

# Appendix K

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Noise Resource Data

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**APPENDIX K**  
**NOISE – TRAFFIC NOISE ANALYSIS**

**Alternative 1**

<b>Roadway Segment<sup>1</sup></b>	<b>Existing Noise Levels<sup>2</sup></b>	<b>Project Traffic</b>	<b>Project Related Increase (dBA)</b>	<b>Buildout Related Traffic</b>	<b>Buildout Related Increase (dBA)</b>
3 <sup>rd</sup> St- North of Evans Ave. (5000)	70	567	0.5	4250	2.7
3 <sup>rd</sup> St- Evans Ave to Palou Ave. (5000)	70	292	0.2	4150	2.6
3 <sup>rd</sup> St- Palou Ave to Carroll Ave. (5000)	70	368	0.3	4260	2.7
3 <sup>rd</sup> St- South of Carroll Ave. (5000)	70	334	0.3	3850	2.5
Evans Ave- 3 <sup>rd</sup> St to Hunters Point Blvd. (1600)	65	741	1.7	2950	4.5
Palou Ave- 3 <sup>rd</sup> St to Crisp Rd. (1600)	65	712	1.6	1390	2.7
Carroll Ave- 3 <sup>rd</sup> St to Ingalls St. (1600)	65	0	0.0	820	1.8
Innes Ave- Hunters Point Blvd to Donahue St. (1600)	65	1294	2.6	1579	3.0
Donahue St- Innes Ave to Galvez Ave. (500)	60	1075	5.0	1214	5.4
Donahue St- Galvez Ave to Lockwood St. (500)	60	861	4.3	913	4.5
Galvez Ave- Donahue St to Robinson St. (500)	60	265	1.8	283	1.9
Lockwood St- Donahue St to Fischer Ave. (500)	60	390	2.5	405	2.6
Crisp Rd- Palou Ave to Spear Ave. (500)	60	1078	5.0	1384	5.8
Spear Ave- Crisp Rd to Morrell St. (500)	60	1040	4.9	1332	5.5

Notes: <sup>1</sup> Number in ( ) is generic peak hour traffic volume used for noise modeling.

<sup>2</sup> Existing noise levels (Ldn) estimated from ambient noise levels presented in the Setting Section.

**Alternative 2**

<b>Roadway Segment<sup>1</sup></b>	<b>Existing Noise Levels<sup>2</sup></b>	<b>Project Traffic</b>	<b>Project Related Increase (dBA)</b>	<b>Buildout Related Traffic</b>	<b>Buildout Related Increase (dBA)</b>
3 <sup>rd</sup> St- North of Evans Ave. (5000)	70	761	0.6	4460	2.8
3 <sup>rd</sup> St- Evans Ave to Palou Ave. (5000)	70	411	0.3	4290	2.7
3 <sup>rd</sup> St- Palou Ave to Carroll Ave. (5000)	70	490	0.4	4410	2.7
3 <sup>rd</sup> St- South of Carroll Ave. (5000)	70	441	0.4	1414	2.5
Evans Ave- 3 <sup>rd</sup> St to Hunters Point Blvd. (1600)	65	997	2.1	3210	4.8
Palou Ave- 3 <sup>rd</sup> St to Crisp Rd. (1600)	65	947	2.0	1630	3.1
Carroll Ave- 3 <sup>rd</sup> St to Ingalls St. (1600)	65	0	0.0	830	1.8
Innes Ave- Hunters Point Blvd to Donahue St. (1600)	65	1753	3.2	2041	3.6
Donahue St- Innes Ave to Galvez Ave. (500)	60	1534	6.1	1674	6.4
Donahue St- Galvez Ave to Lockwood St. (500)	60	1174	5.2	1278	5.5
Galvez Ave- Donahue St to Robinson St. (500)	60	338	2.2	378	2.4
Lockwood St- Donahue St to Fischer Ave. (500)	60	532	3.1	547	3.2
Crisp Rd- Palou Ave to Spear Ave. (500)	60	1595	6.2	1914	6.8
Spear Ave- Crisp Rd to Morrell St. (500)	60	1562	6.2	1864	6.7

Notes: <sup>1</sup> Number in ( ) is generic peak hour traffic volume used for noise modeling.

<sup>2</sup> Existing noise levels (Ldn) estimated from ambient noise levels presented in the Setting Section.

### Alternative 3

Roadway Segment <sup>1</sup>	Existing Noise Levels <sup>2</sup>	Project Traffic	Project Related Increase (dBA)	Buildout Related Traffic	Buildout Related Increase (dBA)
3 <sup>rd</sup> St- North of Evans Ave. (5000)	70	569	0.5	4250	2.7
3 <sup>rd</sup> St- Evans Ave to Palou Ave. (5000)	70	323	0.3	4170	2.6
3 <sup>rd</sup> St- Palou Ave to Carroll Ave. (5000)	70	425	0.4	4320	2.7
3 <sup>rd</sup> St- South of Carroll Ave. (5000)	70	385	0.3	3890	2.5
Evans Ave- 3 <sup>rd</sup> St to Hunters Point Blvd. (1600)	65	823	1.8	3030	4.6
Palou Ave- 3 <sup>rd</sup> St to Crisp Rd. (1600)	65	735	1.6	1420	2.8
Carroll Ave- 3 <sup>rd</sup> St to Ingalls St. (1600)	65	0	0.0	790	1.7
Innes Ave- Hunters Point Blvd to Donahue St. (1600)	65	1403	2.7	1690	3.1
Donahue St- Innes Ave to Galvez Ave. (500)	60	1184	5.3	1322	5.6
Donahue St- Galvez Ave to Lockwood St. (500)	60	890	4.4	991	4.7
Galvez Ave- Donahue St to Robinson St. (500)	60	273	1.9	313	2.1
Lockwood St- Donahue St to Fischer Ave. (500)	60	455	2.8	470	2.9
Crisp Rd- Palou Ave to Spear Ave. (500)	60	1155	5.2	1462	5.9
Spear Ave- Crisp Rd to Morrell St. (500)	60	1127	5.1	1418	5.8

Notes: <sup>1</sup> Number in ( ) is generic peak hour traffic volume used for noise modeling.

<sup>2</sup> Existing noise levels (Ldn) estimated from ambient noise levels presented in the Setting Section.

**Alternative 4**

<b>Roadway Segment<sup>1</sup></b>	<b>Existing Noise Levels<sup>2</sup></b>	<b>Project Traffic</b>	<b>Project Related Increase (dBA)</b>	<b>Buildout Related Traffic</b>	<b>Buildout Related Increase (dBA)</b>
3 <sup>rd</sup> St- North of Evans Ave. (5000)	70	469	0.4	4050	2.6
3 <sup>rd</sup> St- Evans Ave to Palou Ave. (5000)	70	284	0.2	4030	2.6
3 <sup>rd</sup> St- Palou Ave to Carroll Ave. (5000)	70	353	0.3	4120	2.6
3 <sup>rd</sup> St- South of Carroll Ave. (5000)	70	294	0.2	3720	2.4
Evans Ave- 3 <sup>rd</sup> St to Hunters Point Blvd. (1600)	65	618	1.4	2820	4.4
Palou Ave- 3 <sup>rd</sup> St to Crisp Rd. (1600)	65	682	1.5	1300	2.6
Carroll Ave- 3 <sup>rd</sup> St to Ingalls St. (1600)	65	0	0.0	720	1.6
Innes Ave- Hunters Point Blvd to Donahue St. (1600)	65	1069	2.2	1350	2.7
Donahue St- Innes Ave to Galvez Ave. (500)	60	850	4.3	983	4.7
Donahue St- Galvez Ave to Lockwood St. (500)	60	637	3.6	735	3.9
Galvez Ave- Donahue St to Robinson St. (500)	60	191	1.4	231	1.6
Lockwood St- Donahue St to Fischer Ave. (500)	60	302	2.1	317	2.1
Crisp Rd- Palou Ave to Spear Ave. (500)	60	889	4.4	1187	5.3
Spear Ave- Crisp Rd to Morrell St. (500)	60	847	4.3	1128	5.1

Notes: <sup>1</sup> Number in ( ) is generic peak hour traffic volume used for noise modeling.

<sup>2</sup> Existing noise levels (Ldn) estimated from ambient noise levels presented in the Setting Section.

# TNM Generic Noise Model - Existing and Future Conditions

INPUT: ROADWAYS 10-038

I&R 12 May 2010  
MST TNM 2.5

INPUT: ROADWAYS Average pavement type shall be used unless  
PROJECT/CONTRACT: 10-038 a State highway agency substantiates the use  
RUN: Existing Traffic Noise Model of a different type with the approval of FHWA

Roadway Name	Width	Points		Coordinates (pavement)			Flow Control			Segment	
		Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	24.0	point1	1	-1,000.0	0.0	0.00					Average
		point2	2	1,000.0	0.0	0.00					

INPUT: RECEIVERS 10-038

I&R 12 May 2010  
MST TNM 2.5

INPUT: RECEIVERS  
PROJECT/CONTRACT: 10-038  
RUN: Existing Traffic Noise Model

Receiver Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
50 ft	1	1	0.0	50.0	0.00	4.92	0.00	66	10.0	8.0	Y

INPUT: TRAFFIC FOR LAeq1h Volumes 10-038

I&R 13 May 2010  
MST TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes  
PROJECT/CONTRACT: 10-038  
RUN: Existing Traffic Noise Model

Roadway Name	Points Name	No.	Segment	Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	490	30	5	30	5	30	0	0	0	0	
	point2	2											

RESULTS: SOUND LEVELS 10-038

I&R 13 May 2010  
MST TNM 2.5  
Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
PROJECT/CONTRACT: 10-038  
RUN: Existing Traffic Noise Model  
BARRIER DESIGN: INPUT HEIGHTS  
ATMOSPHERICS: 68 deg F, 50% RH Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction Goal	Calculated minus Goal	
			Existing LAeq1h	Calculated	Calculated	Crit'n		Calculated	Noise Reduction			
			dBA	dBA	dBA	dB	dB	dBA	dB	dB	dB	
50 ft	1	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

  

Dwelling Units	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0