

Appendix I

Noise Assumptions and Modeling

Exhibit A

Ambient Noise Data

Summary		
File Name on Meter	LxT_Data.237.s	
File Name on PC	LxT_0004983-20230503 125209-LxT_Data.237.ldbin	
Serial Number	0004983	
Model	SoundTrack LxT*	
Firmware Version	2.404	
User		
Location		
Job Description		
Note		

Measurement		
Description		
Start	2023-05-03 12:52:09	
Stop	2023-05-03 13:12:09	
Duration	00:20:00.0	
Run Time	00:20:00.0	
Pause	00:00:00.0	
Pre-Calibration	2023-05-02 06:54:42	
Post-Calibration	None	
Calibration Deviation	---	

Overall Settings				
RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamplifier	PRMLxT1			
Microphone Correction	Off			
Integration Method	Exponential			
Overload	143.3 dB			
	A	C	Z	
Under Range Peak	99.3	96.3	101.3 dB	
Under Range Limit	36.5	36.2	43.2 dB	
Noise Floor	27.4	27.1	34.1 dB	
	First	Second	Third	
Instrument Identification				

Results		
LASeq	66.8	
LASE	97.6	
EAS	633.998 $\mu\text{Pa}^2\text{h}$	
EAS8	15.216 mPa^2h	
EAS40	76.080 mPa^2h	
LZpeak (max)	2023-05-03 12:58:30	103.0 dB
LASmax	2023-05-03 13:11:44	80.3 dB
LASmin	2023-05-03 13:07:16	48.8 dB
SEA	-99.9 dB	

Exceedance Counts			Duration		
LAS > 85.0 dB	0		0.0 s		
LAS > 115.0 dB	0		0.0 s		
LZpeak > 135.0 dB	0		0.0 s		
LZpeak > 137.0 dB	0		0.0 s		
LZpeak > 140.0 dB	0		0.0 s		
LCSeq	74.7 dB				
LASeq	66.8 dB				
LCSeq - LASEq	8.0 dB				
LALeq	68.5 dB				
LAeq	66.8 dB				
LALeq - LAeq	1.7 dB				
	A		C		Z
	dB	Time Stamp	dB	Time Stamp	dB
Leq	66.8				
Ls(max)	80.3	2023/05/03 13:11:44			
Ls(min)	48.8	2023/05/03 13:07:16			
Lpeak(max)					103.0
					2023/05/03 12:58:30
Overload Count	0				
Overload Duration	0.0 s				

Dose Settings		
Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results		
Dose	-99.94	0.00 %
Projected Dose	-99.94	0.01 %
TWA (Projected)	-99.9	22.4 dB
TWA (t)	-99.9	-0.5 dB
Lep (t)	53.0	53.0 dB

Statistics	
LAS 5.00	73.3 dB
LAS 10.00	71.3 dB
LAS 33.30	64.8 dB
LAS 50.00	61.6 dB
LAS 66.60	58.9 dB
LAS 90.00	54.1 dB

Summary					
File Name on Meter	LxT_Data.235.s				
File Name on PC	LxT_0004983-20230503 114114-LxT_Data.235.ldbin				
Serial Number	0004983				
Model	SoundTrack LxT®				
Firmware Version	2.404				
User					
Location					
Job Description					
Note					
Measurement					
Description					
Start	2023-05-03 11:41:14				
Stop	2023-05-03 12:01:14				
Duration	00:20:00.0				
Run Time	00:20:00.0				
Pause	00:00:00.0				
Pre-Calibration	2023-05-02 06:54:42				
Post-Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	Z Weighting				
Detector	Slow				
Preamplifier	PRMLxT1				
Microphone Correction	Off				
Integration Method	Exponential				
Overload	143.3 dB				
	A	C	Z		
Under Range Peak	99.3	96.3	101.3	dB	
Under Range Limit	36.5	36.2	43.2	dB	
Noise Floor	27.4	27.1	34.1	dB	
	First	Second	Third		
Instrument Identification					
Results					
LASeq	64.5				
LASE	95.3				
EAS	376.555 µPa²h				
EAS8	9.037 mPa²h				
EAS40	45.187 mPa²h				
LZpeak (max)	2023-05-03 11:41:44	100.0 dB			
LASmax	2023-05-03 12:01:06	77.5 dB			
LASmin	2023-05-03 11:43:27	46.6 dB			
SEA	-99.9 dB				
	Exceedance Counts	Duration			
LAS > 85.0 dB	0	0.0 s			
LAS > 115.0 dB	0	0.0 s			
LZpeak > 135.0 dB	0	0.0 s			
LZpeak > 137.0 dB	0	0.0 s			
LZpeak > 140.0 dB	0	0.0 s			
LCSeq	71.9 dB				
LASEq	64.5 dB				
LCSeq - LASEq	7.4 dB				
LALeq	67.6 dB				
LAeq	64.5 dB				
LALeq - LAeq	3.1 dB				
	A		C		Z
	dB	Time Stamp	dB	Time Stamp	dB
Leq	64.5				
Ls(max)	77.5	2023/05/03 12:01:06			
Ls(min)	46.6	2023/05/03 11:43:27			
LPeak(max)					100.0 2023/05/03 11:41:44
Overload Count	0				
Overload Duration	0.0 s				
Dose Settings					
Dose Name	OSHA-1		OSHA-2		
Exchange Rate	5		5 dB		
Threshold	90		80 dB		
Criterion Level	90		90 dB		
Criterion Duration	8		8 h		
Results					
Dose	-99.94		-99.94 %		
Projected Dose	-99.94		-99.94 %		
TWA (Projected)	-99.9		-99.9 dB		
TWA (t)	-99.9		-99.9 dB		
Lep (t)	50.7		50.7 dB		
Statistics					
LAS 5.00	70.7 dB				
LAS 10.00	69.1 dB				
LAS 33.30	62.9 dB				
LAS 50.00	59.5 dB				
LAS 66.60	56.4 dB				
LAS 90.00	51.7 dB				

Summary						
File Name on Meter	LxT_Data.236.s					
File Name on PC	LxT_0004983-20230503 122206-LxT_Data.236.lbin					
Serial Number	0004983					
Model	SoundTrack LxT®					
Firmware Version	2.404					
User						
Location						
Job Description						
Note						
Measurement						
Description						
Start	2023-05-03 12:22:06					
Stop	2023-05-03 12:42:06					
Duration	00:20:00.0					
Run Time	00:20:00.0					
Pause	00:00:00.0					
Pre-Calibration	2023-05-02 06:54:42					
Post-Calibration	None					
Calibration Deviation	---					
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	Z Weighting					
Detector	Slow					
Preamplifier	PRMLxT1					
Microphone Correction	Off					
Integration Method	Exponential					
Overload	143.3 dB					
	A	C	Z			
Under Range Peak	99.3	96.3	101.3	dB		
Under Range Limit	36.5	36.2	43.2	dB		
Noise Floor	27.4	27.1	34.1	dB		
	First	Second	Third			
Instrument Identification						
Results						
LASeq	68.8					
LASE	99.6					
EAS	1.012 mPa²h					
EAS8	24.288 mPa²h					
EAS40	121.440 mPa²h					
LZpeak (max)	2023-05-03 12:23:36	112.6 dB				
LASmax	2023-05-03 12:23:34	86.7 dB				
LASmin	2023-05-03 12:25:31	45.0 dB				
SEA	-99.9 dB					
	Exceedance Counts	Duration				
LAS > 85.0 dB	2	3.3 s				
LAS > 115.0 dB	0	0.0 s				
LZpeak > 135.0 dB	0	0.0 s				
LZpeak > 137.0 dB	0	0.0 s				
LZpeak > 140.0 dB	0	0.0 s				
LCSeq	74.7 dB					
LASEq	68.8 dB					
LCSeq - LASEq	5.9 dB					
LALeq	70.9 dB					
LAeq	68.8 dB					
LALeq - LAeq	2.1 dB					
	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	68.8					
Ls(max)	86.7	2023/05/03 12:23:34				
Ls(min)	45.0	2023/05/03 12:25:31				
LPeak(max)					112.6	2023/05/03 12:23:36
Overload Count	0					
Overload Duration	0.0 s					
Dose Settings						
Dose Name	OSHA-1		OSHA-2			
Exchange Rate	5		5 dB			
Threshold	90		80 dB			
Criterion Level	90		90 dB			
Criterion Duration	8		8 h			
Results						
Dose	-99.94		0.01 %			
Projected Dose	-99.94		0.29 %			
TWA (Projected)	-99.9		48.0 dB			
TWA (t)	-99.9		25.0 dB			
Lep (t)	55.0		55.0 dB			
Statistics						
LAS 5.00	74.3 dB					
LAS 10.00	72.3 dB					
LAS 33.30	67.2 dB					
LAS 50.00	63.9 dB					
LAS 66.60	59.1 dB					
LAS 90.00	50.2 dB					

Summary	
File Name on Meter	LxT_Data.014.s
File Name on PC	LxT_0007058-20230505 115343-LxT_Data.014.ldbin
Serial Number	0007058
Model	SoundTrack LxT*
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement	
Description	
Start	2023-05-05 11:53:43
Stop	2023-05-08 13:21:23
Duration	73:27:39.688
Run Time	73:27:39.688
Pause	00:00:00.0
Pre-Calibration	2023-05-05 11:08:00
Post-Calibration	None
Calibration Deviation	---

Overall Settings				
RMS Weight	A Weighting			
Peak Weight	A Weighting			
Detector	Slow			
Preamplifier	PRMLxT1			
Microphone Correction	Off			
Integration Method	Exponential			
Overload	143.4 dB			
	A	C	Z	
Under Range Peak	99.4	96.4	101.4 dB	
Under Range Limit	36.6	36.2	43.3 dB	
Noise Floor	27.5	27.1	34.1 dB	
	First	Second	Third	
Instrument Identification				

Results

LAseq	68.8	
LASE	123.0	
EAS	221.349 mPa²h	
EAS8	24.105 mPa²h	
EAS40	120.526 mPa²h	
LAp _{peak} (max)	2023-05-06 00:45:11	115.6 dB
LAS _{max}	2023-05-07 22:23:16	95.8 dB
LAS _{min}	2023-05-07 03:35:03	36.5 dB
SEA	-99.9 dB	

	Exceedance Counts	Duration
LAS > 85.0 dB	38	97.4 s
LAS > 115.0 dB	0	0.0 s
LAp _{peak} > 135.0 dB	0	0.0 s
LAp _{peak} > 137.0 dB	0	0.0 s
LAp _{peak} > 140.0 dB	0	0.0 s

LCseq	73.6 dB
LASEq	68.8 dB
LCseq - LASEq	4.8 dB
LALeq	70.9 dB
LAeq	68.8 dB
LALeq - LAeq	2.2 dB

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	68.8					
Ls(max)	95.8	2023/05/07 22:23:16				
Ls(min)	36.5	2023/05/07 3:35:03				
LPeak(max)	115.6	2023/05/06 0:45:11				

Overload Count	0
Overload Duration	0.0 s

Dose Settings		
Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results		
Dose	0.05	1.73 %
Projected Dose	0.01	0.19 %
TWA (Projected)	19.1	44.7 dB
TWA (t)	35.1	60.7 dB
Lep (t)	78.4	78.4 dB

Statistics	
LAS 5.00	76.2 dB
LAS 10.00	73.8 dB
LAS 33.30	63.2 dB
LAS 50.00	56.8 dB
LAS 66.60	52.0 dB
LAS 90.00	44.6 dB

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R3**

	05/07/23	05/08/23	05/09/23	05/10/23	05/11/23	05/12/23	05/13/23	Start Date and Time		
11:53:00 AM	71.5	70.1	71.0					5/7/2023	11:53:00 AM	Start
12:53:00 PM	71.7	70.7	70.4					5/8/2023	12:53:00 PM	5/7/23 11:53 AM
1:53:00 PM	71.1	70.2	69.9					5/9/2023	1:53:00 PM	End
2:53:00 PM	71.6	70.4	69.7					5/10/2023	2:53:00 PM	5/8/23 11:53 AM
3:53:00 PM	71.6	70.8	69.0						3:53:00 PM	
4:53:00 PM	72.0	70.7	69.3						4:53:00 PM	
5:53:00 PM	71.5	70.8	69.7						5:53:00 PM	
6:53:00 PM	70.6	68.9	69.4							
7:53:00 PM	68.9	68.2	69.5							
8:53:00 PM	67.8	67.1	66.4							
9:53:00 PM	67.5	67.5	67.4							
10:53:00 PM	66.6	66.4	64.5							
11:53:00 PM	64.8	65.5	62.3							
12:53:00 AM	63.8	63.3	61.5							
1:53:00 AM	61.5	61.3	58.3							
2:53:00 AM	60.2	59.2	62.1							
3:53:00 AM	64.5	58.8	61.1							
4:53:00 AM	63.6	63.1	66.1							
5:53:00 AM	66.6	63.9	68.4							
6:53:00 AM	67.8	65.7	70.8							
7:53:00 AM	69.6	68.3	71.2							
8:53:00 AM	70.5	69.6	70.4							
9:53:00 AM	71.2	70.6	69.9							
10:53:00 AM	70.9	70.2	69.7							
								CNEL 77.7 L_{dn} 77.5 24-hr Max. 72.0 24-hr Min. 60.2 24-hr Nighttime Average^a 71.5 24-hr Nighttime Max 72.0 24-hr Nighttime Min 70.9 24-hr Daytime Average^a 67.2 24-hr Daytime Max 70.6 24-hr Daytime Min 60.2 Total Period Average 68.8 Total Period Max 72.0 Total Period Min 58.3 Total Period Daytime Average 67.0 Total Period Daytime Max 70.6 Total Period Daytime Min 58.3 Total Period Nighttime Average 70.7 Total Period Nighttime Max 72.0 Total Period Nighttime Min 65.7		

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

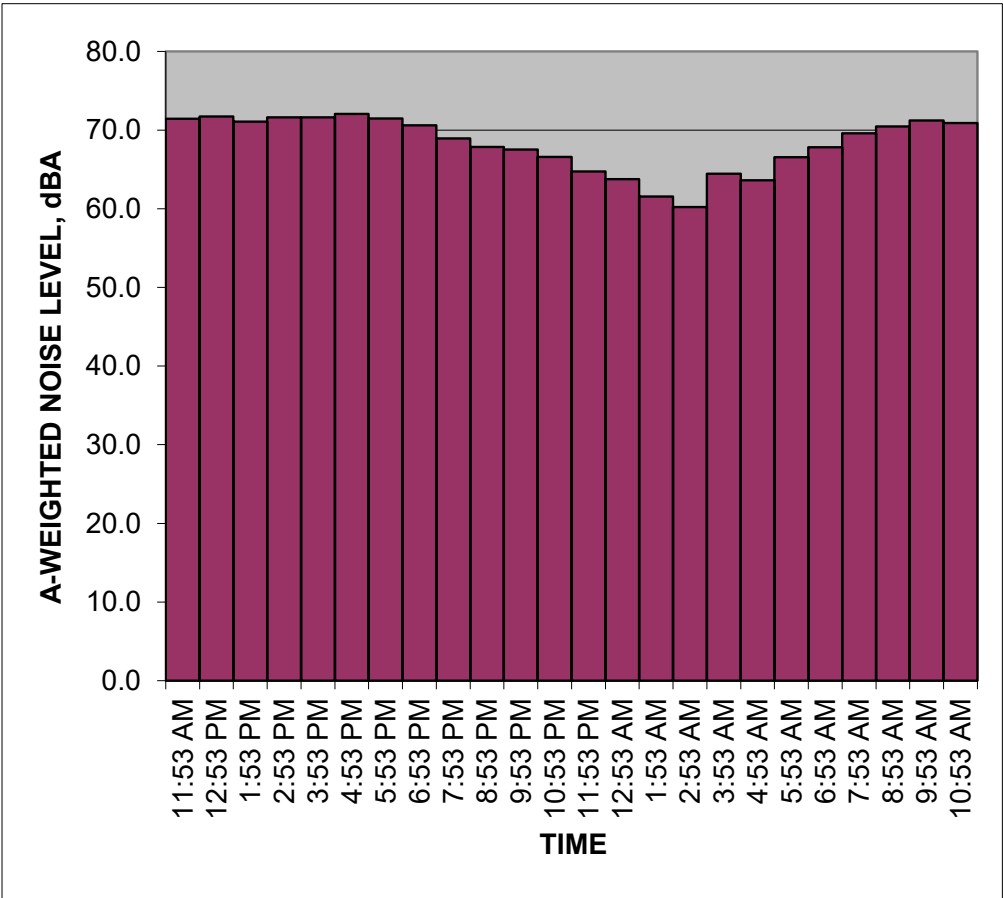


Measured Ambient Noise Levels

Project: Claremont Mckenna
Location: R3
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:53 AM	71.5
12:53 PM	71.7
1:53 PM	71.1
2:53 PM	71.6
3:53 PM	71.6
4:53 PM	72.0
5:53 PM	71.5
6:53 PM	70.6
7:53 PM	68.9
8:53 PM	67.8
9:53 PM	67.5
10:53 PM	66.6
11:53 PM	64.8
12:53 AM	63.8
1:53 AM	61.5
2:53 AM	60.2
3:53 AM	64.5
4:53 AM	63.6
5:53 AM	66.6
6:53 AM	67.8
7:53 AM	69.6
8:53 AM	70.5
9:53 AM	71.2
10:53 AM	70.9
CNEL, dB(A):	77.7



NOTES:

Measurements began on 5/7/23

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R3**

	05/07/23	05/08/23	05/09/23	05/10/23	05/11/23	05/12/23	05/13/23	Start Date and Time			
11:53:00 AM	71.5	70.1	71.0					5/7/2023	11:53:00 AM	Start	
12:53:00 PM	71.7	70.7	70.4					5/8/2023	12:53:00 PM	5/8/23 11:53 AM	
1:53:00 PM	71.1	70.2	69.9					5/9/2023	1:53:00 PM	End	
2:53:00 PM	71.6	70.4	69.7					5/10/2023	2:53:00 PM	5/9/23 11:53 AM	
3:53:00 PM	71.6	70.8	69.0						3:53:00 PM		
4:53:00 PM	72.0	70.7	69.3						4:53:00 PM		
5:53:00 PM	71.5	70.8	69.7						5:53:00 PM		
6:53:00 PM	70.6	68.9	69.4					CNEL			76.7
7:53:00 PM	68.9	68.2	69.5					L _{dn}			76.5
8:53:00 PM	67.8	67.1	66.4					24-hr Max.			70.8
9:53:00 PM	67.5	67.5	67.4					24-hr Min.			58.8
10:53:00 PM	66.6	66.4	64.5					24-hr Nighttime Average ^a			70.5
11:53:00 PM	64.8	65.5	62.3					24-hr Nighttime Max			70.8
12:53:00 AM	63.8	63.3	61.5					24-hr Nighttime Min			70.1
1:53:00 AM	61.5	61.3	58.3					24-hr Daytime Average ^a			66.2
2:53:00 AM	60.2	59.2	62.1					24-hr Daytime Max			69.6
3:53:00 AM	64.5	58.8	61.1					24-hr Daytime Min			58.8
4:53:00 AM	63.6	63.1	66.1					Total Period Average			68.8
5:53:00 AM	66.6	63.9	68.4					Total Period Max			72.0
6:53:00 AM	67.8	65.7	70.8					Total Period Min			58.3
7:53:00 AM	69.6	68.3	71.2	Total Period Daytime Average			67.0				
8:53:00 AM	70.5	69.6	70.4	Total Period Daytime Max			70.6				
9:53:00 AM	71.2	70.6	69.9	Total Period Daytime Min			58.3				
10:53:00 AM	70.9	70.2	69.7	Total Period Nighttime Average			70.7				
				Total Period Nighttime Max			72.0				
				Total Period Nighttime Min			65.7				

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

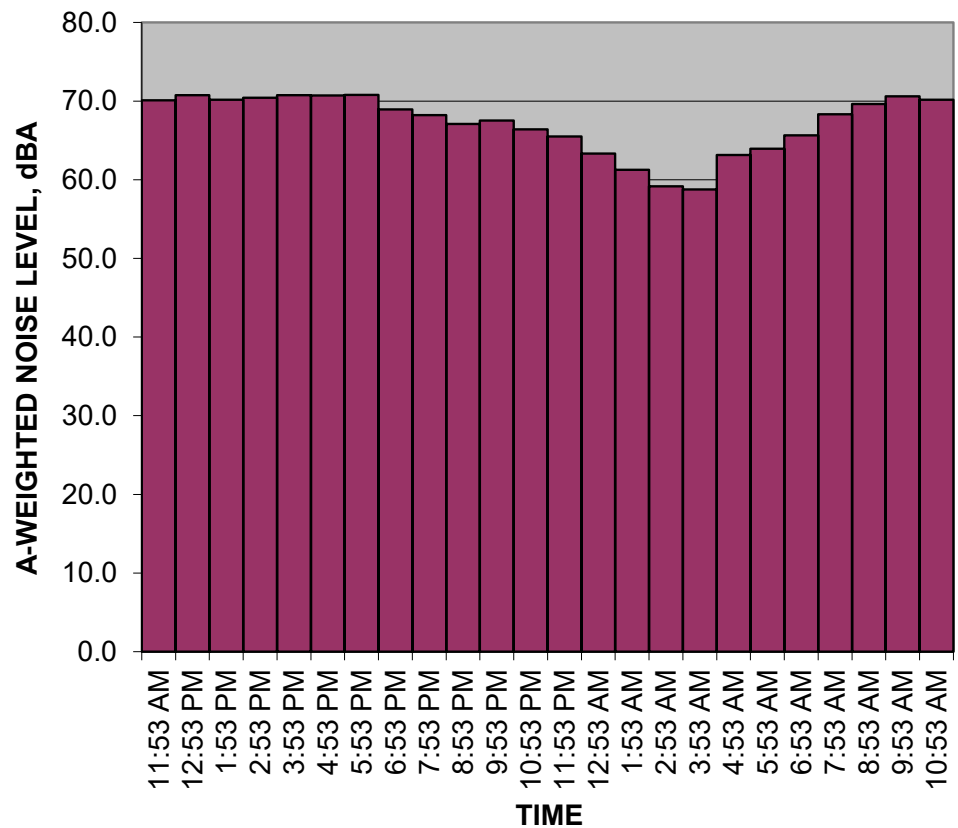
Measured Ambient Noise Levels



Project: Claremont Mckenna
Location: R3
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:53 AM	70.1
12:53 PM	70.7
1:53 PM	70.2
2:53 PM	70.4
3:53 PM	70.8
4:53 PM	70.7
5:53 PM	70.8
6:53 PM	68.9
7:53 PM	68.2
8:53 PM	67.1
9:53 PM	67.5
10:53 PM	66.4
11:53 PM	65.5
12:53 AM	63.3
1:53 AM	61.3
2:53 AM	59.2
3:53 AM	58.8
4:53 AM	63.1
5:53 AM	63.9
6:53 AM	65.7
7:53 AM	68.3
8:53 AM	69.6
9:53 AM	70.6
10:53 AM	70.2
CNEL, dB(A):	76.7



NOTES:

Measurements began on 5/8/23

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R3**

05/07/2305/08/2305/09/2305/10/2305/11/2305/12/2305/13/23				Start Date and Time			
11:53:00 AM	71.5	70.1	71.0		5/7/2023	11:53:00 AM	Start
12:53:00 PM	71.7	70.7	70.4		5/8/2023	12:53:00 PM	5/9/23 11:53 AM
1:53:00 PM	71.1	70.2	69.9		5/9/2023	1:53:00 PM	End
2:53:00 PM	71.6	70.4	69.7		5/10/2023	2:53:00 PM	5/10/23 11:53 AM
3:53:00 PM	71.6	70.8	69.0			3:53:00 PM	
4:53:00 PM	72.0	70.7	69.3			4:53:00 PM	
5:53:00 PM	71.5	70.8	69.7			5:53:00 PM	
6:53:00 PM	70.6	68.9	69.4			CNEL76.4	
7:53:00 PM	68.9	68.2	69.5			L _{dn} 76.0	
8:53:00 PM	67.8	67.1	66.4			24-hr Max.71.2	
9:53:00 PM	67.5	67.5	67.4			24-hr Min.58.3	
10:53:00 PM	66.6	66.4	64.5			24-hr Nighttime Average ^a 69.9	
11:53:00 PM	64.8	65.5	62.3			24-hr Nighttime Max71.0	
12:53:00 AM	63.8	63.3	61.5			24-hr Nighttime Min69.0	
1:53:00 AM	61.5	61.3	58.3			24-hr Daytime Average ^a 67.5	
2:53:00 AM	60.2	59.2	62.1			24-hr Daytime Max71.2	
3:53:00 AM	64.5	58.8	61.1			24-hr Daytime Min58.3	
4:53:00 AM	63.6	63.1	66.1			Total Period Average68.8	
5:53:00 AM	66.6	63.9	68.4			Total Period Max72.0	
6:53:00 AM	67.8	65.7	70.8			Total Period Min58.3	
7:53:00 AM	69.6	68.3	71.2		Total Period Daytime Average67.0		
8:53:00 AM	70.5	69.6	70.4		Total Period Daytime Max70.6		
9:53:00 AM	71.2	70.6	69.9		Total Period Daytime Min58.3		
10:53:00 AM	70.9	70.2	69.7		Total Period Nighttime Average70.7		
					Total Period Nighttime Max72.0		
					Total Period Nighttime Min65.7		

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

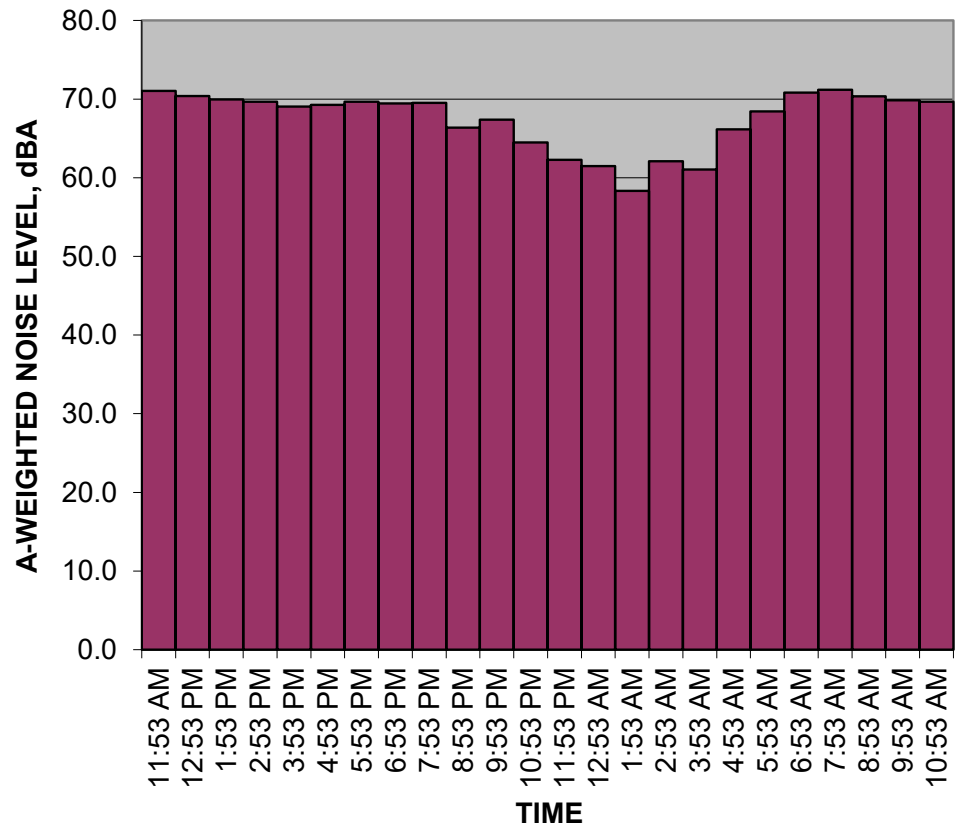
Measured Ambient Noise Levels



Project: Claremont Mckenna
Location: R3
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:53 AM	71.0
12:53 PM	70.4
1:53 PM	69.9
2:53 PM	69.7
3:53 PM	69.0
4:53 PM	69.3
5:53 PM	69.7
6:53 PM	69.4
7:53 PM	69.5
8:53 PM	66.4
9:53 PM	67.4
10:53 PM	64.5
11:53 PM	62.3
12:53 AM	61.5
1:53 AM	58.3
2:53 AM	62.1
3:53 AM	61.1
4:53 AM	66.1
5:53 AM	68.4
6:53 AM	70.8
7:53 AM	71.2
8:53 AM	70.4
9:53 AM	69.9
10:53 AM	69.7
CNEL, dB(A):	76.4



NOTES:

Measurements began on 5/9/23

Summary						
File Name on Meter	LxT_Data.234.s					
File Name on PC	LxT_0004983-20230503 111144-LxT_Data.234.ldbin					
Serial Number	0004983					
Model	SoundTrack LxT®					
Firmware Version	2.404					
User						
Location						
Job Description						
Note						
Measurement						
Description						
Start	2023-05-03 11:11:44					
Stop	2023-05-03 11:31:44					
Duration	00:20:00.0					
Run Time	00:20:00.0					
Pause	00:00:00.0					
Pre-Calibration	2023-05-02 06:54:42					
Post-Calibration	None					
Calibration Deviation	---					
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	Z Weighting					
Detector	Slow					
Preamplifier	PRMLxT1					
Microphone Correction	Off					
Integration Method	Exponential					
Overload	143.3 dB					
	A	C	Z			
Under Range Peak	99.3	96.3	101.3	dB		
Under Range Limit	36.5	36.2	43.2	dB		
Noise Floor	27.4	27.1	34.1	dB		
	First	Second	Third			
Instrument Identification						
Results						
LASeq	66.8					
LASE	97.6					
EAS	634.301 μPa²h					
EAS8	15.223 mPa²h					
EAS40	76.116 mPa²h					
LZpeak (max)	2023-05-03 11:20:22	104.0 dB				
LASmax	2023-05-03 11:23:43	80.6 dB				
LASmin	2023-05-03 11:29:47	43.7 dB				
SEA	-99.9 dB					
	Exceedance Counts	Duration				
LAS > 85.0 dB	0	0.0 s				
LAS > 115.0 dB	0	0.0 s				
LZpeak > 135.0 dB	0	0.0 s				
LZpeak > 137.0 dB	0	0.0 s				
LZpeak > 140.0 dB	0	0.0 s				
LCSeq	72.8 dB					
LASEq	66.8 dB					
LCSeq - LASEq	6.1 dB					
LALeq	69.3 dB					
LAeq	66.8 dB					
LALeq - LAeq	2.5 dB					
	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	66.8					
Ls(max)	80.6	2023/05/03 11:23:43				
Ls(min)	43.7	2023/05/03 11:29:47				
Lpeak(max)					104.0	2023/05/03 11:20:22
Overload Count	0					
Overload Duration	0.0 s					
Dose Settings						
Dose Name	OSHA-1		OSHA-2			
Exchange Rate	5		5 dB			
Threshold	90		80 dB			
Criterion Level	90		90 dB			
Criterion Duration	8		8 h			
Results						
Dose	-99.94		0.00 %			
Projected Dose	-99.94		0.02 %			
TWA (Projected)	-99.9		29.1 dB			
TWA (t)	-99.9		6.2 dB			
Lep (t)	53.0		53.0 dB			
Statistics						
LAS 5.00	73.3 dB					
LAS 10.00	71.0 dB					
LAS 33.30	64.9 dB					
LAS 50.00	60.9 dB					
LAS 66.60	56.5 dB					
LAS 90.00	49.0 dB					

Summary

File Name on Meter

File Name on PC

Serial Number

Model

Firmware Version

User

Location

Job Description

Note

LxT_Data.238.s

LxT_0004983-20230505 112614-LxT_Data.238.ldbin

0004983

SoundTrack LxT®

2.404

Measurement

Description

Start

Stop

Duration

Run Time

Pause

Pre-Calibration

Post-Calibration

Calibration Deviation

2023-05-05 11:26:14

2023-05-08 12:59:17

73:33:02.500

73:33:00.594

00:00:01.9

2023-05-03 10:59:38

None

Overall Settings

RMS Weight

Peak Weight

Detector

Preamplifier

Microphone Correction

Integration Method

Overload

Under Range Peak

Under Range Limit

Noise Floor

A Weighting

Z Weighting

Slow

PRMLxT1

Off

Exponential

143.3 dB

A

99.3

36.5

27.4

C

96.3

36.2

27.0

Z

101.3 dB

43.2 dB

34.1 dB

Instrument Identification

First

Second

Third

Results

LASeq

LASE

EAS

EAS8

EAS40

LZpeak (max)

LASmax

LASmin

SEA

LAS > 85.0 dB

LAS > 115.0 dB

LZpeak > 135.0 dB

LZpeak > 137.0 dB

LZpeak > 140.0 dB

LCSeq

LASEq

LCSeq - LASEq

LALeq

LAeq

LALeq - LAeq

59.7

113.9

27.185 mPa²h

2.957 mPa²h

14.784 mPa²h

2023-05-06 16:16:30

2023-05-07 16:33:56

2023-05-07 03:23:19

-99.9 dB

Exceedance Counts

7

0

0

0

0

68.8 dB

59.7 dB

9.2 dB

61.5 dB

59.7 dB

1.8 dB

Duration

24.5 s

0.0 s

0.0 s

0.0 s

0.0 s

2023-05-07 16:33:56

2023-05-07 03:23:19

34.9 dB

2023-05-06 16:16:30

2023-05-07 16:33:56

2023-05-07 3:23:19

116.2

0

0.0 s

Dose Settings

Dose Name

Exchange Rate

Threshold

Criterion Level

Criterion Duration

OSHA-1

5

90

90

8

OSHA-2

5 dB

80 dB

90 dB

8 h

Results

Dose

Projected Dose

TWA (Projected)

TWA (t)

Lep (t)

0.02

0.00

14.1

30.1

69.3

0.11 %

0.01 %

24.9 dB

40.9 dB

69.3 dB

Statistics

LAS 5.00

LAS 10.00

LAS 33.30

LAS 50.00

LAS 66.60

LAS 90.00

65.3 dB

63.3 dB

57.0 dB

53.4 dB

50.0 dB

43.6 dB

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R4**

	05/07/23	05/08/23	05/09/23	05/10/23	05/11/23	05/12/23	05/13/23	Start Date and Time		
11:26:00 AM	62.3	63.7	61.8					5/7/2023	11:26:00 AM	Start
12:26:00 PM	62.3	60.7	62.3					5/8/2023	12:26:00 PM	5/7/23 11:26 AM
1:26:00 PM	62.1	60.1	61.8					5/9/2023	1:26:00 PM	End
2:26:00 PM	63.4	61.0	63.0					5/10/2023	2:26:00 PM	5/8/23 11:26 AM
3:26:00 PM	63.0	63.0	60.5						3:26:00 PM	
4:26:00 PM	63.6	60.1	65.6						4:26:00 PM	
5:26:00 PM	63.0	60.1	60.1						5:26:00 PM	
6:26:00 PM	61.2	60.4	59.4					CNEL		68.6
7:26:00 PM	59.7	57.8	57.4					L _{dn}		68.4
8:26:00 PM	58.8	57.7	56.6					24-hr Max.		63.6
9:26:00 PM	58.1	59.2	56.1					24-hr Min.		49.7
10:26:00 PM	56.6	56.6	53.8					24-hr Nighttime Average ^a		62.5
11:26:00 PM	56.4	54.6	53.4					24-hr Nighttime Max		63.6
12:26:00 AM	54.7	60.2	54.1					24-hr Nighttime Min		59.9
1:26:00 AM	54.0	51.8	49.6					24-hr Daytime Average ^a		57.1
2:26:00 AM	50.1	49.4	46.2					24-hr Daytime Max		61.2
3:26:00 AM	49.7	47.8	49.8					24-hr Daytime Min		49.7
4:26:00 AM	51.9	48.6	53.7					Total Period Average		59.6
5:26:00 AM	55.8	54.1	57.8					Total Period Max		65.6
6:26:00 AM	56.0	55.4	60.7					Total Period Min		46.2
7:26:00 AM	57.2	55.7	61.8	Total Period Daytime Average		57.0				
8:26:00 AM	59.9	59.1	60.4	Total Period Daytime Max		61.2				
9:26:00 AM	59.9	60.7	61.5	Total Period Daytime Min		46.2				
10:26:00 AM	62.0	61.9	61.2	Total Period Nighttime Average		62.1				
				Total Period Nighttime Max		65.6				
				Total Period Nighttime Min		55.4				

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

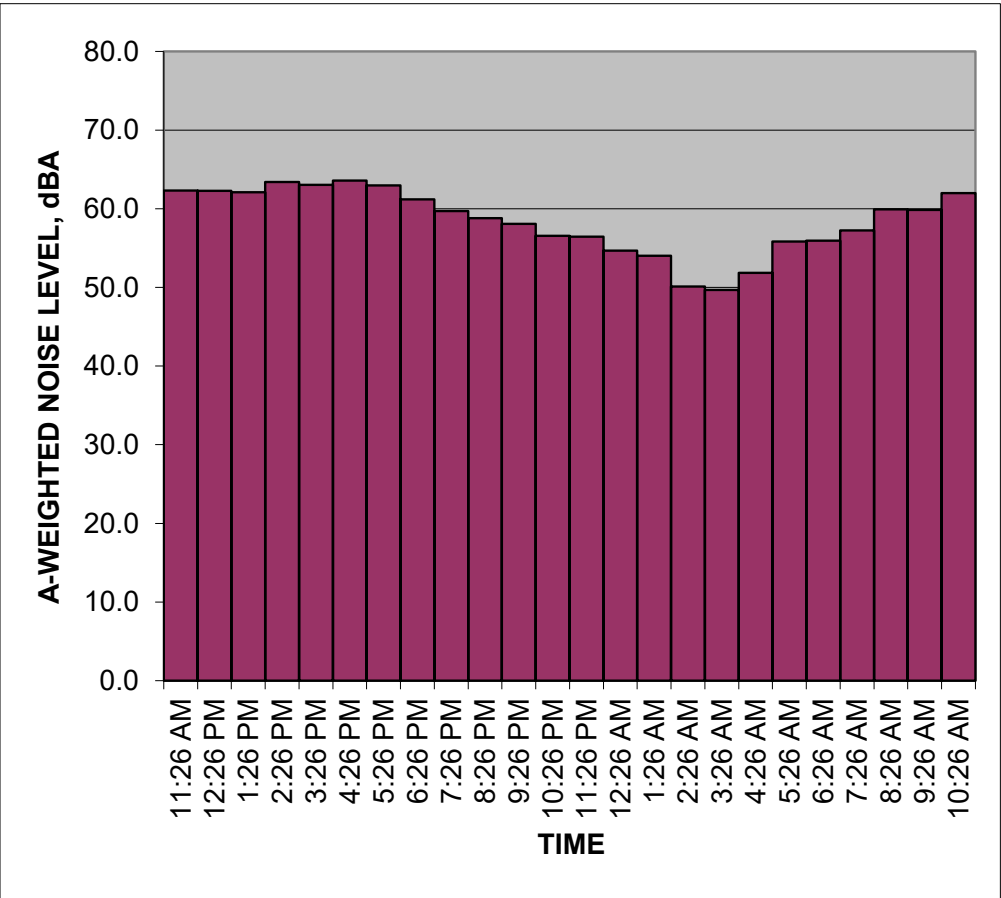


Measured Ambient Noise Levels

Project: Claremont Mckenna
Location: R4
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:26 AM	62.3
12:26 PM	62.3
1:26 PM	62.1
2:26 PM	63.4
3:26 PM	63.0
4:26 PM	63.6
5:26 PM	63.0
6:26 PM	61.2
7:26 PM	59.7
8:26 PM	58.8
9:26 PM	58.1
10:26 PM	56.6
11:26 PM	56.4
12:26 AM	54.7
1:26 AM	54.0
2:26 AM	50.1
3:26 AM	49.7
4:26 AM	51.9
5:26 AM	55.8
6:26 AM	56.0
7:26 AM	57.2
8:26 AM	59.9
9:26 AM	59.9
10:26 AM	62.0
CNEL, dB(A):	68.6



NOTES:

Measurements began on 5/7/23

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R4**

05/07/2305/08/2305/09/2305/10/2305/11/2305/12/2305/13/23								Start Date and Time		
11:26:00 AM	62.3	63.7	61.8					5/7/2023	11:26:00 AM	Start
12:26:00 PM	62.3	60.7	62.3					5/8/2023	12:26:00 PM	5/8/23 11:26 AM
1:26:00 PM	62.1	60.1	61.8					5/9/2023	1:26:00 PM	End
2:26:00 PM	63.4	61.0	63.0					5/10/2023	2:26:00 PM	5/9/23 11:26 AM
3:26:00 PM	63.0	63.0	60.5						3:26:00 PM	
4:26:00 PM	63.6	60.1	65.6						4:26:00 PM	
5:26:00 PM	63.0	60.1	60.1						5:26:00 PM	
6:26:00 PM	61.2	60.4	59.4					CNEL67.5		
7:26:00 PM	59.7	57.8	57.4					L _{dn} 67.4		
8:26:00 PM	58.8	57.7	56.6					24-hr Max.63.7		
9:26:00 PM	58.1	59.2	56.1					24-hr Min.47.8		
10:26:00 PM	56.6	56.6	53.8					24-hr Nighttime Average ^a 61.4		
11:26:00 PM	56.4	54.6	53.4					24-hr Nighttime Max63.7		
12:26:00 AM	54.7	60.2	54.1					24-hr Nighttime Min60.1		
1:26:00 AM	54.0	51.8	49.6					24-hr Daytime Average ^a 56.7		
2:26:00 AM	50.1	49.4	46.2					24-hr Daytime Max60.4		
3:26:00 AM	49.7	47.8	49.8					24-hr Daytime Min47.8		
4:26:00 AM	51.9	48.6	53.7					Total Period Average59.6		
5:26:00 AM	55.8	54.1	57.8					Total Period Max65.6		
6:26:00 AM	56.0	55.4	60.7					Total Period Min46.2		
7:26:00 AM	57.2	55.7	61.8	Total Period Daytime Average57.0						
8:26:00 AM	59.9	59.1	60.4	Total Period Daytime Max61.2						
9:26:00 AM	59.9	60.7	61.5	Total Period Daytime Min46.2						
10:26:00 AM	62.0	61.9	61.2	Total Period Nighttime Average62.1						
				Total Period Nighttime Max65.6						
				Total Period Nighttime Min55.4						

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

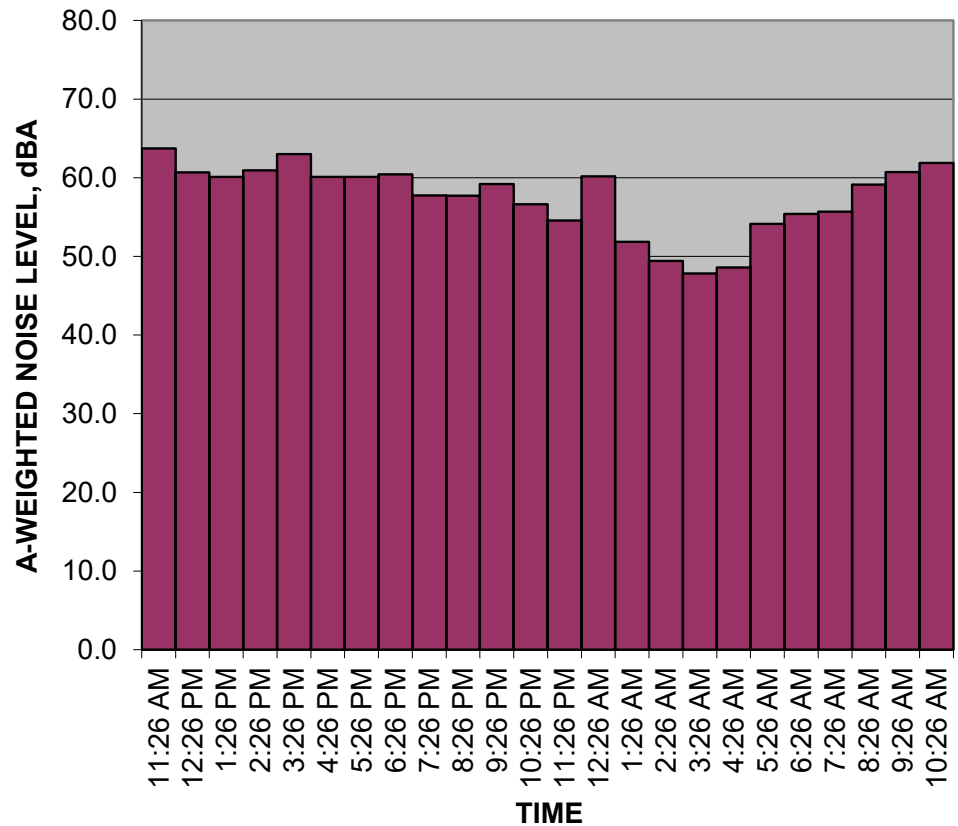
Measured Ambient Noise Levels



Project: Claremont Mckenna
Location: R4
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:26 AM	63.7
12:26 PM	60.7
1:26 PM	60.1
2:26 PM	61.0
3:26 PM	63.0
4:26 PM	60.1
5:26 PM	60.1
6:26 PM	60.4
7:26 PM	57.8
8:26 PM	57.7
9:26 PM	59.2
10:26 PM	56.6
11:26 PM	54.6
12:26 AM	60.2
1:26 AM	51.8
2:26 AM	49.4
3:26 AM	47.8
4:26 AM	48.6
5:26 AM	54.1
6:26 AM	55.4
7:26 AM	55.7
8:26 AM	59.1
9:26 AM	60.7
10:26 AM	61.9
CNEL, dB(A):	67.5



NOTES:

Measurements began on 5/8/23

Noise Measurement Data

Project: **Claremont Mckenna**

Location: **R4**

	05/07/23	05/08/23	05/09/23	05/10/23	05/11/23	05/12/23	05/13/23	Start Date and Time																																								
11:26:00 AM	62.3	63.7	61.8					5/7/2023	11:26:00 AM	Start																																						
12:26:00 PM	62.3	60.7	62.3					5/8/2023	12:26:00 PM	5/9/23 11:26 AM																																						
1:26:00 PM	62.1	60.1	61.8					5/9/2023	1:26:00 PM	End																																						
2:26:00 PM	63.4	61.0	63.0					5/10/2023	2:26:00 PM	5/10/23 11:26 AM																																						
3:26:00 PM	63.0	63.0	60.5						3:26:00 PM																																							
4:26:00 PM	63.6	60.1	65.6						4:26:00 PM																																							
5:26:00 PM	63.0	60.1	60.1						5:26:00 PM																																							
6:26:00 PM	61.2	60.4	59.4																																													
7:26:00 PM	59.7	57.8	57.4																																													
8:26:00 PM	58.8	57.7	56.6																																													
9:26:00 PM	58.1	59.2	56.1																																													
10:26:00 PM	56.6	56.6	53.8																																													
11:26:00 PM	56.4	54.6	53.4																																													
12:26:00 AM	54.7	60.2	54.1																																													
1:26:00 AM	54.0	51.8	49.6																																													
2:26:00 AM	50.1	49.4	46.2																																													
3:26:00 AM	49.7	47.8	49.8																																													
4:26:00 AM	51.9	48.6	53.7																																													
5:26:00 AM	55.8	54.1	57.8																																													
6:26:00 AM	56.0	55.4	60.7																																													
7:26:00 AM	57.2	55.7	61.8																																													
8:26:00 AM	59.9	59.1	60.4																																													
9:26:00 AM	59.9	60.7	61.5																																													
10:26:00 AM	62.0	61.9	61.2																																													
								<table><tr><td>CNEL</td><td>68.4</td></tr><tr><td>L_{dn}</td><td>68.2</td></tr><tr><td>24-hr Max.</td><td>65.6</td></tr><tr><td>24-hr Min.</td><td>46.2</td></tr><tr><td>24-hr Nighttime Average^a</td><td>62.3</td></tr><tr><td>24-hr Nighttime Max</td><td>65.6</td></tr><tr><td>24-hr Nighttime Min</td><td>60.1</td></tr><tr><td>24-hr Daytime Average^a</td><td>57.2</td></tr><tr><td>24-hr Daytime Max</td><td>61.8</td></tr><tr><td>24-hr Daytime Min</td><td>46.2</td></tr><tr><td>Total Period Average</td><td>59.6</td></tr><tr><td>Total Period Max</td><td>65.6</td></tr><tr><td>Total Period Min</td><td>46.2</td></tr><tr><td>Total Period Daytime Average</td><td>57.0</td></tr><tr><td>Total Period Daytime Max</td><td>61.2</td></tr><tr><td>Total Period Daytime Min</td><td>46.2</td></tr><tr><td>Total Period Nighttime Average</td><td>62.1</td></tr><tr><td>Total Period Nighttime Max</td><td>65.6</td></tr><tr><td>Total Period Nighttime Min</td><td>55.4</td></tr></table>			CNEL	68.4	L _{dn}	68.2	24-hr Max.	65.6	24-hr Min.	46.2	24-hr Nighttime Average ^a	62.3	24-hr Nighttime Max	65.6	24-hr Nighttime Min	60.1	24-hr Daytime Average ^a	57.2	24-hr Daytime Max	61.8	24-hr Daytime Min	46.2	Total Period Average	59.6	Total Period Max	65.6	Total Period Min	46.2	Total Period Daytime Average	57.0	Total Period Daytime Max	61.2	Total Period Daytime Min	46.2	Total Period Nighttime Average	62.1	Total Period Nighttime Max	65.6	Total Period Nighttime Min	55.4
CNEL	68.4																																															
L _{dn}	68.2																																															
24-hr Max.	65.6																																															
24-hr Min.	46.2																																															
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24-hr Nighttime Max	65.6																																															
24-hr Nighttime Min	60.1																																															
24-hr Daytime Average ^a	57.2																																															
24-hr Daytime Max	61.8																																															
24-hr Daytime Min	46.2																																															
Total Period Average	59.6																																															
Total Period Max	65.6																																															
Total Period Min	46.2																																															
Total Period Daytime Average	57.0																																															
Total Period Daytime Max	61.2																																															
Total Period Daytime Min	46.2																																															
Total Period Nighttime Average	62.1																																															
Total Period Nighttime Max	65.6																																															
Total Period Nighttime Min	55.4																																															

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

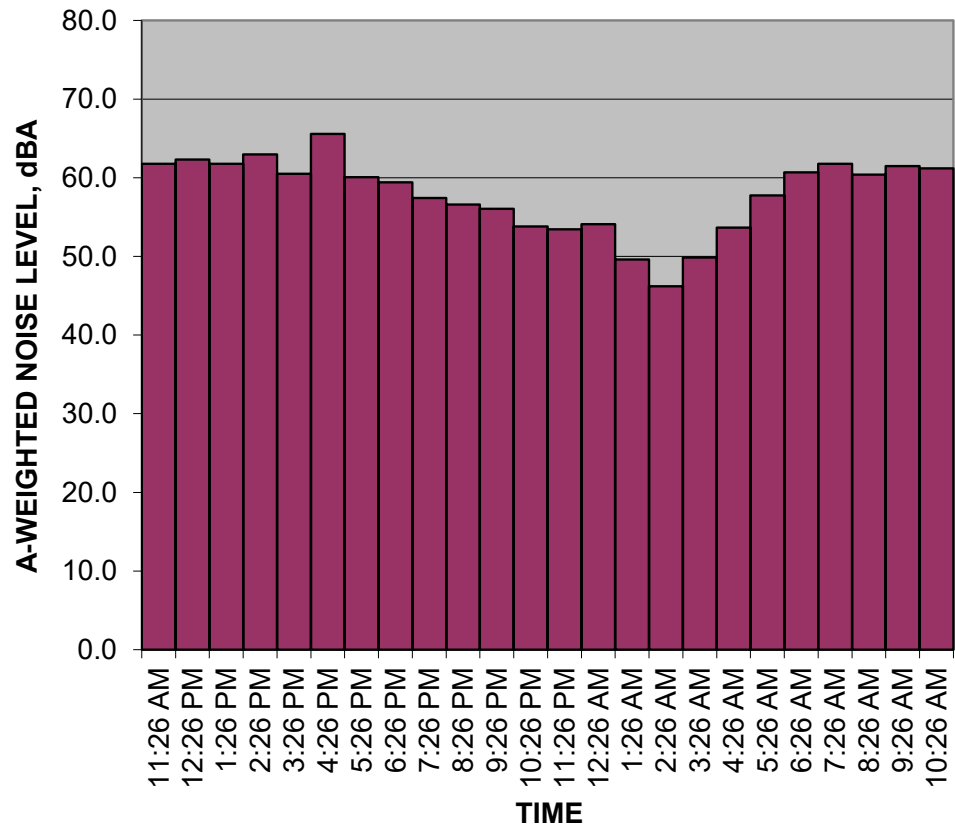
Measured Ambient Noise Levels



Project: Claremont Mckenna
Location: R4
Sources: Ambient

Date: May 23, 2024

TIME	HNL, dB(A)
11:26 AM	61.8
12:26 PM	62.3
1:26 PM	61.8
2:26 PM	63.0
3:26 PM	60.5
4:26 PM	65.6
5:26 PM	60.1
6:26 PM	59.4
7:26 PM	57.4
8:26 PM	56.6
9:26 PM	56.1
10:26 PM	53.8
11:26 PM	53.4
12:26 AM	54.1
1:26 AM	49.6
2:26 AM	46.2
3:26 AM	49.8
4:26 AM	53.7
5:26 AM	57.8
6:26 AM	60.7
7:26 AM	61.8
8:26 AM	60.4
9:26 AM	61.5
10:26 AM	61.2
CNEL, dB(A):	68.4



NOTES:

Measurements began on 5/9/23

Exhibit B

**Construction and
Vibration Noise
Calculations**

Project: Claremont McKenna College Project Addendum
Construction Noise Impact on Sensitive Receptors



Parameters				Noise Barrier+Elevation Difference +5 dBA Reduction																			
Leq to L10 factor				R1-Brighton Park Apartments								R2 - Pitzer Dorms				R3 - Condos east of Monte Vista Avenue				R4 - College Park Luxury Apartments			
Construction Phase Equipment Type	No. of Equip.	Reference Noise Level at 90R, Lmax	Acoustical Usage Factor	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA
Site Preparation																							
1. Roberts Sports Bowl I				50 46								68 64				63 59				71 67			
Tractor/Loader/Backhoe	1	78	40%	1480	49	45	48	0	160	68	64	67	0	160	63	59	62	5	110	71	67	70	0
Tractor/Loader/Backhoe	1	78	40%	2450	44	40	43	0	1000	52	48	51	0	1000	47	43	46	5	1000	52	48	51	0
Dump Truck	1	76	40%	3450	39	35	38	0	2000	44	40	43	0	2000	39	35	38	5	2000	44	40	43	0
2. Street Improvements I				52 48								72 68				67 63				69 65			
Tractor/Loader/Backhoe	1	78	40%	1480	49	45	48	0	100	72	68	71	0	100	67	63	66	5	150	68	64	67	0
Tractor/Loader/Backhoe	1	78	40%	2000	46	42	45	0	750	54	50	53	0	750	49	45	48	5	750	54	50	53	0
Dump Truck	1	76	40%	2500	42	38	41	0	1400	47	43	46	0	1400	42	38	41	5	1400	47	43	46	0
Tractor/Loader/Backhoe	1	78	40%	3000	42	38	41	0	1800	47	43	46	0	1800	42	38	41	5	1800	47	43	46	0
Grading				61 56								74 68				69 63				76 70			
4. Sports Bowl Rough Grading I				1480 52 45 48 0								160 71 64 67 0				160 66 59 62 5				110 74 67 70 0			
Rock Drill	1	81	20%	1600	51	44	47	0	300	65	58	61	0	300	60	53	56	5	300	65	58	61	0
Rock Drill	1	81	20%	1700	50	43	46	0	400	63	56	59	0	400	58	51	54	5	400	63	56	59	0
Dump Truck	5	76	40%	1800	52	48	51	0	500	63	59	62	0	500	58	54	57	5	800	63	59	62	0
Dump Truck	5	76	40%	1900	51	47	50	0	600	61	57	60	0	600	56	52	55	5	800	61	57	60	0
Dump Truck	5	76	40%	2000	51	47	50	0	700	60	56	59	0	700	55	51	54	5	700	60	56	59	0
Dump Truck	5	76	40%	2200	50	46	49	0	800	59	55	58	0	800	54	50	53	5	800	59	55	58	0
Front End Loader	2	79	40%	2400	48	44	47	0	900	57	53	56	0	900	52	48	51	5	900	57	53	56	0
Front End Loader	2	79	40%	2600	48	44	47	0	1000	56	52	55	0	1000	51	47	50	5	1000	56	52	55	0
Excavator	2	81	40%	2800	49	45	48	0	1100	57	53	56	0	1100	52	48	51	5	1100	57	53	56	0
Excavator	1	81	40%	3000	45	41	44	0	1200	53	49	52	0	1200	48	44	47	5	1200	53	49	52	0
Dump Truck	2	76	40%	3400	42	38	41	0	2000	47	43	46	0	2000	42	38	41	5	2000	47	43	46	0
5. Sport Bowl Fine Grading I				59 56								76 73				71 68				79 76			
Other Equipment	1	85	50%	1480	56	53	56	0	160	75	72	75	0	160	70	67	70	5	110	78	75	78	0
Other Equipment	1	85	50%	1700	54	51	54	0	300	68	65	68	0	300	64	61	64	5	300	69	66	69	0
Excavator	1	81	40%	2000	49	45	48	0	600	59	55	58	0	600	54	50	53	5	600	59	55	58	0
Excavator	1	81	40%	2300	48	44	47	0	900	56	52	55	0	900	51	47	50	5	900	56	52	55	0
Tractor/Loader/Backhoe	2	78	40%	2600	47	43	46	0	1200	53	49	52	0	1200	48	44	47	5	1200	53	49	52	0
Tractor/Loader/Backhoe	2	78	40%	2800	46	42	45	0	1500	51	47	50	0	1500	46	42	45	5	1500	51	47	50	0
Dump Truck	1	76	40%	3200	40	36	39	0	1900	44	40	43	0	1900	39	35	38	5	1900	44	40	43	0
Dump Truck	1	76	40%	3400	39	35	38	0	2000	44	40	43	0	2000	39	35	38	5	2000	44	40	43	0
6. Street Improvement I				54 50								79 75				70 66				72 68			
Excavator	1	81	40%	1480	52	48	51	0	100	75	71	74	0	100	70	66	69	5	150	71	67	70	0
Tractor/Loader/Backhoe	1	78	40%	2000	46	42	45	0	500	58	54	57	0	500	53	49	52	5	500	58	54	57	0
Tractor/Loader/Backhoe	1	78	40%	2200	44	40	43	0	600	53	49	52	0	600	48	44	47	5	900	53	49	52	0
Tractor/Loader/Backhoe	1	78	40%	2750	43	39	42	0	1500	48	44	47	0	1500	43	39	42	5	1500	48	44	47	0
Dump Truck	1	76	40%	3000	40	36	39	0	1800	45	41	44	0	1800	40	36	39	5	1800	45	41	44	0
3. Tunnel Rough Grading/Excavation (Shoring) I				54 49								64 60				52 48				64 59			
Excavator	1	81	40%	2470	47	43	46	0	750	57	53	56	0	1450	47	43	46	5	720	57	53	56	0
Excavator	1	81	40%	2475	47	43	46	0	760	57	53	56	0	1500	46	42	45	5	770	57	53	56	0
Dump Truck	2	76	40%	2480	45	41	44	0	770	55	51	54	0	1650	44	40	43	5	780	55	51	54	0
Dump Truck	1	76	40%	2485	42	38	41	0	780	52	48	51	0	1700	40	36	39	5	810	52	48	51	0
Tractor/Loader/Backhoe	2	78	40%	2495	47	43	46	0	800	57	53	56	0	1800	45	41	44	5	840	57	53	56	0
Roller	1	80	20%	2505	46	39	42	0	820	56	49	52	0	1900	43	36	39	5	880	55	48	51	0
7. Tunnel Fine Grading/Excavation I				59 45								69 55				49 44				69 55			
Tractor/Loader/Backhoe	1	78	40%	2470	44	40	43	0	750	54	50	53	0	1450	44	40	43	5	750	54	50	53	0
Tractor/Loader/Backhoe	1	78	40%	2480	44	40	43	0	775	54	50	53	0	1600	43	39	42	5	800	54	50	53	0
Roller	1	80	20%	2490	48	39	42	0	800	56	49	52	0	1750	44	37	40	5	840	55	49	52	0
Dump Truck	1	76	40%	2500	42	38	41	0	825	52	48	51	0	1950	39	35	38	5	880	51	47	50	0
Building Construction				57 53								79 66				65 60				69 61			
8. Structures and Parking Building and Sport Seating I				1900 51 48 51 0								250 67 64 67 0				1350 47 44 47 5				500 61 58 61 0			
Pumps	1	81	50%	1900	51	48	51	0	250	67	64	67	0	1350	47	44	47	5	500	61	58	61	0
Gradall	1	83	40%	1750	52	48	51	0	450	64	60	63	0	1450	49	45	48	5	700	60	56	59	0
Gradall	1	83	40%	2000	51	47	50	0	550	62	58	61	0	1425	49	45	48	5	900	58	54	57	0
Crane	1	81	16%	2200	48	40	43	0	650	59	51	54	0	1450	47	39	42	5	1100	54	46	49	0
Man Lift	1	75	20%	2400	41	34	37	0	750	51	44	47	0	1475	41	34	37	5	1300	47	40	43	0
Man Lift	1	75	20%	2600	41	34	37	0	900	50	43	46	0	1600	40	33	36	5	1500	45	38	41	0
Dump Truck	1	76	40%	2800	41	37	40	0	1100	49	45	48	0	1550	41	37	40	5	1700	45	41	44	0
9. Street Improvements I				54 50								79 75				70 66				72 68			
Excavator	1	81	40%	1480	52	48	51	0	100	75	71	74	0	100	70	66	69	5	150	71	67	70	0
Tractor/Loader/Backhoe	1	78	40%	2000	46	42	45	0	500	58	54	57	0	500	53	49	52	5	500	58	54	57	0
Tractor/Loader/Backhoe	1	78	40%	2200	44	40	43	0	600	53	49	52	0	600	48	44	47	5	900	53	49	52	0
Tractor/Loader/Backhoe	1	78	40%	2750	41	37	40	0	1500	46	42	45	0	1500	41	37	40	5	1500	46	42	45	0
Roller	80	20%	3000	44	37	40	0	1800	49	42	45	0	1800	44	37	40	5	1800	49	42	45	0	
10. Roberts Sports Bowl Site Utilities and Wall I				54 54 56 52 40								76 73 69 65 50				61 57 53 49 35				69 65 61 57 43			
Excavator	1	81	40%	2400	47	43	46	0	750	57	53	56	0	800	52	48	51	5	300	65	61	64	0
Excavator	1	81	40%	2450	47	43	46	0	850	56	52	55	0	900	51	47	50	5	350	64	60	63	0
Tractor/Loader/Backhoe	1	78	40%	2500	44	40	43	0	950	52	48	51	0	1000	47	43	46	5	400	60	56	59	0
Tractor/Loader/Backhoe	1	78	40%	2550	44	40	43	0	1100	48	44	47	0	1100	46	42	45	5	450	59	55	58	0
Tractor/Loader/Backhoe	1	78	40%	2600	44	40	43	0	1100	51	47	50	0	1200	45	41	44	5	500	58	54	57	0
Tractor/Loader/Backhoe	1	78	40%	2650	44	40	43	0	1200	50	46	49	0	1300	45	41	44	5	550	57	53	56	0
Tractor/Loader/Backhoe	1	78	40%	2700	41	37	40	0	1300	48	44	47	0	1400	42	38	41	5	600	54	50	53	0
Dump Truck	1	76	40%	2750	41	37	40	0	1325	48	44	47	0	1600	41	37	40	5	700	53	49	52	0
Roller	1	80	20%	2800	45	38	41	0	1350	51	44	47	0	1800	44	37	40	5	800	56	49	52	0
11. Pathways and Surface Parking I				52 47								66 62				65 60				60 56			
Tractor/Loader/Backhoe	1	78	40%	1500	48	44	47	0	250	64	60	63	0										

Project: Claremont McKenna College Project Addendum
Construction Noise Impact on Sensitive Receptors



Parameters

Leq to L10 factor **3**

Noise Barrier+Elevation Difference =5 dBA Reduction

				R1-Brighton Park Apartments					R2 - Pitzer Dorms					R3 - Condos east of Monte Vista Avenue					R4 - College Park Luxury Apartments				
Construction Phase Equipment Type	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA	Distance (ft)	Lmax	Leq	L10	Estimated Noise Shielding, dBA
Site Preparation																							
15. Roberts Sports Bowl II																							
Tractor/Loader/Backhoe	1	78	40%	600	56	52	55	0	160	68	64	67	0	160	63	59	62	5	1500	48	44	47	0
Tractor/Loader/Backhoe	1	78	40%	1200	50	46	49	0	600	56	52	55	0	600	51	47	50	5	2000	46	42	45	0
Tractor/Loader/Backhoe	1	78	40%	1500	48	44	47	0	1200	50	46	49	0	1200	45	41	44	5	2500	44	40	43	0
Dump Truck	1	76	40%	2000	44	40	43	0	1600	46	42	45	0	1600	41	37	40	5	3000	40	36	39	0
Grading																							
16. Sports Bowl Rough Grading II																							
Rock Drill	1	81	20%	600	59	52	55	0	160	71	64	67	0	160	66	59	62	5	1500	51	44	47	0
Rock Drill	1	81	20%	700	58	51	54	0	300	65	58	61	0	300	60	53	56	5	1600	51	44	47	0
Rock Drill	1	81	20%	800	57	50	53	0	400	63	56	59	0	400	58	51	54	5	1700	50	43	46	0
Dump Truck	5	76	40%	900	58	54	57	0	500	63	59	62	0	500	58	54	57	5	1800	52	48	51	0
Dump Truck	5	76	40%	1000	57	53	56	0	600	61	57	60	0	600	56	52	55	5	1900	51	47	50	0
Dump Truck	5	76	40%	1100	56	52	55	0	700	60	56	59	0	700	55	51	54	5	2000	51	47	50	0
Dump Truck	5	76	40%	1200	55	51	54	0	800	59	55	58	0	800	54	50	53	5	2100	51	47	50	0
Front End Loader	1	79	40%	1300	51	47	50	0	900	54	50	53	0	900	49	45	48	5	2200	46	42	45	0
Front End Loader	1	79	40%	1400	50	46	49	0	1000	53	49	52	0	1000	48	44	47	5	2300	46	42	45	0
Front End Loader	1	79	40%	1500	49	45	48	0	1100	52	48	51	0	1100	47	43	46	5	2400	45	41	44	0
Front End Loader	1	79	40%	1600	49	45	48	0	1200	51	47	50	0	1200	46	42	45	5	2500	45	41	44	0
Excavator	1	81	40%	1700	50	46	49	0	1300	53	49	52	0	1300	48	44	47	5	2600	47	43	46	0
Excavator	1	81	40%	1800	50	46	49	0	1400	52	48	51	0	1400	47	43	46	5	2700	46	42	45	0
Excavator	1	81	40%	1900	49	45	48	0	1500	51	47	50	0	1500	46	42	45	5	2800	46	42	45	0
Dump Truck	2	76	40%	2000	47	43	46	0	1600	49	45	48	0	1600	44	40	43	5	2900	44	40	43	0
17. Sport Bowl Fine Grading II																							
Other Equipment	1	85	50%	600	63	60	63	0	160	75	72	75	0	160	70	67	70	5	1500	55	52	55	0
Other Equipment	1	85	50%	800	61	58	61	0	500	65	62	65	0	500	60	57	60	5	1700	54	51	54	0
Excavator	1	81	40%	1000	55	51	54	0	700	58	54	57	0	700	53	49	52	5	1900	49	45	48	0
Excavator	1	81	40%	1200	53	49	52	0	900	56	52	55	0	900	51	47	50	5	2100	49	45	48	0
Tractor/Loader/Backhoe	2	78	40%	1400	52	48	51	0	1100	54	50	53	0	1100	49	45	48	5	2300	48	44	47	0
Tractor/Loader/Backhoe	2	78	40%	1600	51	47	50	0	1200	53	49	52	0	1200	48	44	47	5	2500	47	43	46	0
Dump Truck	1	76	40%	1900	44	40	43	0	1400	47	43	46	0	1400	42	38	41	5	2900	41	37	40	0
Dump Truck	1	76	40%	2000	44	40	43	0	1600	46	42	45	0	1600	41	37	40	5	3000	40	36	39	0
Building Construction																							
18. Roberts Sports Bowl Site Utilities and Wall II																							
Excavator	1	81	40%	600	59	55	58	0	160	71	67	70	0	160	66	62	65	5	1500	51	47	50	0
Excavator	1	81	40%	800	57	53	56	0	300	65	61	64	0	300	60	56	59	5	1700	50	46	49	0
Tractor/Loader/Backhoe	1	78	40%	1000	52	48	51	0	700	55	51	54	0	700	50	46	49	5	1900	46	42	45	0
Tractor/Loader/Backhoe	1	78	40%	1200	50	46	49	0	900	53	49	52	0	900	48	44	47	5	2100	46	42	45	0
Tractor/Loader/Backhoe	1	78	40%	1400	49	45	48	0	1100	51	47	50	0	1100	46	42	45	5	2300	45	41	44	0
Tractor/Loader/Backhoe	1	78	40%	1600	48	44	47	0	1200	50	46	49	0	1200	45	41	44	5	2500	44	40	43	0
Dump Truck	1	76	40%	1800	45	41	44	0	1300	48	44	47	0	1300	43	39	42	5	2700	41	37	40	0
Dump Truck	1	76	40%	1900	44	40	43	0	1500	46	42	45	0	1500	41	37	40	5	2900	41	37	40	0
Roller	1	80	20%	2000	48	41	44	0	1600	50	43	46	0	1600	45	38	41	5	3000	44	37	40	0
19. Pathways and Surface Parking II																							
Tractor/Loader/Backhoe	1	78	40%	1000	52	48	51	0	1100	51	47	50	0	600	51	47	50	5	2675	43	39	42	0
Roller	1	80	20%	1250	52	45	48	0	1300	52	45	48	0	900	50	43	46	5	2750	45	38	41	0
Pumps	1	81	50%	1500	51	48	51	0	1500	51	48	51	0	1100	49	46	49	5	2825	46	43	46	0
Maximum Combined Overlapping Noise Levels-16,18						63				71					66					58			
Maximum Combined Overlapping Noise Levels-17,18						64				74					69					58			
Maximum Combined Overlapping Noise Levels-17,19						63				73					68					57			
Maximum Noise Level						64				74					69					58			
Ambient Noise Level						66.8				64.5					68.8					66.8			
Threshold (Ambient +5 dBA)						71.8				69.5					73.8					71.8			
Significant Impact?						No				Yes					No					No			

PROJECT NAME
Vibration Level Calculations

				Receptor		
				N =	1.5	
Construction Equipment	Project Equipment	Equipment Velocity Decibels @ 25 Feet* (VdB)	Equipment Peak Particle Velocity @ 25 Feet* (inches/second)	Distance to Structure (Feet)	Estimated Velocity Decibels @ Distance** (VdB)	Estimated Peak Particle Velocity @ Distance*** (inches/second)
Hoe Ram	Yes	87	0.089	110	74.1	0.010
Large Bulldozer	Yes	87	0.089	110	74.1	0.010
Caisson Drilling	Yes	87	0.089	110	67.7	0.010
Loaded Trucks	Yes	86	0.076	110	66.7	0.008
Jackhammer	Yes	79	0.035	110	66.1	0.004
Small Bulldozer	Yes	58	0.003	110	38.7	0.000

Source:
 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018.

Notes:
 * Values taken from Table 7-4.
 ** Based on the formula $VdB(D) = VdB(25ft) - 30 \times \log_{10}(D/25)$, where D is equal to the distance (see page 185).
 *** Based on the formula $PPV(D) = PPV(25 ft) \times (25/D)^N$, where D is equal to the distance (see page 185).
 N = soil type classification factor (typically ranges from 1 to 1.5)

Exhibit C

**Traffic Noise
Modeling**

Claremont Colleges E. Campus Landfill
Horizon Year (2040) Plus Weekday Practice

Roadway Segment	Traffic Noise Levels (dBA CNEL)		Increase over Existing	Significant Impact?
	Horizon Year	Horizon Year + Weekday Practice		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	69.3	69.3	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	68.7	68.7	0.0	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	71.4	71.5	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	67.7	67.7	0.0	No
College Avenue between Foothill Boulevard and 6th Street	62.7	62.7	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	69.2	69.4	0.2	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	70.2	70.2	0.0	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	72.7	72.7	0.0	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	72.9	72.9	0.0	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	70.2	70.2	0.0	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	69.6	69.6	0.0	No
College Avenue between 6th Street and 1st Street	64.0	64.0	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	68.4	68.4	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	70.6	70.6	0.0	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	73.2	73.3	0.1	No
Indian Hill Boulevard between 1st Street and Arrow Highway	70.4	70.4	0.0	No
College Avenue between 1st Street and Arrow Highway	63.9	63.9	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	69.5	69.5	0.0	No
Indian Hill Boulevard n/o Base Line Road	64.4	64.4	0.0	No
Claremont Boulevard n/o Foothill Boulevard	68.8	68.8	0.0	No
Mills Avenue n/o Base Line Road	66.9	66.9	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	66.7	66.7	0.1	No
Central Avenue s/o Foothill Boulevard	71.7	71.7	0.0	No
Monte Vista Avenue s/o 1st Street	73.3	73.3	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	67.0	67.1	0.0	No
College Avenue s/o Arrow Highway	62.1	62.1	0.0	No
Indian Hill Boulevard s/o Arrow Highway	70.8	70.8	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	75.2	75.2	0.0	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	74.8	74.8	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	75.5	75.6	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.9	72.9	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	73.2	73.2	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	73.4	73.5	0.0	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.8	72.9	0.1	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	72.6	72.6	0.0	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	73.0	73.1	0.0	No
6th Street between Indian Hill Boulevard and College Avenue	63.3	63.4	0.1	No
6th Street between College Avenue and Mills Avenue	64.1	64.1	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	65.2	65.3	0.0	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	67.4	67.4	0.1	No
1st Street between Indian Hill Boulevard and College Avenue	64.8	64.8	0.0	No
1st Street between College Avenue and Claremont Boulevard	65.3	65.3	0.0	No
1st Street between Claremont Boulevard and Monte Vista Avenue	49.1	49.1	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	71.1	71.1	0.0	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	74.1	74.1	0.0	No
Base Line Road e/o I-210 Ramps	74.2	74.2	0.0	No
Foothill Boulevard e/o Central Avenue	69.9	69.9	0.0	No
1st Street e/o Monte Vista Avenue	66.6	66.6	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	74.0	74.0	0.0	No
Base Line Road w/o Indian Hill Boulevard	73.3	73.3	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	71.0	71.0	0.0	No
Claremont Boulevard w/o Monte Vista/Padua Ave	69.0	69.0	0.0	No

Claremont Colleges E. Campus Landfill
Horizon Year (2040) Plus Weekday Game

Roadway Segment	Traffic Noise Levels (dBA CNEL)		Increase over Existing	Significant Impact?
	Horizon Year	Horizon Year + Weekday Game		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	69.3	69.3	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	68.7	68.7	0.0	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	71.4	71.5	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	67.7	67.7	0.0	No
College Avenue between Foothill Boulevard and 6th Street	62.7	62.7	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	69.2	69.5	0.4	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	70.2	70.2	0.0	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	72.7	72.7	0.1	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	72.9	72.9	0.0	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	70.2	70.2	0.0	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	69.6	69.6	0.0	No
College Avenue between 6th Street and 1st Street	64.0	64.0	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	68.4	68.4	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	70.6	70.6	0.0	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	73.2	73.3	0.1	No
Indian Hill Boulevard between 1st Street and Arrow Highway	70.4	70.4	0.0	No
College Avenue between 1st Street and Arrow Highway	63.9	63.9	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	69.5	69.5	0.0	No
Indian Hill Boulevard n/o Base Line Road	64.4	64.4	0.0	No
Claremont Boulevard n/o Foothill Boulevard	68.8	68.8	0.0	No
Mills Avenue n/o Base Line Road	66.9	66.9	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	66.7	66.8	0.1	No
Central Avenue s/o Foothill Boulevard	71.7	71.7	0.0	No
Monte Vista Avenue s/o 1st Street	73.3	73.3	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	67.0	67.1	0.1	No
College Avenue s/o Arrow Highway	62.1	62.1	0.0	No
Indian Hill Boulevard s/o Arrow Highway	70.8	70.8	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	75.2	75.2	0.0	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	74.8	74.8	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	75.5	75.6	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.9	72.9	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	73.2	73.2	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	73.4	73.5	0.0	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.8	72.9	0.1	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	72.6	72.6	0.0	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	73.0	73.1	0.0	No
6th Street between Indian Hill Boulevard and College Avenue	63.3	63.4	0.1	No
6th Street between College Avenue and Mills Avenue	64.1	64.1	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	65.2	65.3	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	67.4	67.4	0.1	No
1st Street between Indian Hill Boulevard and College Avenue	64.8	64.9	0.1	No
1st Street between College Avenue and Claremont Boulevard	65.3	65.4	0.1	No
1st Street between Claremont Boulevard and Monte Vista Avenue	49.1	49.1	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	71.1	71.1	0.0	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	74.1	74.1	0.0	No
Base Line Road e/o I-210 Ramps	74.2	74.2	0.0	No
Foothill Boulevard e/o Central Avenue	69.9	69.9	0.0	No
1st Street e/o Monte Vista Avenue	66.6	66.6	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	74.0	74.0	0.0	No
Base Line Road w/o Indian Hill Boulevard	73.3	73.3	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	71.0	71.0	0.0	No
Claremont Boulevard w/o Monte Vista/Padua Ave	69.0	69.0	0.0	No

Claremont Colleges E. Campus Landfill
Horizon Year Weekend (2040) Plus Weekend Game in Fall

Roadway Segment	Traffic Noise Levels (dBA CNEL)			
	Horizon Year Weekend	Horizon Year + Weekend Game (Fall)	Increase over Existing	Significant Impact?
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	68.1	68.2	0.1	No
Mills Avenue between Base Line Road and Foothill Boulevard	67.5	68.0	0.5	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	71.6	71.7	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	68.1	68.1	0.0	No
College Avenue between Foothill Boulevard and 6th Street	61.8	61.8	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	68.5	69.2	0.7	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.8	69.2	0.4	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	72.1	72.2	0.1	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	73.2	73.3	0.1	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.8	69.2	0.4	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	69.7	69.8	0.1	No
College Avenue between 6th Street and 1st Street	63.7	63.7	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	68.6	68.6	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	69.6	69.8	0.2	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	73.0	73.2	0.2	No
Indian Hill Boulevard between 1st Street and Arrow Highway	71.0	71.0	0.0	No
College Avenue between 1st Street and Arrow Highway	63.2	63.2	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	68.0	68.2	0.2	No
Indian Hill Boulevard n/o Base Line Road	64.0	64.2	0.2	No
Claremont Boulevard n/o Foothill Boulevard	67.9	68.0	0.1	No
Mills Avenue n/o Base Line Road	67.5	67.5	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	67.2	67.3	0.1	No
Central Avenue s/o Foothill Boulevard	70.5	70.5	0.0	No
Monte Vista Avenue s/o 1st Street	73.2	73.3	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	65.8	66.0	0.2	No
College Avenue s/o Arrow Highway	60.7	60.7	0.0	No
Indian Hill Boulevard s/o Arrow Highway	71.3	71.3	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.9	74.1	0.2	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	74.1	74.1	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	75.1	75.1	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.4	72.4	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.9	72.9	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.5	72.6	0.1	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.1	72.4	0.3	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	72.0	72.2	0.2	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	72.6	72.7	0.1	No
6th Street between Indian Hill Boulevard and College Avenue	63.4	63.6	0.2	No
6th Street between College Avenue and Mills Avenue	64.3	64.4	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	65.1	65.2	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	66.5	66.6	0.1	No
1st Street between Indian Hill Boulevard and College Avenue	64.7	64.8	0.1	No
1st Street between College Avenue and Claremont Boulevard	64.6	64.7	0.1	No
1st Street between Claremont Boulevard and Monte Vista Avenue	47.7	47.7	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	71.5	71.6	0.1	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	74.5	74.5	0.0	No
Base Line Road e/o I-210 Ramps	73.4	73.4	0.0	No
Foothill Boulevard e/o Central Avenue	69.3	69.4	0.1	No
1st Street e/o Monte Vista Avenue	62.6	62.6	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	73.0	73.0	0.0	No
Base Line Road w/o Indian Hill Boulevard	72.7	72.7	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	70.7	70.8	0.1	No
Claremont Boulevard w/o Monte Vista/Padua Ave	68.4	68.4	0.0	No

Claremont Colleges E. Campus Landfill
Horizon Year Weekend (2040) + Weekend Game in Spring

Roadway Segment	Traffic Noise Levels (dBA CNEL)			
	Horizon Year	Horizon Year	Increase over Existing	Significant Impact?
	Weekend	Weekend + Weekend Game (Spring)		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	68.1	68.1	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	67.5	67.8	0.3	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	71.6	71.7	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	68.1	68.1	0.0	No
College Avenue between Foothill Boulevard and 6th Street	61.8	61.8	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	68.5	68.9	0.4	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.8	69.1	0.3	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	72.1	72.2	0.1	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	73.2	73.3	0.1	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.8	69.1	0.3	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	69.7	69.8	0.1	No
College Avenue between 6th Street and 1st Street	63.7	63.7	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	68.6	68.6	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	69.6	69.7	0.1	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	73.0	73.1	0.1	No
Indian Hill Boulevard between 1st Street and Arrow Highway	71.0	71.0	0.0	No
College Avenue between 1st Street and Arrow Highway	63.2	63.2	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	68.0	68.1	0.1	No
Indian Hill Boulevard n/o Base Line Road	64.0	64.1	0.1	No
Claremont Boulevard n/o Foothill Boulevard	67.9	68.0	0.1	No
Mills Avenue n/o Base Line Road	67.5	67.5	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	67.2	67.2	0.0	No
Central Avenue s/o Foothill Boulevard	70.5	70.5	0.0	No
Monte Vista Avenue s/o 1st Street	73.2	73.3	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	65.8	65.9	0.1	No
College Avenue s/o Arrow Highway	60.7	60.7	0.0	No
Indian Hill Boulevard s/o Arrow Highway	71.3	71.3	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.9	74.0	0.1	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	74.1	74.1	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	75.1	75.1	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.4	72.4	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.9	72.9	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.5	72.6	0.1	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.1	72.3	0.2	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	72.0	72.1	0.1	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	72.6	72.7	0.1	No
6th Street between Indian Hill Boulevard and College Avenue	63.4	63.5	0.1	No
6th Street between College Avenue and Mills Avenue	64.3	64.4	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	65.1	65.2	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	66.5	66.6	0.1	No
1st Street between Indian Hill Boulevard and College Avenue	64.7	64.8	0.1	No
1st Street between College Avenue and Claremont Boulevard	64.6	64.7	0.1	No
1st Street between Claremont Boulevard and Monte Vista Avenue	47.7	47.7	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	71.5	71.5	0.0	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	74.5	74.5	0.0	No
Base Line Road e/o I-210 Ramps	73.4	73.4	0.0	No
Foothill Boulevard e/o Central Avenue	69.3	69.4	0.1	No
1st Street e/o Monte Vista Avenue	62.6	62.6	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	73.0	73.0	0.0	No
Base Line Road w/o Indian Hill Boulevard	72.7	72.7	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	70.7	70.8	0.1	No
Claremont Boulevard w/o Monte Vista/Padua Ave	68.4	68.4	0.0	No

Claremont Colleges E. Campus Landfill
Opening Year (2027) Plus Weekday Practice

Roadway Segment	Traffic Noise Levels (dBA CNEL)		Increase over Existing	Significant Impact?
	Opening Year	Opening Year + Weekday Practice		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	68.6	68.6	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	67.7	67.7	0.0	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	70.8	70.9	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	66.6	66.6	0.0	No
College Avenue between Foothill Boulevard and 6th Street	62.5	62.5	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	69.0	69.2	0.2	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	69.3	69.4	0.1	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	70.3	70.4	0.1	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	71.3	71.3	0.0	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	69.3	69.4	0.1	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	68.6	68.6	0.0	No
College Avenue between 6th Street and 1st Street	63.0	63.0	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	67.1	67.1	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	69.5	69.5	0.0	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	71.7	71.8	0.1	No
Indian Hill Boulevard between 1st Street and Arrow Highway	69.0	69.0	0.0	No
College Avenue between 1st Street and Arrow Highway	63.1	63.1	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	67.9	67.9	0.0	No
Indian Hill Boulevard n/o Base Line Road	63.5	63.5	0.0	No
Claremont Boulevard n/o Foothill Boulevard	68.3	68.3	0.0	No
Mills Avenue n/o Base Line Road	67.0	67.0	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	66.3	66.3	0.1	No
Central Avenue s/o Foothill Boulevard	68.7	68.7	0.0	No
Monte Vista Avenue s/o 1st Street	71.9	72.0	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	66.7	66.8	0.0	No
College Avenue s/o Arrow Highway	61.4	61.4	0.0	No
Indian Hill Boulevard s/o Arrow Highway	69.9	69.9	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.4	73.4	0.0	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	72.8	72.8	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	74.5	74.5	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.0	72.0	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.4	72.4	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.7	72.7	0.0	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.0	72.1	0.1	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	71.8	71.8	0.0	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	72.1	72.2	0.0	No
6th Street between Indian Hill Boulevard and College Avenue	59.9	60.0	0.1	No
6th Street between College Avenue and Mills Avenue	62.3	62.4	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	63.1	63.2	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	64.4	64.5	0.1	No
1st Street between Indian Hill Boulevard and College Avenue	62.2	62.3	0.1	No
1st Street between College Avenue and Claremont Boulevard	61.5	61.6	0.1	No
1st Street between Claremont Boulevard and Monte Vista Avenue	48.5	48.5	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	70.3	70.3	0.0	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	73.2	73.2	0.0	No
Base Line Road e/o I-210 Ramps	73.2	73.2	0.0	No
Foothill Boulevard e/o Central Avenue	69.6	69.6	0.0	No
1st Street e/o Monte Vista Avenue	63.2	63.2	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	72.6	72.6	0.0	No
Base Line Road w/o Indian Hill Boulevard	72.4	72.4	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	70.2	70.2	0.0	No
Claremont Boulevard w/o Monte Vista/Padua Ave	67.6	67.6	0.0	No

Claremont Colleges E. Campus Landfill
Opening Year (2027) Plus Weekday Game

Roadway Segment	Traffic Noise Levels (dBA CNEL)		Increase over Existing	Significant Impact?
	Opening Year	Opening Year + Weekday Game		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	68.6	68.6	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	67.7	67.7	0.0	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	70.8	70.9	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	66.6	66.6	0.0	No
College Avenue between Foothill Boulevard and 6th Street	62.5	62.5	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	69.0	69.4	0.4	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	69.3	69.5	0.2	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	70.3	70.5	0.1	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	71.3	71.3	0.0	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	69.3	69.5	0.2	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	68.6	68.6	0.0	No
College Avenue between 6th Street and 1st Street	63.0	63.0	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	67.1	67.1	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	69.5	69.6	0.1	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	71.7	71.9	0.2	No
Indian Hill Boulevard between 1st Street and Arrow Highway	69.0	69.0	0.0	No
College Avenue between 1st Street and Arrow Highway	63.1	63.1	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	67.9	67.9	0.0	No
Indian Hill Boulevard n/o Base Line Road	63.5	63.5	0.0	No
Claremont Boulevard n/o Foothill Boulevard	68.3	68.3	0.0	No
Mills Avenue n/o Base Line Road	67.0	67.0	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	66.3	66.4	0.1	No
Central Avenue s/o Foothill Boulevard	68.7	68.7	0.0	No
Monte Vista Avenue s/o 1st Street	71.9	72.0	0.1	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	66.7	66.8	0.1	No
College Avenue s/o Arrow Highway	61.4	61.4	0.0	No
Indian Hill Boulevard s/o Arrow Highway	69.9	69.9	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.4	73.4	0.0	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	72.8	72.8	0.0	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	74.5	74.5	0.0	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	72.0	72.1	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.4	72.4	0.0	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.7	72.8	0.0	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	72.0	72.2	0.1	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	71.8	71.8	0.0	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	72.1	72.2	0.1	No
6th Street between Indian Hill Boulevard and College Avenue	59.9	60.1	0.2	No
6th Street between College Avenue and Mills Avenue	62.3	62.5	0.1	No
6th Street between Mills Avenue and Claremont Boulevard	63.1	63.2	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	64.4	64.6	0.2	No
1st Street between Indian Hill Boulevard and College Avenue	62.2	62.3	0.1	No
1st Street between College Avenue and Claremont Boulevard	61.5	61.6	0.1	No
1st Street between Claremont Boulevard and Monte Vista Avenue	48.5	48.5	0.0	No
Arrow Highway between Indian Hill Boulevard and College Avenue	70.3	70.4	0.0	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	73.2	73.2	0.0	No
Base Line Road e/o I-210 Ramps	73.2	73.2	0.0	No
Foothill Boulevard e/o Central Avenue	69.6	69.6	0.0	No
1st Street e/o Monte Vista Avenue	63.2	63.2	0.0	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	72.6	72.6	0.0	No
Base Line Road w/o Indian Hill Boulevard	72.4	72.4	0.0	No
Foothill Boulevard w/o Indian Hill Boulevard	70.2	70.2	0.0	No
Claremont Boulevard w/o Monte Vista/Padua Ave	67.6	67.6	0.0	No

Claremont Colleges E. Campus Landfill
Opening Year Weekend (2027) Plus Weekend Game in Fall

Roadway Segment	Traffic Noise Levels (dBA CNEL)		Increase over Existing	Significant Impact?
	Opening Year	Opening Year + Weekend Game (Fall)		
1st Street between Claremont Boulevard and Monte Vista Avenue	47.7	47.3	-0.4	No
1st Street between College Avenue and Claremont Boulevard	61.3	60.8	-0.5	No
1st Street between Indian Hill Boulevard and College Avenue	61.9	62.3	0.4	No
1st Street e/o Monte Vista Avenue	63.0	61.2	-1.8	No
6th Street between College Avenue and Mills Avenue	61.4	62.1	0.6	No
6th Street between Indian Hill Boulevard and College Avenue	57.6	59.4	1.8	No
6th Street between Mills Avenue and Claremont Boulevard	62.3	62.5	0.2	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	63.8	63.4	-0.4	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	72.9	73.7	0.8	No
Arrow Highway between Indian Hill Boulevard and College Avenue	70.0	70.7	0.7	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	72.3	73.2	0.9	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.2	72.1	-1.0	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	72.6	71.9	-0.7	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	74.2	74.1	-0.1	No
Base Line Road e/o I-210 Ramps	72.9	72.3	-0.6	No
Base Line Road w/o Indian Hill Boulevard	72.3	71.8	-0.5	No
Central Avenue s/o Foothill Boulevard	68.9	68.9	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	67.1	67.3	0.2	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	68.3	68.6	0.3	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.1	68.7	0.6	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.1	68.7	0.6	No
Claremont Boulevard between Foothill Boulevard and 9th Street	68.0	68.8	0.8	No
Claremont Boulevard n/o Foothill Boulevard	67.4	67.5	0.1	No
Claremont Boulevard w/o Monte Vista/Padua Ave	67.4	67.1	-0.3	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	65.7	65.9	0.2	No
College Avenue between 1st Street and Arrow Highway	62.0	62.0	0.0	No
College Avenue between 6th Street and 1st Street	62.6	62.6	0.0	No
College Avenue between Foothill Boulevard and 6th Street	61.2	61.2	0.0	No
College Avenue s/o Arrow Highway	59.6	59.6	0.0	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	71.3	71.4	0.0	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.1	72.2	0.1	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.4	71.8	-0.6	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	71.7	71.5	-0.1	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	71.6	71.9	0.2	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	71.7	71.7	0.0	No
Foothill Boulevard e/o Central Avenue	69.1	69.4	0.2	No
Foothill Boulevard w/o Indian Hill Boulevard	70.0	69.8	-0.2	No
Indian Hill Boulevard between 1st Street and Arrow Highway	68.8	68.8	0.0	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	67.9	68.0	0.1	No
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	66.3	66.3	0.0	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	66.4	66.4	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	66.7	66.7	0.0	No
Indian Hill Boulevard n/o Base Line Road	62.9	63.1	0.2	No
Indian Hill Boulevard s/o Arrow Highway	70.0	70.0	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	66.2	66.7	0.5	No
Mills Avenue n/o Base Line Road	66.7	66.7	0.0	No
Monte Vista Avenue s/o 1st Street	71.7	71.9	0.2	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	70.9	71.3	0.4	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	70.4	70.6	0.2	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	70.1	70.4	0.2	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	70.6	70.8	0.2	No
Monte Vista/Padua Ave n/o Base Line Road	66.5	66.6	0.1	No

Claremont Colleges E. Campus Landfill
Opening Year Weekend (2027) Plus Weekend Game in Spring

Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
	Opening Year	Opening Year + Weekend Game (Spring)	Increase over Existing	
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	66.3	66.3	0.0	No
Mills Avenue between Base Line Road and Foothill Boulevard	66.2	66.5	0.3	No
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	70.4	70.6	0.1	No
Indian Hill Boulevard between Foothill Boulevard and 6th Street	66.4	66.4	0.0	No
College Avenue between Foothill Boulevard and 6th Street	61.2	61.2	0.0	No
Claremont Boulevard between Foothill Boulevard and 9th Street	68.0	68.5	0.5	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.1	68.5	0.4	No
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	70.1	70.3	0.2	No
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	70.6	70.8	0.1	No
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	68.1	68.5	0.4	No
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	67.9	68.0	0.0	No
College Avenue between 6th Street and 1st Street	62.6	62.6	0.0	No
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	66.7	66.7	0.0	No
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	68.3	68.5	0.2	No
Monte Vista/Padua Ave between Arrow Route and 1st Street	70.9	71.2	0.2	No
Indian Hill Boulevard between 1st Street and Arrow Highway	68.8	68.8	0.0	No
College Avenue between 1st Street and Arrow Highway	62.0	62.0	0.0	No
Claremont Boulevard between 1st Street and Arrow Highway	67.1	67.2	0.1	No
Indian Hill Boulevard n/o Base Line Road	62.9	63.0	0.1	No
Claremont Boulevard n/o Foothill Boulevard	67.4	67.4	0.1	No
Mills Avenue n/o Base Line Road	66.7	66.7	0.0	No
Monte Vista/Padua Ave n/o Base Line Road	66.5	66.6	0.1	No
Central Avenue s/o Foothill Boulevard	68.9	68.9	0.0	No
Monte Vista Avenue s/o 1st Street	71.7	71.8	0.2	No
Claremont Boulevard/Mills Avenue s/o Arrow Highway	65.7	65.8	0.1	No
College Avenue s/o Arrow Highway	59.6	59.6	0.0	No
Indian Hill Boulevard s/o Arrow Highway	70.0	70.0	0.0	No
Base Line Road between Indian Hill Boulevard and Mills Avenue	73.2	72.1	-1.1	No
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	72.6	71.9	-0.7	No
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	74.2	74.0	-0.1	No
Foothill Boulevard between Indian Hill Boulevard and College Avenue	71.7	71.5	-0.2	No
Foothill Boulevard between College Avenue and Dartmouth Avenue	72.1	72.2	0.1	No
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	72.4	71.8	-0.6	No
Foothill Boulevard between Mills Avenue and Claremont Boulevard	71.6	71.8	0.2	No
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	71.3	71.3	0.0	No
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	71.7	71.6	0.0	No
6th Street between Indian Hill Boulevard and College Avenue	57.6	59.3	1.6	No
6th Street between College Avenue and Mills Avenue	61.4	62.0	0.6	No
6th Street between Mills Avenue and Claremont Boulevard	62.3	62.4	0.1	No
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	63.8	63.3	-0.5	No
1st Street between Indian Hill Boulevard and College Avenue	61.9	62.2	0.3	No
1st Street between College Avenue and Claremont Boulevard	61.3	60.7	-0.6	No
1st Street between Claremont Boulevard and Monte Vista Avenue	47.7	47.3	-0.4	No
Arrow Highway between Indian Hill Boulevard and College Avenue	70.0	70.7	0.7	No
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	72.9	73.7	0.8	No
Base Line Road e/o I-210 Ramps	72.9	72.3	-0.6	No
Foothill Boulevard e/o Central Avenue	69.1	69.3	0.2	No
1st Street e/o Monte Vista Avenue	63.0	61.2	-1.8	No
Arrow Highway e/o Claremont Boulevard/Mills Avenue	72.3	73.2	0.9	No
Base Line Road w/o Indian Hill Boulevard	72.3	71.8	-0.5	No
Foothill Boulevard w/o Indian Hill Boulevard	70.0	69.8	-0.2	No
Claremont Boulevard w/o Monte Vista/Padua Ave	67.4	67.0	-0.4	No

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Existing (2023) Weekend**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	9	0	0	46.6	46.9
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	269	6	3	59.8	60.1
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	391	8	4	61.4	61.7
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	158	3	2	60.8	61.1
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	315	7	3	60.6	60.9
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	150	3	2	57.2	57.5
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	359	7	4	61.0	61.3
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	439	9	5	61.9	62.2
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1926	40	20	73.0	73.3
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1952	40	20	70.0	70.3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1738	36	18	72.6	72.9
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1323	27	14	71.5	71.8
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1275	26	13	71.3	71.6
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2077	43	21	73.3	73.6
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2008	41	21	71.7	72.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	1875	39	19	71.4	71.7
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	807	17	8	67.9	68.2
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	845	17	9	66.4	66.7
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	782	16	8	67.7	68.0
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	732	15	8	67.4	67.7
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	732	15	8	67.4	67.7
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	715	15	7	67.2	67.5
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	655	14	7	66.9	67.2
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	613	13	6	66.6	66.9
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	631	13	7	65.1	65.4
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	390	8	4	61.5	61.8
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	445	9	5	62.0	62.3
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	323	7	3	60.6	60.9
College Avenue s/o Arrow Highway	Hard	30	30	30	25	226	5	2	59.0	59.3
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1447	30	15	70.3	70.6
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	1884	39	19	71.5	71.8
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	1724	36	18	71.1	71.4
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	1602	33	17	70.8	71.1
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	1669	34	17	70.9	71.2
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	1570	32	16	70.7	71.0
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	1908	39	20	68.3	68.6
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1111	23	11	69.3	69.6
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1275	26	13	68.3	68.6
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1032	21	11	67.4	67.7
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	713	15	7	65.8	66.1
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1022	21	11	65.7	66.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1120	23	12	66.1	66.4
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	319	7	3	62.2	62.5
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1620	33	17	69.2	69.5
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	497	10	5	65.7	66.0
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	531	11	5	66.0	66.3
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1218	25	13	71.1	71.4
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1016	21	10	70.2	70.5
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1272	26	13	69.8	70.1
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	830	17	9	69.4	69.7
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	947	20	10	69.9	70.2
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	525	11	5	66.0	66.3

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	735	671	735	713	15	7
Mills Avenue between Base Line Road and Foothill Boulevard	512	501	512	497	10	5
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,311	1,112	1,311	1,272	26	13
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,050	1,054	1,054	1,022	21	11
College Avenue between Foothill Boulevard and 6th Street	319	333	333	323	7	3
Claremont Boulevard between Foothill Boulevard and 9th Street	737	673	737	715	15	7
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	755	728	755	732	15	8
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	856	767	856	830	17	9
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	976	850	976	947	20	10
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	755	728	755	732	15	8
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,061	1,064	1,064	1,032	21	11
College Avenue between 6th Street and 1st Street	447	459	459	445	9	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,155	1,026	1,155	1,120	23	12
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	806	772	806	782	16	8
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,039	1,047	1,047	1,016	21	10
Indian Hill Boulevard between 1st Street and Arrow Highway	1,314	1,177	1,314	1,275	26	13
College Avenue between 1st Street and Arrow Highway	402	400	402	390	8	4
Claremont Boulevard between 1st Street and Arrow Highway	734	871	871	845	17	9
Indian Hill Boulevard n/o Base Line Road	329	290	329	319	7	3
Claremont Boulevard n/o Foothill Boulevard	675	612	675	655	14	7
Mills Avenue n/o Base Line Road	547	535	547	531	11	5
Monte Vista/Padua Ave n/o Base Line Road	541	476	541	525	11	5
Central Avenue s/o Foothill Boulevard	832	817	832	807	17	8
Monte Vista Avenue s/o 1st Street	1,104	1,256	1,256	1,218	25	13
Claremont Boulevard/Mills Avenue s/o Arrow Highway	563	650	650	631	13	7
College Avenue s/o Arrow Highway	193	233	233	226	5	2
Indian Hill Boulevard s/o Arrow Highway	1,670	1,615	1,670	1,620	33	17
Base Line Road between Indian Hill Boulevard and Mills Avenue	1,364	1,262	1,364	1,323	27	14
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,314	1,258	1,314	1,275	26	13
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,141	2,105	2,141	2,077	43	21
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,652	1,634	1,652	1,602	33	17
Foothill Boulevard between College Avenue and Dartmouth Avenue	1,747	1,942	1,942	1,884	39	19
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	1,766	1,777	1,777	1,724	36	18
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,721	1,578	1,721	1,669	34	17
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,492	1,482	1,492	1,447	30	15
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,619	1,573	1,619	1,570	32	16
6th Street between Indian Hill Boulevard and College Avenue	130	155	155	150	3	2
6th Street between College Avenue and Mills Avenue	325	317	325	315	7	3
6th Street between Mills Avenue and Claremont Boulevard	370	340	370	359	7	4
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	453	427	453	439	9	5
1st Street between Indian Hill Boulevard and College Avenue	403	393	403	391	8	4
1st Street between College Avenue and Claremont Boulevard	274	277	277	269	6	3
1st Street between Claremont Boulevard and Monte Vista Avenue	8	9	9	9	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,523	2,012	2,012	1,952	40	20
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,448	1,986	1,986	1,926	40	20
Base Line Road e/o I-210 Ramps	2,032	2,070	2,070	2,008	41	21
Foothill Boulevard e/o Central Avenue	1,967	1,903	1,967	1,908	39	20
1st Street e/o Monte Vista Avenue	141	163	163	158	3	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,269	1,792	1,792	1,738	36	18
Base Line Road w/o Indian Hill Boulevard	1,933	1,877	1,933	1,875	39	19
Foothill Boulevard w/o Indian Hill Boulevard	1,145	1,067	1,145	1,111	23	11
Claremont Boulevard w/o Monte Vista/Padua Ave	632	626	632	613	13	6

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: Existing (2023)
 Source of Traffic Volumes: KOA

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	11	0	0	47.4	47.7
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	343	7	4	60.8	61.1
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	397	8	4	61.5	61.8
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	252	5	3	62.8	63.1
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	358	7	4	61.1	61.4
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	149	3	2	57.2	57.5
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	439	9	5	61.9	62.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	617	13	6	63.4	63.7
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1734	36	18	72.6	72.9
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1797	37	19	69.7	70.0
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1526	31	16	72.0	72.3
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1856	38	19	73.0	73.3
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1617	33	17	72.4	72.7
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2344	48	24	73.9	74.2
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2460	51	25	72.6	72.9
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2140	44	22	72.0	72.3
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	806	17	8	67.9	68.2
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1035	21	11	67.3	67.6
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1053	22	11	68.9	69.2
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1009	21	10	68.7	69.0
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1009	21	10	68.7	69.0
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	935	19	10	68.4	68.7
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	806	17	8	67.8	68.1
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	695	14	7	67.1	67.4
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	790	16	8	66.1	66.4
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	498	10	5	62.6	62.9
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	469	10	5	62.2	62.5
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	415	9	4	61.7	62.0
College Avenue s/o Arrow Highway	Hard	30	30	30	25	330	7	3	60.7	61.0
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1708	35	18	71.0	71.3
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2024	42	21	71.8	72.1
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2193	45	23	72.1	72.4
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	1845	38	19	71.4	71.7
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	1827	38	19	71.3	71.6
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	1840	38	19	71.4	71.7
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2105	43	22	68.7	69.0
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1255	26	13	69.8	70.1
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1297	27	13	68.4	68.7
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1163	24	12	67.9	68.2
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1226	25	13	68.1	68.4
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1085	22	11	66.0	66.3
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1178	24	12	66.3	66.6
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	377	8	4	62.9	63.2
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1579	33	16	69.1	69.4
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	716	15	7	67.3	67.6
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	585	12	6	66.4	66.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1300	27	13	71.4	71.7
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1235	25	13	71.1	71.4
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1386	29	14	70.1	70.4
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	876	18	9	69.6	69.9
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1127	23	12	70.7	71.0
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	498	10	5	65.8	66.1

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,264	741	1,264	1,226	25	13
Mills Avenue between Base Line Road and Foothill Boulevard	738	538	738	716	15	7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,308	1,429	1,429	1,386	29	14
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,119	1,058	1,119	1,085	22	11
College Avenue between Foothill Boulevard and 6th Street	428	302	428	415	9	4
Claremont Boulevard between Foothill Boulevard and 9th Street	964	953	964	935	19	10
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,040	1,003	1,040	1,009	21	10
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	891	903	903	876	18	9
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	939	1,162	1,162	1,127	23	12
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,040	1,003	1,040	1,009	21	10
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,199	1,089	1,199	1,163	24	12
College Avenue between 6th Street and 1st Street	483	474	483	469	10	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,214	1,080	1,214	1,178	24	12
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,086	1,055	1,086	1,053	22	11
Monte Vista/Padua Ave between Arrow Route and 1st Street	970	1,273	1,273	1,235	25	13
Indian Hill Boulevard between 1st Street and Arrow Highway	1,337	1,259	1,337	1,297	27	13
College Avenue between 1st Street and Arrow Highway	454	513	513	498	10	5
Claremont Boulevard between 1st Street and Arrow Highway	1,067	988	1,067	1,035	21	11
Indian Hill Boulevard n/o Base Line Road	389	300	389	377	8	4
Claremont Boulevard n/o Foothill Boulevard	831	766	831	806	17	8
Mills Avenue n/o Base Line Road	603	450	603	585	12	6
Monte Vista/Padua Ave n/o Base Line Road	404	513	513	498	10	5
Central Avenue s/o Foothill Boulevard	534	831	831	806	17	8
Monte Vista Avenue s/o 1st Street	1,049	1,340	1,340	1,300	27	13
Claremont Boulevard/Mills Avenue s/o Arrow Highway	769	814	814	790	16	8
College Avenue s/o Arrow Highway	340	301	340	330	7	3
Indian Hill Boulevard s/o Arrow Highway	1,610	1,628	1,628	1,579	33	16
Base Line Road between Indian Hill Boulevard and Mills Avenue	1,913	1,625	1,913	1,856	38	19
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,667	1,537	1,667	1,617	33	17
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,249	2,416	2,416	2,344	48	24
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,824	1,902	1,902	1,845	38	19
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,020	2,087	2,087	2,024	42	21
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,002	2,261	2,261	2,193	45	23
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,698	1,883	1,883	1,827	38	19
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,387	1,761	1,761	1,708	35	18
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,567	1,897	1,897	1,840	38	19
6th Street between Indian Hill Boulevard and College Avenue	144	154	154	149	3	2
6th Street between College Avenue and Mills Avenue	319	369	369	358	7	4
6th Street between Mills Avenue and Claremont Boulevard	319	453	453	439	9	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	503	636	636	617	13	6
1st Street between Indian Hill Boulevard and College Avenue	317	409	409	397	8	4
1st Street between College Avenue and Claremont Boulevard	349	354	354	343	7	4
1st Street between Claremont Boulevard and Monte Vista Avenue	7	11	11	11	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,531	1,853	1,853	1,797	37	19
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,492	1,788	1,788	1,734	36	18
Base Line Road e/o I-210 Ramps	2,103	2,536	2,536	2,460	51	25
Foothill Boulevard e/o Central Avenue	1,621	2,170	2,170	2,105	43	22
1st Street e/o Monte Vista Avenue	245	260	260	252	5	3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,212	1,573	1,573	1,526	31	16
Base Line Road w/o Indian Hill Boulevard	2,206	1,918	2,206	2,140	44	22
Foothill Boulevard w/o Indian Hill Boulevard	1,294	1,201	1,294	1,255	26	13
Claremont Boulevard w/o Monte Vista/Padua Ave	716	649	716	695	14	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: Claremont Mckenna Roberts Sports Bowl
 Analysis Scenario: Horizon Year with Weekday Game
 Source of Traffic Volumes: KOA

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1519	31	16	69.0	69.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	933	19	10	68.4	68.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1778	37	18	71.2	71.5
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1528	32	16	67.4	67.7
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	482	10	5	62.4	62.7
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1128	23	12	69.2	69.5
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1688	35	17	72.4	72.7
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1764	36	18	72.6	72.9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1629	34	17	69.3	69.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	642	13	7	63.7	64.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1762	36	18	68.1	68.4
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1447	30	15	70.3	70.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1916	40	20	73.0	73.3
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1956	40	20	70.1	70.4
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	635	13	7	63.6	63.9
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1604	33	17	69.2	69.5
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	499	10	5	64.1	64.4
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	948	20	10	68.5	68.8
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	618	13	6	66.6	66.9
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	598	12	6	66.5	66.8
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1877	39	19	71.4	71.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1932	40	20	73.0	73.3
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	919	19	9	66.8	67.1
College Avenue s/o Arrow Highway	Hard	30	30	30	25	416	9	4	61.8	62.1
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2149	44	22	70.5	70.8
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2974	61	31	74.9	75.2
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2732	56	28	74.5	74.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	3239	67	33	75.3	75.6
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2472	51	25	72.6	72.9
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2642	54	27	72.9	73.2
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2790	58	29	73.2	73.5
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2457	51	25	72.6	72.9
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2289	47	24	72.3	72.6
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2552	53	26	72.8	73.1
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	562	12	6	63.1	63.4
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	665	14	7	63.8	64.1
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	865	18	9	65.0	65.3
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1424	29	15	67.1	67.4
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	787	16	8	64.6	64.9
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	885	18	9	65.1	65.4
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	15	0	0	48.8	49.1
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2324	48	24	70.8	71.1
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2328	48	24	73.8	74.1
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	3308	68	34	73.9	74.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2517	52	26	69.6	69.9
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	569	12	6	66.3	66.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2270	47	23	73.7	74.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2694	56	28	73.0	73.3
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1589	33	16	70.7	71.0
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	981	20	10	68.7	69.0

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,566	1,202	1,566	1,519	31	16
Mills Avenue between Base Line Road and Foothill Boulevard	962	836	962	933	19	10
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,578	1,833	1,833	1,778	37	18
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,575	1,540	1,575	1,528	32	16
College Avenue between Foothill Boulevard and 6th Street	497	352	497	482	10	5
Claremont Boulevard between Foothill Boulevard and 9th Street	1,008	1,163	1,163	1,128	23	12
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,138	1,348	1,308	27	13
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,557	1,740	1,740	1,688	35	17
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,819	1,816	1,819	1,764	36	18
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,138	1,348	1,308	27	13
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,679	1,597	1,679	1,629	34	17
College Avenue between 6th Street and 1st Street	662	657	662	642	13	7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,817	1,560	1,817	1,762	36	18
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,490	1,492	1,492	1,447	30	15
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,908	1,975	1,975	1,916	40	20
Indian Hill Boulevard between 1st Street and Arrow Highway	1,858	2,017	2,017	1,956	40	20
College Avenue between 1st Street and Arrow Highway	519	655	655	635	13	7
Claremont Boulevard between 1st Street and Arrow Highway	1,654	1,479	1,654	1,604	33	17
Indian Hill Boulevard n/o Base Line Road	514	461	514	499	10	5
Claremont Boulevard n/o Foothill Boulevard	977	940	977	948	20	10
Mills Avenue n/o Base Line Road	637	588	637	618	13	6
Monte Vista/Padua Ave n/o Base Line Road	481	617	617	598	12	6
Central Avenue s/o Foothill Boulevard	949	1,935	1,935	1,877	39	19
Monte Vista Avenue s/o 1st Street	1,763	1,992	1,992	1,932	40	20
Claremont Boulevard/Mills Avenue s/o Arrow Highway	901	947	947	919	19	9
College Avenue s/o Arrow Highway	429	358	429	416	9	4
Indian Hill Boulevard s/o Arrow Highway	2,215	2,195	2,215	2,149	44	22
Base Line Road between Indian Hill Boulevard and Mills Avenue	3,066	2,861	3,066	2,974	61	31
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,817	2,707	2,817	2,732	56	28
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	3,296	3,339	3,339	3,239	67	33
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,454	2,548	2,548	2,472	51	25
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,647	2,724	2,724	2,642	54	27
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,643	2,876	2,876	2,790	58	29
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,375	2,533	2,533	2,457	51	25
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,151	2,360	2,360	2,289	47	24
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,138	2,631	2,631	2,552	53	26
6th Street between Indian Hill Boulevard and College Avenue	397	579	579	562	12	6
6th Street between College Avenue and Mills Avenue	582	686	686	665	14	7
6th Street between Mills Avenue and Claremont Boulevard	549	892	892	865	18	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,025	1,468	1,468	1,424	29	15
1st Street between Indian Hill Boulevard and College Avenue	678	811	811	787	16	8
1st Street between College Avenue and Claremont Boulevard	779	912	912	885	18	9
1st Street between Claremont Boulevard and Monte Vista Avenue	9	15	15	15	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,109	2,396	2,396	2,324	48	24
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,281	2,400	2,400	2,328	48	24
Base Line Road e/o I-210 Ramps	3,092	3,410	3,410	3,308	68	34
Foothill Boulevard e/o Central Avenue	1,773	2,595	2,595	2,517	52	26
1st Street e/o Monte Vista Avenue	587	339	587	569	12	6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	2,030	2,340	2,340	2,270	47	23
Base Line Road w/o Indian Hill Boulevard	2,777	2,578	2,777	2,694	56	28
Foothill Boulevard w/o Indian Hill Boulevard	1,617	1,638	1,638	1,589	33	16
Claremont Boulevard w/o Monte Vista/Padua Ave	1,011	954	1,011	981	20	10

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Horizon Year (2040) with Weekday Practice**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1519	31	16	69.0	69.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	933	19	10	68.4	68.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1763	36	18	71.2	71.5
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1528	32	16	67.4	67.7
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	482	10	5	62.4	62.7
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1094	23	11	69.1	69.4
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1678	35	17	72.4	72.7
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1764	36	18	72.6	72.9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1629	34	17	69.3	69.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	642	13	7	63.7	64.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1762	36	18	68.1	68.4
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1445	30	15	70.3	70.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1896	39	20	73.0	73.3
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1956	40	20	70.1	70.4
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	635	13	7	63.6	63.9
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1604	33	17	69.2	69.5
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	499	10	5	64.1	64.4
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	948	20	10	68.5	68.8
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	618	13	6	66.6	66.9
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	594	12	6	66.4	66.7
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1877	39	19	71.4	71.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1918	40	20	73.0	73.3
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	914	19	9	66.8	67.1
College Avenue s/o Arrow Highway	Hard	30	30	30	25	416	9	4	61.8	62.1
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2149	44	22	70.5	70.8
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2974	61	31	74.9	75.2
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2732	56	28	74.5	74.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	3229	67	33	75.3	75.6
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2467	51	25	72.6	72.9
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2637	54	27	72.9	73.2
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2785	57	29	73.2	73.5
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2433	50	25	72.6	72.9
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2284	47	24	72.3	72.6
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2542	52	26	72.8	73.1
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	557	11	6	63.1	63.4
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	661	14	7	63.8	64.1
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	860	18	9	65.0	65.3
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1414	29	15	67.1	67.4
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	782	16	8	64.5	64.8
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	880	18	9	65.0	65.3
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	15	0	0	48.8	49.1
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2319	48	24	70.8	71.1
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2323	48	24	73.8	74.1
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	3308	68	34	73.9	74.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2507	52	26	69.6	69.9
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	569	12	6	66.3	66.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2270	47	23	73.7	74.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2694	56	28	73.0	73.3
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1584	33	16	70.7	71.0
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	981	20	10	68.7	69.0

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,566	1,197	1,566	1,519	31	16
Mills Avenue between Base Line Road and Foothill Boulevard	962	821	962	933	19	10
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,578	1,818	1,818	1,763	36	18
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,575	1,540	1,575	1,528	32	16
College Avenue between Foothill Boulevard and 6th Street	497	352	497	482	10	5
Claremont Boulevard between Foothill Boulevard and 9th Street	1,008	1,128	1,128	1,094	23	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,108	1,348	1,308	27	13
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,557	1,730	1,730	1,678	35	17
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,819	1,816	1,819	1,764	36	18
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,108	1,348	1,308	27	13
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,679	1,592	1,679	1,629	34	17
College Avenue between 6th Street and 1st Street	662	657	662	642	13	7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,817	1,560	1,817	1,762	36	18
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,490	1,477	1,490	1,445	30	15
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,908	1,955	1,955	1,896	39	20
Indian Hill Boulevard between 1st Street and Arrow Highway	1,858	2,017	2,017	1,956	40	20
College Avenue between 1st Street and Arrow Highway	519	655	655	635	13	7
Claremont Boulevard between 1st Street and Arrow Highway	1,654	1,469	1,654	1,604	33	17
Indian Hill Boulevard n/o Base Line Road	514	456	514	499	10	5
Claremont Boulevard n/o Foothill Boulevard	977	935	977	948	20	10
Mills Avenue n/o Base Line Road	637	588	637	618	13	6
Monte Vista/Padua Ave n/o Base Line Road	481	612	612	594	12	6
Central Avenue s/o Foothill Boulevard	949	1,935	1,935	1,877	39	19
Monte Vista Avenue s/o 1st Street	1,763	1,977	1,977	1,918	40	20
Claremont Boulevard/Mills Avenue s/o Arrow Highway	901	942	942	914	19	9
College Avenue s/o Arrow Highway	429	358	429	416	9	4
Indian Hill Boulevard s/o Arrow Highway	2,215	2,190	2,215	2,149	44	22
Base Line Road between Indian Hill Boulevard and Mills Avenue	3,066	2,846	3,066	2,974	61	31
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,817	2,707	2,817	2,732	56	28
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	3,296	3,329	3,329	3,229	67	33
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,454	2,543	2,543	2,467	51	25
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,647	2,719	2,719	2,637	54	27
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,643	2,871	2,871	2,785	57	29
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,375	2,508	2,508	2,433	50	25
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,151	2,355	2,355	2,284	47	24
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,138	2,621	2,621	2,542	52	26
6th Street between Indian Hill Boulevard and College Avenue	397	574	574	557	11	6
6th Street between College Avenue and Mills Avenue	582	681	681	661	14	7
6th Street between Mills Avenue and Claremont Boulevard	549	887	887	860	18	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,025	1,458	1,458	1,414	29	15
1st Street between Indian Hill Boulevard and College Avenue	678	806	806	782	16	8
1st Street between College Avenue and Claremont Boulevard	779	907	907	880	18	9
1st Street between Claremont Boulevard and Monte Vista Avenue	9	15	15	15	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,109	2,391	2,391	2,319	48	24
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,281	2,395	2,395	2,323	48	24
Base Line Road e/o I-210 Ramps	3,092	3,410	3,410	3,308	68	34
Foothill Boulevard e/o Central Avenue	1,773	2,585	2,585	2,507	52	26
1st Street e/o Monte Vista Avenue	587	339	587	569	12	6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	2,030	2,340	2,340	2,270	47	23
Base Line Road w/o Indian Hill Boulevard	2,777	2,573	2,777	2,694	56	28
Foothill Boulevard w/o Indian Hill Boulevard	1,617	1,633	1,633	1,584	33	16
Claremont Boulevard w/o Monte Vista/Padua Ave	1,011	954	1,011	981	20	10

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Horizon Year (2040) Weekend Fall Game**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1180	24	12	67.9	68.2
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	792	16	8	67.7	68.0
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1872	39	19	71.4	71.7
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1650	34	17	67.8	68.1
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	393	8	4	61.5	61.8
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1046	22	11	68.9	69.2
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1057	22	11	68.9	69.2
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1501	31	15	71.9	72.2
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1931	40	20	73.0	73.3
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1057	22	11	68.9	69.2
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1712	35	18	69.5	69.8
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	598	12	6	63.4	63.7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1847	38	19	68.3	68.6
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1198	25	12	69.5	69.8
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1851	38	19	72.9	73.2
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	2251	46	23	70.7	71.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	531	11	5	62.9	63.2
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1179	24	12	67.9	68.2
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	475	10	5	63.9	64.2
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	800	17	8	67.7	68.0
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	707	15	7	67.2	67.5
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	673	14	7	67.0	67.3
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1425	29	15	70.2	70.5
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1918	40	20	73.0	73.3
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	709	15	7	65.7	66.0
College Avenue s/o Arrow Highway	Hard	30	30	30	25	302	6	3	60.4	60.7
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2453	51	25	71.0	71.3
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2278	47	23	73.8	74.1
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2280	47	24	73.8	74.1
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2925	60	30	74.8	75.1
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2201	45	23	72.1	72.4
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2461	51	25	72.6	72.9
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2280	47	24	72.3	72.6
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2168	45	22	72.1	72.4
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2071	43	21	71.9	72.2
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2348	48	24	72.4	72.7
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	586	12	6	63.3	63.6
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	710	15	7	64.1	64.4
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	849	18	9	64.9	65.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1185	24	12	66.3	66.6
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	781	16	8	64.5	64.8
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	760	16	8	64.4	64.7
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	11	0	0	47.4	47.7
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2576	53	27	71.3	71.6
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2546	53	26	74.2	74.5
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2769	57	29	73.1	73.4
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2242	46	23	69.1	69.4
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	228	5	2	62.3	62.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1784	37	18	72.7	73.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2354	49	24	72.4	72.7
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1515	31	16	70.5	70.8
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	841	17	9	68.1	68.4

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,142	1,217	1,217	1,180	24	12
Mills Avenue between Base Line Road and Foothill Boulevard	680	817	817	792	16	8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,930	1,608	1,930	1,872	39	19
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,217	1,701	1,701	1,650	34	17
College Avenue between Foothill Boulevard and 6th Street	370	405	405	393	8	4
Claremont Boulevard between Foothill Boulevard and 9th Street	1,078	985	1,078	1,046	22	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,090	967	1,090	1,057	22	11
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,356	1,547	1,547	1,501	31	15
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,991	1,462	1,991	1,931	40	20
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,090	967	1,090	1,057	22	11
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,418	1,765	1,765	1,712	35	18
College Avenue between 6th Street and 1st Street	528	616	616	598	12	6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,904	1,663	1,904	1,847	38	19
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,235	1,159	1,235	1,198	25	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,908	1,758	1,908	1,851	38	19
Indian Hill Boulevard between 1st Street and Arrow Highway	2,321	2,027	2,321	2,251	46	23
College Avenue between 1st Street and Arrow Highway	445	547	547	531	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,215	1,206	1,215	1,179	24	12
Indian Hill Boulevard n/o Base Line Road	480	490	490	475	10	5
Claremont Boulevard n/o Foothill Boulevard	825	798	825	800	17	8
Mills Avenue n/o Base Line Road	729	686	729	707	15	7
Monte Vista/Padua Ave n/o Base Line Road	694	604	694	673	14	7
Central Avenue s/o Foothill Boulevard	1,469	1,191	1,469	1,425	29	15
Monte Vista Avenue s/o 1st Street	1,977	1,935	1,977	1,918	40	20
Claremont Boulevard/Mills Avenue s/o Arrow Highway	731	640	731	709	15	7
College Avenue s/o Arrow Highway	276	311	311	302	6	3
Indian Hill Boulevard s/o Arrow Highway	2,529	2,380	2,529	2,453	51	25
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,155	2,348	2,348	2,278	47	23
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,329	2,351	2,351	2,280	47	24
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,889	3,015	3,015	2,925	60	30
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,077	2,269	2,269	2,201	45	23
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,156	2,537	2,537	2,461	51	25
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,163	2,351	2,351	2,280	47	24
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,142	2,235	2,235	2,168	45	22
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,135	2,019	2,135	2,071	43	21
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,421	2,323	2,421	2,348	48	24
6th Street between Indian Hill Boulevard and College Avenue	590	604	604	586	12	6
6th Street between College Avenue and Mills Avenue	718	732	732	710	15	7
6th Street between Mills Avenue and Claremont Boulevard	875	853	875	849	18	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,209	1,222	1,222	1,185	24	12
1st Street between Indian Hill Boulevard and College Avenue	586	805	805	781	16	8
1st Street between College Avenue and Claremont Boulevard	411	784	784	760	16	8
1st Street between Claremont Boulevard and Monte Vista Avenue	10	11	11	11	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,109	2,656	2,656	2,576	53	27
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,154	2,625	2,625	2,546	53	26
Base Line Road e/o I-210 Ramps	2,806	2,855	2,855	2,769	57	29
Foothill Boulevard e/o Central Avenue	2,265	2,311	2,311	2,242	46	23
1st Street e/o Monte Vista Avenue	153	235	235	228	5	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,503	1,839	1,839	1,784	37	18
Base Line Road w/o Indian Hill Boulevard	2,367	2,427	2,427	2,354	49	24
Foothill Boulevard w/o Indian Hill Boulevard	1,400	1,562	1,562	1,515	31	16
Claremont Boulevard w/o Monte Vista/Padua Ave	687	867	867	841	17	9

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Horizon Year (2040) Weekend Spring Game**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1171	24	12	67.8	68.1
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	761	16	8	67.5	67.8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1845	38	19	71.4	71.7
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1650	34	17	67.8	68.1
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	393	8	4	61.5	61.8
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	985	20	10	68.6	68.9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1017	21	10	68.8	69.1
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1480	31	15	71.9	72.2
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1911	39	20	73.0	73.3
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1017	21	10	68.8	69.1
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1702	35	18	69.5	69.8
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	598	12	6	63.4	63.7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1847	38	19	68.3	68.6
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1178	24	12	69.4	69.7
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1830	38	19	72.8	73.1
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	2251	46	23	70.7	71.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	531	11	5	62.9	63.2
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1165	24	12	67.8	68.1
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	466	10	5	63.8	64.1
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	793	16	8	67.7	68.0
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	707	15	7	67.2	67.5
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	666	14	7	66.9	67.2
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1425	29	15	70.2	70.5
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1897	39	20	73.0	73.3
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	702	14	7	65.6	65.9
College Avenue s/o Arrow Highway	Hard	30	30	30	25	302	6	3	60.4	60.7
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2446	50	25	71.0	71.3
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2247	46	23	73.7	74.0
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2280	47	24	73.8	74.1
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2904	60	30	74.8	75.1
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2191	45	23	72.1	72.4
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2451	51	25	72.6	72.9
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2271	47	23	72.3	72.6
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2117	44	22	72.0	72.3
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2044	42	21	71.8	72.1
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2335	48	24	72.4	72.7
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	576	12	6	63.2	63.5
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	700	14	7	64.1	64.4
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	842	17	9	64.9	65.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1165	24	12	66.3	66.6
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	771	16	8	64.5	64.8
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	751	15	8	64.4	64.7
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	11	0	0	47.4	47.7
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2567	53	26	71.2	71.5
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2537	52	26	74.2	74.5
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2769	57	29	73.1	73.4
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2221	46	23	69.1	69.4
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	228	5	2	62.3	62.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1784	37	18	72.7	73.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2344	48	24	72.4	72.7
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1505	31	16	70.5	70.8
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	841	17	9	68.1	68.4

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,142	1,207	1,207	1,171	24	12
Mills Avenue between Base Line Road and Foothill Boulevard	659	785	785	761	16	8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,902	1,577	1,902	1,845	38	19
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,217	1,701	1,701	1,650	34	17
College Avenue between Foothill Boulevard and 6th Street	370	405	405	393	8	4
Claremont Boulevard between Foothill Boulevard and 9th Street	1,015	910	1,015	985	20	10
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,048	903	1,048	1,017	21	10
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,335	1,526	1,526	1,480	31	15
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,970	1,462	1,970	1,911	39	20
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,048	903	1,048	1,017	21	10
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,411	1,755	1,755	1,702	35	18
College Avenue between 6th Street and 1st Street	528	616	616	598	12	6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,904	1,663	1,904	1,847	38	19
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,214	1,127	1,214	1,178	24	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,887	1,716	1,887	1,830	38	19
Indian Hill Boulevard between 1st Street and Arrow Highway	2,321	2,027	2,321	2,251	46	23
College Avenue between 1st Street and Arrow Highway	445	547	547	531	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,201	1,185	1,201	1,165	24	12
Indian Hill Boulevard n/o Base Line Road	473	480	480	466	10	5
Claremont Boulevard n/o Foothill Boulevard	818	788	818	793	16	8
Mills Avenue n/o Base Line Road	729	686	729	707	15	7
Monte Vista/Padua Ave n/o Base Line Road	687	594	687	666	14	7
Central Avenue s/o Foothill Boulevard	1,469	1,191	1,469	1,425	29	15
Monte Vista Avenue s/o 1st Street	1,956	1,903	1,956	1,897	39	20
Claremont Boulevard/Mills Avenue s/o Arrow Highway	724	630	724	702	14	7
College Avenue s/o Arrow Highway	276	311	311	302	6	3
Indian Hill Boulevard s/o Arrow Highway	2,522	2,370	2,522	2,446	50	25
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,134	2,316	2,316	2,247	46	23
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,329	2,351	2,351	2,280	47	24
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,868	2,994	2,994	2,904	60	30
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,070	2,259	2,259	2,191	45	23
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,149	2,527	2,527	2,451	51	25
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,156	2,341	2,341	2,271	47	23
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,107	2,182	2,182	2,117	44	22
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,107	2,009	2,107	2,044	42	21
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,407	2,302	2,407	2,335	48	24
6th Street between Indian Hill Boulevard and College Avenue	583	594	594	576	12	6
6th Street between College Avenue and Mills Avenue	711	722	722	700	14	7
6th Street between Mills Avenue and Claremont Boulevard	868	843	868	842	17	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,195	1,201	1,201	1,165	24	12
1st Street between Indian Hill Boulevard and College Avenue	579	795	795	771	16	8
1st Street between College Avenue and Claremont Boulevard	404	774	774	751	15	8
1st Street between Claremont Boulevard and Monte Vista Avenue	10	11	11	11	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,102	2,646	2,646	2,567	53	26
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,147	2,615	2,615	2,537	52	26
Base Line Road e/o I-210 Ramps	2,806	2,855	2,855	2,769	57	29
Foothill Boulevard e/o Central Avenue	2,251	2,290	2,290	2,221	46	23
1st Street e/o Monte Vista Avenue	153	235	235	228	5	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,503	1,839	1,839	1,784	37	18
Base Line Road w/o Indian Hill Boulevard	2,367	2,417	2,417	2,344	48	24
Foothill Boulevard w/o Indian Hill Boulevard	1,400	1,552	1,552	1,505	31	16
Claremont Boulevard w/o Monte Vista/Padua Ave	680	867	867	841	17	9

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Horizon Year (2040) Weekend without Project**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1155	24	12	67.8	68.1
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	715	15	7	67.2	67.5
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1799	37	19	71.3	71.6
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1650	34	17	67.8	68.1
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	393	8	4	61.5	61.8
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	882	18	9	68.2	68.5
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	947	20	10	68.5	68.8
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1448	30	15	71.8	72.1
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1879	39	19	72.9	73.2
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	947	20	10	68.5	68.8
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1687	35	17	69.4	69.7
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	598	12	6	63.4	63.7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1847	38	19	68.3	68.6
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1143	24	12	69.3	69.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1795	37	19	72.7	73.0
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	2251	46	23	70.7	71.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	531	11	5	62.9	63.2
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1142	24	12	67.7	68.0
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	450	9	5	63.7	64.0
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	782	16	8	67.6	67.9
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	707	15	7	67.2	67.5
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	655	14	7	66.9	67.2
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1425	29	15	70.2	70.5
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1862	38	19	72.9	73.2
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	691	14	7	65.5	65.8
College Avenue s/o Arrow Highway	Hard	30	30	30	25	302	6	3	60.4	60.7
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2435	50	25	71.0	71.3
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2201	45	23	73.6	73.9
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2280	47	24	73.8	74.1
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2872	59	30	74.8	75.1
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2176	45	22	72.1	72.4
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2436	50	25	72.6	72.9
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2255	47	23	72.2	72.5
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2039	42	21	71.8	72.1
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2000	41	21	71.7	72.0
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2312	48	24	72.3	72.6
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	561	12	6	63.1	63.4
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	685	14	7	64.0	64.3
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	830	17	9	64.8	65.1
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1136	23	12	66.2	66.5
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	756	16	8	64.4	64.7
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	735	15	8	64.3	64.6
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	11	0	0	47.4	47.7
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2551	53	26	71.2	71.5
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2521	52	26	74.2	74.5
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2769	57	29	73.1	73.4
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2189	45	23	69.0	69.3
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	228	5	2	62.3	62.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1784	37	18	72.7	73.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2329	48	24	72.4	72.7
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1490	31	15	70.4	70.7
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	841	17	9	68.1	68.4

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,141	1,191	1,191	1,155	24	12
Mills Avenue between Base Line Road and Foothill Boulevard	623	737	737	715	15	7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,855	1,528	1,855	1,799	37	19
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,217	1,701	1,701	1,650	34	17
College Avenue between Foothill Boulevard and 6th Street	370	405	405	393	8	4
Claremont Boulevard between Foothill Boulevard and 9th Street	909	797	909	882	18	9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	976	806	976	947	20	10
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,300	1,493	1,493	1,448	30	15
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,937	1,461	1,937	1,879	39	19
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	976	806	976	947	20	10
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,399	1,739	1,739	1,687	35	17
College Avenue between 6th Street and 1st Street	528	616	616	598	12	6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,904	1,663	1,904	1,847	38	19
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,178	1,079	1,178	1,143	24	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,850	1,652	1,850	1,795	37	19
Indian Hill Boulevard between 1st Street and Arrow Highway	2,321	2,027	2,321	2,251	46	23
College Avenue between 1st Street and Arrow Highway	445	547	547	531	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,177	1,153	1,177	1,142	24	12
Indian Hill Boulevard n/o Base Line Road	461	464	464	450	9	5
Claremont Boulevard n/o Foothill Boulevard	806	772	806	782	16	8
Mills Avenue n/o Base Line Road	729	686	729	707	15	7
Monte Vista/Padua Ave n/o Base Line Road	675	578	675	655	14	7
Central Avenue s/o Foothill Boulevard	1,469	1,191	1,469	1,425	29	15
Monte Vista Avenue s/o 1st Street	1,920	1,855	1,920	1,862	38	19
Claremont Boulevard/Mills Avenue s/o Arrow Highway	712	614	712	691	14	7
College Avenue s/o Arrow Highway	276	311	311	302	6	3
Indian Hill Boulevard s/o Arrow Highway	2,510	2,354	2,510	2,435	50	25
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,098	2,269	2,269	2,201	45	23
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,329	2,351	2,351	2,280	47	24
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,833	2,961	2,961	2,872	59	30
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,058	2,243	2,243	2,176	45	22
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,137	2,511	2,511	2,436	50	25
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,144	2,325	2,325	2,255	47	23
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,047	2,102	2,102	2,039	42	21
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,062	1,991	2,062	2,000	41	21
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,383	2,269	2,383	2,312	48	24
6th Street between Indian Hill Boulevard and College Avenue	571	578	578	561	12	6
6th Street between College Avenue and Mills Avenue	699	706	706	685	14	7
6th Street between Mills Avenue and Claremont Boulevard	856	827	856	830	17	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,171	1,169	1,171	1,136	23	12
1st Street between Indian Hill Boulevard and College Avenue	567	779	779	756	16	8
1st Street between College Avenue and Claremont Boulevard	392	758	758	735	15	8
1st Street between Claremont Boulevard and Monte Vista Avenue	10	11	11	11	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,090	2,630	2,630	2,551	53	26
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,135	2,599	2,599	2,521	52	26
Base Line Road e/o I-210 Ramps	2,806	2,855	2,855	2,769	57	29
Foothill Boulevard e/o Central Avenue	2,227	2,257	2,257	2,189	45	23
1st Street e/o Monte Vista Avenue	153	235	235	228	5	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,503	1,839	1,839	1,784	37	18
Base Line Road w/o Indian Hill Boulevard	2,366	2,401	2,401	2,329	48	24
Foothill Boulevard w/o Indian Hill Boulevard	1,399	1,536	1,536	1,490	31	15
Claremont Boulevard w/o Monte Vista/Padua Ave	669	867	867	841	17	9

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Horizon Year (2040) Without Project**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1519	31	16	69.0	69.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	933	19	10	68.4	68.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1739	36	18	71.1	71.4
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1528	32	16	67.4	67.7
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	482	10	5	62.4	62.7
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1038	21	11	68.9	69.2
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	1662	34	17	72.4	72.7
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1764	36	18	72.6	72.9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1308	27	13	69.9	70.2
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1629	34	17	69.3	69.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	642	13	7	63.7	64.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1762	36	18	68.1	68.4
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1445	30	15	70.3	70.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1866	38	19	72.9	73.2
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1956	40	20	70.1	70.4
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	635	13	7	63.6	63.9
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1604	33	17	69.2	69.5
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	499	10	5	64.1	64.4
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	948	20	10	68.5	68.8
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	618	13	6	66.6	66.9
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	586	12	6	66.4	66.7
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	1877	39	19	71.4	71.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1894	39	20	73.0	73.3
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	906	19	9	66.7	67.0
College Avenue s/o Arrow Highway	Hard	30	30	30	25	416	9	4	61.8	62.1
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	2149	44	22	70.5	70.8
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	2974	61	31	74.9	75.2
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	2732	56	28	74.5	74.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	3213	66	33	75.2	75.5
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2459	51	25	72.6	72.9
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2630	54	27	72.9	73.2
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2777	57	29	73.1	73.4
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2393	49	25	72.5	72.8
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	2276	47	23	72.3	72.6
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2527	52	26	72.7	73.0
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	549	11	6	63.0	63.3
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	653	13	7	63.8	64.1
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	853	18	9	64.9	65.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	1398	29	14	67.1	67.4
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	774	16	8	64.5	64.8
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	872	18	9	65.0	65.3
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	15	0	0	48.8	49.1
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2312	48	24	70.8	71.1
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2315	48	24	73.8	74.1
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	3308	68	34	73.9	74.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2492	51	26	69.6	69.9
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	569	12	6	66.3	66.6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2270	47	23	73.7	74.0
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2694	56	28	73.0	73.3
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1577	33	16	70.7	71.0
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	981	20	10	68.7	69.0

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,566	1,190	1,566	1,519	31	16
Mills Avenue between Base Line Road and Foothill Boulevard	962	797	962	933	19	10
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,578	1,793	1,793	1,739	36	18
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,575	1,540	1,575	1,528	32	16
College Avenue between Foothill Boulevard and 6th Street	497	352	497	482	10	5
Claremont Boulevard between Foothill Boulevard and 9th Street	1,008	1,070	1,070	1,038	21	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,059	1,348	1,308	27	13
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,557	1,713	1,713	1,662	34	17
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,819	1,814	1,819	1,764	36	18
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,348	1,059	1,348	1,308	27	13
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,679	1,584	1,679	1,629	34	17
College Avenue between 6th Street and 1st Street	662	657	662	642	13	7
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,817	1,560	1,817	1,762	36	18
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,490	1,453	1,490	1,445	30	15
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,908	1,924	1,924	1,866	38	19
Indian Hill Boulevard between 1st Street and Arrow Highway	1,858	2,017	2,017	1,956	40	20
College Avenue between 1st Street and Arrow Highway	519	655	655	635	13	7
Claremont Boulevard between 1st Street and Arrow Highway	1,654	1,452	1,654	1,604	33	17
Indian Hill Boulevard n/o Base Line Road	514	448	514	499	10	5
Claremont Boulevard n/o Foothill Boulevard	977	927	977	948	20	10
Mills Avenue n/o Base Line Road	637	588	637	618	13	6
Monte Vista/Padua Ave n/o Base Line Road	481	604	604	586	12	6
Central Avenue s/o Foothill Boulevard	949	1,935	1,935	1,877	39	19
Monte Vista Avenue s/o 1st Street	1,763	1,953	1,953	1,894	39	20
Claremont Boulevard/Mills Avenue s/o Arrow Highway	901	934	934	906	19	9
College Avenue s/o Arrow Highway	429	358	429	416	9	4
Indian Hill Boulevard s/o Arrow Highway	2,215	2,182	2,215	2,149	44	22
Base Line Road between Indian Hill Boulevard and Mills Avenue	3,066	2,821	3,066	2,974	61	31
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	2,817	2,707	2,817	2,732	56	28
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	3,296	3,312	3,312	3,213	66	33
Foothill Boulevard between Indian Hill Boulevard and College Avenue	2,454	2,535	2,535	2,459	51	25
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,647	2,711	2,711	2,630	54	27
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,643	2,863	2,863	2,777	57	29
Foothill Boulevard between Mills Avenue and Claremont Boulevard	2,375	2,467	2,467	2,393	49	25
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	2,151	2,346	2,346	2,276	47	23
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	2,138	2,605	2,605	2,527	52	26
6th Street between Indian Hill Boulevard and College Avenue	397	566	566	549	11	6
6th Street between College Avenue and Mills Avenue	582	673	673	653	13	7
6th Street between Mills Avenue and Claremont Boulevard	549	879	879	853	18	9
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	1,025	1,441	1,441	1,398	29	14
1st Street between Indian Hill Boulevard and College Avenue	678	798	798	774	16	8
1st Street between College Avenue and Claremont Boulevard	779	899	899	872	18	9
1st Street between Claremont Boulevard and Monte Vista Avenue	9	15	15	15	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	2,109	2,383	2,383	2,312	48	24
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	2,281	2,387	2,387	2,315	48	24
Base Line Road e/o I-210 Ramps	3,092	3,410	3,410	3,308	68	34
Foothill Boulevard e/o Central Avenue	1,773	2,569	2,569	2,492	51	26
1st Street e/o Monte Vista Avenue	587	339	587	569	12	6
Arrow Highway e/o Claremont Boulevard/Mills Avenue	2,030	2,340	2,340	2,270	47	23
Base Line Road w/o Indian Hill Boulevard	2,777	2,566	2,777	2,694	56	28
Foothill Boulevard w/o Indian Hill Boulevard	1,617	1,626	1,626	1,577	33	16
Claremont Boulevard w/o Monte Vista/Padua Ave	1,011	953	1,011	981	20	10

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) with Weekday Game**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1299	27	13	68.3	68.6
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	747	15	8	67.4	67.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1557	32	16	70.6	70.9
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1176	24	12	66.3	66.6
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	459	9	5	62.2	62.5
Claremont Boulevard between 9th Street and Foothill Boulevard	Hard	30	40	40	35	1096	23	11	69.1	69.4
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1127	23	12	69.2	69.5
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	995	21	10	70.2	70.5
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1217	25	13	71.0	71.3
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1127	23	12	69.2	69.5
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1312	27	14	68.3	68.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	510	11	5	62.7	63.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1307	27	13	66.8	67.1
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1142	24	12	69.3	69.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1378	28	14	71.6	71.9
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1429	29	15	68.7	69.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	528	11	5	62.8	63.1
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1109	23	11	67.6	67.9
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	400	8	4	63.2	63.5
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	859	18	9	68.0	68.3
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	630	13	6	66.7	67.0
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	547	11	6	66.1	66.4
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	940	19	10	68.4	68.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1435	30	15	71.7	72.0
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	861	18	9	66.5	66.8
College Avenue s/o Arrow Highway	Hard	30	30	30	25	353	7	4	61.1	61.4
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1775	37	18	69.6	69.9
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1950	40	20	73.1	73.4
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1724	36	18	72.5	72.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2551	53	26	74.2	74.5
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2021	42	21	71.8	72.1
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2210	46	23	72.1	72.4
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2372	49	24	72.5	72.8
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2067	43	21	71.9	72.2
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1913	39	20	71.5	71.8
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2076	43	21	71.9	72.2
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	264	5	3	59.8	60.1
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	453	9	5	62.2	62.5
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	537	11	6	62.9	63.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	732	15	8	64.3	64.6
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	437	9	5	62.0	62.3
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	373	8	4	61.3	61.6
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	13	0	0	48.2	48.5
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1956	40	20	70.1	70.4
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1890	39	19	72.9	73.2
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2616	54	27	72.9	73.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2364	49	24	69.3	69.6
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	265	5	3	62.9	63.2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1638	34	17	72.3	72.6
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2178	45	22	72.1	72.4
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1329	27	14	69.9	70.2
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	719	15	7	67.3	67.6

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,339	815	1,339	1,299	27	13
Mills Avenue between Base Line Road and Foothill Boulevard	770	603	770	747	15	8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,433	1,605	1,605	1,557	32	16
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,212	1,149	1,212	1,176	24	12
College Avenue between Foothill Boulevard and 6th Street	473	330	473	459	9	5
Claremont Boulevard between 9th Street and Foothill Boulevard	977	1,130	1,130	1,096	23	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,162	1,162	1,127	23	12
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	979	1,026	1,026	995	21	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,019	1,255	1,255	1,217	25	13
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,162	1,162	1,127	23	12
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,353	1,243	1,353	1,312	27	14
College Avenue between 6th Street and 1st Street	526	513	526	510	11	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,347	1,210	1,347	1,307	27	13
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,162	1,177	1,177	1,142	24	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,041	1,421	1,421	1,378	28	14
Indian Hill Boulevard between 1st Street and Arrow Highway	1,473	1,400	1,473	1,429	29	15
College Avenue between 1st Street and Arrow Highway	483	544	544	528	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,143	1,100	1,143	1,109	23	11
Indian Hill Boulevard n/o Base Line Road	412	335	412	400	8	4
Claremont Boulevard n/o Foothill Boulevard	886	828	886	859	18	9
Mills Avenue n/o Base Line Road	649	491	649	630	13	6
Monte Vista/Padua Ave n/o Base Line Road	437	564	564	547	11	6
Central Avenue s/o Foothill Boulevard	646	969	969	940	19	10
Monte Vista Avenue s/o 1st Street	1,124	1,479	1,479	1,435	30	15
Claremont Boulevard/Mills Avenue s/o Arrow Highway	817	888	888	861	18	9
College Avenue s/o Arrow Highway	364	323	364	353	7	4
Indian Hill Boulevard s/o Arrow Highway	1,790	1,830	1,830	1,775	37	18
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,010	1,759	2,010	1,950	40	20
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,777	1,645	1,777	1,724	36	18
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,418	2,630	2,630	2,551	53	26
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,974	2,084	2,084	2,021	42	21
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,179	2,278	2,278	2,210	46	23
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,172	2,445	2,445	2,372	49	24
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,861	2,131	2,131	2,067	43	21
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,543	1,972	1,972	1,913	39	20
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,721	2,140	2,140	2,076	43	21
6th Street between Indian Hill Boulevard and College Avenue	252	272	272	264	5	3
6th Street between College Avenue and Mills Avenue	439	467	467	453	9	5
6th Street between Mills Avenue and Claremont Boulevard	399	554	554	537	11	6
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	582	755	755	732	15	8
1st Street between Indian Hill Boulevard and College Avenue	341	451	451	437	9	5
1st Street between College Avenue and Claremont Boulevard	366	385	385	373	8	4
1st Street between Claremont Boulevard and Monte Vista Avenue	8	13	13	13	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,659	2,016	2,016	1,956	40	20
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,609	1,948	1,948	1,890	39	19
Base Line Road e/o I-210 Ramps	2,240	2,697	2,697	2,616	54	27
Foothill Boulevard e/o Central Avenue	1,827	2,437	2,437	2,364	49	24
1st Street e/o Monte Vista Avenue	258	273	273	265	5	3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,298	1,689	1,689	1,638	34	17
Base Line Road w/o Indian Hill Boulevard	2,245	1,963	2,245	2,178	45	22
Foothill Boulevard w/o Indian Hill Boulevard	1,370	1,316	1,370	1,329	27	14
Claremont Boulevard w/o Monte Vista/Padua Ave	741	665	741	719	15	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) with Weekday Practice**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1299	27	13	68.3	68.6
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	747	15	8	67.4	67.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1542	32	16	70.6	70.9
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1176	24	12	66.3	66.6
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	459	9	5	62.2	62.5
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1058	22	11	68.9	69.2
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1098	23	11	69.1	69.4
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	986	20	10	70.1	70.4
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1217	25	13	71.0	71.3
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1098	23	11	69.1	69.4
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1312	27	14	68.3	68.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	510	11	5	62.7	63.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1307	27	13	66.8	67.1
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1127	23	12	69.2	69.5
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1359	28	14	71.5	71.8
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1429	29	15	68.7	69.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	528	11	5	62.8	63.1
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1109	23	11	67.6	67.9
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	400	8	4	63.2	63.5
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	859	18	9	68.0	68.3
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	630	13	6	66.7	67.0
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	542	11	6	66.0	66.3
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	940	19	10	68.4	68.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1420	29	15	71.7	72.0
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	857	18	9	66.5	66.8
College Avenue s/o Arrow Highway	Hard	30	30	30	25	353	7	4	61.1	61.4
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1770	37	18	69.6	69.9
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1950	40	20	73.1	73.4
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1724	36	18	72.5	72.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2541	52	26	74.2	74.5
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2017	42	21	71.7	72.0
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2205	45	23	72.1	72.4
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2367	49	24	72.4	72.7
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2043	42	21	71.8	72.1
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1908	39	20	71.5	71.8
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2066	43	21	71.9	72.2
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	259	5	3	59.7	60.0
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	448	9	5	62.1	62.4
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	533	11	5	62.9	63.2
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	723	15	7	64.2	64.5
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	433	9	4	62.0	62.3
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	369	8	4	61.3	61.6
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	13	0	0	48.2	48.5
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1951	40	20	70.0	70.3
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1885	39	19	72.9	73.2
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2616	54	27	72.9	73.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2354	49	24	69.3	69.6
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	265	5	3	62.9	63.2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1638	34	17	72.3	72.6
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2178	45	22	72.1	72.4
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1329	27	14	69.9	70.2
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	719	15	7	67.3	67.6

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,339	810	1,339	1,299	27	13
Mills Avenue between Base Line Road and Foothill Boulevard	770	588	770	747	15	8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,433	1,590	1,590	1,542	32	16
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,212	1,149	1,212	1,176	24	12
College Avenue between Foothill Boulevard and 6th Street	473	330	473	459	9	5
Claremont Boulevard between Foothill Boulevard and 9th Street	1,036	1,091	1,091	1,058	22	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,132	1,132	1,098	23	11
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	979	1,016	1,016	986	20	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,019	1,255	1,255	1,217	25	13
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,132	1,132	1,098	23	11
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,353	1,238	1,353	1,312	27	14
College Avenue between 6th Street and 1st Street	526	513	526	510	11	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,347	1,210	1,347	1,307	27	13
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,162	1,162	1,162	1,127	23	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,041	1,401	1,401	1,359	28	14
Indian Hill Boulevard between 1st Street and Arrow Highway	1,473	1,400	1,473	1,429	29	15
College Avenue between 1st Street and Arrow Highway	483	544	544	528	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,143	1,090	1,143	1,109	23	11
Indian Hill Boulevard n/o Base Line Road	412	330	412	400	8	4
Claremont Boulevard n/o Foothill Boulevard	886	823	886	859	18	9
Mills Avenue n/o Base Line Road	649	491	649	630	13	6
Monte Vista/Padua Ave n/o Base Line Road	437	559	559	542	11	6
Central Avenue s/o Foothill Boulevard	646	969	969	940	19	10
Monte Vista Avenue s/o 1st Street	1,124	1,464	1,464	1,420	29	15
Claremont Boulevard/Mills Avenue s/o Arrow Highway	817	883	883	857	18	9
College Avenue s/o Arrow Highway	364	323	364	353	7	4
Indian Hill Boulevard s/o Arrow Highway	1,790	1,825	1,825	1,770	37	18
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,010	1,744	2,010	1,950	40	20
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,777	1,645	1,777	1,724	36	18
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,418	2,620	2,620	2,541	52	26
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,974	2,079	2,079	2,017	42	21
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,179	2,273	2,273	2,205	45	23
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,172	2,440	2,440	2,367	49	24
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,861	2,106	2,106	2,043	42	21
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,543	1,967	1,967	1,908	39	20
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,721	2,130	2,130	2,066	43	21
6th Street between Indian Hill Boulevard and College Avenue	252	267	267	259	5	3
6th Street between College Avenue and Mills Avenue	439	462	462	448	9	5
6th Street between Mills Avenue and Claremont Boulevard	399	549	549	533	11	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	582	745	745	723	15	7
1st Street between Indian Hill Boulevard and College Avenue	341	446	446	433	9	4
1st Street between College Avenue and Claremont Boulevard	366	380	380	369	8	4
1st Street between Claremont Boulevard and Monte Vista Avenue	8	13	13	13	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,659	2,011	2,011	1,951	40	20
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,609	1,943	1,943	1,885	39	19
Base Line Road e/o I-210 Ramps	2,240	2,697	2,697	2,616	54	27
Foothill Boulevard e/o Central Avenue	1,827	2,427	2,427	2,354	49	24
1st Street e/o Monte Vista Avenue	258	273	273	265	5	3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,298	1,689	1,689	1,638	34	17
Base Line Road w/o Indian Hill Boulevard	2,245	1,958	2,245	2,178	45	22
Foothill Boulevard w/o Indian Hill Boulevard	1,370	1,311	1,370	1,329	27	14
Claremont Boulevard w/o Monte Vista/Padua Ave	741	665	741	719	15	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) Weekend Fall Game**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	776	16	8	66.0	66.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	587	12	6	66.4	66.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1461	30	15	70.3	70.6
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1123	23	12	66.1	66.4
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	342	7	4	60.9	61.2
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	954	20	10	68.5	68.8
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	933	19	10	68.4	68.7
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	977	20	10	70.1	70.4
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1089	22	11	70.5	70.8
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	933	19	10	68.4	68.7
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1139	23	12	67.7	68.0
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	470	10	5	62.3	62.6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1204	25	12	66.4	66.7
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	911	19	9	68.3	68.6
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1216	25	13	71.0	71.3
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1373	28	14	68.5	68.8
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	408	8	4	61.7	62.0
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	970	20	10	67.0	67.3
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	366	8	4	62.8	63.1
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	705	15	7	67.2	67.5
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	582	12	6	66.4	66.7
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	581	12	6	66.3	66.6
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	979	20	10	68.6	68.9
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1402	29	14	71.6	71.9
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	701	14	7	65.6	65.9
College Avenue s/o Arrow Highway	Hard	30	30	30	25	237	5	2	59.3	59.6
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1803	37	19	69.7	70.0
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1466	30	15	71.8	72.1
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1383	29	14	71.6	71.9
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2294	47	24	73.8	74.1
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	1787	37	18	71.2	71.5
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2076	43	21	71.9	72.2
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	1905	39	20	71.5	71.8
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	1933	40	20	71.6	71.9
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1721	35	18	71.1	71.4
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	1853	38	19	71.4	71.7
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	226	5	2	59.1	59.4
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	415	9	4	61.8	62.1
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	455	9	5	62.2	62.5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	561	12	6	63.1	63.4
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	436	9	4	62.0	62.3
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	308	6	3	60.5	60.8
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	10	0	0	47.0	47.3
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2128	44	22	70.4	70.7
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2102	43	22	73.4	73.7
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2138	44	22	72.0	72.3
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2213	46	23	69.1	69.4
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	166	3	2	60.9	61.2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1859	38	19	72.9	73.2
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	1907	39	20	71.5	71.8
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1213	25	13	69.5	69.8
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	642	13	7	66.8	67.1

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	800	754	800	776	16	8
Mills Avenue between Base Line Road and Foothill Boulevard	593	605	605	587	12	6
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,506	1,303	1,506	1,461	30	15
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,158	1,153	1,158	1,123	23	12
College Avenue between Foothill Boulevard and 6th Street	339	353	353	342	7	4
Claremont Boulevard between Foothill Boulevard and 9th Street	983	930	983	954	20	10
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	950	962	962	933	19	10
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	1,007	913	1,007	977	20	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,123	944	1,123	1,089	22	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	950	962	962	933	19	10
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,170	1,174	1,174	1,139	23	12
College Avenue between 6th Street and 1st Street	472	485	485	470	10	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,241	1,105	1,241	1,204	25	12
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	939	920	939	911	19	9
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,178	1,254	1,254	1,216	25	13
Indian Hill Boulevard between 1st Street and Arrow Highway	1,415	1,273	1,415	1,373	28	14
College Avenue between 1st Street and Arrow Highway	421	419	421	408	8	4
Claremont Boulevard between 1st Street and Arrow Highway	849	1,000	1,000	970	20	10
Indian Hill Boulevard n/o Base Line Road	377	339	377	366	8	4
Claremont Boulevard n/o Foothill Boulevard	727	667	727	705	15	7
Mills Avenue n/o Base Line Road	600	583	600	582	12	6
Monte Vista/Padua Ave n/o Base Line Road	599	535	599	581	12	6
Central Avenue s/o Foothill Boulevard	1,009	978	1,009	979	20	10
Monte Vista Avenue s/o 1st Street	1,246	1,445	1,445	1,402	29	14
Claremont Boulevard/Mills Avenue s/o Arrow Highway	626	723	723	701	14	7
College Avenue s/o Arrow Highway	203	244	244	237	5	2
Indian Hill Boulevard s/o Arrow Highway	1,859	1,799	1,859	1,803	37	19
Base Line Road between Indian Hill Boulevard and Mills Avenue	1,511	1,420	1,511	1,466	30	15
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,426	1,361	1,426	1,383	29	14
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,365	2,322	2,365	2,294	47	24
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,842	1,820	1,842	1,787	37	18
Foothill Boulevard between College Avenue and Dartmouth Avenue	1,940	2,140	2,140	2,076	43	21
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	1,956	1,964	1,964	1,905	39	20
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,993	1,870	1,993	1,933	40	20
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,774	1,702	1,774	1,721	35	18
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,910	1,855	1,910	1,853	38	19
6th Street between Indian Hill Boulevard and College Avenue	207	233	233	226	5	2
6th Street between College Avenue and Mills Avenue	428	420	428	415	9	4
6th Street between Mills Avenue and Claremont Boulevard	469	438	469	455	9	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	578	558	578	561	12	6
1st Street between Indian Hill Boulevard and College Avenue	449	447	449	436	9	4
1st Street between College Avenue and Claremont Boulevard	309	318	318	308	6	3
1st Street between Claremont Boulevard and Monte Vista Avenue	10	10	10	10	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,680	2,194	2,194	2,128	44	22
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,601	2,167	2,167	2,102	43	22
Base Line Road e/o I-210 Ramps	2,171	2,204	2,204	2,138	44	22
Foothill Boulevard e/o Central Avenue	2,281	2,209	2,281	2,213	46	23
1st Street e/o Monte Vista Avenue	149	171	171	166	3	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,369	1,917	1,917	1,859	38	19
Base Line Road w/o Indian Hill Boulevard	1,966	1,932	1,966	1,907	39	20
Foothill Boulevard w/o Indian Hill Boulevard	1,250	1,187	1,250	1,213	25	13
Claremont Boulevard w/o Monte Vista/Padua Ave	662	635	662	642	13	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) Weekend Spring Game**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	776	16	8	66.0	66.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	556	11	6	66.2	66.5
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1434	30	15	70.3	70.6
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1123	23	12	66.1	66.4
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	342	7	4	60.9	61.2
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	892	18	9	68.2	68.5
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	881	18	9	68.2	68.5
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	956	20	10	70.0	70.3
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1069	22	11	70.5	70.8
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	881	18	9	68.2	68.5
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1129	23	12	67.7	68.0
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	470	10	5	62.3	62.6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1204	25	12	66.4	66.7
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	890	18	9	68.2	68.5
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1176	24	12	70.9	71.2
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1373	28	14	68.5	68.8
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	408	8	4	61.7	62.0
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	950	20	10	66.9	67.2
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	359	7	4	62.7	63.0
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	698	14	7	67.1	67.4
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	582	12	6	66.4	66.7
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	574	12	6	66.3	66.6
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	979	20	10	68.6	68.9
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1371	28	14	71.5	71.8
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	692	14	7	65.5	65.8
College Avenue s/o Arrow Highway	Hard	30	30	30	25	237	5	2	59.3	59.6
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1796	37	19	69.7	70.0
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1445	30	15	71.8	72.1
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1383	29	14	71.6	71.9
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2274	47	23	73.7	74.0
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	1780	37	18	71.2	71.5
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2066	43	21	71.9	72.2
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	1895	39	20	71.5	71.8
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	1899	39	20	71.5	71.8
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1694	35	17	71.0	71.3
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	1839	38	19	71.3	71.6
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	216	4	2	59.0	59.3
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	408	8	4	61.7	62.0
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	448	9	5	62.1	62.4
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	547	11	6	63.0	63.3
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	429	9	4	61.9	62.2
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	299	6	3	60.4	60.7
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	10	0	0	47.0	47.3
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	2118	44	22	70.4	70.7
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	2092	43	22	73.4	73.7
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2138	44	22	72.0	72.3
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2199	45	23	69.0	69.3
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	166	3	2	60.9	61.2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1859	38	19	72.9	73.2
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	1907	39	20	71.5	71.8
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1213	25	13	69.5	69.8
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	635	13	7	66.7	67.0

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	800	744	800	776	16	8
Mills Avenue between Base Line Road and Foothill Boulevard	572	573	573	556	11	6
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,478	1,272	1,478	1,434	30	15
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,158	1,153	1,158	1,123	23	12
College Avenue between Foothill Boulevard and 6th Street	339	353	353	342	7	4
Claremont Boulevard between Foothill Boulevard and 9th Street	920	855	920	892	18	9
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	908	898	908	881	18	9
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	986	892	986	956	20	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,102	944	1,102	1,069	22	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	908	898	908	881	18	9
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,163	1,164	1,164	1,129	23	12
College Avenue between 6th Street and 1st Street	472	485	485	470	10	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,241	1,105	1,241	1,204	25	12
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	918	888	918	890	18	9
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,157	1,212	1,212	1,176	24	12
Indian Hill Boulevard between 1st Street and Arrow Highway	1,415	1,273	1,415	1,373	28	14
College Avenue between 1st Street and Arrow Highway	421	419	421	408	8	4
Claremont Boulevard between 1st Street and Arrow Highway	835	979	979	950	20	10
Indian Hill Boulevard n/o Base Line Road	370	329	370	359	7	4
Claremont Boulevard n/o Foothill Boulevard	720	657	720	698	14	7
Mills Avenue n/o Base Line Road	600	583	600	582	12	6
Monte Vista/Padua Ave n/o Base Line Road	592	525	592	574	12	6
Central Avenue s/o Foothill Boulevard	1,009	978	1,009	979	20	10
Monte Vista Avenue s/o 1st Street	1,225	1,413	1,413	1,371	28	14
Claremont Boulevard/Mills Avenue s/o Arrow Highway	619	713	713	692	14	7
College Avenue s/o Arrow Highway	203	244	244	237	5	2
Indian Hill Boulevard s/o Arrow Highway	1,852	1,789	1,852	1,796	37	19
Base Line Road between Indian Hill Boulevard and Mills Avenue	1,490	1,388	1,490	1,445	30	15
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,426	1,361	1,426	1,383	29	14
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,344	2,301	2,344	2,274	47	23
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,835	1,810	1,835	1,780	37	18
Foothill Boulevard between College Avenue and Dartmouth Avenue	1,933	2,130	2,130	2,066	43	21
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	1,949	1,954	1,954	1,895	39	20
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,958	1,817	1,958	1,899	39	20
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,746	1,692	1,746	1,694	35	17
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,896	1,834	1,896	1,839	38	19
6th Street between Indian Hill Boulevard and College Avenue	200	223	223	216	4	2
6th Street between College Avenue and Mills Avenue	421	410	421	408	8	4
6th Street between Mills Avenue and Claremont Boulevard	462	428	462	448	9	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	564	537	564	547	11	6
1st Street between Indian Hill Boulevard and College Avenue	442	437	442	429	9	4
1st Street between College Avenue and Claremont Boulevard	302	308	308	299	6	3
1st Street between Claremont Boulevard and Monte Vista Avenue	10	10	10	10	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,673	2,184	2,184	2,118	44	22
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,594	2,157	2,157	2,092	43	22
Base Line Road e/o I-210 Ramps	2,171	2,204	2,204	2,138	44	22
Foothill Boulevard e/o Central Avenue	2,267	2,188	2,267	2,199	45	23
1st Street e/o Monte Vista Avenue	149	171	171	166	3	2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,369	1,917	1,917	1,859	38	19
Base Line Road w/o Indian Hill Boulevard	1,966	1,922	1,966	1,907	39	20
Foothill Boulevard w/o Indian Hill Boulevard	1,250	1,177	1,250	1,213	25	13
Claremont Boulevard w/o Monte Vista/Padua Ave	655	635	655	635	13	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) Weekend Without Project**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	775	16	8	66.0	66.3
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	520	11	5	65.9	66.2
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1388	29	14	70.1	70.4
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1123	23	12	66.1	66.4
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	342	7	4	60.9	61.2
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	790	16	8	67.7	68.0
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	811	17	8	67.8	68.1
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	922	19	10	69.8	70.1
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1037	21	11	70.3	70.6
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	811	17	8	67.8	68.1
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1116	23	12	67.6	67.9
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	470	10	5	62.3	62.6
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1204	25	12	66.4	66.7
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	856	18	9	68.0	68.3
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1114	23	11	70.6	70.9
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1373	28	14	68.5	68.8
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	408	8	4	61.7	62.0
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	919	19	9	66.8	67.1
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	347	7	4	62.6	62.9
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	687	14	7	67.1	67.4
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	582	12	6	66.4	66.7
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	563	12	6	66.2	66.5
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	979	20	10	68.6	68.9
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1324	27	14	71.4	71.7
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	676	14	7	65.4	65.7
College Avenue s/o Arrow Highway	Hard	30	30	30	25	237	5	2	59.3	59.6
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1785	37	18	69.7	70.0
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1856	38	19	72.9	73.2
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1617	33	17	72.3	72.6
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2344	48	24	73.9	74.2
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	1845	38	19	71.4	71.7
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2024	42	21	71.8	72.1
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2193	45	23	72.1	72.4
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	1827	38	19	71.3	71.6
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1708	35	18	71.0	71.3
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	1840	38	19	71.4	71.7
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	149	3	2	57.3	57.6
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	358	7	4	61.1	61.4
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	439	9	5	62.0	62.3
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	617	13	6	63.5	63.8
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	397	8	4	61.6	61.9
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	343	7	4	61.0	61.3
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	11	0	0	47.4	47.7
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1797	37	19	69.7	70.0
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1734	36	18	72.6	72.9
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2460	51	25	72.6	72.9
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2105	43	22	68.8	69.1
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	252	5	3	62.7	63.0
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1526	31	16	72.0	72.3
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2140	44	22	72.0	72.3
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1255	26	13	69.7	70.0
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	695	14	7	67.1	67.4

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	799	728	799	775	16	8
Mills Avenue between Base Line Road and Foothill Boulevard	536	525	536	520	11	5
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,431	1,223	1,431	1,388	29	14
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,158	1,153	1,158	1,123	23	12
College Avenue between Foothill Boulevard and 6th Street	339	353	353	342	7	4
Claremont Boulevard between Foothill Boulevard and 9th Street	814	742	814	790	16	8
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	836	801	836	811	17	8
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	951	859	951	922	19	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,069	943	1,069	1,037	21	11
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	836	801	836	811	17	8
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,151	1,148	1,151	1,116	23	12
College Avenue between 6th Street and 1st Street	472	485	485	470	10	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,241	1,105	1,241	1,204	25	12
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	882	840	882	856	18	9
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,120	1,148	1,148	1,114	23	11
Indian Hill Boulevard between 1st Street and Arrow Highway	1,415	1,273	1,415	1,373	28	14
College Avenue between 1st Street and Arrow Highway	421	419	421	408	8	4
Claremont Boulevard between 1st Street and Arrow Highway	811	947	947	919	19	9
Indian Hill Boulevard n/o Base Line Road	358	313	358	347	7	4
Claremont Boulevard n/o Foothill Boulevard	708	641	708	687	14	7
Mills Avenue n/o Base Line Road	600	583	600	582	12	6
Monte Vista/Padua Ave n/o Base Line Road	580	509	580	563	12	6
Central Avenue s/o Foothill Boulevard	1,009	978	1,009	979	20	10
Monte Vista Avenue s/o 1st Street	1,189	1,365	1,365	1,324	27	14
Claremont Boulevard/Mills Avenue s/o Arrow Highway	607	697	697	676	14	7
College Avenue s/o Arrow Highway	203	244	244	237	5	2
Indian Hill Boulevard s/o Arrow Highway	1,840	1,773	1,840	1,785	37	18
Base Line Road between Indian Hill Boulevard and Mills Avenue	1,913	1,625	1,913	1,856	38	19
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,667	1,537	1,667	1,617	33	17
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,249	2,416	2,416	2,344	48	24
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,824	1,902	1,902	1,845	38	19
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,020	2,087	2,087	2,024	42	21
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,002	2,261	2,261	2,193	45	23
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,698	1,883	1,883	1,827	38	19
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,387	1,761	1,761	1,708	35	18
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,567	1,897	1,897	1,840	38	19
6th Street between Indian Hill Boulevard and College Avenue	144	154	154	149	3	2
6th Street between College Avenue and Mills Avenue	319	369	369	358	7	4
6th Street between Mills Avenue and Claremont Boulevard	319	453	453	439	9	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	503	636	636	617	13	6
1st Street between Indian Hill Boulevard and College Avenue	317	409	409	397	8	4
1st Street between College Avenue and Claremont Boulevard	349	354	354	343	7	4
1st Street between Claremont Boulevard and Monte Vista Avenue	7	11	11	11	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,531	1,853	1,853	1,797	37	19
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,492	1,788	1,788	1,734	36	18
Base Line Road e/o I-210 Ramps	2,103	2,536	2,536	2,460	51	25
Foothill Boulevard e/o Central Avenue	1,621	2,170	2,170	2,105	43	22
1st Street e/o Monte Vista Avenue	245	260	260	252	5	3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,212	1,573	1,573	1,526	31	16
Base Line Road w/o Indian Hill Boulevard	2,206	1,918	2,206	2,140	44	22
Foothill Boulevard w/o Indian Hill Boulevard	1,294	1,201	1,294	1,255	26	13
Claremont Boulevard w/o Monte Vista/Padua Ave	716	649	716	695	14	7

TRAFFIC NOISE ANALYSIS TOOL



Project Name: **Claremont Mckenna Roberts Sports Bowl**
 Analysis Scenario: **Opening Year (2027) Without Project**
 Source of Traffic Volumes: **KOA**

Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	Hard	30	35	35	30	1299	27	13	68.3	68.6
Mills Avenue between Base Line Road and Foothill Boulevard	Hard	30	40	40	35	747	15	8	67.4	67.7
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	Hard	30	40	40	35	1518	31	16	70.5	70.8
Indian Hill Boulevard between Foothill Boulevard and 6th Street	Hard	30	30	30	25	1176	24	12	66.3	66.6
College Avenue between Foothill Boulevard and 6th Street	Hard	30	30	30	25	459	9	5	62.2	62.5
Claremont Boulevard between Foothill Boulevard and 9th Street	Hard	30	40	40	35	1005	21	10	68.7	69.0
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1079	22	11	69.0	69.3
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	Hard	30	45	45	40	969	20	10	70.0	70.3
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	Hard	30	45	45	40	1215	25	13	71.0	71.3
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	Hard	30	40	40	35	1079	22	11	69.0	69.3
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	Hard	30	35	35	30	1312	27	14	68.3	68.6
College Avenue between 6th Street and 1st Street	Hard	30	30	30	25	510	11	5	62.7	63.0
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	Hard	30	30	30	25	1307	27	13	66.8	67.1
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	Hard	30	40	40	35	1127	23	12	69.2	69.5
Monte Vista/Padua Ave between Arrow Route and 1st Street	Hard	30	45	45	40	1329	27	14	71.4	71.7
Indian Hill Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1429	29	15	68.7	69.0
College Avenue between 1st Street and Arrow Highway	Hard	30	30	30	25	528	11	5	62.8	63.1
Claremont Boulevard between 1st Street and Arrow Highway	Hard	30	35	35	30	1109	23	11	67.6	67.9
Indian Hill Boulevard n/o Base Line Road	Hard	30	35	35	30	400	8	4	63.2	63.5
Claremont Boulevard n/o Foothill Boulevard	Hard	30	40	40	35	859	18	9	68.0	68.3
Mills Avenue n/o Base Line Road	Hard	30	40	40	35	630	13	6	66.7	67.0
Monte Vista/Padua Ave n/o Base Line Road	Hard	30	40	40	35	534	11	6	66.0	66.3
Central Avenue s/o Foothill Boulevard	Hard	30	40	40	35	940	19	10	68.4	68.7
Monte Vista Avenue s/o 1st Street	Hard	30	45	45	40	1397	29	14	71.6	71.9
Claremont Boulevard/Mills Avenue s/o Arrow Highway	Hard	30	35	35	30	849	18	9	66.4	66.7
College Avenue s/o Arrow Highway	Hard	30	30	30	25	353	7	4	61.1	61.4
Indian Hill Boulevard s/o Arrow Highway	Hard	30	35	35	30	1762	36	18	69.6	69.9
Base Line Road between Indian Hill Boulevard and Mills Avenue	Hard	30	45	45	40	1950	40	20	73.1	73.4
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	Hard	30	45	45	40	1724	36	18	72.5	72.8
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	Hard	30	45	45	40	2525	52	26	74.2	74.5
Foothill Boulevard between Indian Hill Boulevard and College Avenue	Hard	30	40	40	35	2009	41	21	71.7	72.0
Foothill Boulevard between College Avenue and Dartmouth Avenue	Hard	30	40	40	35	2197	45	23	72.1	72.4
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	Hard	30	40	40	35	2359	49	24	72.4	72.7
Foothill Boulevard between Mills Avenue and Claremont Boulevard	Hard	30	40	40	35	2003	41	21	71.7	72.0
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	40	40	35	1899	39	20	71.5	71.8
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	Hard	30	40	40	35	2051	42	21	71.8	72.1
6th Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	251	5	3	59.6	59.9
6th Street between College Avenue and Mills Avenue	Hard	30	30	30	25	440	9	5	62.0	62.3
6th Street between Mills Avenue and Claremont Boulevard	Hard	30	30	30	25	525	11	5	62.8	63.1
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	Hard	30	30	30	25	706	15	7	64.1	64.4
1st Street between Indian Hill Boulevard and College Avenue	Hard	30	30	30	25	425	9	4	61.9	62.2
1st Street between College Avenue and Claremont Boulevard	Hard	30	30	30	25	361	7	4	61.2	61.5
1st Street between Claremont Boulevard and Monte Vista Avenue	Hard	30	35	35	30	13	0	0	48.2	48.5
Arrow Highway between Indian Hill Boulevard and College Avenue	Hard	30	35	35	30	1943	40	20	70.0	70.3
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1877	39	19	72.9	73.2
Base Line Road e/o I-210 Ramps	Hard	30	40	40	35	2616	54	27	72.9	73.2
Foothill Boulevard e/o Central Avenue	Hard	30	30	30	25	2339	48	24	69.3	69.6
1st Street e/o Monte Vista Avenue	Hard	30	40	40	35	265	5	3	62.9	63.2
Arrow Highway e/o Claremont Boulevard/Mills Avenue	Hard	30	45	45	40	1638	34	17	72.3	72.6
Base Line Road w/o Indian Hill Boulevard	Hard	30	40	40	35	2178	45	22	72.1	72.4
Foothill Boulevard w/o Indian Hill Boulevard	Hard	30	40	40	35	1329	27	14	69.9	70.2
Claremont Boulevard w/o Monte Vista/Padua Ave	Hard	30	40	40	35	719	15	7	67.3	67.6

Claremont Mckenna Roberts Sports Bowl Traffic Segment Volumes

Roadway Segment	AM	PM	Max	Auto	MT	HT
Indian Hill Boulevard between Base Line Road and Foothill Boulevard	1,339	803	1,339	1,299	27	13
Mills Avenue between Base Line Road and Foothill Boulevard	770	564	770	747	15	8
Monte Vista/Padua Ave between Base Line Road and Claremont Boulevard	1,433	1,565	1,565	1,518	31	16
Indian Hill Boulevard between Foothill Boulevard and 6th Street	1,212	1,149	1,212	1,176	24	12
College Avenue between Foothill Boulevard and 6th Street	473	330	473	459	9	5
Claremont Boulevard between Foothill Boulevard and 9th Street	1,036	1,033	1,036	1,005	21	10
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,083	1,112	1,079	22	11
Monte Vista/Padua Ave between Claremont Boulevard and Foothill Boulevard	979	999	999	969	20	10
Monte Vista/Padua Ave between Foothill Boulevard and Arrow Route	1,019	1,253	1,253	1,215	25	13
Claremont Boulevard between 9th Street and 6th Street/Arrow Route	1,112	1,083	1,112	1,079	22	11
Indian Hill Boulevard between 6th Street and Harrison Avenue/5th Street	1,353	1,230	1,353	1,312	27	14
College Avenue between 6th Street and 1st Street	526	513	526	510	11	5
Indian Hill Boulevard between Harrison Avenue/5th Street and 1st Street	1,347	1,210	1,347	1,307	27	13
Claremont Boulevard between 6th Street/Arrow Route and 1st Street	1,162	1,138	1,162	1,127	23	12
Monte Vista/Padua Ave between Arrow Route and 1st Street	1,041	1,370	1,370	1,329	27	14
Indian Hill Boulevard between 1st Street and Arrow Highway	1,473	1,400	1,473	1,429	29	15
College Avenue between 1st Street and Arrow Highway	483	544	544	528	11	5
Claremont Boulevard between 1st Street and Arrow Highway	1,143	1,073	1,143	1,109	23	11
Indian Hill Boulevard n/o Base Line Road	412	322	412	400	8	4
Claremont Boulevard n/o Foothill Boulevard	886	815	886	859	18	9
Mills Avenue n/o Base Line Road	649	491	649	630	13	6
Monte Vista/Padua Ave n/o Base Line Road	437	551	551	534	11	6
Central Avenue s/o Foothill Boulevard	646	969	969	940	19	10
Monte Vista Avenue s/o 1st Street	1,124	1,440	1,440	1,397	29	14
Claremont Boulevard/Mills Avenue s/o Arrow Highway	817	875	875	849	18	9
College Avenue s/o Arrow Highway	364	323	364	353	7	4
Indian Hill Boulevard s/o Arrow Highway	1,790	1,817	1,817	1,762	36	18
Base Line Road between Indian Hill Boulevard and Mills Avenue	2,010	1,719	2,010	1,950	40	20
Base Line Road between Mills Avenue and Monte Vista/Padua Ave	1,777	1,645	1,777	1,724	36	18
Base Line Road between Monte Vista/Padua Ave and I-210 Ramps	2,418	2,603	2,603	2,525	52	26
Foothill Boulevard between Indian Hill Boulevard and College Avenue	1,974	2,071	2,071	2,009	41	21
Foothill Boulevard between College Avenue and Dartmouth Avenue	2,179	2,265	2,265	2,197	45	23
Foothill Boulevard between Dartmouth Avenue and Mills Avenue	2,172	2,432	2,432	2,359	49	24
Foothill Boulevard between Mills Avenue and Claremont Boulevard	1,861	2,065	2,065	2,003	41	21
Foothill Boulevard between Claremont Boulevard and Monte Vista/Padua Ave	1,543	1,958	1,958	1,899	39	20
Foothill Boulevard between Monte Vista/Padua Ave and Central Avenue	1,721	2,114	2,114	2,051	42	21
6th Street between Indian Hill Boulevard and College Avenue	252	259	259	251	5	3
6th Street between College Avenue and Mills Avenue	439	454	454	440	9	5
6th Street between Mills Avenue and Claremont Boulevard	399	541	541	525	11	5
6th Street/Arrow Route between Claremont Boulevard and Monte Vista/Padua Ave	582	728	728	706	15	7
1st Street between Indian Hill Boulevard and College Avenue	341	438	438	425	9	4
1st Street between College Avenue and Claremont Boulevard	366	372	372	361	7	4
1st Street between Claremont Boulevard and Monte Vista Avenue	8	13	13	13	0	0
Arrow Highway between Indian Hill Boulevard and College Avenue	1,659	2,003	2,003	1,943	40	20
Arrow Highway between College Avenue and Claremont Boulevard/Mills Avenue	1,609	1,935	1,935	1,877	39	19
Base Line Road e/o I-210 Ramps	2,240	2,697	2,697	2,616	54	27
Foothill Boulevard e/o Central Avenue	1,827	2,411	2,411	2,339	48	24
1st Street e/o Monte Vista Avenue	258	273	273	265	5	3
Arrow Highway e/o Claremont Boulevard/Mills Avenue	1,298	1,689	1,689	1,638	34	17
Base Line Road w/o Indian Hill Boulevard	2,245	1,951	2,245	2,178	45	22
Foothill Boulevard w/o Indian Hill Boulevard	1,370	1,304	1,370	1,329	27	14
Claremont Boulevard w/o Monte Vista/Padua Ave	741	664	741	719	15	7

Exhibit D

**Operational
Noise
Modeling**

Claremont Mckenna Campus Sport Bowl at Receiver R1
Weekday Practice

Baseball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	30						
	15	8	3	65	74.0	1925	17.9
	15	8	3	65	74.0	1925	17.9
Total	30	16	-	-	77.0	-	20.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	20						
	10	5	3	65	72.0	2225	14.6
	10	5	3	65	72.0	2225	14.6
Total	20	10	-	-	75.0	-	17.6

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	2575	20.3
	50	25	3	65	79.0	2575	20.3
Total	100	50	-	-	82.0	-	23.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	1626	20.3
	20	10	3	65	75.0	1626	20.3
Total	40	20	-	-	78.0	-	23.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	950	22.8
	13	7	3	65	73.5	950	23.4
Total	25	13	-	-	76.1	-	26.1

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Practice			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	215		
	215	96	30.1
Total w/o Shielding	215	96	30.1
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at Receiver R1
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
	140	70	3	65	83.5	1925	27.3
	140	70	3	65	83.5	1925	27.3
Total	280	140	-	-	86.5	-	30.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
	135	68	3	65	83.3	2225	25.9
	135	68	3	65	83.3	2225	25.9
Total	270	136	-	-	86.3	-	28.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	2575	20.3
	50	25	3	65	79.0	2575	20.3
Total	100	50	-	-	82.0	-	23.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	1626	20.3
	20	10	3	65	75.0	1626	20.3
Total	40	20	-	-	78.0	-	23.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	950	22.8
	13	7	3	65	73.5	950	23.4
Total	25	13	-	-	76.1	-	26.1

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	715		
	715	346	34.3
Total w/o Shielding	715	346	34.3
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at Receiver R1							
Weekend Gameday Fall							

Football or Track and Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	2000						
	1000	500	3	65	92.0	2790	32.6
	1000	500	3	65	92.0	2790	32.6
Total	2000	1000	-	-	95.0	-	35.6

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
	70	35	3	65	80.4	1626	25.8
	70	35	3	65	80.4	1626	25.8
Total	140	70	-	-	83.5	-	28.8

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekend Gameday Fall			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	2140		
	2140	1070	36.4
Total w/o Shielding	2140	1070	36.4
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at Receiver R1
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
	140	70	3	65	83.5	1925	27.3
	140	70	3	65	83.5	1925	27.3
Total	280	140	-	-	86.5	-	30.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
	135	68	3	65	83.3	2225	25.9
	135	68	3	65	83.3	2225	25.9
Total	270	136	-	-	86.3	-	28.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
	70	35	3	65	80.4	1626	25.8
	70	35	3	65	80.4	1626	25.8
Total	140	70	-	-	83.5	-	28.8

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	690		
	690	346	34.2
Total w/o Shielding	690	346	34.2
Reduction provided by shielding			

Claremont Mckenna Roberts Sports Bowl at R1
Speaker Noise Levels
Weekday Gameday Scenario

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R1	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	1,930	48.3	5.0	43.3		
Speaker 2 @ Softball Field	5	100	2,250	46.9	5.0	41.9		
Total	5	100	-	50.7	5.0	45.7	46.0	66.8

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957

5
0
1

Weekend Game in Fall

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R1	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Western Football Bleacher	5	100	2,525	45.9	5.0	40.9		
Speaker 2 @ Western Football Bleacher	5	100	2,600	45.7	5.0	40.7		
Speaker 3 @ Eastern Football Bleacher	5	100	2,725	45.3	5.0	40.3		
Speaker 4 @ Eastern Football Bleacher	5	100	2,800	45.0	5.0	40.0		
Speaker 5 @ Soccer Field	5	100	1,630	49.7	5.0	44.7		
Total	5	100	-	53.7	5.0	48.7	49.0	66.9

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591
4 106.021 1.249187366
5 106.99 0.96910013

4
3
2
1
0
1

Weekend Game in Spring

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R1	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	1,930	48.3	5.0	43.3		
Speaker 2 @ Softball Field	5	100	2,250	46.9	5.0	41.9		
Speaker 3 @ Soccer Field	5	100	3,630	40.7	5.0	35.7		
Total	5	100	-	53.2	5.0	48.2	48.4	66.9

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591

4
2
0
1

Claremont Mckenna Campus Sport Bowl at R2
Weekday Practice

Baseball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	30						
	15	8	3	65	74.0	640	27.4
	15	8	3	65	74.0	640	27.4
Total	30	16	-	-	77.0	-	30.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	20						
	10	5	3	65	72.0	1000	21.5
	10	5	3	65	72.0	1000	21.5
Total	20	10	-	-	75.0	-	24.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	920	29.2
	50	25	3	65	79.0	920	29.2
Total	100	50	-	-	82.0	-	32.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	640	28.4
	20	10	3	65	75.0	640	28.4
Total	40	20	-	-	78.0	-	31.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	370	31.0
	13	7	3	65	73.5	370	31.6
Total	25	13	-	-	76.1	-	34.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Practice			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	215		
	215	96	38.6
Total w/o Shielding	215	96	38.6
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R2
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
	140	70	3	65	83.5	640	36.9
	140	70	3	65	83.5	640	36.9
Total	280	140	-	-	86.5	-	39.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
	135	68	3	65	83.3	1000	32.9
	135	68	3	65	83.3	1000	32.9
Total	270	136	-	-	86.3	-	35.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	920	29.2
	50	25	3	65	79.0	920	29.2
Total	100	50	-	-	82.0	-	32.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	640	28.4
	20	10	3	65	75.0	640	28.4
Total	40	20	-	-	78.0	-	31.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	370	31.0
	13	7	3	65	73.5	370	31.6
Total	25	13	-	-	76.1	-	34.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	715		
	715	346	42.9
Total w/o Shielding	715	346	42.9
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R2
Weekend Gameday Fall

Football or Track and Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	2000						
Females (Adult)	1000	500	3	65	92.0	920	42.3
Males (Adult)	1000	500	3	65	92.0	920	42.3
Total	2000	1000	-	-	95.0	-	45.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
Females (Adult)	70	35	3	65	80.4	640	33.9
Males (Adult)	70	35	3	65	80.4	640	33.9
Total	140	70	-	-	83.5	-	36.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekend Gameday Fall			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	2140		
	2140	1070	45.9
Total w/o Shielding	2140	1070	45.9
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R2
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
	140	70	3	65	83.5	640	36.9
	140	70	3	65	83.5	640	36.9
Total	280	140	-	-	86.5	-	39.9

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
	135	68	3	65	83.3	1000	32.9
	135	68	3	65	83.3	1000	32.9
Total	270	136	-	-	86.3	-	35.9

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
	70	35	3	65	80.4	640	33.9
	70	35	3	65	80.4	640	33.9
Total	140	70	-	-	83.5	-	36.9

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	690		
	690	346	42.7
Total w/o Shielding	690	346	42.7
Reduction provided by shielding			

Claremont Mckenna Roberts Sports Bowl at R2

Speaker Noise Levels

Weekday Gameday Scenario

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R2	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	950	59.3	5.0	54.3		
Speaker 2 @ Softball Field	5	100	950	54.4	5.0	49.4		
Total	5	100	-	60.4	5.0	55.4	55.7	65.0

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3587664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957

5

0

1

Weekend Gameday Fall

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R2	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Western Football Bleacher	5	100	915	54.7	5.0	49.7		
Speaker 2 @ Western Football Bleacher	5	100	1,000	54.0	5.0	49.0		
Speaker 3 @ Eastern Football Bleacher	5	100	1,375	51.2	5.0	46.2		
Speaker 4 @ Eastern Football Bleacher	5	100	1,450	50.8	5.0	45.8		
Speaker 5 @ Soccer Field	5	100	690	57.3	5.0	52.3		
Total	5	100	-	61.2	5.0	56.2	56.6	65.2

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3587664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591
4 106.021 1.249187366
5 106.99 0.96910013

4

3

2

1

0

1

Weekend Gameday Spring

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R2	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	950	59.3	5.0	54.3		
Speaker 2 @ Softball Field	5	100	950	54.4	5.0	49.4		
Speaker 3 @ Soccer Field	5	100	690	57.3	5.0	52.3		
Total	5	100	-	61.2	5.0	57.1	57.3	65.3

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3587664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591

4

2

0

1

Claremont Mckenna Campus Sport Bowl at R3
Weekday Practice

Baseball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	30						
	15	8	3	65	74.0	690	26.8
	15	8	3	65	74.0	690	26.8
Total	30	16	-	-	77.0	-	29.8

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	20						
	10	5	3	65	72.0	460	28.3
	10	5	3	65	72.0	460	28.3
Total	20	10	-	-	75.0	-	31.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	800	30.5
	50	25	3	65	79.0	800	30.5
Total	100	50	-	-	82.0	-	33.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	540	29.9
	20	10	3	65	75.0	540	29.9
Total	40	20	-	-	78.0	-	32.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	190	36.7
	13	7	3	65	73.5	190	37.4
Total	25	13	-	-	76.1	-	40.1

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Practice			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	215		
	215	96	42.2
Total w/o Shielding	215	96	42.2
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R3
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
	140	70	3	65	83.5	690	36.2
	140	70	3	65	83.5	690	36.2
Total	280	140	-	-	86.5	-	39.2

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
	135	68	3	65	83.3	460	39.6
	135	68	3	65	83.3	460	39.6
Total	270	136	-	-	86.3	-	42.6

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
	50	25	3	65	79.0	800	30.5
	50	25	3	65	79.0	800	30.5
Total	100	50	-	-	82.0	-	33.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
	20	10	3	65	75.0	540	29.9
	20	10	3	65	75.0	540	29.9
Total	40	20	-	-	78.0	-	32.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
	12	6	3	65	72.8	190	36.7
	13	7	3	65	73.5	190	37.4
Total	25	13	-	-	76.1	-	40.1

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	715		
	715	346	46.1
Total w/o Shielding	715	346	46.1
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R3							
Weekend Gameday Fall							

Football or Track and Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	2000						
	1000	500	3	65	92.0	800	43.5
	1000	500	3	65	92.0	800	43.5
Total	2000	1000	-	-	95.0	-	46.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
	70	35	3	65	80.4	540	35.3
	70	35	3	65	80.4	540	35.3
Total	140	70	-	-	83.5	-	38.3

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekend Gameday Fall			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	2140		
	2140	1070	47.1
Total w/o Shielding	2140	1070	47.1
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R3
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
Females (Adult)	140	70	3	65	83.5	690	36.2
Males (Adult)	140	70	3	65	83.5	690	36.2
Total	280	140	-	-	86.5	-	39.2

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
Females (Adult)	135	68	3	65	83.3	460	39.6
Males (Adult)	135	68	3	65	83.3	460	39.6
Total	270	136	-	-	86.3	-	42.6

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
Females (Adult)	70	35	3	65	80.4	540	35.3
Males (Adult)	70	35	3	65	80.4	540	35.3
Total	140	70	-	-	83.5	-	38.3

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	690		
	690	346	45.2
Total w/o Shielding	690	346	45.2
Reduction provided by shielding			

Claremont Mckenna Roberts Sports Bowl at R3

Speaker Noise Levels

Weekday Gameday Scenario

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R3	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	700	57.3	5.0	52.1		
Speaker 2 @ Softball Field	5	100	475	60.4	5.0	55.4		
Total	5	100	-	62.1	5.0	57.1	57.4	70.8

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957

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Weekend Gameday Fall

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R3	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Western Football Bleacher	5	100	1,120	52.0	5.0	47.0		
Speaker 2 @ Western Football Bleacher	5	100	1,125	51.5	5.0	46.5		
Speaker 3 @ Eastern Football Bleacher	5	100	800	55.9	5.0	50.9		
Speaker 4 @ Eastern Football Bleacher	5	100	875	55.1	5.0	50.1		
Speaker 5 @ Soccer Field	5	100	175	58.8	5.0	53.8		
Total	5	100	-	62.3	5.0	57.3	57.9	70.4

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591
4 106.021 1.249187366
5 106.99 0.96910013

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Weekend Gameday Spring

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor R3	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	700	57.3	5.0	52.1		
Speaker 2 @ Softball Field	5	100	475	60.4	5.0	55.4		
Speaker 3 @ Soccer Field	5	100	-	68.8	5.0	58.8	58.9	68.3

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directivity at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591

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Claremont Mckenna Campus Sport Bowl at R4
Weekday Practice

Baseball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	30						
Females (Adult)	15	8	3	65	74.0	960	23.9
Males (Adult)	15	8	3	65	74.0	960	23.9
Total	30	16	-	-	77.0	-	26.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	20						
Females (Adult)	10	5	3	65	72.0	1060	21.0
Males (Adult)	10	5	3	65	72.0	1060	21.0
Total	20	10	-	-	75.0	-	24.0

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
Females (Adult)	50	25	3	65	79.0	640	32.4
Males (Adult)	50	25	3	65	79.0	640	32.4
Total	100	50	-	-	82.0	-	35.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
Females (Adult)	20	10	3	65	75.0	1540	20.8
Males (Adult)	20	10	3	65	75.0	1540	20.8
Total	40	20	-	-	78.0	-	23.8

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
Females (Adult)	12	6	3	65	72.8	470	28.9
Males (Adult)	13	7	3	65	73.5	470	29.6
Total	25	13	-	-	76.1	-	32.2

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Practice			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	215		
	215	96	37.9
Total w/o Shielding	215	96	37.9
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R4
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
Females (Adult)	140	70	3	65	83.5	960	33.3
Males (Adult)	140	70	3	65	83.5	960	33.3
Total	280	140	-	-	86.5	-	36.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
Females (Adult)	135	68	3	65	83.3	1060	32.4
Males (Adult)	135	68	3	65	83.3	1060	32.4
Total	270	136	-	-	86.3	-	35.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Football or Track and Field Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	100						
Females (Adult)	50	25	3	65	79.0	640	32.4
Males (Adult)	50	25	3	65	79.0	640	32.4
Total	100	50	-	-	82.0	-	35.4

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	40						
Females (Adult)	20	10	3	65	75.0	1540	20.8
Males (Adult)	20	10	3	65	75.0	1540	20.8
Total	40	20	-	-	78.0	-	23.8

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Golf Practice Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	25						
Females (Adult)	12	6	3	65	72.8	470	28.9
Males (Adult)	13	7	3	65	73.5	470	29.6
Total	25	13	-	-	76.1	-	32.2

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	715		
	715	346	41.2
Total w/o Shielding	715	346	41.2
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R4							
Weekend Gameday Fall							

Football or Track and Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	2000						
Females (Adult)	1000	500	3	65	92.0	800	43.5
Males (Adult)	1000	500	3	65	92.0	800	43.5
Total	2000	1000	-	-	95.0	-	46.5

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
Females (Adult)	70	35	3	65	80.4	1800	24.9
Males (Adult)	70	35	3	65	80.4	1800	24.9
Total	140	70	-	-	83.5	-	27.9

Source:

¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekend Gameday Fall			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	2140		
	2140	1070	46.5
Total w/o Shielding	2140	1070	46.5
Reduction provided by shielding			

Claremont Mckenna Campus Sport Bowl at R4
Weekday Gameday

Baseball Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	280						
Females (Adult)	140	70	3	65	83.5	690	36.2
Males (Adult)	140	70	3	65	83.5	690	36.2
Total	280	140	-	-	86.5	-	39.2

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Softball Field Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	270						
Females (Adult)	135	68	3	65	83.3	460	39.6
Males (Adult)	135	68	3	65	83.3	460	39.6
Total	270	136	-	-	86.3	-	42.6

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Soccer/Rugby Spectators + Participants							
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Reference Distance (ft) ¹	Reference Noise Level (dBA) ¹	Combined Noise Level (dBA)	Distance to Receptor (ft)	Noise Level at Receptor (dBA)
Total Capacity	140						
Females (Adult)	70	35	3	65	80.4	540	35.3
Males (Adult)	70	35	3	65	80.4	540	35.3
Total	140	70	-	-	83.5	-	38.3

Source:
¹ American Journal of Audiology Vol. 7, p. 3 (1998)

Weekday Gameday			
Category	# of Individuals (estimated capacity)	# of Individuals Speaking (half of estimated capacity)	Noise Level at Receptor (dBA)
	690		
	690	346	45.2
Total w/o Shielding	690	346	45.2
Reduction provided by shielding			

Claremont Mckenna Roberts Sports Bowl at R4
Speaker Noise Levels
Weekday Gameday Scenario

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor ft	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	950	54.8	5.0	49.4		
Speaker 2 @ Softball Field	5	100	1,025	53.8	5.0	48.8		
Total	5	100	-	57.1	5.0	52.1	52.5	61.7

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directly at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957

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Weekend Gameday Fall

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor ft	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Western Football Bleacher	5	100	650	57.7	5.0	52.7		
Speaker 2 @ Western Football Bleacher	5	100	725	56.8	5.0	51.8		
Speaker 3 @ Eastern Football Bleacher	5	100	800	55.9	5.0	50.9		
Speaker 4 @ Eastern Football Bleacher	5	100	875	55.1	5.0	50.1		
Speaker 5 @ Soccer Field	5	100	1,750	49.3	5.0	44.3		
Total	5	100	-	62.7	5.0	57.7	58.0	62.2

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directly at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591
4 106.021 1.249187366
5 106.99 0.96910013

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Weekend Gameday Spring

Point Source	Reference Distance (ft)	Reference Noise Level (dBA) ¹	Distance to Sensitive Receptor ft	Noise Level at Receptor (dBA)	Attenuation (dBA) ²	Noise Level at Receptor with Attenuation (dBA)	Combined Crowd and Speaker Noise Level at Receptor	Combined Ambient and Operational
Speaker 1 @ Baseball Field	5	100	950	54.8	5.0	49.4		
Speaker 2 @ Softball Field	5	100	1,025	53.8	5.0	48.8		
Speaker 3 @ Soccer Field	5	100	1,750	49.3	5.0	44.3		
Total	5	100	-	57.8	5.0	52.8	53.5	57.9

¹ World Health Organization recommends a limit of 100 dBA for outdoor concerts and festivals. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3187664/>

² Attenuation accounts for speaker directly at a lower elevation than the surrounding sensitive receptors

1 100
2 103.01 3.010299957
3 104.771 1.760912591

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