Appendix F

Noise Modeling Data

Construction Source Noise Prediction Model

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold	1,278	60.0
Townhome Residences	140	79.2
Rainbow Daycare	400	70.1
Office Buildings	80	84.1
Franklin D. Roosevelt Park	75	84.6

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Concrete Saw	90	0.4
Dozer	85	0.4
Roller	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]
Concrete Saw	86.0
Dozer	81.0
Roller	81.0

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.

Construction Source Noise Prediction Model

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{max} dBA)
Threshold	2,020	60.0
Townhome Residences	140	83.2
Rainbow Daycare	400	74.1
Office Buildings	80	88.0
Rainbow Daycare	75	88.6

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Concrete Saw	90	1
Dozer	85	1
Roller	85	1

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

Predicted Noise Level [3]	L_{max} dBA at 50 feet[3]
Concrete Saw	90.0
Dozer	85.0
Roller	85.0

Combined Predicted Noise Level (L_{max} dBA at 50 feet)
92.1

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.

Traffic Noise Spreadsheet Calculator

Project: Bateson Building Renovation Project

Noise Level Descriptor: CNEL
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 9.76

		Segment Description and Location		Input											Output			
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing Conditions																		
1	N Street	7th Street	8th Street	519	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	8	25	78	245
2	N Street	8th Street	9th Street	520	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	8	25	78	246
3	N Street	9th Street	10th Street	672	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.0	10	32	100	318
4	N Street	10th Street	11th Street	749	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.5	11	35	112	354
5	O Street	8th Street	9th Street	47	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	51.5	1	2	7	22
6	O Street	10th Street	11th Street	72	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	53.3	1	3	11	34
7	P Street	2nd Street	3rd Street	2,644	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.0	40	125	395	1249
8	P Street	3rd Street	7th Street	1,971	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	29	93	295	931
9	P Street	7th Street	8th Street	1,223	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	18	58	183	578
10	P Street	8th Street	9th Street	1,158	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	173	547
11	P Street	9th Street	10th Street	1,191	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	18	56	178	563
12	P Street	10th Street	11th Street	1,163	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	174	550
13	Q Street	2nd Street	3rd Street	2,879	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.3	43	136	430	1360
14	Q Street	3rd Street	7th Street	2,710	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	40	128	405	1281
15	Q Street	7th Street	8th Street	1,580	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	24	75	236	747
16	Q Street	8th Street	9th Street	1,413	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	21	67	211	668
17	Q Street	9th Street	10th Street	1,404	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	21	66	210	663
18	Q Street	10th Street	11th Street	1,137	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	170	537
19	W Street	10th Street	11th Street	1,660	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	78	248	784
20	W Street	11th Street	15th Street	1,644	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	25	78	246	777
21	W Street	15th Street	16th Street	1,616	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	24	76	241	764
22	W Street	16th Street	17th Street	1,141	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	171	539
23	X Street	14th Street	15th Street	747	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.5	11	35	112	353
24	X Street	15th Street	16th Street	1,952	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	29	92	292	922
25	X Street	16th Street	17th Street	1,189	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	18	56	178	562
26	8th Street	Capitol Mall	N Street	418	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	6	20	62	198
27	8th Street	N Street	P Street	428	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	6	20	64	202
28	8th Street	P Street	Q Street	418	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	6	20	62	198
29	8th Street	Q Street	R Street	423	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	6	20	63	200
30	9th Street	Capitol Mall	N Street	934	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.5	14	44	140	441
31	9th Street	N Street	O Street	782	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.7	12	37	117	370
32	9th Street	O Street	P Street	1,039	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.9	16	49	155	491
33	9th Street	P Street	Q Street	1,072	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	16	51	160	507
34	9th Street	Q Street	R Street	1,170	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	175	553

*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: Bateson Building Renovation Project

Noise Level Descriptor: CNEL
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 9.76

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing Conditions																		
35	3rd Street	O Street	P Street	1,338	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	20	63	200	632
36	3rd Street	P Street	Q Street	665	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.0	10	31	99	314
37	3rd Street	Q Street	R Street	554	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.2	8	26	83	262
38	7th Street	O Street	P Street	845	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.0	13	40	126	399
39	7th Street	P Street	Q Street	701	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.2	10	33	105	331
40	7th Street	Q Street	R Street	492	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.7	7	23	74	232
41	10th Street	Capitol Mall	N Street	829	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.9	12	39	124	392
42	10th Street	N Street	O Street	1,076	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	16	51	161	508
43	10th Street	O Street	P Street	1,218	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	18	58	182	576
44	10th Street	P Street	Q Street	1,243	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	19	59	186	587
45	10th Street	Q Street	R Street	976	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.6	15	46	146	461
46	11th Street	V Street	W Street	640	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.8	10	30	96	302
47	11th Street	W Street	X Street	872	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	41	130	412
48	15th Street	V Street	W Street	1,660	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	78	248	784
49	15th Street	W Street	X Street	1,439	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	22	68	215	680
50	15th Street	X Street	Broadway	1,109	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	17	52	166	524
51	16th Street	V Street	W Street	1,660	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	78	248	784
52	16th Street	W Street	X Street	1,141	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	171	539
53	16th Street	X Street	Broadway	1,161	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	173	549
54	On Ramp	15th Street	US 50 WB	889	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	42	133	420
55	On Ramp	16th Street	US 50 EB	652	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	10	31	97	308
56	Off Ramp	US 50 WB	15th Street	875	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	41	131	413
57	Off Ramp	US 50 EB	16th Street	847	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.0	13	40	127	400

*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: Bateson Building Renovation Project

Noise Level Descriptor: CNEL
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 9.76

	Segment Description and Location			Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project Conditions																		
1	N Street	7th Street	8th Street	519	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	8	25	78	245
2	N Street	8th Street	9th Street	520	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.9	8	25	78	246
3	N Street	9th Street	10th Street	672	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.0	10	32	100	318
4	N Street	10th Street	11th Street	749	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.5	11	35	112	354
5	O Street	8th Street	9th Street	47	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	51.5	1	2	7	22
6	O Street	10th Street	11th Street	72	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	53.3	1	3	11	34
7	P Street	2nd Street	3rd Street	2,648	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.0	40	125	396	1251
8	P Street	3rd Street	7th Street	1,975	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	30	93	295	933
9	P Street	7th Street	8th Street	1,227	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	18	58	183	580
10	P Street	8th Street	9th Street	1,158	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	173	547
11	P Street	9th Street	10th Street	1,191	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	18	56	178	563
12	P Street	10th Street	11th Street	1,163	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	174	550
13	Q Street	2nd Street	3rd Street	2,886	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.4	43	136	431	1364
14	Q Street	3rd Street	7th Street	2,717	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	41	128	406	1284
15	Q Street	7th Street	8th Street	1,580	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	24	75	236	747
16	Q Street	8th Street	9th Street	1,415	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	21	67	211	669
17	Q Street	9th Street	10th Street	1,405	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.2	21	66	210	664
18	Q Street	10th Street	11th Street	1,138	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	170	538
19	W Street	10th Street	11th Street	1,668	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	79	249	788
20	W Street	11th Street	15th Street	1,652	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.9	25	78	247	781
21	W Street	15th Street	16th Street	1,616	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.8	24	76	241	764
22	W Street	16th Street	17th Street	1,141	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	171	539
23	X Street	14th Street	15th Street	747	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.5	11	35	112	353
24	X Street	15th Street	16th Street	1,953	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	29	92	292	923
25	X Street	16th Street	17th Street	1,189	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	18	56	178	562
26	8th Street	Capitol Mall	N Street	418	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	6	20	62	198
27	8th Street	N Street	P Street	428	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.1	6	20	64	202
28	8th Street	P Street	Q Street	419	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.0	6	20	63	198
29	8th Street	Q Street	R Street	442	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.2	7	21	66	209
30	9th Street	Capitol Mall	N Street	934	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.5	14	44	140	441
31	9th Street	N Street	O Street	782	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.7	12	37	117	370
32	9th Street	O Street	P Street	1,039	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.9	16	49	155	491
33	9th Street	P Street	Q Street	1,072	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	16	51	160	507
34	9th Street	Q Street	R Street	1,176	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	18	56	176	556
35	3rd Street	O Street	P Street	1,338	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	20	63	200	632

*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: Bateson Building Renovation Project

Noise Level Descriptor: CNEL
Site Conditions: Hard
Traffic Input: Peak
Traffic K-Factor: 9.76

	Segment Description and Location			Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	Peak Hour Volume	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	CNEL, (dBA)[5,6,7]	70 dBA	65 dBA	60 dBA	55 dBA
Existing + Project Conditions																		
36	3rd Street	P Street	Q Street	665	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.0	10	31	99	314
37	3rd Street	Q Street	R Street	554	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.2	8	26	83	262
38	7th Street	O Street	P Street	845	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.0	13	40	126	399
39	7th Street	P Street	Q Street	701	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.2	10	33	105	331
40	7th Street	Q Street	R Street	493	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.7	7	23	74	233
41	10th Street	Capitol Mall	N Street	829	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	63.9	12	39	124	392
42	10th Street	N Street	O Street	1,076	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	16	51	161	508
43	10th Street	O Street	P Street	1,218	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.6	18	58	182	576
44	10th Street	P Street	Q Street	1,243	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.7	19	59	186	587
45	10th Street	Q Street	R Street	976	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.6	15	46	146	461
46	11th Street	V Street	W Street	643	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.8	10	30	96	304
47	11th Street	W Street	X Street	875	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	41	131	413
48	15th Street	V Street	W Street	1,661	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	78	248	785
49	15th Street	W Street	X Street	1,440	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	22	68	215	680
50	15th Street	X Street	Broadway	1,109	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	17	52	166	524
51	16th Street	V Street	W Street	1,660	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.0	25	78	248	784
52	16th Street	W Street	X Street	1,141	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.3	17	54	171	539
53	16th Street	X Street	Broadway	1,161	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.4	17	55	173	549
54	On Ramp	15th Street	US 50 WB	889	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	42	133	420
55	On Ramp	16th Street	US 50 EB	653	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	62.9	10	31	98	309
56	Off Ramp	US 50 WB	15th Street	875	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.2	13	41	131	413
57	Off Ramp	US 50 EB	16th Street	847	35	50	50	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.0	13	40	127	400

*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.

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3	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-16), Pg 2-32.	FHWA 2004 TNM Version 2.5
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