,230	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	52	164	520	1644
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	30,586	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	75	237	749	2368
11	Silva Valley Parkway	Entrada Drive	School Driveway	31,043	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.0	18	56	176	557
12	Silva Valley Parkway	School Driveway	Clarksville Road	30,614	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	17	55	174	549
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	24,832	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.4	61	192	608	1922
14	Silva Valley Parkway	North/South Site Access	Tong Road	31,440	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.4	77	243	770	2434
15	Silva Valley Parkway	Tong Road	US 50 WB	30,848	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	76	239	755	2388
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	6,029	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	47	148	467
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	5,872	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	144	455
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	5,872	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	144	455
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	6,246	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	48	153	484
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	20,469	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	158	501	1585
21	Bass Lake Road	Serrano Parkway	Country Club Drive	14,912	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.5	50	157	497	1573
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	30,315	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.6	101	320	1011	3197
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	17,605	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	59	186	587	1857
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	6,033	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	47	148	467
25	US 50 Westbound	East of Silva Valley Parkway Interchange		14,833	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.1	18	57	180	570
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	17,737	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	22	68	216	682
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		6,508	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	79	250

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Summary

Project: North Site Remainder Area- Weekend Traffic Volumes

Number	Segment Description and Location: Name	From	To	Existing Conditions	Existing + Project + North Site Remainder Area Conditions	Δ Existing – Existing + Project	Cumulative (Year 2034) Conditions	Cumulative + Project + North Site Remainder Area	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	El Dorado Hills Blvd/Latrobe Ro	Saratoga Way	Latrobe Road		42.1			42.1	
2	Latrobe Road	US 50	White Rock Road						
3	White Rock Road	Latrobe Road	Post Street		49.0			49.0	
4	White Rock Road	Post Street	Vine Street/ Valley View Parkway		49.0			49.0	
5	White Rock Road	Vine Street/Valley View Parkway	Clarksville Road/Old White Rock	62.9	63.1	0.1	64.7	64.8	0.1
6	White Rock Road	Clarksville Road/Old White Rock I	US 50 EB Off-ramp	64.9	65.1	0.2	66.8	66.9	0.1
7	White Rock Road/Silva Valley Pa	US 50 EB Off-Ramp	US 50 WB	66.1	66.4	0.3	67.2	67.5	0.3
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Park D		40.7			40.7	
9	Silva Valley Parkway	Golden Eagle Lane/Walker Park	Serrano Parkway	61.3	61.6	0.2	62.1	62.3	0.2
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	65.9	66.2	0.3	66.9	67.1	0.2
11	Silva Valley Parkway	Entrada Drive	School Driveway	60.0	60.3	0.3	61.1	61.3	0.2
12	Silva Valley Parkway	School Driveway	Clarksville Road	60.0	60.2	0.3	61.0	61.2	0.2
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	65.5	65.7	0.2	66.3	66.4	0.1
14	Silva Valley Parkway	North/South Site Access	Tong Road	66.9	67.3	0.4	67.4	67.8	0.4
15	Silva Valley Parkway	Tong Road	US 50 WB	66.9	67.3	0.4	67.3	67.7	0.4
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Clarksville Crossing	58.5	58.5	0.0	60.4	60.4	0.0
17	Clarksville Crossing	South Site North Access on Clarksville Crossing	South Site Center Access on Clark	58.1	58.1	0.0	60.1	60.1	0.0
18	Clarksville Crossing	South Site Center Access on Clark	South Site South Access on Clarks	58.1	58.1	0.0	60.1	60.1	0.0
19	Clarksville Crossing	South Site South Access on Clarks	White Rock Road	59.1	59.1	0.0	60.9	60.9	0.0
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	62.0	62.2	0.2	62.4	62.6	0.2
21	Bass Lake Road	Serrano Parkway	Country Club Drive		43.4			43.4	
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps		48.8			48.8	
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps		45.7			45.7	
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	61.9	62.1	0.2	61.1	61.0	-0.1
25	US 50 Westbound	East of Silva Valley Parkway Interchange		59.7	59.8	0.2	61.4	62.0	0.6
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	58.7	59.3	0.7	62.6	62.6	0.0
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		57.6	58.5	0.8	57.7	57.7	0.0

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Existing Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	$(dBA)_{5,6,7}$	70 dBA	65 dBA	60 dBA	55 dBA
Existing Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50 EB Ramps	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Valley View Parkway	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Valley View Parkway	Clarksville Crossing	8,989	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	22	70	220	696
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	14,197	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.9	35	110	348	1099
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	18,628	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	46	144	456	1442
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	6,222	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.3	15	48	152	482
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	17,928	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.9	44	139	439	1388
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	19,749	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	112	354
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	19,527	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	11	35	111	350
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	16,332	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	40	126	400	1264
14	Silva Valley Parkway	North/South Site Access	Tong Road	22,125	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	54	171	542	1713
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	22,119	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	54	171	542	1712
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,206	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	78	248
17	Clarksville Crossing	South Site North Access	South Site Center Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
18	Clarksville Crossing	South Site Center Access	South Site South Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
19	Clarksville Crossing	South Site South Access	White Rock Road	3,746	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.1	9	29	92	290
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	7,236	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.0	18	56	177	560
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	7,063	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	17	55	173	547
25	US 50 Westbound	East of Silva Valley Parkway In	0	8,549	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.7	10	33	104	329
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	5,410	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	7	21	66	208
27	US 50 Eastbound	East of Silva Valley Parkway In	0	4,982	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.3	6	19	61	192

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Existing + Project + North Site Development Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project + North Site Remainder Area Conditions																		
1	El Dorado Hills Blvd/Latrobe R	US 50 WB Ramps	US 50 EB Ramps	74	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	42.1		1	2	6
2	Latrobe Road	US 50 EB Ramps	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	362	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.0	1	3	9	28
4	White Rock Road	Post Street	Valley View Parkway	362	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.0	1	3	9	28
5	White Rock Road	Valley View Parkway	Clarksville Crossing	9,261	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.1	23	72	227	717
6	White Rock Road	Clarksville Crossing	US 50 EB Ramps	14,741	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	36	114	361	1141
7	White Rock Road/Silva Valley	US 50 EB Ramps	US 50 WB Ramps	20,094	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	156	492	1556
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	232	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	40.7			1	4
9	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	6,542	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.6	16	51	160	506
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	19,157	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	47	148	469	1483
11	Silva Valley Parkway	Entrada Drive	Oak Meadow Elementary Scho	20,978	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.3	12	38	119	377
12	Silva Valley Parkway	Oak Meadow Elementary Scho	Clarksville Crossing	20,756	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.2	12	37	118	373
13	Silva Valley Parkway	Clarksville Crossing	North/South Site Access	16,938	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	41	131	415	1311
14	Silva Valley Parkway	North/South Site Access	Tong Road	24,519	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	60	190	600	1898
15	Silva Valley Parkway	Tong Road	US 50 WB Ramps	24,513	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	60	190	600	1898
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,206	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.5	8	25	78	248
17	Clarksville Crossing	South Site North Access	South Site Center Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
18	Clarksville Crossing	South Site Center Access	South Site South Access	2,971	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.1	7	23	73	230
19	Clarksville Crossing	South Site South Access	White Rock Road	3,746	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.1	9	29	92	290
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	7,635	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.2	19	59	187	591
21	Bass Lake Road	Serrano Parkway	Country Club Drive	73	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	43.4		1	2	8
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	253	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	48.8	1	3	8	27
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	126	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	45.7		1	4	13
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	7,367	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.1	18	57	180	570
25	US 50 Westbound	East of Silva Valley Parkway In	0	8,853	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.8	11	34	108	340
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	5,423	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.7	7	21	66	209
27	US 50 Eastbound	East of Silva Valley Parkway In	0	4,995	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.4	6	19	61	192

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Cumulative + Project Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative (Year 2034) Conditions																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
2	Latrobe Road	US 50	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	13,555	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.7	33	105	332	1049
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	21,882	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	54	169	536	1694
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	24,052	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	59	186	589	1862
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	0	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	7,403	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.1	18	57	181	573
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	22,442	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	55	174	549	1737
11	Silva Valley Parkway	Entrada Drive	School Driveway	25,171	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	452
12	Silva Valley Parkway	School Driveway	Clarksville Road	24,541	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	14	44	139	440
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	19,495	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	48	151	477	1509
14	Silva Valley Parkway	North/South Site Access	Tong Road	25,266	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.4	62	196	619	1956
15	Silva Valley Parkway	Tong Road	US 50 WB	24,598	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	60	190	602	1904
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	4,958	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.4	12	38	121	384
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	5,558	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	43	136	430
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	7,932	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.4	19	61	194	614
21	Bass Lake Road	Serrano Parkway	Country Club Drive	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	5,843	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	452
25	US 50 Westbound	East of Silva Valley Parkway Interchange		12,581	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.4	15	48	153	484
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	11,730	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	451
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		4,971	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.3	6	19	60	191

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator - Weekend Cumulative + Project + North Site Remainder Area Conditions

Project: El Dorado Hills Project - Weekend Traffic Volumes

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics						Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	(dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Cumulative + Project + North Site Remainder Area																		
1	El Dorado Hills Blvd/Latrobe Road		Latrobe Road	74	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	42.1		1	2	6
2	Latrobe Road	US 50	White Rock Road	0	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%					
3	White Rock Road	Latrobe Road	Post Street	362	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.0	1	3	9	28
4	White Rock Road	Post Street	Vine Street/ Valley View Parkv	362	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.0	1	3	9	28
5	White Rock Road	Vine Street/Valley View Parkw	Clarksville Road/Old White Ro	13,827	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.8	34	107	339	1070
6	White Rock Road	Clarksville Road/Old White Ro	US 50 EB Off-ramp	22,426	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	55	174	549	1736
7	White Rock Road/Silva Valley	US 50 EB Off-Ramp	US 50 WB	25,518	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.5	62	198	625	1976
8	Silva Valley Parkway	Harvard Way	Golden Eagle Lane/Walker Par	232	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	40.7			1	4
9	Silva Valley Parkway	Golden Eagle Lane/Walker Par	Serrano Parkway	7,723	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.3	19	60	189	598
10	Silva Valley Parkway	Serrano Parkway	Entrada Drive	23,671	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	58	183	580	1833
11	Silva Valley Parkway	Entrada Drive	School Driveway	26,400	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.3	15	47	150	474
12	Silva Valley Parkway	School Driveway	Clarksville Road	25,770	25	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	15	46	146	463
13	Silva Valley Parkway	Clarksville Road	North/South Site Access	20,101	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	49	156	492	1556
14	Silva Valley Parkway	North/South Site Access	Tong Road	27,660	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	68	214	677	2141
15	Silva Valley Parkway	Tong Road	US 50 WB	26,992	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	66	209	661	2090
16	Clarksville Crossing	Silva Valley Parkway	South Site North Access on Cl	4,958	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.4	12	38	121	384
17	Clarksville Crossing	South Site North Access on Cl	South Site Center Access on C	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
18	Clarksville Crossing	South Site Center Access on C	South Site South Access on Cl	4,669	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	11	36	114	361
19	Clarksville Crossing	South Site South Access on Cl	White Rock Road	5,558	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.9	14	43	136	430
20	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	8,331	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.6	20	64	204	645
21	Bass Lake Road	Serrano Parkway	Country Club Drive	73	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	43.4		1	2	8
22	Bass Lake Road	Country Club Drive	US 50 WB Ramps	253	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	48.8	1	3	8	27
23	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	126	50	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	45.7		1	4	13
24	US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	6,147	45	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.3	15	48	150	476
25	US 50 Westbound	East of Silva Valley Parkway Interchange		12,885	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.5	16	50	157	495
26	US 50 Eastbound	El Dorado Hills Boulevard	Silva Valley Parkway	11,743	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	14	45	143	452
27	US 50 Eastbound	East of Silva Valley Parkway Interchange		4,984	35	100	125	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	57.3	6	19	61	192

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Weekday Daily Volumes - Study Intersections + Study Roadways

Segment N	To		From		Roadway	From	To	Existing	Existing Plu	Near Term	Near Term Plus Project
1		1		2	El Dorado Hills Blvd/Latrobe Road	US 50 WB Ramps	US 50 EB Ramps	51,221	51,371	57,779	57,929
2		2		3	Latrobe Road	US 50 EB Ramps	White Rock Road	50,286	50,286	52,814	52,814
3		3		4	White Rock Road	Latrobe Road	Post Street	18,943	19,666	29,407	30,130
4		4		15	White Rock Road	Post Street	Valley View Parkway	17,593	18,316	26,457	27,180
5		15		14	White Rock Road	Valley View Parkway	Clarksville Crossing	15,229	15,771	22,650	23,192
6		14		13	White Rock Road	Clarksville Crossing	US 50 EB Ramps	19,180	19,560	30,143	30,523
7		13		12	White Rock Road/Silva Valley Parkway	US 50 EB Ramps	US 50 WB Ramps	18,086	22,403	23,757	28,074
8		5		6	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	16,000	16,477	19,564	20,041
9		6		7	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	16,801	17,452	20,357	21,008
10		7		8	Silva Valley Parkway	Serrano Parkway	Entrada Drive	20,700	23,187	27,243	29,730
11		8		9	Silva Valley Parkway	Entrada Drive	Oak Meadows Elementary S	20,986	23,473	27,700	30,187
12		9		10	Silva Valley Parkway	Oak Meadows Element	Clarksville Crossing	20,814	23,301	27,271	29,758
13		10	A		Silva Valley Parkway	Clarksville Crossing	North/South Site Access	17,914	20,365	21,957	24,408
14	A			11	Silva Valley Parkway	North/South Site Acces	Tong Road	18,029	25,719	22,071	29,761
15		11		12	Silva Valley Parkway	Tong Road	US 50 WB Ramps	18,022	25,712	21,479	29,169
16		10	B		Clarksville Crossing	Silva Valley Parkway	South Site North Access	3,150	3,543	5,636	6,029
17	B		C		Clarksville Crossing	South Site North Acces	South Site Center Access	3,157	3,386	5,643	5,872
18	C		D		Clarksville Crossing	South Site Center Acce	South Site South Access	3,157	3,386	5,643	5,872
19	D			14	Clarksville Crossing	South Site South Acces	White Rock Road	3,057	3,760	5,543	6,246
20		7		16	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	16,529	17,326	19,393	20,190
21		16		17	Bass Lake Road	Serrano Parkway	Country Club Drive	10,979	11,124	14,714	14,860
22		17		18	Bass Lake Road	Country Club Drive	US 50 WB Ramps	19,565	20,072	29,629	30,136
23		18		19	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	11,665	11,917	17,264	17,516
24		5			US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	4,443	6,943	3,229	5,729
25		6			US 50 Westbound	East of Silva Valley Parkway Interchange		7,014	9,514	12,029	14,529
26		7			US 50 Eastbound	El Dorado Hills Boulev	Silva Valley Parkway	6,757	7,895	16,586	17,724
27		8			US 50 Eastbound	East of Silva Valley Parkway Interchange		5,343	6,481	5,357	6,495

Weekend Daily Volumes - Study Intersections + Study Roadways

1		1		2	El Dorado Hills Blvd/Latrobe Road	US 50 WB Ramps	US 50 EB Ramps	0	0	0	0
2		2		3	Latrobe Road	US 50 EB Ramps	White Rock Road	0	0	0	0
3		3		4	White Rock Road	Latrobe Road	Post Street	0	0	0	0
4		4		15	White Rock Road	Post Street	Valley View Parkway	0	0	0	0
5		15		14	White Rock Road	Valley View Parkway	Clarksville Crossing	8,271	8,989	12,837	13,555
6		14		13	White Rock Road	Clarksville Crossing	US 50 EB Ramps	13,793	14,197	21,478	21,882
7		13		12	White Rock Road/Silva Valley Parkway	US 50 EB Ramps	US 50 WB Ramps	14,471	18,628	19,895	24,052
8		5		6	Silva Valley Parkway	Harvard Way	Golden Eagle Lane	0	0	0	0
9		6		7	Silva Valley Parkway	Golden Eagle Lane	Serrano Parkway	5,386	6,222	6,567	7,403
10		7		8	Silva Valley Parkway	Serrano Parkway	Entrada Drive	14,693	17,928	19,207	22,442
11		8		9	Silva Valley Parkway	Entrada Drive	Oak Meadows Elementary S	16,514	19,749	21,936	25,171
12		9		10	Silva Valley Parkway	Oak Meadows Element	Clarksville Crossing	16,293	19,527	21,307	24,541
13		10	A		Silva Valley Parkway	Clarksville Crossing	North/South Site Access	13,650	16,332	16,814	19,495
14	A			11	Silva Valley Parkway	North/South Site Acces	Tong Road	13,636	22,125	16,777	25,266
15		11		12	Silva Valley Parkway	Tong Road	US 50 WB Ramps	13,629	22,119	16,108	24,598
16		10	B		Clarksville Crossing	Silva Valley Parkway	South Site North Access	2,643	3,206	4,395	4,958
17	B		C		Clarksville Crossing	South Site North Acces	South Site Center Access	2,643	2,971	4,341	4,669
18	C		D		Clarksville Crossing	South Site Center Acce	South Site South Access	2,643	2,971	4,341	4,669
19	D			14	Clarksville Crossing	South Site South Acces	White Rock Road	2,714	3,746	4,526	5,558
20		7		16	Serrano Parkway	Silva Valley Parkway	Bass Lake Road	6,186	7,236	6,881	7,932
21		16		17	Bass Lake Road	Serrano Parkway	Country Club Drive	0	0	0	0
22		17		18	Bass Lake Road	Country Club Drive	US 50 WB Ramps	0	0	0	0
23		18		19	Bass Lake Road	US 50 WB Ramps	US 50 EB Ramps	0	0	0	0
24		5			US 50 Westbound	Silva Valley Parkway	El Dorado Hills Boulevard	4100	7063	2880	5843
25		6			US 50 Westbound	East of Silva Valley Parkway Interchange		5586	8549	9618	12581
26		7			US 50 Eastbound	El Dorado Hills Boulev	Silva Valley Parkway	4357	5410	10677	11730
27		8			US 50 Eastbound	East of Silva Valley Parkway Interchange		3929	4982	3918	4971

Weekday Daily Volumes - Study Intersections + Study Roadways North Site Remainder Area

Segment N	To		From		Roadway	From	To	Trips	Existing	Existing+project + remainder area	Near Term + Project	Near Term Plus Project + North Site Remainder Area
1		1		2	El Dorado Hills Blvd/Latrobe Road	US 50 WB I	US 50 EB Ramps	52	51,221	51,423	57,779	57,981
2		2		3	Latrobe Road	US 50 EB R	White Rock Road	0	50,286	50,286	52,814	52,814
3		3		4	White Rock Road	Latrobe Ro	Post Street	254	18,943	19,920	29,407	30,384
4		4		15	White Rock Road	Post Street	Valley View Parkway	254	17,593	18,570	26,457	27,434
5		15		14	White Rock Road	Valley Viev	Clarksville Crossing	190	15,229	15,961	22,650	23,382
6		14		13	White Rock Road	Clarksville	US 50 EB Ramps	380	19,180	19,940	30,143	30,903
7		13		12	White Rock Road/Silva Valley Parkway	US 50 EB R	US 50 WB Ramps	1,024	18,086	23,427	23,757	29,098
8		5		6	Silva Valley Parkway	Harvard W	Golden Eagle Lane	162	16,000	16,639	19,564	20,203
9		6		7	Silva Valley Parkway	Golden Eag	Serrano Parkway	222	16,801	17,674	20,357	21,230
10		7		8	Silva Valley Parkway	Serrano Pa	Entrada Drive	856	20,700	24,043	27,243	30,586
11		8		9	Silva Valley Parkway	Entrada Dr	Oak Meadows Elementary School	856	20,986	24,329	27,700	31,043
12		9		10	Silva Valley Parkway	Oak Meadc	Clarksville Crossing	856	20,814	24,157	27,271	30,614
13		10	A		Silva Valley Parkway	Clarksville	North/South Site Access	424	17,914	20,789	21,957	24,832
14	A			11	Silva Valley Parkway	North/Sout	Tong Road	1,679	18,029	27,398	22,071	31,440
15		11		12	Silva Valley Parkway	Tong Road	US 50 WB Ramps	1,679	18,022	27,391	21,479	30,848
16		10	B		Clarksville Crossing	Silva Valley	South Site North Access	0	3,150	3,543	5,636	6,029
17	B		C		Clarksville Crossing	South Site	South Site Center Access	0	3,157	3,386	5,643	5,872
18	C		D		Clarksville Crossing	South Site	South Site South Access	0	3,157	3,386	5,643	5,872
19	D			14	Clarksville Crossing	South Site	White Rock Road	0	3,057	3,760	5,543	6,246
20		7		16	Serrano Parkway	Silva Valley	Bass Lake Road	279	16,529	17,605	19,393	20,469
21		16		17	Bass Lake Road	Serrano Pa	Country Club Drive	52	10,979	11,176	14,714	14,912
22		17		18	Bass Lake Road	Country Cl	US 50 WB Ramps	179	19,565	20,251	29,629	30,315
23		18		19	Bass Lake Road	US 50 WB I	US 50 EB Ramps	89	11,665	12,006	17,264	17,605
24		5			US 50 Westbound	Silva Valley	El Dorado Hills Boulevard	304	4,443	7,247	3,229	6,033
25		6			US 50 Westbound	East of Silva Valley Parkway Interchange		304	7,014	9,818	12,029	14,833
26		7			US 50 Eastbound	El Dorado I	Silva Valley Parkway	13	6,757	7,908	16,586	17,737
27		8			US 50 Eastbound	East of Silva Valley Parkway Interchange		13	5,343	6,494	5,357	6,508

Weekend Daily Volumes - Study Intersections + Study Roadways

Segment N	To		From		Roadway	From	To	Trips	Existing	Existing+project + remainder area	Near Term	Near Term Plus Project + North Site Remainder Area
1		1		2	El Dorado Hills Blvd/Latrobe Road	US 50 WB I	US 50 EB Ramps	74	0	74	0	74
2		2		3	Latrobe Road	US 50 EB R	White Rock Road	0	0	0	0	0
3		3		4	White Rock Road	Latrobe Ro	Post Street	362	0	362	0	362
4		4		15	White Rock Road	Post Street	Valley View Parkway	362	0	362	0	362
5		15		14	White Rock Road	Valley Viev	Clarksville Crossing	272	8271	9261	12837	13827
6		14		13	White Rock Road	Clarksville	US 50 EB Ramps	544	13793	14741	21478	22426
7		13		12	White Rock Road/Silva Valley Parkway	US 50 EB R	US 50 WB Ramps	1466	14471	20094	19895	25518
8		5		6	Silva Valley Parkway	Harvard W	Golden Eagle Lane	232	0	232	0	232
9		6		7	Silva Valley Parkway	Golden Eag	Serrano Parkway	320	5386	6542	6567	7723
10		7		8	Silva Valley Parkway	Serrano Pa	Entrada Drive	1229	14693	19157	19207	23671
11		8		9	Silva Valley Parkway	Entrada Dr	Oak Meadows Elementary School	1229	16514	20978	21936	26400
12		9		10	Silva Valley Parkway	Oak Meadc	Clarksville Crossing	1229	16293	20756	21307	25770
13		10	A		Silva Valley Parkway	Clarksville	North/South Site Access	606	13650	16938	16814	20101
14	A			11	Silva Valley Parkway	North/Sout	Tong Road	2394	13636	24519	16777	27660
15		11		12	Silva Valley Parkway	Tong Road	US 50 WB Ramps	2394	13629	24513	16108	26992
16		10	B		Clarksville Crossing	Silva Valley	South Site North Access	0	2643	3206	4395	4958
17	B		C		Clarksville Crossing	South Site	South Site Center Access	0	2643	2971	4341	4669
18	C		D		Clarksville Crossing	South Site	South Site South Access	0	2643	2971	4341	4669
19	D			14	Clarksville Crossing	South Site	White Rock Road	0	2714	3746	4526	5558
20		7		16	Serrano Parkway	Silva Valley	Bass Lake Road	399	6186	7635	6881	8331
21		16		17	Bass Lake Road	Serrano Pa	Country Club Drive	73	0	73	0	73
22		17		18	Bass Lake Road	Country Cl	US 50 WB Ramps	253	0	253	0	253
23		18		19	Bass Lake Road	US 50 WB I	US 50 EB Ramps	126	0	126	0	126
24		5			US 50 Westbound	Silva Valley	El Dorado Hills Boulevard	304	4100	7367	2880	6147
25		6			US 50 Westbound	East of Silva Valley Parkway Interchange		304	5586	8853	9618	12885
26		7			US 50 Eastbound	El Dorado I	Silva Valley Parkway	13	4357	5423	10677	11743
27		8			US 50 Eastbound	East of Silva Valley Parkway Interchange		13	3929	4995	3918	4984

Citation #	Citations	
1	Caltrans Technical Noise Supplement. 2009 (November). Table (5-11), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Table (4-2), Pg 4-17.
2	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-26), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Equation (4-5), Pg 4-17
3	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-16), Pg 2-32.	FHWA 2004 TNM Version 2.5
4	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-11), Pg 5-47, 48.	FHWA 2004 TNM Version 2.5
5	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-26), Pg 2-55, 56.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-23), Pg 2-5
6	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-27), Pg 2-57.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-24), Pg 2-5
7	Caltrans Technical Noise Supplement. 2009 (November). Pg 2-53.	Caltrans Technical Noise Supplement. 2013 (September). Pg 2-57.
8	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-7), Pg 5-45.	FHWA 2004 TNM Version 2.5
9	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-8), Pg 5-45.	FHWA 2004 TNM Version 2.5
10	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-9), Pg 5-45.	FHWA 2004 TNM Version 2.5
11	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-13), Pg 5-49.	FHWA 2004 TNM Version 2.5
12	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-14), Pg 5-49.	FHWA 2004 TNM Version 2.5
13	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (16), Pg 67	
14	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (20), Pg 69	
15	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (18), Pg 69	

References

California Department of Transportation (Caltrans). 2009 (November). Technical Noise Supplement. Available: http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf. Accessed A
2017.

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
Loading Dock Activity (daytime: 55 dBA Leq)	59.3	@	100	hard	8	5	0.00	55.0	@	165
Loading Dock Activity (evening: 50 dBA Leq)	59.3	@	100	hard	8	5	0.00	49.8	@	300
Loading Dock Activity (nighttimetime: 45 dBA Leq)	59.3	@	100	hard	8	5	0.00	44.9	@	522
Loading Dock Activity at nearest sensitive receptor	59.3	@	100	hard	8	5	0.00	38.8	@	1065
Trash Compactor (daytime: 55 dBA Leq)	77.0	@	10	hard	8	5	0.00	54.9	@	127
Trash Compactor (evening: 50 dBA Leq)	77.0	@	10	hard	8	5	0.00	49.9	@	226
Trash Compactor (nighttime: 45 dBA Leq)	77.0	@	10	hard	8	5	0.00	44.9	@	405
Trash Compactor Activity at nearest sensitive receptor	77.0	@	10	hard	8	5	0.00	36.7	@	1030
Parking Lot Noise - South Site (daytime: 55 dBA Leq)	64.7	@	50	hard	8	5	0.00	54.9	@	155
Parking Lot Noise - South Site (evening: 50 dBA Leq)	64.7	@	50	hard	8	5	0.00	49.9	@	275
Parking Lot Noise- South Site (nighttime: 45 dBA Leq)	64.7	@	50	hard	8	5	0.00	45.0	@	485
Parking Lot Noise - North Site (daytime: 55 dBA Leq)	59.0	@	50	hard	8	5	0.00	54.9	@	80
Parking Lot Noise - North Site (evening: 50 dBA Leq)	59.0	@	50	hard	8	5	0.00	49.2	@	155
Parking Lot Noise - North Site(nighttime: 45 dBA Leq)	59.0	@	50	hard	8	5	0.00	44.8	@	255
Parking Lot Noise - nearest sensitive receptor North Site	59.0	@	50	hard	8	5	0.00	42.1	@	350
Parking Lot Noise - nearest sensitive receptor South Site	64.7	@	50	hard	8	5	0.00	41.8	@	700
Tire Center Noise (daytime: 55 dBA Leq)	65.0	@	50	hard	8	5	0.00	54.9	@	160
Tire Center Noise (evening: 50 dBA Leq)	65.0	@	50	hard	8	5	0.00	49.9	@	285
Tire Center Noise - nearest sensitive receptor	65.0	@	50	hard	8	5	0.00	39.3	@	965
Heavy Vehicles - nearest sensitive receptor to South Site	65.8	@	16	hard	8	5	0.00	34.1	@	612
Heavy Vehicles - nearest sensitive receptor to North Site	65.8	@	16	hard	8	5	0.00	33.4	@	670

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presentd in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: <http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>Accessed: March 5,

Addition of Noise Levels from Multiple Sources at a Discrete Receptor

ASCENT

OBJECTIVE: This work sheet is designed to estiamte the combined level of noise exposure at a single discrete receptor from multiple point sources.

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Receptor Name: **Sensitive Receptors near El Dorado Hills Costco Project**

STEP 1: Identify the noise sources and enter the reference noise levels (dBA and distance).
Hour of Day (24-HR time)
STEP 3: Select the distance to the receptor and the reduction provided by any intervening barrier.

Step 1. Step 2. Step 3.

Noise Source	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor (SR 5)			
	Reference Noise Level (dBA)	@	Reference Distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	Noise Level (dBA)	@	Distance to Receptor (ft)	Reduction Provided by Barrier, if any (dBA)
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0
HVAC Unit	75.0	@	3	hard	35	5	0.00	25.8	@	870	0

Combined level of noise exposure at receptor from all noise sources (dBA): 31.8

Noise Source	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor (SR6)			
	Reference Noise (dBA)	@	Reference Distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	Noise Level (dBA)	@	Distance to Receptor (ft)	Reduction Provided (dBA)
Trash Compactor	74.0	@	10	hard	35	5	0.00	74.0	@	10	0
Trash Compactor	74.0	@	10	hard	35	5	0.00	74.0	@	10	0

Combined level of noise exposure at receptor from all noise sources (dBA): 77.0

Computation of the attenuated noise level is based on the equation presented on pg. 12-3 and 12-4 of FTA 2006.
Computation of the ground factor is based on the equation presentd in Figure 6-23 on pg. 6-23 of FTA 2006, where the distance of the reference noise leve can be
Summation of noise levels from different stationary noise sources at the same receptor is based on the equation presented on page 2-3 of FTA 2006.

Sources:
Federal Transit Association (FTA). 2006 (May). Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06. Washington, D.C. Available:

Parking Lot South Site Noise Calculation

KEY:	Orange cells are for input.
	Green cells are data to present in a written analysis (output).

Number of automobiles per hour	1697
Number of buses per hour	0
Distance to sensitive receptor (feet)	700

	distance	sound level
Leq @	50	**64.7**
Leq @	700	**41.8**

Source

Federal Transit Administration. 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed 2025. See pages 45–47, including Equation 4-14.

Parking Lot North Site Noise Calculation

KEY:	Orange cells are for input.
	Green cells are data to present in a written analysis (output).

Number of automobiles per hour	461
Number of buses per hour	0
Distance to sensitive receptor (feet)	350

	distance	sound level
Leq @	50	**59.0**
Leq @	350	**42.1**

Source

Federal Transit Administration. 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed 2025. See pages 45–47, including Equation 4-14.

Distance Propagation Calculations for Stationary Sources of Ground Vibration

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Determine units in which to perform calculation.

— If vibration decibels (VdB), then use Table A and proceed to Steps 2A and 3A.

— If peak particle velocity (PPV), then use Table B and proceed to Steps 2B and 3B.

STEP 2A: Identify the vibration source and enter the reference vibration level (VdB) and distance.

STEP 3A: Select the distance to the receiver.

Table A. Propagation of vibration decibels (VdB) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (VdB)	@	distance (ft)	vibration level (VdB)	@	distance (ft)
Hoe Ram	87	@	25	79.9	@	43
Vibratory Roller	87	@	25	79.9	@	43
Large Bulldozer	87	@	25	79.9	@	43
Loaded Trucks	70	@	25	79.9	@	12
Small Bulldozer	58	@	25	78.8	@	5

The Lv metric (VdB) is used to assess the likelihood for vibration to result in human annoyance.

STEP 2B: Identify the vibration source and enter the reference peak particle velocity (PPV) and distance.

STEP 3B: Select the distance to the receiver.

Table B. Propagation of peak particle velocity (PPV) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (PPV)	@	distance (ft)	vibration level (PPV)	@	distance (ft)
Hoe Ram	0.089	@	25	0.237		13
Vibratory Roller	0.089	@	25	0.237		13
Large Bulldozer	0.089	@	25	0.237		13

The PPV metric (in/sec) is used for assessing the likelihood for the potential of structural damage.

Notes:

Computation of propagated vibration levels is based on the equations presented on pg. 185 of FTA 2018. Estimates of attenuated vibration levels do not account for reductions from intervening underground barriers or other underground structures of any type, or changes in soil type.

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Washington, D.C. Accessed: December 20, 2020. Page Available:

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

El Dorado Hills Costco EIR
Noise Source Characteristics - Existing Environment Noise

Name	Source group	Source type	Lw dB(A)	Emission spectrum	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
Clarksville Road	Environmental Noise	Line	111.0	Traffic Noise	92.5	96.5	100.6	103.6	106.5	104.5	99.6	94.5
Silva Valley Parkway	Environmental Noise	Line	112.0	Traffic Noise	93.5	97.5	101.6	104.6	107.5	105.5	100.6	95.5
State Route 50	Environmental Noise	Line	125.5	Traffic Noise	107.0	111.0	115.1	118.1	121.0	119.0	114.1	109.0

El Dorado HIlls Costco EIR
Contribution level - Existing Environment Noise Points

Source	Source group	Source type	Leq dB(A)
Receiver LT-1 Leq 56.8 dB(A)			
Clarksville Road	Environmental Noise	Line	47.9
Silva Valley Parkway	Environmental Noise	Line	42.3
State Route 50	Environmental Noise	Line	56.0
Receiver LT-2 Leq 52.4 dB(A)			
Clarksville Road	Environmental Noise	Line	44.1
Silva Valley Parkway	Environmental Noise	Line	47.5
State Route 50	Environmental Noise	Line	49.6

El Dorado Hills Costco EIR
Noise Source Characteristics - Operational Noise

Name	Source group	Source type	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz
			dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
15 HVAC units	Operational Noise	Area	98.8	Exhaust air fan (max. 26.600 m³/h)	68.6	74.8	80.8	85.8	88.0	89.8	97.4	71.7	
Heavy Vehicles North Site	Operational Noise	Line	91.0	Truck: start the engine Lmax	72.5	76.5	80.6	83.6	86.5	84.5	79.6	74.5	
Heavy Vehicles South Site	Operational Noise	Line	91.0	Truck: start the engine Lmax	72.5	76.5	80.6	83.6	86.5	84.5	79.6	74.5	
Loading Dock	Operational Noise	Area	101.8	Truck: start the engine Lmax	83.3	87.3	91.4	94.4	97.3	95.3	90.4	85.3	
Parking Lots North Site	Operational Noise	Area	94.4	Car engine start	65.1	73.7	73.4	79.6	89.0	90.0	88.2	81.6	70.2
Parking Lots South Site	Operational Noise	Area	100.0	Car engine start	70.7	79.3	79.0	85.2	94.6	95.6	93.8	87.2	75.8
Tire Center	Operational Noise	Line	100.3	Fitting tires with impact wrench	54.1	66.7	76.6	82.7	91.0	97.3	94.7	89.1	77.1
Two Trash Compactors	Operational Noise	Point	97.7	C8.3 Waste compactor	70.1	84.2	79.7	89.1	95.3	88.5	85.3	83.2	

El Dorado HIlls Costco EIR
Contribution level - Operational Noise Points

Source	Source group	Source type	Leq dB(A)
Receiver LT-1 Leq 42.6 dB(A)			
Heavy Vehicles South Site	Operational Noise	Line	26.8
Heavy Vehicles North Site	Operational Noise	Line	23.1
15 HVAC units	Operational Noise	Area	29.9
Loading Dock	Operational Noise	Area	37.1
Parking Lots North Site	Operational Noise	Area	26.5
Parking Lots South Site	Operational Noise	Area	37.1
Tire Center	Operational Noise	Line	37.5
Two Trash Compactors	Operational Noise	Point	17.3
Receiver LT-2 Leq 42.0 dB(A)			
Heavy Vehicles South Site	Operational Noise	Line	16.1
Heavy Vehicles North Site	Operational Noise	Line	33.7
15 HVAC units	Operational Noise	Area	27.7
Loading Dock	Operational Noise	Area	16.1
Parking Lots North Site	Operational Noise	Area	36.6
Parking Lots South Site	Operational Noise	Area	35.5
Tire Center	Operational Noise	Line	36.8
Two Trash Compactors	Operational Noise	Point	6.3

El Dorado Hills Costco EIR
Noise Source Characteristics - Existing Plus Operational

Name	Source group	Source type	Lw	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz
			dB(A)		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
15 HVAC units	Operational Noise	Area	98.8	Exhaust air fan (max. 26.600 m³/h)	68.6	74.8	80.8	85.8	88.0	89.8	97.4	71.7	
Clarksville Road	Environmental Noise	Line	111.0	Traffic Noise	92.5	96.5	100.6	103.6	106.5	104.5	99.6	94.5	
Heavy Vehicles North Site	Operational Noise	Line	91.0	Truck: start the engine Lmax	72.5	76.5	80.6	83.6	86.5	84.5	79.6	74.5	
Heavy Vehicles South Site	Operational Noise	Line	91.0	Truck: start the engine Lmax	72.5	76.5	80.6	83.6	86.5	84.5	79.6	74.5	
Loading Dock	Operational Noise	Area	101.8	Truck: start the engine Lmax	83.3	87.3	91.4	94.4	97.3	95.3	90.4	85.3	
Parking Lots North Site	Operational Noise	Area	94.4	Car engine start	65.1	73.7	73.4	79.6	89.0	90.0	88.2	81.6	70.2
Parking Lots South Site	Operational Noise	Area	100.0	Car engine start	70.7	79.3	79.0	85.2	94.6	95.6	93.8	87.2	75.8
Silva Valley Parkway	Environmental Noise	Line	112.0	Traffic Noise	93.5	97.5	101.6	104.6	107.5	105.5	100.6	95.5	
State Route 50	Environmental Noise	Line	125.5	Traffic Noise	107.0	111.0	115.1	118.1	121.0	119.0	114.1	109.0	
Tire Center	Operational Noise	Line	100.3	Fitting tires with impact wrench	54.1	66.7	76.6	82.7	91.0	97.3	94.7	89.1	77.1
Two Trash Compactors	Operational Noise	Point	97.7	C8.3 Waste compactor	70.1	84.2	79.7	89.1	95.3	88.5	85.3	83.2	

El Dorado Hills Costco EIR
Contribution level - Existing Plus Operational Points

Source	Source group	Source	Leq dB(A)
Receiver LT-1 Leq 57.0 dB(A)			
15 HVAC units	Operational Noise	Area	29.9
Clarksville Road	Environmental Noise	Line	48.4
Heavy Vehicles North Site	Operational Noise	Line	23.1
Heavy Vehicles South Site	Operational Noise	Line	26.8
Loading Dock	Operational Noise	Area	37.1
Parking Lots North Site	Operational Noise	Area	26.5
Parking Lots South Site	Operational Noise	Area	37.1
Silva Valley Parkway	Environmental Noise	Line	42.9
State Route 50	Environmental Noise	Line	56.0
Tire Center	Operational Noise	Line	37.5
Two Trash Compactors	Operational Noise	Point	17.3
Receiver LT-2 Leq 52.6 dB(A)			
15 HVAC units	Operational Noise	Area	27.7
Clarksville Road	Environmental Noise	Line	44.4
Heavy Vehicles North Site	Operational Noise	Line	33.7
Heavy Vehicles South Site	Operational Noise	Line	16.1
Loading Dock	Operational Noise	Area	16.1
Parking Lots North Site	Operational Noise	Area	36.6
Parking Lots South Site	Operational Noise	Area	35.5
Silva Valley Parkway	Environmental Noise	Line	47.3
State Route 50	Environmental Noise	Line	49.3
Tire Center	Operational Noise	Line	36.8
Two Trash Compactors	Operational Noise	Point	6.3