

## Appendix C: Noise Calculation Sheets

**Appendix D-1**

Brentwood General Plan Update

24hr Continuous Noise Monitoring - Site A

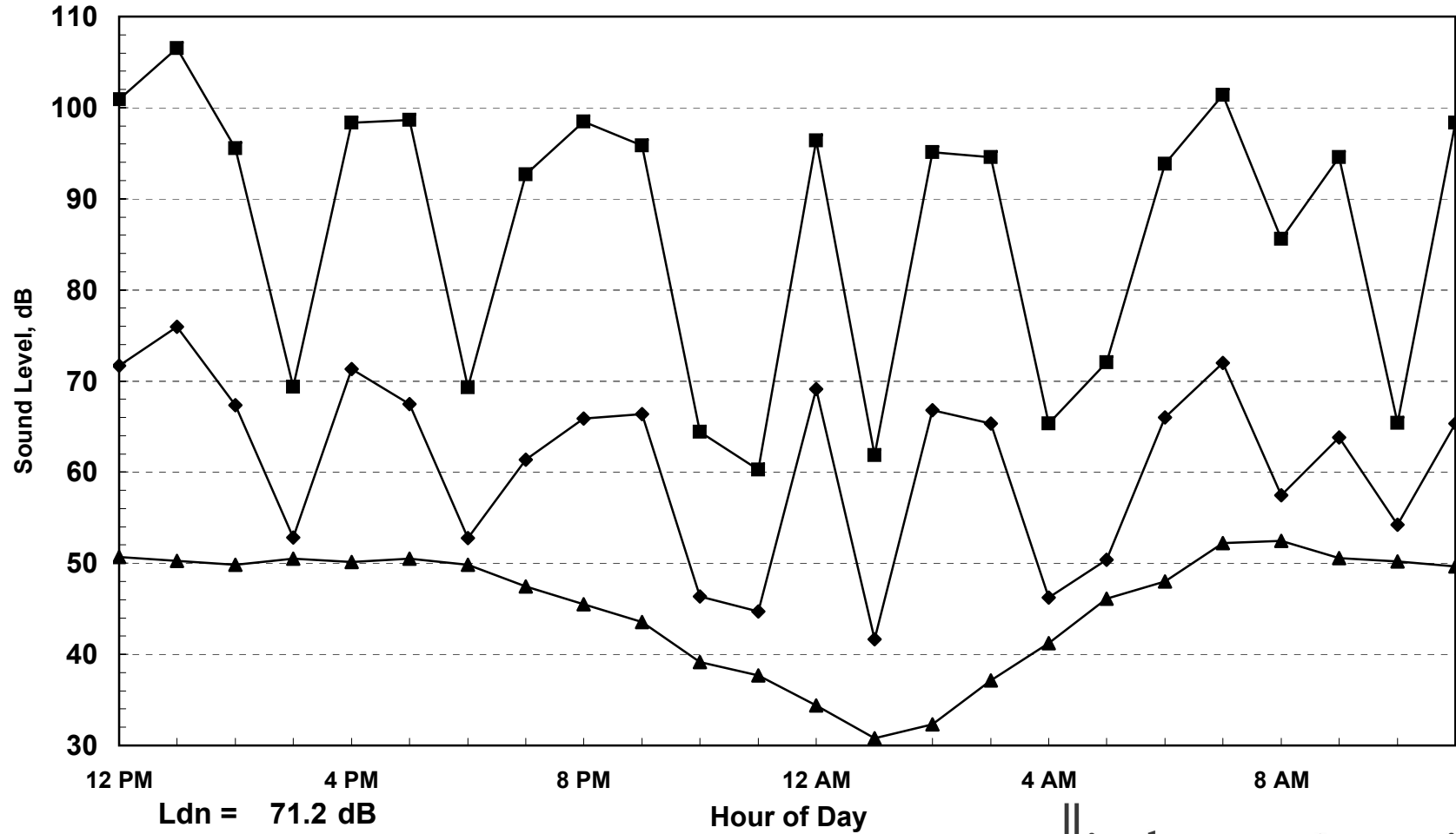
Thursday December 13 - Friday December 14, 2012

Hour	Leq	Lmax	L50	L90
12:00	72	101	51	45
13:00	76	107	50	42
14:00	67	96	50	45
15:00	53	69	50	45
16:00	71	98	50	44
17:00	67	99	50	45
18:00	53	69	50	42
19:00	61	93	47	38
20:00	66	98	46	39
21:00	66	96	44	35
22:00	46	64	39	33
23:00	45	60	38	34
0:00	69	96	34	30
1:00	42	62	31	29
2:00	67	95	32	30
3:00	65	95	37	33
4:00	46	65	41	37
5:00	50	72	46	42
6:00	66	94	48	44
7:00	72	101	52	47
8:00	57	86	52	47
9:00	64	95	51	45
10:00	54	65	50	43
11:00	65	98	50	43

Statistical Summary						
Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)			
	High	Low	Average	High	Low	Average
Leq (Average)	75.9	52.7	68.7	69.1	41.6	63.6
Lmax (Maximum)	106.5	65.4	91.4	96.4	60.3	78.2
L50 (Median)	52.5	43.6	49.6	48.0	30.8	38.5
L90 (Background)	46.6	35.1	43.0	44.1	29.2	34.6

Computed Ldn, dB	71
% Daytime Energy	84%
% Nighttime Energy	16%

**Appendix D-1**  
 Brentwood General Plan Update  
 24hr Continuous Noise Monitoring - Site A  
 Thursday December 13 - Friday December 14, 2012



Ldn = 71.2 dB

◆ Leq    ■ Lmax    ▲ L50



**Appendix D-1**

Brentwood General Plan Update

24hr Continuous Noise Monitoring - Site B

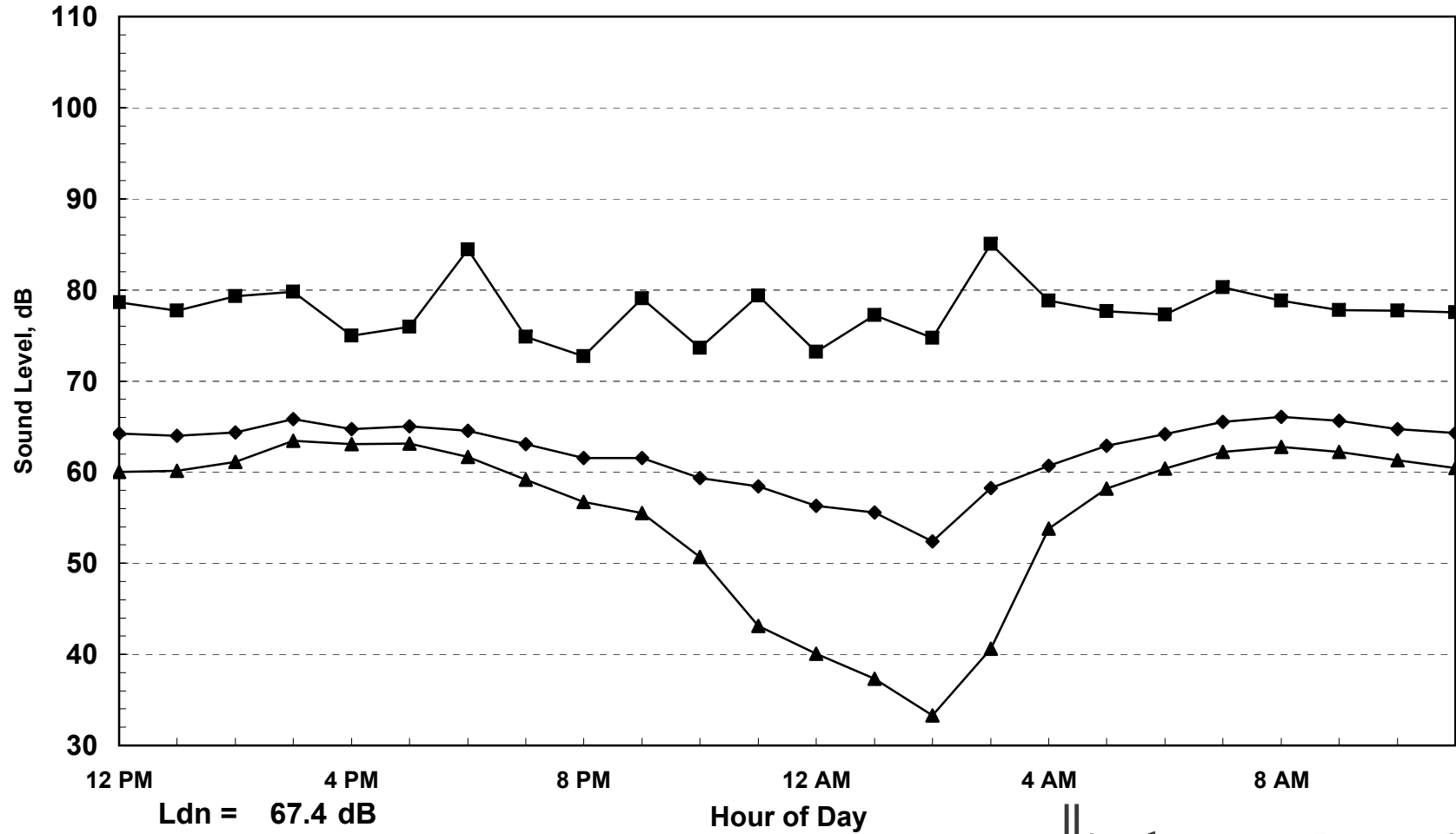
Thursday December 13 - Friday December 14, 2012

Hour	Leq	Lmax	L50	L90
12:00	64	79	60	50
13:00	64	78	60	50
14:00	64	79	61	53
15:00	66	80	63	57
16:00	65	75	63	57
17:00	65	76	63	57
18:00	65	84	62	55
19:00	63	75	59	50
20:00	62	73	57	46
21:00	62	79	56	46
22:00	59	74	51	39
23:00	58	79	43	33
0:00	56	73	40	31
1:00	56	77	37	30
2:00	52	75	33	29
3:00	58	85	41	30
4:00	61	79	54	39
5:00	63	78	58	50
6:00	64	77	60	54
7:00	66	80	62	56
8:00	66	79	63	55
9:00	66	78	62	54
10:00	65	78	61	53
11:00	64	78	60	50

Statistical Summary						
Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)			
	High	Low	Average	High	Low	Average
Leq (Average)	66.1	61.5	64.5	64.2	52.4	60.0
Lmax (Maximum)	84.4	72.7	78.0	85.1	73.2	77.4
L50 (Median)	63.4	55.5	60.9	60.4	33.3	46.4
L90 (Background)	57.4	45.9	52.7	53.9	29.0	37.4

Computed Ldn, dB	67
% Daytime Energy	83%
% Nighttime Energy	17%

**Appendix D-1**  
 Brentwood General Plan Update  
 24hr Continuous Noise Monitoring - Site B  
 Thursday December 13 - Friday December 14, 2012



Ldn = 67.4 dB

◆ Leq    ■ Lmax    ▲ L50



**Appendix D-1**

Brentwood General Plan Update

24hr Continuous Noise Monitoring - Site C

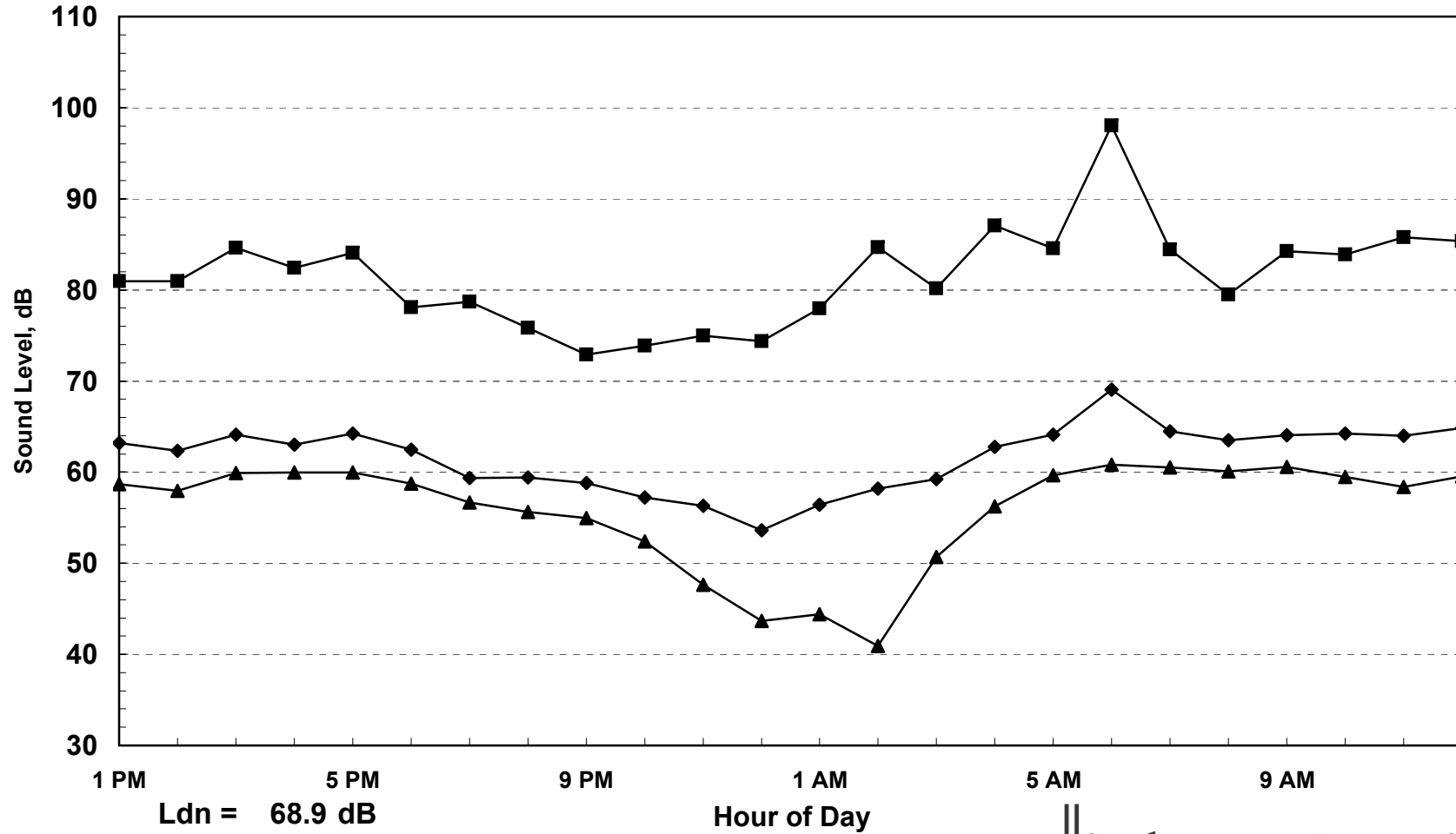
Thursday December 13 - Friday December 14, 2012

Hour	Leq	Lmax	L50	L90
13:10	63	81	59	52
14:00	62	81	58	52
15:00	64	85	60	55
16:00	63	82	60	55
17:00	64	84	60	56
18:00	62	78	59	54
19:00	59	79	57	51
20:00	59	76	56	50
21:00	59	73	55	47
22:00	57	74	52	44
23:00	56	75	48	40
0:00	54	74	44	38
1:00	56	78	44	34
2:00	58	85	41	31
3:00	59	80	51	40
4:00	63	87	56	49
5:00	64	85	60	54
6:00	69	98	61	55
7:00	64	84	61	55
8:00	64	79	60	54
9:00	64	84	61	53
10:00	64	84	60	53
11:00	64	86	58	51
12:00	65	85	60	52

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64.8	58.8	63.2	69.1	53.6	62.4
Lmax (Maximum)	85.8	72.9	81.5	98.1	73.9	81.7
L50 (Median)	60.6	55.0	58.7	60.8	40.9	50.7
L90 (Background)	55.6	47.2	52.8	55.2	31.0	42.8

Computed Ldn, dB	69
% Daytime Energy	67%
% Nighttime Energy	33%

**Appendix D-1**  
 Brentwood General Plan Update  
 24hr Continuous Noise Monitoring - Site C  
 Thursday December 13 - Friday December 14, 2012



Ldn = 68.9 dB

◆ Leq    ■ Lmax    ▲ L50



**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Lone Tree Way	West of Hillcrest	19,370	83		17	3	1	45	80	-5
2	Lone Tree Way	Hillcrest to SR 4	35,240	83		17	3	1	45	80	-5
3	Lone Tree Way	SR 4 to Shady Willow	28,190	83		17	3	1	45	100	
4	Lone Tree Way	Shady Willow to Empire	21,680	83		17	3	1	45	100	
5	Lone Tree Way	Empire to Fairview	17,510	83		17	3	1	45	90	-5
6	Lone Tree Way	Fairview to O Hara	12,520	83		17	3	1	45	80	-5
7	Lone Tree Way	O Hara to Anderson	8,510	83		17	3	1	45	75	
8	Lone Tree Way	Anderson to Brentwood	8,170	83		17	3	1	45	75	
9	Lone Tree Way	East of Brentwood	1,030	83		17	3	1	40	45	-5
10	Grant Street	West of Fairview	2,170	83		17	2	1	35	50	-5
11	Grant Street	East of Fairview	2,470	83		17	2	1	35	50	
12	Grant Street	West of Brentwood Blvd.	2,300	83		17	2	1	30	50	
13	Sunset Road	East of Brentwood Blvd.	5,260	83		17	2	1	30	45	-5
14	Sand Creek Road	SR 4 to Shady Willow	14,930	83		17	2	1	45	100	
15	Sand Creek Road	Shady Willow to Fairview	14,600	83		17	2	1	45	90	-5
16	Sand Creek Road	Fairview to Minnesota	12,990	83		17	2	1	45	85	-5
17	Sand Creek Road	Minnesota to O Hara	12,990	83		17	2	1	45	85	-5
18	Sand Creek Road	O Hara to Brentwood Blvd.	7,990	83		17	2	1	35	85	-5
19	Sand Creek Road	East of Brentwood Blvd.	3,320	83		17	2	1	35	100	
20	San Jose Avenue	West of Fairview	4,280	83		17	2	1	35	50	-5
21	San Jose Avenue	East of Fairview	1,690	83		17	2	1	25	45	
22	Central Blvd.	West of Fairview	4,410	83		17	2	1	25	60	-5
23	Central Blvd.	East of Fairview	6,090	83		17	2	1	35	75	-5
24	Central Blvd.	West of Brentwood Blvd.	3,720	83		17	2	1	25	45	-5
25	Oak Street	East of Brentwood Blvd.	4,530	83		17	2	1	25	40	
26	Balfour Road	Deer Valley to American	8,040	83		17	2	1	55	140	
27	Balfour Road	American to Foothill	11,660	83		17	2	1	45	80	-5
28	Balfour Road	Foothill to John Muir	16,310	83		17	2	1	45	80	-5
29	Balfour Road	John Muir to Eagle Rock	16,900	83		17	2	1	45	100	
30	Balfour Road	Eagle Rock to SR 4	22,480	83		17	2	1	45	100	
31	Balfour Road	SR 4 to Fairview	20,750	83		17	2	1	45	80	-5
32	Balfour Road	Fairview to Minnesota	18,250	83		17	2	1	45	80	-5
33	Balfour Road	Minnesota to Griffith	18,720	83		17	2	1	40	75	-5
34	Balfour Road	Griffith to Walnut	15,600	83		17	2	1	40	60	-5



**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Existing Traffic  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Lone Tree Way	West of Hillcrest	61.1	54.3	54.0	62.6
2	Lone Tree Way	Hillcrest to SR 4	63.7	56.9	56.6	65.2
3	Lone Tree Way	SR 4 to Shady Willow	66.3	59.5	59.2	67.7
4	Lone Tree Way	Shady Willow to Empire	65.1	58.3	58.0	66.6
5	Lone Tree Way	Empire to Fairview	59.9	53.1	52.8	61.4
6	Lone Tree Way	Fairview to O Hara	59.2	52.4	52.1	60.7
7	Lone Tree Way	O Hara to Anderson	62.9	56.1	55.9	64.4
8	Lone Tree Way	Anderson to Brentwood	62.8	56.0	55.7	64.2
9	Lone Tree Way	East of Brentwood	50.6	44.5	44.5	52.3
10	Grant Street	West of Fairview	51.5	44.4	46.6	53.3
11	Grant Street	East of Fairview	57.1	49.9	52.1	58.9
12	Grant Street	West of Brentwood Blvd.	54.9	48.6	52.7	57.5
13	Sunset Road	East of Brentwood Blvd.	54.1	47.9	52.0	56.8
14	Sand Creek Road	SR 4 to Shady Willow	63.5	54.9	56.4	64.8
15	Sand Creek Road	Shady Willow to Fairview	59.1	50.5	52.0	60.4
16	Sand Creek Road	Fairview to Minnesota	59.0	50.4	51.9	60.2
17	Sand Creek Road	Minnesota to O Hara	59.0	50.4	51.9	60.2
18	Sand Creek Road	O Hara to Brentwood Blvd.	53.7	46.6	48.8	55.5
19	Sand Creek Road	East of Brentwood Blvd.	53.9	46.7	48.9	55.7
20	San Jose Avenue	West of Fairview	54.5	47.3	49.5	56.3
21	San Jose Avenue	East of Fairview	51.9	46.7	51.3	55.3
22	Central Blvd.	West of Fairview	49.2	44.0	48.6	52.6
23	Central Blvd.	East of Fairview	53.4	46.2	48.4	55.2
24	Central Blvd.	West of Brentwood Blvd.	50.4	45.1	49.7	53.7
25	Oak Street	East of Brentwood Blvd.	57.0	51.7	56.4	60.3
26	Balfour Road	Deer Valley to American	61.2	51.4	52.3	62.1
27	Balfour Road	American to Foothill	58.9	50.3	51.8	60.2
28	Balfour Road	Foothill to John Muir	60.4	51.8	53.3	61.6
29	Balfour Road	John Muir to Eagle Rock	64.1	55.5	57.0	65.3
30	Balfour Road	Eagle Rock to SR 4	65.3	56.7	58.2	66.6
31	Balfour Road	SR 4 to Fairview	61.4	52.8	54.3	62.7
32	Balfour Road	Fairview to Minnesota	60.9	52.3	53.7	62.1
33	Balfour Road	Minnesota to Griffith	59.9	52.0	53.8	61.4
34	Balfour Road	Griffith to Walnut	60.6	52.7	54.5	62.1

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

----- Distances to Traffic Noise Contours -----

Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Lone Tree Way	West of Hillcrest	12	26	55	118	255
2	Lone Tree Way	Hillcrest to SR 4	18	38	82	177	380
3	Lone Tree Way	SR 4 to Shady Willow	33	71	152	328	706
4	Lone Tree Way	Shady Willow to Empire	28	59	128	275	593
5	Lone Tree Way	Empire to Fairview	11	24	51	111	239
6	Lone Tree Way	Fairview to O Hara	9	19	41	89	191
7	Lone Tree Way	O Hara to Anderson	15	32	68	147	318
8	Lone Tree Way	Anderson to Brentwood	14	31	67	144	309
9	Lone Tree Way	East of Brentwood	1	3	6	14	30
10	Grant Street	West of Fairview	2	4	8	18	39
11	Grant Street	East of Fairview	4	9	20	42	91
12	Grant Street	West of Brentwood Blvd.	3	7	16	34	74
13	Sunset Road	East of Brentwood Blvd.	3	6	13	28	59
14	Sand Creek Road	SR 4 to Shady Willow	21	45	97	208	449
15	Sand Creek Road	Shady Willow to Fairview	10	21	44	95	205
16	Sand Creek Road	Fairview to Minnesota	9	19	41	88	190
17	Sand Creek Road	Minnesota to O Hara	9	19	41	88	190
18	Sand Creek Road	O Hara to Brentwood Blvd.	4	9	20	43	92
19	Sand Creek Road	East of Brentwood Blvd.	5	11	24	51	111
20	San Jose Avenue	West of Fairview	3	6	13	28	61
21	San Jose Avenue	East of Fairview	2	5	10	22	47
22	Central Blvd.	West of Fairview	2	4	9	19	41
23	Central Blvd.	East of Fairview	4	8	17	36	77
24	Central Blvd.	West of Brentwood Blvd.	2	4	8	17	37
25	Oak Street	East of Brentwood Blvd.	4	9	20	42	91
26	Balfour Road	Deer Valley to American	19	42	90	193	416
27	Balfour Road	American to Foothill	8	18	38	82	177
28	Balfour Road	Foothill to John Muir	10	22	48	103	221
29	Balfour Road	John Muir to Eagle Rock	23	49	105	226	488
30	Balfour Road	Eagle Rock to SR 4	27	59	127	274	590
31	Balfour Road	SR 4 to Fairview	12	26	56	121	260
32	Balfour Road	Fairview to Minnesota	11	24	51	111	238
33	Balfour Road	Minnesota to Griffith	9	20	43	93	200
34	Balfour Road	Griffith to Walnut	8	18	38	82	177

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
35	Balfour Road	Walnut to Brentwood Blvd.	14,190	83		17	2	1	35	65	-5
36	Balfour Road	East of Brentwood Blvd.	7,600	83		17	2	1	35	75	-5
37	Marsh Creek Road	West of SR 4	3,620	83		17	2	1	50	100	
38	Marsh Creek Road (SR 4)	East of SR 4	7,780	67		33	3	6	50	110	
39	Deer Valley Road	North of Balfour	7,260	83		17	2	1	45	50	
40	Deer Valley Road	South of Balfour	2,640	83		17	2	1	45	200	
41	Hillcrest Avenue	North of Lone Tree	10,600	83		17	2	1	45	70	-5
42	Hillcrest Avenue	South of Lone Tree	2,970	83		17	2	1	45	80	-5
43	SR 4	North of Sand Creek	32,190	67		33	3	3	65	830	
44	SR 4	Sand Creek to Balfour	23,810	67		33	3	3	55	200	-5
45	SR 4	Balfour to Marsh Creek	16,470	67		33	3	6	55	100	-8
46	Slatten Ranch Road	North of Lone Tree	8,320	83		17	2	1	35	100	
47	Shady Willow Lane	Lone Tree to Sand Creek	9,290	83		17	2	1	35	75	-5
48	Highland Way	South of Sand Creek	2,670	83		17	2	1	25	50	
49	Empire Avenue	North of Lone Tree	11,280	83		17	2	1	35	125	
50	Empire Avenue	South of Lone Tree	6,530	83		17	2	1	35	75	-5
51	Fairview Avenue	Lone Tree to Grant	7,400	83		17	2	1	35	50	-5
52	Fairview Avenue	Grant to Sand Creek	6,500	83		17	2	1	35	50	-5
53	Fairview Avenue	Sand Creek to San Jose	12,880	83		17	2	1	45	75	-5
54	Fairview Avenue	San Jose to Central	13,420	83		17	2	1	45	75	-5
55	Fairview Avenue	Central to Balfour	12,200	83		17	2	1	45	75	-5
56	Fairview Avenue	South of Balfour	6,970	83		17	2	1	35	75	-5
57	Minnesota Avenue	North of Sand Creek	3,230	83		17	2	1	30	50	-5
58	Minnesota Avenue	Sand Creek to Balfour	4,900	83		17	2	1	35	65	-5
59	O Hara Avenue	North of Lone Tree	10,130	83		17	2	1	35	75	
60	O Hara Avenue	South of Lone Tree	9,160	83		17	2	1	35	65	-5
61	O Hara Avenue	North of Sand Creek	8,350	83		17	2	1	35	65	-5
62	O Hara Avenue	South of Sand Creek	10,160	83		17	2	1	35	55	-5
63	2nd Street	West of Brentwood Blvd.	5,820	83		17	2	1	30	100	0
64	2nd Street	East of Brentwood Blvd.	5,830	83		17	2	1	30	100	
65	Anderson Lane	North of Lone Tree	810	83		17	2	1	30	50	
66	Anderson Lane	South of Lone Tree	660	83		17	2	1	25	50	
67	Griffith Lane	North of Balfour	2,910	83		17	2	1	30	65	-5
68	Griffith Lane	South of Balfour	5,220	83		17	2	1	35	75	-5

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Existing Traffic  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
35	Balfour Road	Walnut to Brentwood Blvd.	58.0	50.8	53.0	59.8
36	Balfour Road	East of Brentwood Blvd.	54.3	47.2	49.4	56.1
37	Marsh Creek Road	West of SR 4	58.7	49.5	50.7	59.8
38	Marsh Creek Road (SR 4)	East of SR 4	63.1	55.9	63.1	66.5
39	Deer Valley Road	North of Balfour	64.9	56.3	57.8	66.2
40	Deer Valley Road	South of Balfour	51.5	42.9	44.4	52.7
41	Hillcrest Avenue	North of Lone Tree	59.4	50.8	52.3	60.6
42	Hillcrest Avenue	South of Lone Tree	53.0	44.4	45.9	54.2
43	SR 4	North of Sand Creek	59.5	50.7	54.2	61.0
44	SR 4	Sand Creek to Balfour	60.4	52.5	56.5	62.3
45	SR 4	Balfour to Marsh Creek	60.2	52.4	59.4	63.2
46	Slatten Ranch Road	North of Lone Tree	57.9	50.7	52.9	59.6
47	Shady Willow Lane	Lone Tree to Sand Creek	55.2	48.0	50.2	57.0
48	Highland Way	South of Sand Creek	53.2	48.0	52.6	56.6
49	Empire Avenue	North of Lone Tree	57.7	50.6	52.7	59.5
50	Empire Avenue	South of Lone Tree	53.7	46.5	48.7	55.5
51	Fairview Avenue	Lone Tree to Grant	56.9	49.7	51.9	58.7
52	Fairview Avenue	Grant to Sand Creek	56.3	49.1	51.3	58.1
53	Fairview Avenue	Sand Creek to San Jose	59.8	51.2	52.7	61.0
54	Fairview Avenue	San Jose to Central	60.0	51.3	52.8	61.2
55	Fairview Avenue	Central to Balfour	59.5	50.9	52.4	60.8
56	Fairview Avenue	South of Balfour	54.0	46.8	49.0	55.8
57	Minnesota Avenue	North of Sand Creek	51.3	45.1	49.2	54.0
58	Minnesota Avenue	Sand Creek to Balfour	53.4	46.2	48.4	55.2
59	O Hara Avenue	North of Lone Tree	60.6	53.4	55.6	62.4
60	O Hara Avenue	South of Lone Tree	56.1	48.9	51.1	57.9
61	O Hara Avenue	North of Sand Creek	55.7	48.5	50.7	57.5
62	O Hara Avenue	South of Sand Creek	57.6	50.5	52.6	59.4
63	2nd Street	West of Brentwood Blvd.	54.4	48.1	52.2	57.0
64	2nd Street	East of Brentwood Blvd.	54.4	48.1	52.2	57.0
65	Anderson Lane	North of Lone Tree	50.3	44.0	48.2	53.0
66	Anderson Lane	South of Lone Tree	47.2	41.9	46.5	50.5
67	Griffith Lane	North of Balfour	49.2	42.9	47.0	51.8
68	Griffith Lane	South of Balfour	52.7	45.5	47.7	54.5

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

			----- Distances to Traffic Noise Contours -----				
Segment	Roadway Name	Segment Description	75	70	65	60	55
35	Balfour Road	Walnut to Brentwood Blvd.	6	14	29	63	135
36	Balfour Road	East of Brentwood Blvd.	4	9	19	41	89
37	Marsh Creek Road	West of SR 4	10	21	45	97	208
38	Marsh Creek Road (SR 4)	East of SR 4	30	64	139	299	644
39	Deer Valley Road	North of Balfour	13	28	60	129	278
40	Deer Valley Road	South of Balfour	7	14	30	66	141
41	Hillcrest Avenue	North of Lone Tree	8	17	36	77	166
42	Hillcrest Avenue	South of Lone Tree	3	7	15	33	71
43	SR 4	North of Sand Creek	97	210	452	974	2099
44	SR 4	Sand Creek to Balfour	29	62	133	286	617
45	SR 4	Balfour to Marsh Creek	16	35	76	163	351
46	Slatten Ranch Road	North of Lone Tree	9	20	44	95	204
47	Shady Willow Lane	Lone Tree to Sand Creek	5	10	22	47	102
48	Highland Way	South of Sand Creek	3	6	14	30	64
49	Empire Avenue	North of Lone Tree	12	25	54	116	250
50	Empire Avenue	South of Lone Tree	4	8	17	37	81
51	Fairview Avenue	Lone Tree to Grant	4	9	19	41	88
52	Fairview Avenue	Grant to Sand Creek	4	8	17	37	80
53	Fairview Avenue	Sand Creek to San Jose	9	19	41	88	189
54	Fairview Avenue	San Jose to Central	9	19	42	90	194
55	Fairview Avenue	Central to Balfour	8	18	39	85	182
56	Fairview Avenue	South of Balfour	4	8	18	39	84
57	Minnesota Avenue	North of Sand Creek	2	4	9	20	43
58	Minnesota Avenue	Sand Creek to Balfour	3	7	14	31	67
59	O Hara Avenue	North of Lone Tree	11	23	50	108	233
60	O Hara Avenue	South of Lone Tree	5	10	22	47	101
61	O Hara Avenue	North of Sand Creek	4	9	20	44	95
62	O Hara Avenue	South of Sand Creek	5	11	23	50	108
63	2nd Street	West of Brentwood Blvd.	6	14	29	63	137
64	2nd Street	East of Brentwood Blvd.	6	14	29	63	137
65	Anderson Lane	North of Lone Tree	2	4	8	17	37
66	Anderson Lane	South of Lone Tree	1	3	5	12	25
67	Griffith Lane	North of Balfour	2	4	9	19	40
68	Griffith Lane	South of Balfour	3	7	15	32	69

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
69	Walnut Boulevard	North of Oak	6,830	83		17	2	1	35	40	
70	Walnut Boulevard	Oak to Balfour	10,140	83		17	2	1	35	75	
71	Walnut Boulevard	South of Balfour	10,650	83		17	2	1	40	80	-5
72	Brentwood Blvd.	North of Lone Tree	11,610	83		17	2	1	40	100	
73	Brentwood Blvd.	Lone Tree to Sunset	14,090	83		17	2	1	40	100	
74	Brentwood Blvd.	Sunset to Sand Creek	13,880	83		17	2	1	40	100	
75	Brentwood Blvd.	Sand Creek to Central	12,730	83		17	2	1	35	100	
76	Brentwood Blvd.	Central to 2nd	10,440	83		17	2	1	25	100	
77	Brentwood Blvd.	2nd to Oak	10,620	83		17	2	1	25	60	
78	Brentwood Blvd.	Oak to Balfour	9,050	83		17	2	1	35	100	
79	Brentwood Blvd.	South of Balfour	10,120	83		17	2	1	55	100	

## Appendix D-2

### FHWA-RD-77-108 Highway Traffic Noise Prediction Model

#### Predicted Levels

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
69	Walnut Boulevard	North of Oak	63.0	55.8	58.0	64.8
70	Walnut Boulevard	Oak to Balfour	60.6	53.4	55.6	62.4
71	Walnut Boulevard	South of Balfour	57.1	49.1	50.9	58.5
72	Brentwood Blvd.	North of Lone Tree	61.0	53.0	54.9	62.5
73	Brentwood Blvd.	Lone Tree to Sunset	61.8	53.9	55.7	63.3
74	Brentwood Blvd.	Sunset to Sand Creek	61.8	53.8	55.6	63.2
75	Brentwood Blvd.	Sand Creek to Central	59.7	52.5	54.7	61.5
76	Brentwood Blvd.	Central to 2nd	54.6	49.4	54.0	58.0
77	Brentwood Blvd.	2nd to Oak	58.0	52.8	57.4	61.4
78	Brentwood Blvd.	Oak to Balfour	58.2	51.1	53.2	60.0
79	Brentwood Blvd.	South of Balfour	64.4	54.6	55.5	65.3

**Appendix D-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
69	Walnut Boulevard	North of Oak	8	18	39	83	179
70	Walnut Boulevard	Oak to Balfour	11	23	50	108	233
71	Walnut Boulevard	South of Balfour	6	14	30	64	138
72	Brentwood Blvd.	North of Lone Tree	15	31	68	146	314
73	Brentwood Blvd.	Lone Tree to Sunset	17	36	77	166	357
74	Brentwood Blvd.	Sunset to Sand Creek	16	35	76	164	354
75	Brentwood Blvd.	Sand Creek to Central	13	27	58	126	271
76	Brentwood Blvd.	Central to 2nd	7	16	34	73	158
77	Brentwood Blvd.	2nd to Oak	7	16	35	74	160
78	Brentwood Blvd.	Oak to Balfour	10	22	47	100	216
79	Brentwood Blvd.	South of Balfour	23	48	104	225	485



**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Lone Tree Way	West of Hillcrest	26,800	83		17	3	1	45	80	-5
2	Lone Tree Way	Hillcrest to SR 4	45,820	83		17	3	1	45	80	-5
3	Lone Tree Way	SR 4 to Shady Willow	43,240	83		17	3	1	45	100	
4	Lone Tree Way	Shady Willow to Empire	36,490	83		17	3	1	45	100	
5	Lone Tree Way	Empire to Fairview	37,420	83		17	3	1	45	90	-5
6	Lone Tree Way	Fairview to O Hara	33,100	83		17	3	1	45	80	-5
7	Lone Tree Way	O Hara to Anderson	23,980	83		17	3	1	45	75	
8	Lone Tree Way	Anderson to Brentwood	22,180	83		17	3	1	45	75	
9	Lone Tree Way	East of Brentwood	8,940	83		17	3	1	40	45	-5
10	Grant Street	West of Fairview	2,550	83		17	2	1	35	50	-5
11	Grant Street	East of Fairview	3,060	83		17	2	1	35	50	
12	Grant Street	West of Brentwood Blvd.	5,190	83		17	2	1	30	50	
13	Sunset Road	East of Brentwood Blvd.	10,540	83		17	2	1	30	45	-5
14	Sand Creek Road	SR 4 to Shady Willow	28,590	83		17	2	1	45	100	
15	Sand Creek Road	Shady Willow to Fairview	26,200	83		17	2	1	45	90	-5
16	Sand Creek Road	Fairview to Minnesota	17,460	83		17	2	1	45	85	-5
17	Sand Creek Road	Minnesota to O Hara	14,580	83		17	2	1	45	85	-5
18	Sand Creek Road	O Hara to Brentwood Blvd.	10,040	83		17	2	1	35	85	-5
19	Sand Creek Road	East of Brentwood Blvd.	3,830	83		17	2	1	35	100	
20	San Jose Avenue	West of Fairview	5,900	83		17	2	1	35	50	-5
21	San Jose Avenue	East of Fairview	1,920	83		17	2	1	25	45	
22	Central Blvd.	West of Fairview	5,360	83		17	2	1	25	60	-5
23	Central Blvd.	East of Fairview	15,320	83		17	2	1	35	75	-5
24	Central Blvd.	West of Brentwood Blvd.	4,210	83		17	2	1	25	45	-5
25	Oak Street	East of Brentwood Blvd.	4,950	83		17	2	1	25	40	
26	Balfour Road	Deer Valley to American	16,920	83		17	2	1	55	140	
27	Balfour Road	American to Foothill	18,900	83		17	2	1	45	80	-5
28	Balfour Road	Foothill to John Muir	23,880	83		17	2	1	45	80	-5
29	Balfour Road	John Muir to Eagle Rock	27,040	83		17	2	1	45	100	
30	Balfour Road	Eagle Rock to SR 4	66,380	83		17	2	1	45	100	
31	Balfour Road	SR 4 to Fairview	32,760	83		17	2	1	45	80	-5
32	Balfour Road	Fairview to Minnesota	32,760	83		17	2	1	45	80	-5
33	Balfour Road	Minnesota to Griffith	24,400	83		17	2	1	40	75	-5
34	Balfour Road	Griffith to Walnut	21,600	83		17	2	1	40	60	-5

**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Buildout to City Limits  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Lone Tree Way	West of Hillcrest	62.5	55.7	55.4	64.0
2	Lone Tree Way	Hillcrest to SR 4	64.8	58.0	57.7	66.3
3	Lone Tree Way	SR 4 to Shady Willow	68.1	61.3	61.0	69.6
4	Lone Tree Way	Shady Willow to Empire	67.4	60.6	60.3	68.9
5	Lone Tree Way	Empire to Fairview	63.2	56.4	56.1	64.6
6	Lone Tree Way	Fairview to O Hara	63.4	56.6	56.3	64.9
7	Lone Tree Way	O Hara to Anderson	67.4	60.6	60.4	68.9
8	Lone Tree Way	Anderson to Brentwood	67.1	60.3	60.0	68.6
9	Lone Tree Way	East of Brentwood	60.0	53.9	53.9	61.7
10	Grant Street	West of Fairview	52.2	45.1	47.3	54.0
11	Grant Street	East of Fairview	58.0	50.9	53.0	59.8
12	Grant Street	West of Brentwood Blvd.	58.4	52.1	56.2	61.0
13	Sunset Road	East of Brentwood Blvd.	57.2	50.9	55.0	59.8
14	Sand Creek Road	SR 4 to Shady Willow	66.4	57.8	59.2	67.6
15	Sand Creek Road	Shady Willow to Fairview	61.7	53.1	54.5	62.9
16	Sand Creek Road	Fairview to Minnesota	60.3	51.7	53.2	61.5
17	Sand Creek Road	Minnesota to O Hara	59.5	50.9	52.4	60.7
18	Sand Creek Road	O Hara to Brentwood Blvd.	54.7	47.6	49.8	56.5
19	Sand Creek Road	East of Brentwood Blvd.	54.5	47.3	49.5	56.3
20	San Jose Avenue	West of Fairview	55.9	48.7	50.9	57.7
21	San Jose Avenue	East of Fairview	52.5	47.2	51.9	55.8
22	Central Blvd.	West of Fairview	50.1	44.8	49.5	53.4
23	Central Blvd.	East of Fairview	57.4	50.2	52.4	59.2
24	Central Blvd.	West of Brentwood Blvd.	50.9	45.7	50.3	54.3
25	Oak Street	East of Brentwood Blvd.	57.4	52.1	56.7	60.7
26	Balfour Road	Deer Valley to American	64.4	54.6	55.6	65.3
27	Balfour Road	American to Foothill	61.0	52.4	53.9	62.3
28	Balfour Road	Foothill to John Muir	62.0	53.4	54.9	63.3
29	Balfour Road	John Muir to Eagle Rock	66.1	57.5	59.0	67.4
30	Balfour Road	Eagle Rock to SR 4	70.0	61.4	62.9	71.3
31	Balfour Road	SR 4 to Fairview	63.4	54.8	56.3	64.7
32	Balfour Road	Fairview to Minnesota	63.4	54.8	56.3	64.7
33	Balfour Road	Minnesota to Griffith	61.1	53.1	55.0	62.6
34	Balfour Road	Griffith to Walnut	62.0	54.1	55.9	63.5

### Appendix D-3

## FHWA-RD-77-108 Highway Traffic Noise Prediction Model

### Noise Contour Output

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
1	Lone Tree Way	West of Hillcrest	15	32	68	147	317
2	Lone Tree Way	Hillcrest to SR 4	21	45	98	210	453
3	Lone Tree Way	SR 4 to Shady Willow	44	94	202	436	939
4	Lone Tree Way	Shady Willow to Empire	39	84	181	389	839
5	Lone Tree Way	Empire to Fairview	18	40	85	184	396
6	Lone Tree Way	Fairview to O Hara	17	36	79	169	365
7	Lone Tree Way	O Hara to Anderson	29	63	137	294	634
8	Lone Tree Way	Anderson to Brentwood	28	60	130	279	602
9	Lone Tree Way	East of Brentwood	6	13	27	59	126
10	Grant Street	West of Fairview	2	4	9	20	43
11	Grant Street	East of Fairview	5	10	23	49	105
12	Grant Street	West of Brentwood Blvd.	6	13	27	59	127
13	Sunset Road	East of Brentwood Blvd.	4	9	20	44	94
14	Sand Creek Road	SR 4 to Shady Willow	32	69	149	321	693
15	Sand Creek Road	Shady Willow to Fairview	14	30	65	141	303
16	Sand Creek Road	Fairview to Minnesota	11	23	50	107	231
17	Sand Creek Road	Minnesota to O Hara	10	21	44	95	205
18	Sand Creek Road	O Hara to Brentwood Blvd.	5	11	23	50	107
19	Sand Creek Road	East of Brentwood Blvd.	6	12	26	56	122
20	San Jose Avenue	West of Fairview	3	8	16	35	75
21	San Jose Avenue	East of Fairview	2	5	11	24	51
22	Central Blvd.	West of Fairview	2	5	10	22	47
23	Central Blvd.	East of Fairview	7	14	31	66	142
24	Central Blvd.	West of Brentwood Blvd.	2	4	9	19	40
25	Oak Street	East of Brentwood Blvd.	4	10	21	45	96
26	Balfour Road	Deer Valley to American	32	68	147	317	683
27	Balfour Road	American to Foothill	11	24	53	113	244
28	Balfour Road	Foothill to John Muir	13	29	61	132	285
29	Balfour Road	John Muir to Eagle Rock	31	67	144	310	667
30	Balfour Road	Eagle Rock to SR 4	56	121	262	564	1214
31	Balfour Road	SR 4 to Fairview	16	35	76	163	352
32	Balfour Road	Fairview to Minnesota	16	35	76	163	352
33	Balfour Road	Minnesota to Griffith	11	24	52	111	239
34	Balfour Road	Griffith to Walnut	10	22	47	102	220

**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
35	Balfour Road	Walnut to Brentwood Blvd.	21,100	83		17	2	1	35	65	-5
36	Balfour Road	East of Brentwood Blvd.	9,500	83		17	2	1	35	75	-5
37	Marsh Creek Road	West of SR 4	13,520	83		17	2	1	50	100	
38	Marsh Creek Road (SR 4)	East of SR 4	8,910	67		33	3	6	50	110	
39	Deer Valley Road	North of Balfour	9,050	83		17	2	1	45	50	
40	Deer Valley Road	South of Balfour	3,840	83		17	2	1	45	200	
41	Hillcrest Avenue	North of Lone Tree	14,830	83		17	2	1	45	70	-5
42	Hillcrest Avenue	South of Lone Tree	8,040	83		17	2	1	45	80	-5
43	SR 4	North of Sand Creek	70,390	67		33	3	3	65	830	
44	SR 4	Sand Creek to Balfour	62,400	67		33	3	3	55	200	-5
45	SR 4	Balfour to Marsh Creek	43,900	67		33	3	6	55	100	-8
46	Slatten Ranch Road	North of Lone Tree	9,260	83		17	2	1	35	100	
47	Shady Willow Lane	Lone Tree to Sand Creek	10,570	83		17	2	1	35	75	-5
48	Highland Way	South of Sand Creek	3,490	83		17	2	1	25	50	
49	Empire Avenue	North of Lone Tree	9,620	83		17	2	1	35	125	
50	Empire Avenue	South of Lone Tree	9,390	83		17	2	1	35	75	-5
51	Fairview Avenue	Lone Tree to Grant	9,410	83		17	2	1	35	50	-5
52	Fairview Avenue	Grant to Sand Creek	7,600	83		17	2	1	35	50	-5
53	Fairview Avenue	Sand Creek to San Jose	21,490	83		17	2	1	45	75	-5
54	Fairview Avenue	San Jose to Central	22,400	83		17	2	1	45	75	-5
55	Fairview Avenue	Central to Balfour	17,040	83		17	2	1	45	75	-5
56	Fairview Avenue	South of Balfour	17,780	83		17	2	1	35	75	-5
57	Minnesota Avenue	North of Sand Creek	4,000	83		17	2	1	30	50	-5
58	Minnesota Avenue	Sand Creek to Balfour	6,690	83		17	2	1	35	65	-5
59	O Hara Avenue	North of Lone Tree	12,770	83		17	2	1	35	75	
60	O Hara Avenue	South of Lone Tree	15,230	83		17	2	1	35	65	-5
61	O Hara Avenue	North of Sand Creek	17,420	83		17	2	1	35	65	-5
62	O Hara Avenue	South of Sand Creek	18,280	83		17	2	1	35	55	-5
63	2nd Street	West of Brentwood Blvd.	6,490	83		17	2	1	30	100	0
64	2nd Street	East of Brentwood Blvd.	6,380	83		17	2	1	30	100	
65	Anderson Lane	North of Lone Tree	1,860	83		17	2	1	30	50	
66	Anderson Lane	South of Lone Tree	3,710	83		17	2	1	25	50	
67	Griffith Lane	North of Balfour	3,290	83		17	2	1	30	65	-5
68	Griffith Lane	South of Balfour	5,860	83		17	2	1	35	75	-5

### Appendix D-3

## FHWA-RD-77-108 Highway Traffic Noise Prediction Model

### Predicted Levels

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
35	Balfour Road	Walnut to Brentwood Blvd.	59.7	52.5	54.7	61.5
36	Balfour Road	East of Brentwood Blvd.	55.3	48.1	50.3	57.1
37	Marsh Creek Road	West of SR 4	64.4	55.2	56.4	65.5
38	Marsh Creek Road (SR 4)	East of SR 4	63.7	56.5	63.7	67.1
39	Deer Valley Road	North of Balfour	65.9	57.3	58.8	67.1
40	Deer Valley Road	South of Balfour	53.1	44.5	46.0	54.4
41	Hillcrest Avenue	North of Lone Tree	60.8	52.2	53.7	62.1
42	Hillcrest Avenue	South of Lone Tree	57.3	48.7	50.2	58.6
43	SR 4	North of Sand Creek	62.9	54.1	57.6	64.4
44	SR 4	Sand Creek to Balfour	64.6	56.7	60.6	66.5
45	SR 4	Balfour to Marsh Creek	64.4	56.7	63.6	67.4
46	Slatten Ranch Road	North of Lone Tree	58.3	51.2	53.3	60.1
47	Shady Willow Lane	Lone Tree to Sand Creek	55.8	48.6	50.8	57.6
48	Highland Way	South of Sand Creek	54.4	49.2	53.8	57.8
49	Empire Avenue	North of Lone Tree	57.0	49.9	52.1	58.8
50	Empire Avenue	South of Lone Tree	55.3	48.1	50.3	57.0
51	Fairview Avenue	Lone Tree to Grant	57.9	50.7	52.9	59.7
52	Fairview Avenue	Grant to Sand Creek	57.0	49.8	52.0	58.8
53	Fairview Avenue	Sand Creek to San Jose	62.0	53.4	54.9	63.2
54	Fairview Avenue	San Jose to Central	62.2	53.6	55.1	63.4
55	Fairview Avenue	Central to Balfour	61.0	52.4	53.9	62.2
56	Fairview Avenue	South of Balfour	58.0	50.9	53.0	59.8
57	Minnesota Avenue	North of Sand Creek	52.3	46.0	50.1	54.9
58	Minnesota Avenue	Sand Creek to Balfour	54.7	47.6	49.7	56.5
59	O Hara Avenue	North of Lone Tree	61.6	54.4	56.6	63.4
60	O Hara Avenue	South of Lone Tree	58.3	51.1	53.3	60.1
61	O Hara Avenue	North of Sand Creek	58.9	51.7	53.9	60.7
62	O Hara Avenue	South of Sand Creek	60.2	53.0	55.2	62.0
63	2nd Street	West of Brentwood Blvd.	54.9	48.6	52.7	57.5
64	2nd Street	East of Brentwood Blvd.	54.8	48.5	52.6	57.4
65	Anderson Lane	North of Lone Tree	53.9	47.7	51.8	56.6
66	Anderson Lane	South of Lone Tree	54.7	49.4	54.0	58.0
67	Griffith Lane	North of Balfour	49.7	43.4	47.5	52.4
68	Griffith Lane	South of Balfour	53.2	46.0	48.2	55.0

**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

			----- Distances to Traffic Noise Contours -----				
Segment	Roadway Name	Segment Description	75	70	65	60	55
35	Balfour Road	Walnut to Brentwood Blvd.	8	18	38	82	176
36	Balfour Road	East of Brentwood Blvd.	5	10	22	48	103
37	Marsh Creek Road	West of SR 4	23	50	108	232	501
38	Marsh Creek Road (SR 4)	East of SR 4	33	71	152	327	705
39	Deer Valley Road	North of Balfour	15	32	69	149	322
40	Deer Valley Road	South of Balfour	8	18	39	84	182
41	Hillcrest Avenue	North of Lone Tree	10	21	45	96	208
42	Hillcrest Avenue	South of Lone Tree	6	14	30	64	138
43	SR 4	North of Sand Creek	164	354	762	1642	3537
44	SR 4	Sand Creek to Balfour	54	117	253	544	1173
45	SR 4	Balfour to Marsh Creek	31	67	145	313	675
46	Slatten Ranch Road	North of Lone Tree	10	22	47	102	219
47	Shady Willow Lane	Lone Tree to Sand Creek	5	11	24	52	111
48	Highland Way	South of Sand Creek	4	8	16	35	76
49	Empire Avenue	North of Lone Tree	10	22	48	104	225
50	Empire Avenue	South of Lone Tree	5	10	22	48	103
51	Fairview Avenue	Lone Tree to Grant	5	10	22	48	103
52	Fairview Avenue	Grant to Sand Creek	4	9	19	41	89
53	Fairview Avenue	Sand Creek to San Jose	12	27	57	123	266
54	Fairview Avenue	San Jose to Central	13	27	59	127	273
55	Fairview Avenue	Central to Balfour	11	23	49	106	228
56	Fairview Avenue	South of Balfour	7	16	34	73	157
57	Minnesota Avenue	North of Sand Creek	2	5	11	23	49
58	Minnesota Avenue	Sand Creek to Balfour	4	8	18	38	82
59	O Hara Avenue	North of Lone Tree	13	27	59	126	272
60	O Hara Avenue	South of Lone Tree	7	14	31	66	142
61	O Hara Avenue	North of Sand Creek	7	16	33	72	155
62	O Hara Avenue	South of Sand Creek	7	16	34	74	160
63	2nd Street	West of Brentwood Blvd.	7	15	32	68	147
64	2nd Street	East of Brentwood Blvd.	7	15	31	67	145
65	Anderson Lane	North of Lone Tree	3	6	14	30	64
66	Anderson Lane	South of Lone Tree	4	8	17	37	79
67	Griffith Lane	North of Balfour	2	4	9	20	43
68	Griffith Lane	South of Balfour	3	7	16	35	75

**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
69	Walnut Boulevard	North of Oak	7,440	83		17	2	1	35	40	
70	Walnut Boulevard	Oak to Balfour	14,450	83		17	2	1	35	75	
71	Walnut Boulevard	South of Balfour	16,910	83		17	2	1	40	80	-5
72	Brentwood Blvd.	North of Lone Tree	23,050	83		17	2	1	40	100	
73	Brentwood Blvd.	Lone Tree to Sunset	30,800	83		17	2	1	40	100	
74	Brentwood Blvd.	Sunset to Sand Creek	25,340	83		17	2	1	40	100	
75	Brentwood Blvd.	Sand Creek to Central	13,970	83		17	2	1	35	100	
76	Brentwood Blvd.	Central to 2nd	11,370	83		17	2	1	25	100	
77	Brentwood Blvd.	2nd to Oak	11,760	83		17	2	1	25	60	
78	Brentwood Blvd.	Oak to Balfour	16,230	83		17	2	1	35	100	
79	Brentwood Blvd.	South of Balfour	21,670	83		17	2	1	55	100	

### Appendix D-3

## FHWA-RD-77-108 Highway Traffic Noise Prediction Model

### Predicted Levels

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
Description: Buildout to City Limits  
Ldn/CNEL: Ldn  
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
69	Walnut Boulevard	North of Oak	63.3	56.2	58.4	65.1
70	Walnut Boulevard	Oak to Balfour	62.1	55.0	57.1	63.9
71	Walnut Boulevard	South of Balfour	59.1	51.1	52.9	60.5
72	Brentwood Blvd.	North of Lone Tree	64.0	56.0	57.8	65.4
73	Brentwood Blvd.	Lone Tree to Sunset	65.2	57.3	59.1	66.7
74	Brentwood Blvd.	Sunset to Sand Creek	64.4	56.4	58.2	65.8
75	Brentwood Blvd.	Sand Creek to Central	60.1	52.9	55.1	61.9
76	Brentwood Blvd.	Central to 2nd	55.0	49.8	54.4	58.4
77	Brentwood Blvd.	2nd to Oak	58.5	53.2	57.9	61.8
78	Brentwood Blvd.	Oak to Balfour	60.8	53.6	55.8	62.5
79	Brentwood Blvd.	South of Balfour	67.7	57.9	58.8	68.6



**Appendix D-3**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to City Limits

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
69	Walnut Boulevard	North of Oak	9	19	41	88	189
70	Walnut Boulevard	Oak to Balfour	14	29	64	137	295
71	Walnut Boulevard	South of Balfour	9	19	40	87	187
72	Brentwood Blvd.	North of Lone Tree	23	50	107	230	496
73	Brentwood Blvd.	Lone Tree to Sunset	28	60	130	279	602
74	Brentwood Blvd.	Sunset to Sand Creek	25	53	114	245	528
75	Brentwood Blvd.	Sand Creek to Central	13	29	62	134	288
76	Brentwood Blvd.	Central to 2nd	8	17	36	78	168
77	Brentwood Blvd.	2nd to Oak	8	17	37	80	171
78	Brentwood Blvd.	Oak to Balfour	15	32	69	148	319
79	Brentwood Blvd.	South of Balfour	37	81	174	374	806

**Appendix Appendix D-4**  
**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**  
**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
Description: Buildout to Planning Area  
Ldn/CNEL: Ldn  
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Lone Tree Way	West of Hillcrest	28,010	83		17	3	1	45	80	-5
2	Lone Tree Way	Hillcrest to SR 4	47,040	83		17	3	1	45	80	-5
3	Lone Tree Way	SR 4 to Shady Willow	45,610	83		17	3	1	45	100	
4	Lone Tree Way	Shady Willow to Empire	38,770	83		17	3	1	45	100	
5	Lone Tree Way	Empire to Fairview	40,160	83		17	3	1	45	90	-5
6	Lone Tree Way	Fairview to O Hara	35,540	83		17	3	1	45	80	-5
7	Lone Tree Way	O Hara to Anderson	25,140	83		17	3	1	45	75	
8	Lone Tree Way	Anderson to Brentwood	22,180	83		17	3	1	45	75	
9	Lone Tree Way	East of Brentwood	9,380	83		17	3	1	40	45	-5
10	Grant Street	West of Fairview	2,650	83		17	2	1	35	50	-5
11	Grant Street	East of Fairview	3,160	83		17	2	1	35	50	
12	Grant Street	West of Brentwood Blvd.	6,000	83		17	2	1	30	50	
13	Sunset Road	East of Brentwood Blvd.	16,400	83		17	2	1	30	45	-5
14	Sand Creek Road	SR 4 to Shady Willow	29,830	83		17	2	1	45	100	
15	Sand Creek Road	Shady Willow to Fairview	27,610	83		17	2	1	45	90	-5
16	Sand Creek Road	Fairview to Minnesota	18,520	83		17	2	1	45	85	-5
17	Sand Creek Road	Minnesota to O Hara	14,980	83		17	2	1	45	85	-5
18	Sand Creek Road	O Hara to Brentwood Blvd.	11,370	83		17	2	1	35	85	-5
19	Sand Creek Road	East of Brentwood Blvd.	5,310	83		17	2	1	35	100	
20	San Jose Avenue	West of Fairview	6,170	83		17	2	1	35	50	-5
21	San Jose Avenue	East of Fairview	1,920	83		17	2	1	25	45	
22	Central Blvd.	West of Fairview	5,370	83		17	2	1	25	60	-5
23	Central Blvd.	East of Fairview	15,740	83		17	2	1	35	75	-5
24	Central Blvd.	West of Brentwood Blvd.	4,460	83		17	2	1	25	45	-5
25	Oak Street	East of Brentwood Blvd.	5,040	83		17	2	1	25	40	
26	Balfour Road	Deer Valley to American	17,220	83		17	2	1	55	140	
27	Balfour Road	American to Foothill	19,250	83		17	2	1	45	80	-5
28	Balfour Road	Foothill to John Muir	24,280	83		17	2	1	45	80	-5
29	Balfour Road	John Muir to Eagle Rock	27,590	83		17	2	1	45	100	
30	Balfour Road	Eagle Rock to SR 4	37,630	83		17	2	1	45	100	
31	Balfour Road	SR 4 to Fairview	34,230	83		17	2	1	45	80	-5
32	Balfour Road	Fairview to Minnesota	34,230	83		17	2	1	45	80	-5
33	Balfour Road	Minnesota to Griffith	24,830	83		17	2	1	40	75	-5
34	Balfour Road	Griffith to Walnut	22,160	83		17	2	1	40	60	-5

**Appendix Appendix D-4**  
**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Buildout to Planning Area  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Lone Tree Way	West of Hillcrest	62.7	55.9	55.6	64.2
2	Lone Tree Way	Hillcrest to SR 4	64.9	58.1	57.9	66.4
3	Lone Tree Way	SR 4 to Shady Willow	68.3	61.5	61.3	69.8
4	Lone Tree Way	Shady Willow to Empire	67.6	60.8	60.6	69.1
5	Lone Tree Way	Empire to Fairview	63.5	56.7	56.4	65.0
6	Lone Tree Way	Fairview to O Hara	63.7	56.9	56.6	65.2
7	Lone Tree Way	O Hara to Anderson	67.6	60.8	60.6	69.1
8	Lone Tree Way	Anderson to Brentwood	67.1	60.3	60.0	68.6
9	Lone Tree Way	East of Brentwood	60.2	54.1	54.1	61.9
10	Grant Street	West of Fairview	52.4	45.2	47.4	54.2
11	Grant Street	East of Fairview	58.2	51.0	53.2	60.0
12	Grant Street	West of Brentwood Blvd.	59.0	52.7	56.9	61.7
13	Sunset Road	East of Brentwood Blvd.	59.1	52.8	56.9	61.7
14	Sand Creek Road	SR 4 to Shady Willow	66.5	57.9	59.4	67.8
15	Sand Creek Road	Shady Willow to Fairview	61.9	53.3	54.8	63.1
16	Sand Creek Road	Fairview to Minnesota	60.5	51.9	53.4	61.8
17	Sand Creek Road	Minnesota to O Hara	59.6	51.0	52.5	60.9
18	Sand Creek Road	O Hara to Brentwood Blvd.	55.3	48.1	50.3	57.1
19	Sand Creek Road	East of Brentwood Blvd.	55.9	48.7	50.9	57.7
20	San Jose Avenue	West of Fairview	56.1	48.9	51.1	57.9
21	San Jose Avenue	East of Fairview	52.5	47.2	51.9	55.8
22	Central Blvd.	West of Fairview	50.1	44.8	49.5	53.4
23	Central Blvd.	East of Fairview	57.5	50.3	52.5	59.3
24	Central Blvd.	West of Brentwood Blvd.	51.1	45.9	50.5	54.5
25	Oak Street	East of Brentwood Blvd.	57.4	52.2	56.8	60.8
26	Balfour Road	Deer Valley to American	64.5	54.7	55.6	65.4
27	Balfour Road	American to Foothill	61.1	52.5	54.0	62.3
28	Balfour Road	Foothill to John Muir	62.1	53.5	55.0	63.4
29	Balfour Road	John Muir to Eagle Rock	66.2	57.6	59.1	67.5
30	Balfour Road	Eagle Rock to SR 4	67.6	58.9	60.4	68.8
31	Balfour Road	SR 4 to Fairview	63.6	55.0	56.5	64.8
32	Balfour Road	Fairview to Minnesota	63.6	55.0	56.5	64.8
33	Balfour Road	Minnesota to Griffith	61.2	53.2	55.0	62.6
34	Balfour Road	Griffith to Walnut	62.1	54.2	56.0	63.6

## Appendix Appendix D-4

### FHWA-RD-77-108 Highway Traffic Noise Prediction Model

#### Noise Contour Output

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to Planning Area

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
1	Lone Tree Way	West of Hillcrest	15	33	70	151	326
2	Lone Tree Way	Hillcrest to SR 4	21	46	99	214	461
3	Lone Tree Way	SR 4 to Shady Willow	45	97	210	452	973
4	Lone Tree Way	Shady Willow to Empire	41	87	188	405	873
5	Lone Tree Way	Empire to Fairview	19	41	89	193	415
6	Lone Tree Way	Fairview to O Hara	18	38	82	178	382
7	Lone Tree Way	O Hara to Anderson	30	65	141	304	654
8	Lone Tree Way	Anderson to Brentwood	28	60	130	279	602
9	Lone Tree Way	East of Brentwood	6	13	28	61	131
10	Grant Street	West of Fairview	2	4	10	21	44
11	Grant Street	East of Fairview	5	11	23	50	107
12	Grant Street	West of Brentwood Blvd.	6	14	30	65	139
13	Sunset Road	East of Brentwood Blvd.	6	13	27	59	126
14	Sand Creek Road	SR 4 to Shady Willow	33	71	154	331	712
15	Sand Creek Road	Shady Willow to Fairview	15	31	68	146	314
16	Sand Creek Road	Fairview to Minnesota	11	24	52	112	241
17	Sand Creek Road	Minnesota to O Hara	10	21	45	97	209
18	Sand Creek Road	O Hara to Brentwood Blvd.	5	12	25	54	117
19	Sand Creek Road	East of Brentwood Blvd.	7	15	33	70	151
20	San Jose Avenue	West of Fairview	4	8	17	36	78
21	San Jose Avenue	East of Fairview	2	5	11	24	51
22	Central Blvd.	West of Fairview	2	5	10	22	47
23	Central Blvd.	East of Fairview	7	14	31	67	145
24	Central Blvd.	West of Brentwood Blvd.	2	4	9	19	42
25	Oak Street	East of Brentwood Blvd.	5	10	21	45	97
26	Balfour Road	Deer Valley to American	32	69	149	321	691
27	Balfour Road	American to Foothill	11	25	53	115	247
28	Balfour Road	Foothill to John Muir	13	29	62	134	288
29	Balfour Road	John Muir to Eagle Rock	31	68	146	314	676
30	Balfour Road	Eagle Rock to SR 4	39	83	179	386	832
31	Balfour Road	SR 4 to Fairview	17	36	78	168	362
32	Balfour Road	Fairview to Minnesota	17	36	78	168	362
33	Balfour Road	Minnesota to Griffith	11	24	52	112	242
34	Balfour Road	Griffith to Walnut	10	22	48	104	224

**Appendix Appendix D-4**  
**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**  
**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
Description: Buildout to Planning Area  
Ldn/CNEL: Ldn  
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
35	Balfour Road	Walnut to Brentwood Blvd.	24,590	83		17	2	1	35	65	-5
36	Balfour Road	East of Brentwood Blvd.	12,020	83		17	2	1	35	75	-5
37	Marsh Creek Road	West of SR 4	18,620	83		17	2	1	50	100	
38	Marsh Creek Road (SR 4)	East of SR 4	11,010	67		33	3	6	50	110	
39	Deer Valley Road	North of Balfour	11,030	83		17	2	1	45	50	
40	Deer Valley Road	South of Balfour	4,830	83		17	2	1	45	200	
41	Hillcrest Avenue	North of Lone Tree	15,250	83		17	2	1	45	70	-5
42	Hillcrest Avenue	South of Lone Tree	8,270	83		17	2	1	45	80	-5
43	SR 4	North of Sand Creek	71,340	67		33	3	3	65	830	
44	SR 4	Sand Creek to Balfour	63,130	67		33	3	3	55	200	-5
45	SR 4	Balfour to Marsh Creek	45,750	67		33	3	6	55	100	-8
46	Slatten Ranch Road	North of Lone Tree	9,480	83		17	2	1	35	100	
47	Shady Willow Lane	Lone Tree to Sand Creek	10,610	83		17	2	1	35	75	-5
48	Highland Way	South of Sand Creek	3,570	83		17	2	1	25	50	
49	Empire Avenue	North of Lone Tree	9,620	83		17	2	1	35	125	
50	Empire Avenue	South of Lone Tree	9,920	83		17	2	1	35	75	-5
51	Fairview Avenue	Lone Tree to Grant	9,420	83		17	2	1	35	50	-5
52	Fairview Avenue	Grant to Sand Creek	8,090	83		17	2	1	35	50	-5
53	Fairview Avenue	Sand Creek to San Jose	22,420	83		17	2	1	45	75	-5
54	Fairview Avenue	San Jose to Central	23,510	83		17	2	1	45	75	-5
55	Fairview Avenue	Central to Balfour	18,150	83		17	2	1	45	75	-5
56	Fairview Avenue	South of Balfour	20,220	83		17	2	1	35	75	-5
57	Minnesota Avenue	North of Sand Creek	4,040	83		17	2	1	30	50	-5
58	Minnesota Avenue	Sand Creek to Balfour	6,750	83		17	2	1	35	65	-5
59	O Hara Avenue	North of Lone Tree	13,550	83		17	2	1	35	75	
60	O Hara Avenue	South of Lone Tree	18,020	83		17	2	1	35	65	-5
61	O Hara Avenue	North of Sand Creek	20,560	83		17	2	1	35	65	-5
62	O Hara Avenue	South of Sand Creek	21,120	83		17	2	1	35	55	-5
63	2nd Street	West of Brentwood Blvd.	9,190	83		17	2	1	30	100	
64	2nd Street	East of Brentwood Blvd.	6,530	83		17	2	1	30	100	
65	Anderson Lane	North of Lone Tree	1,860	83		17	2	1	30	50	
66	Anderson Lane	South of Lone Tree	4,480	83		17	2	1	25	50	
67	Griffith Lane	North of Balfour	3,330	83		17	2	1	30	65	-5
68	Griffith Lane	South of Balfour	5,970	83		17	2	1	35	75	-5

**Appendix Appendix D-4  
FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Buildout to Planning Area  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
35	Balfour Road	Walnut to Brentwood Blvd.	60.4	53.2	55.4	62.2
36	Balfour Road	East of Brentwood Blvd.	56.3	49.2	51.3	58.1
37	Marsh Creek Road	West of SR 4	65.8	56.6	57.8	66.9
38	Marsh Creek Road (SR 4)	East of SR 4	64.6	57.4	64.6	68.0
39	Deer Valley Road	North of Balfour	66.7	58.1	59.6	68.0
40	Deer Valley Road	South of Balfour	54.1	45.5	47.0	55.4
41	Hillcrest Avenue	North of Lone Tree	61.0	52.3	53.8	62.2
42	Hillcrest Avenue	South of Lone Tree	57.4	48.8	50.3	58.7
43	SR 4	North of Sand Creek	63.0	54.1	57.6	64.5
44	SR 4	Sand Creek to Balfour	64.6	56.8	60.7	66.6
45	SR 4	Balfour to Marsh Creek	64.6	56.9	63.8	67.6
46	Slatten Ranch Road	North of Lone Tree	58.4	51.3	53.4	60.2
47	Shady Willow Lane	Lone Tree to Sand Creek	55.8	48.6	50.8	57.6
48	Highland Way	South of Sand Creek	54.5	49.3	53.9	57.8
49	Empire Avenue	North of Lone Tree	57.0	49.9	52.1	58.8
50	Empire Avenue	South of Lone Tree	55.5	48.3	50.5	57.3
51	Fairview Avenue	Lone Tree to Grant	57.9	50.7	52.9	59.7
52	Fairview Avenue	Grant to Sand Creek	57.3	50.1	52.3	59.0
53	Fairview Avenue	Sand Creek to San Jose	62.2	53.6	55.1	63.4
54	Fairview Avenue	San Jose to Central	62.4	53.8	55.3	63.6
55	Fairview Avenue	Central to Balfour	61.3	52.7	54.1	62.5
56	Fairview Avenue	South of Balfour	58.6	51.4	53.6	60.4
57	Minnesota Avenue	North of Sand Creek	52.3	46.0	50.1	55.0
58	Minnesota Avenue	Sand Creek to Balfour	54.8	47.6	49.8	56.5
59	O Hara Avenue	North of Lone Tree	61.9	54.7	56.9	63.6
60	O Hara Avenue	South of Lone Tree	59.0	51.9	54.0	60.8
61	O Hara Avenue	North of Sand Creek	59.6	52.4	54.6	61.4
62	O Hara Avenue	South of Sand Creek	60.8	53.6	55.8	62.6
63	2nd Street	West of Brentwood Blvd.	56.4	50.1	54.2	59.0
64	2nd Street	East of Brentwood Blvd.	54.9	48.6	52.7	57.5
65	Anderson Lane	North of Lone Tree	53.9	47.7	51.8	56.6
66	Anderson Lane	South of Lone Tree	55.5	50.2	54.9	58.8
67	Griffith Lane	North of Balfour	49.8	43.5	47.6	52.4
68	Griffith Lane	South of Balfour	53.3	46.1	48.3	55.1

**Appendix Appendix D-4**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to Planning Area

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
35	Balfour Road	Walnut to Brentwood Blvd.	9	20	42	91	195
36	Balfour Road	East of Brentwood Blvd.	6	12	26	56	121
37	Marsh Creek Road	West of SR 4	29	62	134	288	620
38	Marsh Creek Road (SR 4)	East of SR 4	38	81	175	377	812
39	Deer Valley Road	North of Balfour	17	37	79	170	367
40	Deer Valley Road	South of Balfour	10	21	46	98	212
41	Hillcrest Avenue	North of Lone Tree	10	21	46	98	211
42	Hillcrest Avenue	South of Lone Tree	7	14	30	65	141
43	SR 4	North of Sand Creek	166	357	769	1656	3568
44	SR 4	Sand Creek to Balfour	55	118	255	549	1182
45	SR 4	Balfour to Marsh Creek	32	69	149	322	694
46	Slatten Ranch Road	North of Lone Tree	10	22	48	103	223
47	Shady Willow Lane	Lone Tree to Sand Creek	5	11	24	52	111
48	Highland Way	South of Sand Creek	4	8	17	36	77
49	Empire Avenue	North of Lone Tree	10	22	48	104	225
50	Empire Avenue	South of Lone Tree	5	11	23	49	107
51	Fairview Avenue	Lone Tree to Grant	5	10	22	48	103
52	Fairview Avenue	Grant to Sand Creek	4	9	20	43	93
53	Fairview Avenue	Sand Creek to San Jose	13	27	59	127	273
54	Fairview Avenue	San Jose to Central	13	28	61	131	282
55	Fairview Avenue	Central to Balfour	11	24	51	110	237
56	Fairview Avenue	South of Balfour	8	17	37	79	171
57	Minnesota Avenue	North of Sand Creek	2	5	11	23	50
58	Minnesota Avenue	Sand Creek to Balfour	4	8	18	38	82
59	O Hara Avenue	North of Lone Tree	13	28	61	131	282
60	O Hara Avenue	South of Lone Tree	7	16	34	74	159
61	O Hara Avenue	North of Sand Creek	8	17	37	80	173
62	O Hara Avenue	South of Sand Creek	8	18	38	82	176
63	2nd Street	West of Brentwood Blvd.	9	19	40	86	185
64	2nd Street	East of Brentwood Blvd.	7	15	32	68	147
65	Anderson Lane	North of Lone Tree	3	6	14	30	64
66	Anderson Lane	South of Lone Tree	4	9	19	42	90
67	Griffith Lane	North of Balfour	2	4	9	20	44
68	Griffith Lane	South of Balfour	4	8	16	35	76

**Appendix Appendix D-4**  
**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**  
**Data Input Sheet**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Buildout to Planning Area  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
69	Walnut Boulevard	North of Oak	7,790	83		17	2	1	35	40	
70	Walnut Boulevard	Oak to Balfour	17,120	83		17	2	1	35	75	
71	Walnut Boulevard	South of Balfour	22,940	83		17	2	1	40	80	-5
72	Brentwood Blvd.	North of Lone Tree	23,050	83		17	2	1	40	100	
73	Brentwood Blvd.	Lone Tree to Sunset	33,530	83		17	2	1	40	100	
74	Brentwood Blvd.	Sunset to Sand Creek	26,000	83		17	2	1	40	100	
75	Brentwood Blvd.	Sand Creek to Central	14,630	83		17	2	1	35	100	
76	Brentwood Blvd.	Central to 2nd	11,470	83		17	2	1	25	100	
77	Brentwood Blvd.	2nd to Oak	13,940	83		17	2	1	25	60	
78	Brentwood Blvd.	Oak to Balfour	17,870	83		17	2	1	35	100	
79	Brentwood Blvd.	South of Balfour	24,660	83		17	2	1	55	100	



**Appendix Appendix D-4**  
**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Predicted Levels**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update  
 Description: Buildout to Planning Area  
 Ldn/CNEL: Ldn  
 Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
69	Walnut Boulevard	North of Oak	63.5	56.4	58.6	65.3
70	Walnut Boulevard	Oak to Balfour	62.9	55.7	57.9	64.7
71	Walnut Boulevard	South of Balfour	60.4	52.5	54.3	61.9
72	Brentwood Blvd.	North of Lone Tree	64.0	56.0	57.8	65.4
73	Brentwood Blvd.	Lone Tree to Sunset	65.6	57.6	59.5	67.1
74	Brentwood Blvd.	Sunset to Sand Creek	64.5	56.5	58.4	66.0
75	Brentwood Blvd.	Sand Creek to Central	60.3	53.1	55.3	62.1
76	Brentwood Blvd.	Central to 2nd	55.0	49.8	54.4	58.4
77	Brentwood Blvd.	2nd to Oak	59.2	54.0	58.6	62.6
78	Brentwood Blvd.	Oak to Balfour	61.2	54.0	56.2	63.0
79	Brentwood Blvd.	South of Balfour	68.2	58.5	59.4	69.2

**Appendix Appendix D-4**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Noise Contour Output**

Project #: 2012-166 City of Brentwood General Plan Noise Element Update

Description: Buildout to Planning Area

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Segment Description	----- Distances to Traffic Noise Contours -----				
			75	70	65	60	55
69	Walnut Boulevard	North of Oak	9	20	42	91	195
70	Walnut Boulevard	Oak to Balfour	15	33	71	153	330
71	Walnut Boulevard	South of Balfour	11	23	49	107	229
72	Brentwood Blvd.	North of Lone Tree	23	50	107	230	496
73	Brentwood Blvd.	Lone Tree to Sunset	30	64	137	296	637
74	Brentwood Blvd.	Sunset to Sand Creek	25	54	116	249	537
75	Brentwood Blvd.	Sand Creek to Central	14	30	64	138	297
76	Brentwood Blvd.	Central to 2nd	8	17	36	78	169
77	Brentwood Blvd.	2nd to Oak	9	19	41	89	192
78	Brentwood Blvd.	Oak to Balfour	16	34	73	158	340
79	Brentwood Blvd.	South of Balfour	41	88	189	408	878