

Noise Measurement Field Data

Project:	Kaiser Manteca ED Expansion Project	Job Number:	197000014
Site No.:	ST-1	Date:	12/3/2024
Analyst:	Max Swinderman	Time:	10:55 AM
Location:	Next to vehicle driveway entrance along the western boundary of the Kaiser facility		
Noise Sources:	Cars from W. Yosemite Avenue, Cars entering and exiting facility driveway		
Comments:	N/A		
Results (dBA):			
	Leq:	Lmin:	Lmax:
	73.9	53.8	82.0
			Peak:
			100.4

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	55°F
Wind (mph):	2 mph NW
Sky:	Clear
Bar. Pressure:	30.17
Humidity:	64%

Photo:



Measurement Report

Report Summary

Meter's File Name LxT_Data.008.s
LxT SE 0006073

LxTse_0006073-20241203 105515-LxT_Data.008.lbin
2.404

2024-12-03 10:55:15	0:10:00.0	
2024-12-03 11:05:15	0:10:00.0	0:00:00.0
2024-12-03 10:46:55	None	---

73.9 dB	
101.7 dB	--- dB
1.6 mPa ² h	
100.4 dB	2024-12-03 10:56:28
82.0 dB	2024-12-03 11:04:59
53.8 dB	2024-12-03 11:02:34
73.9 dB	
77.8 dB	3.9 dB
75.6 dB	1.7 dB

0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0

73.9 dB	73.9 dB	--- dB
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73.9 dB	73.9 dB	--- dB	--- dB
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Any Data

L_{eq}

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
73.9 dB	77.8 dB	--- dB
82.0 dB	--- dB	--- dB
53.8 dB	None	None
100.4 dB	None	None

0 0:00:00.0 0 0:00:00.0

- 78.8 dB
- 77.5 dB
- 74.5 dB
- 72.5 dB
- 70.0 dB
- 63.3 dB

Time History



Noise Measurement Field Data

Project:	Kaiser Manteca ED Expansion Project	Job Number:	197000014
Site No.:	ST-2	Date:	12/3/2024
Analyst:	Max Swinderman	Time:	11:15 AM
Location:	Near St. Dominic's Drive entrance on grass patch within Project site		
Noise Sources:	Cars on W. Yosemite Avenue and St. Dominic's Drive, Cars entering facility from St. Dominic's Drive		
Comments:	N/A		

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	58.5	48.5	77.2	96.2

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	56°F
Wind (mph):	2 mph NW
Sky:	Clear
Bar. Pressure:	30.17
Humidity:	62%

Photo:



Measurement Report

Report Summary

Meter's File Name LxT_Data.009.s
LxT SE 0006073

LxTse_0006073-20241203 111543-LxT_Data.009.lbin
2.404

2024-12-03 11:15:43	0:10:00.0	
2024-12-03 11:25:43	0:10:00.0	0:00:00.0
2024-12-03 10:46:52	None	---

58.5 dB	
86.3 dB	--- dB
47.2 $\mu\text{Pa}^2\text{h}$	
96.2 dB	2024-12-03 11:15:53
77.2 dB	2024-12-03 11:15:54
48.5 dB	2024-12-03 11:19:53
58.5 dB	
69.1 dB	10.6 dB
63.4 dB	4.9 dB

0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0

58.5 dB	58.5 dB	--- dB
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58.5 dB	58.5 dB	--- dB	--- dB
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Any Data

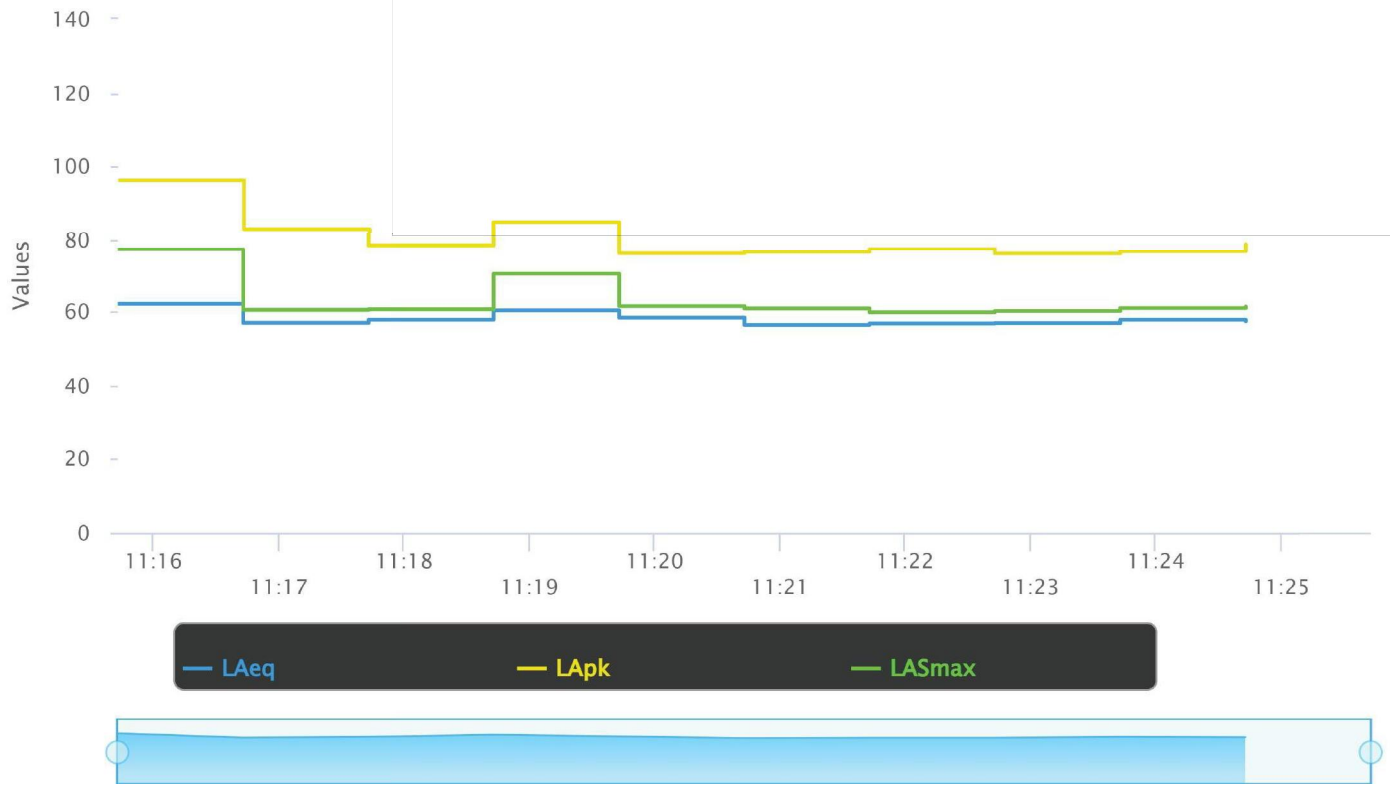
L_{eq}

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
58.5 dB	69.1 dB	--- dB
77.2 dB	--- dB	None
48.5 dB	--- dB	None
96.2 dB	--- dB	None

0 0:00:00.0 0 0:00:00.0

- 60.9 dB
- 60.1 dB
- 58.1 dB
- 56.9 dB
- 55.8 dB
- 53.3 dB

Time History



Noise Measurement Field Data

Project:	Kaiser Manteca ED Expansion Project	Job Number:	197000014
Site No.:	ST-3	Date:	12/3/2024
Analyst:	Max Swinderman	Time:	11:34 AM
Location:	On corner of Tuscany Drive and Ashford Avenue across from 1801 Ashford Avenue		
Noise Sources:	Birds, Cars driving along Ashford Avenue		
Comments:	N/A		

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
48.1	38.4	67.3	89.8

Equipment

Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather

Temp. (degrees F):	58°F
Wind (mph):	2 mph NW
Sky:	Clear
Bar. Pressure:	30.16
Humidity:	61%

Photo:



Measurement Report

Report Summary

Meter's File Name LxT_Data.010.s
LxT SE 0006073

LxTse_0006073-20241203 113416-LxT_Data.010.lbin
2.404

2024-12-03 11:34:16	0:10:00.0	
2024-12-03 11:44:16	0:10:00.0	0:00:00.0
2024-12-03 10:46:52	None	---

48.1 dB	
75.9 dB	--- dB
4.3 $\mu\text{Pa}^2\text{h}$	
89.8 dB	2024-12-03 11:43:30
67.3 dB	2024-12-03 11:41:18
38.4 dB	2024-12-03 11:42:54
48.1 dB	
61.7 dB	13.6 dB
52.7 dB	4.6 dB

0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0

48.1 dB	48.1 dB	--- dB
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48.1 dB	48.1 dB	--- dB	--- dB
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Any Data

L_{eq}

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
48.1 dB	61.7 dB	--- dB
67.3 dB	--- dB	None
38.4 dB	--- dB	None
89.8 dB	--- dB	None
0	0	0:00:00.0
49.8 dB		
47.2 dB		
45.7 dB		
45.0 dB		
44.3 dB		
42.4 dB		

Noise Measurement Field Data

Project:	Kaiser Manteca ED Expansion Project	Job Number:	197000014
Site No.:	ST-4	Date:	12/3/2024
Analyst:	Max Swinderman	Time:	11:51 AM
Location:	Next to Central Valley Veteranarian Hospital within the Valley Oak Plaza		
Noise Sources:	W. Yosemite Avenue car noise, cars within Valley Oak Plaza parking lot		
Comments:			

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	54.0	43.8	63.6	89.5

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	59°F
Wind (mph):	3 mph NW
Sky:	Clear
Bar. Pressure:	30.15
Humidity:	69%

Photo:



Measurement Report

Report Summary

Meter's File Name LxT_Data.011.s
LxT SE 0006073

LxTse_0006073-20241203 115148-LxT_Data.011.lbin
2.404

2024-12-03 11:51:48	0:10:00.0	
2024-12-03 12:01:48	0:10:00.0	0:00:00.0
2024-12-03 10:46:52	None	---

54.0 dB	
81.8 dB	--- dB
16.7 $\mu\text{Pa}^2\text{h}$	
89.5 dB	2024-12-03 12:01:43
63.6 dB	2024-12-03 11:56:59
43.8 dB	2024-12-03 11:56:36
54.0 dB	
66.9 dB	12.9 dB
56.3 dB	2.3 dB

0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0

54.0 dB	54.0 dB	--- dB
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54.0 dB	54.0 dB	--- dB	--- dB
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Any Data

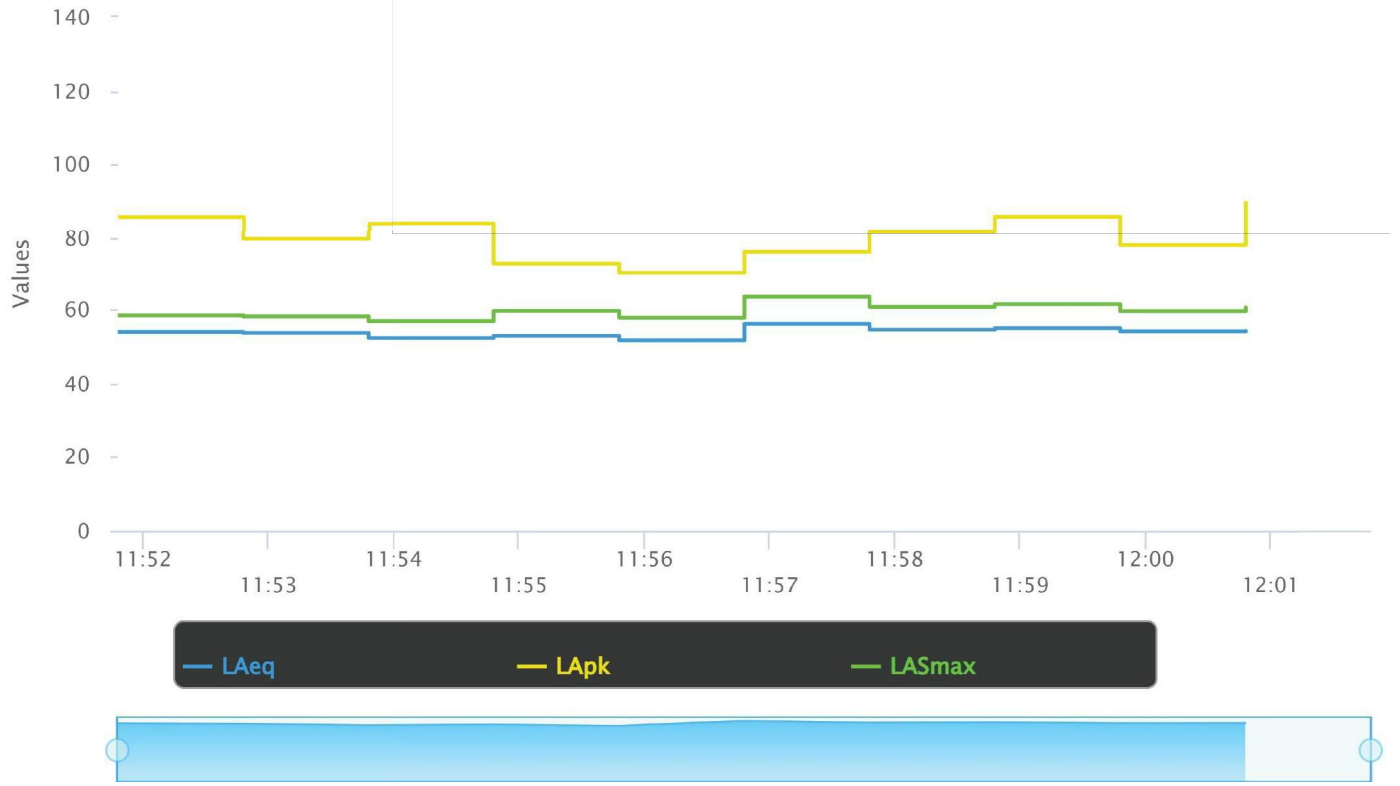
L_{eq}

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
54.0 dB	66.9 dB	--- dB
63.6 dB	--- dB	--- dB
43.8 dB	None	None
89.5 dB	None	--- dB

0 0:00:00.0 0 0:00:00.0

- 57.8 dB
- 56.7 dB
- 54.5 dB
- 52.9 dB
- 51.5 dB
- 48.4 dB

Time History



Noise Measurement Field Data

Project:	Kaiser Manteca ED Expansion Project	Job Number:	197000014	
Site No.:	LT-1	Date:	12/3/2024-12/4/2024	
Analyst:	Max Swinderman	Time:	12:53 PM - 12:53 PM	
Location:	On tree near the vehicle entrance along St. Dominic's Drive, close to ST-2 location			
Noise Sources:	Cars along W. Yosemite Avenue and St. Dominic's Drive			
Comments:	Mic was wrapped/tied to tree approximately 6 feet in height			
Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	59.2	42.9	83.7	104.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	~6 feet

Weather	
Temp. (degrees F):	55°F
Wind (mph):	2 mph NW
Sky:	Clear
Bar. Pressure:	30.17
Humidity:	64%

Photo:



Measurement Report

Report Summary

Meter's File Name LxT_Data.012.s
LxT SE 0006073

LxTse_0006073-20241203 125353-LxT_Data.012.lbin
2.404

2024-12-03 12:53:53	24:00:00.0	
2024-12-04 12:53:53	24:00:00.0	0:00:00.0
2024-12-03 10:46:52	None	---

59.2 dB		
108.6 dB		--- dB
8.0 mPa ² h		
104.3 dB	2024-12-03 13:46:24	
83.7 dB	2024-12-03 16:04:47	
42.9 dB	2024-12-04 00:59:46	
59.2 dB		
67.8 dB		8.6 dB
60.4 dB		1.2 dB

0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0
0	0:00:00.0

65.3 dB	59.5 dB	58.8 dB	
65.5 dB	59.8 dB	57.6 dB	58.8 dB

Any Data

L_{eq}

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
59.2 dB	67.8 dB	--- dB
83.7 dB	--- dB	--- dB
42.9 dB	None	None
104.3 dB	None	None

0 0:00:00.0 0 0:00:00.0

- 62.8 dB
- 61.2 dB
- 58.2 dB
- 56.7 dB
- 54.8 dB
- 48.8 dB

Time History



Parameters		
Construction Hours:	Daytime hours (7 am to 7 pm)	8
	Evening hours (7 pm to 10 pm)	0
	Nighttime hours (10 pm to 7 am)	0
Leq to L10 factor		3

	Receptor (Land Use)	Average Distance (feet)	Distance to Property Line (feet)	Shielding	Direction
1	Single Family Residence	200	35		0 W
2	Medical Office	440	50		0 E
3	Commercial	170	100		0 S
4	Industrial	750	440		0 W
5	Residences	540	500		0 S
6					
7					

Construction Noise Levels by Phase (Leq)									
Demolition	Site Prep	Grading	Building Construction	Paving	Architectural Coating	Paving (Road)	Construction Phase 8	Maximum Construction	
74.4	75.6	76.3	75.7	76.2	61.7	63.2	10.8	79.0	
67.6	68.7	69.4	68.8	69.4	54.8	69.4	10.8	72.1	
75.8	77.0	77.7	77.1	77.6	63.1	77.6	10.8	80.4	
60.6	64.1	64.8	64.2	64.7	50.2		10.8	67.5	
65.8	67.0	67.7	67.0	67.6	53.1		10.8	70.3	
							10.8		
							10.8		

Construction Phase	Equipment Type	No. of Equip.	Acoustical Usage Factor	Reference Noise Level at 50ft per Unit, Lmax
Demolition	Concrete Saw	1	20%	90
	Excavator	3	40%	81
	Dozer	2	40%	82
	Combined LEO			
Site Prep	Dozer	3	40%	82
	Tractor	4	40%	84
	Combined LEO			
Grading	Excavator	2	40%	81
	Grader	1	40%	85
	Dozer	1	40%	82
	Tractor	4	40%	84
	Combined LEO			
Building Construction	Crane	1	16%	81
	Backhoe	4	40%	78
	Generator	1	50%	81
	Tractor	4	40%	84
	Welder/Torch	2	40%	74
	Combined LEO			
Paving	Drum Mixer	2	50%	80
	Paver	2	50%	77
	Pavement Scarifier	2	20%	90
	Roller	3	20%	80
	Tractor	1	40%	84
	Combined LEO			
Architectural Coating	Compressor (air)	1	40%	78
	Combined LEO			
Paving (Road)	Drum Mixer	2	50%	80
	Paver	2	50%	77
	Pavement Scarifier	2	20%	90
	Roller	3	20%	80
	Tractor	1	40%	84
	Combined LEO			

RECEPTOR 1			RECEPTOR 2			RECEPTOR 3			RECEPTOR 4		
Distance (feet)	Noise Level at Receptor 1, Lmax	Noise Level at Receptor 1, Leq	Distance (feet)	Noise Level at Receptor 2, Lmax	Noise Level at Receptor 2, Leq	Distance (feet)	Noise Level at Receptor 3, Lmax	Noise Level at Receptor 3, Leq	Distance (feet)	Noise Level at Receptor 4, Lmax	Noise Level at Receptor 4, Leq
200	77.6	70.6	440	70.7	63.7	170	79.0	72.0	750	66.1	59.1
200	73.4	69.5	440	66.6	62.6	170	74.8	70.9	750	61.9	58.0
200	72.7	68.7	440	65.8	61.8	170	74.1	70.1	750	61.2	57.2
		74.4			67.6			75.8			60.6
200	74.4	70.5	440	67.6	63.6	170	75.8	71.9	750	62.9	59.0
200	78.0	74.0	440	71.1	67.2	170	79.4	75.4	750	66.5	62.5
		75.6			68.7			77.0			64.1
200	71.7	67.7	440	64.8	60.8	170	73.1	69.1	750	60.2	56.2
200	73.0	69.0	440	66.1	62.1	170	74.4	70.4	750	61.5	57.5
200	69.7	65.7	440	62.8	58.8	170	71.1	67.1	750	58.2	54.2
200	78.0	74.0	440	71.1	67.2	170	79.4	75.4	750	66.5	62.5
200	65.0	61.0	440	58.1	54.1	170	66.4	62.4	750	53.5	49.5
		76.3			69.4			77.7			64.8
200	68.6	60.6	440	61.7	53.8	170	70.0	62.0	750	57.1	49.1
200	71.6	67.6	440	64.7	60.8	170	73.0	69.0	750	60.1	56.1
200	68.6	65.5	440	61.7	58.7	170	70.0	67.0	750	57.1	54.1
200	78.0	74.0	440	71.1	67.2	170	79.4	75.4	750	66.5	62.5
200	65.0	61.0	440	58.1	54.1	170	66.4	62.4	750	53.5	49.5
		75.7			68.8			77.1			64.2
200	71.0	68.0	440	64.1	61.1	170	72.4	69.4	750	59.5	56.5
200	68.2	65.2	440	61.3	58.3	170	69.6	66.6	750	56.7	53.7
200	80.5	73.5	440	73.6	66.6	170	81.9	74.9	750	69.0	62.0
200	72.7	65.7	440	65.9	58.9	170	74.1	67.2	750	61.2	54.3
200	72.0	68.0	440	65.1	61.1	170	73.4	69.4	750	60.5	56.5
		76.2			69.4			77.6			64.7
200	65.7	61.7	440	58.8	54.8	170	67.1	63.1	750	54.2	50.2
		61.7			54.8			63.1			50.2
900	57.9	54.9	440.0	64.1	61.1	170.0	72.4	69.4			
900	55.1	52.1	440.0	61.3	58.3	170.0	69.6	66.6			
900	67.4	60.4	440.0	73.6	66.6	170.0	81.9	74.9			
900	59.7	52.7	440.0	65.9	58.9	170.0	74.1	67.2			
900	58.9	54.9	440.0	65.1	61.1	170.0	73.4	69.4			
		63.2			69.4			77.6			

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Manteca Kaiser
Project Number:
Scenario: Existing
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width (ft)	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	Distance to Contour			
										70 Ldn	65 Ldn	60 Ldn	55 Ldn	
1	Yosemite	W/O Fishback Rd	4	13	14,400	45	0	2.0%	1.0%	64.2	-	84	264	836
2	Yosemite	Between Fishback Rd & St. Dominics	4	13	15,600	45	0	2.0%	1.0%	64.6	-	91	286	906
3	Yosemite	Between St. Dominics Dr & Winters	4	13	15,200	45	0	2.0%	1.0%	64.5	-	88	279	883
4	Yosemite	E/O Winters Dr	4	12	16,400	35	0	2.0%	1.0%	62.4	-	55	174	549

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Manteca Kaiser
Project Number:
Scenario: Opening Year
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	Distance to Contour			
										70 Ldn	65 Ldn	60 Ldn	55 Ldn	
1	Yosemite	W/O Fishback Rd	4	13	16,600	45	0	2.0%	1.0%	64.8	-	96	305	964
2	Yosemite	Between Fishback Rd & St. Dominics	4	13	17,700	45	0	2.0%	1.0%	65.1	-	103	325	1,028
3	Yosemite	Between St. Dominics Dr & Winters	4	13	17,400	45	0	2.0%	1.0%	65.0	-	101	319	1,010
4	Yosemite	E/O Winters Dr	4	12	18,700	35	0	2.0%	1.0%	63.0	-	63	198	626

¹ Distance is from the centerline of the roadway segment to the receptor location.

"-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Manteca Kaiser
Project Number:
Scenario: Opening Year Plus Project
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	Distance to Contour			
										70 Ldn	65 Ldn	60 Ldn	55 Ldn	
1	Yosemite	W/O Fishback Rd	4	13	15,900	45	0	2.0%	1.0%	64.7	-	92	292	923
2	Yosemite	Between Fishback Rd & St. Dominics	4	13	17,400	45	0	2.0%	1.0%	65.0	-	101	319	1,010
3	Yosemite	Between St. Dominics Dr & Winters	4	13	15,900	45	0	2.0%	1.0%	64.7	-	92	292	923
4	Yosemite	E/O Winters Dr	4	12	17,200	35	0	2.0%	1.0%	62.6	-	58	182	576

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Manteca Kaiser
Project Number:
Scenario: Horizon Year
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	70 Ldn	65 Ldn	60 Ldn	55 Ldn
1	Yosemite	W/O Fishback Rd	4	13	17,700	45	0	2.0%	1.0%	65.1	-	103	325	1,028
2	Yosemite	Between Fishback Rd & St. Dominics	4	13	19,000	45	0	2.0%	1.0%	65.4	-	110	349	1,103
3	Yosemite	Between St. Dominics Dr & Winters	4	13	18,300	45	0	2.0%	1.0%	65.3	-	106	336	1,063
4	Yosemite	E/O Winters Dr	4	12	19,100	35	0	2.0%	1.0%	63.1	-	64	202	640

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.

FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels

Project Name: Manteca Kaiser
Project Number:
Scenario: Horizon Year Plus Project
Ldn/CNEL: Ldn

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

#	Roadway	Segment	Lanes	Median Width	ADT Volume	Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway				
								Medium Trucks	Heavy Trucks	Ldn at 100 Feet	Distance to Contour			
										70 Ldn	65 Ldn	60 Ldn	55 Ldn	
1	Yosemite	W/O Fishback Rd	4	13	17,000	45	0	2.0%	1.0%	64.9	-	99	312	987
2	Yosemite	Between Fishback Rd & St. Dominics	4	13	18,600	45	0	2.0%	1.0%	65.3	-	108	342	1,080
3	Yosemite	Between St. Dominics Dr & Winters	4	13	16,700	45	0	2.0%	1.0%	64.9	-	97	307	970
4	Yosemite	E/O Winters Dr	4	12	17,600	35	0	2.0%	1.0%	62.7	-	59	186	589

¹ Distance is from the centerline of the roadway segment to the receptor location.
 "-" = contour is located within the roadway right-of-way.