

# TECHNICAL MEMORANDUM

**DATE:** April 28, 2025  
**TO:** Tracy Zinn, T&B Planning, Inc.  
**FROM:** Bill Lawson, Urban Crossroads, Inc.  
**JOB NO:** 14982-06 Memo

## **SUBJECT: TEMESCAL VALLEY COMMERCE CENTER NOISE ASSESSMENT**

Urban Crossroads, Inc. has completed the following Noise Assessment for the Temescal Valley Commerce Center (Project), which is located off Temescal Canyon Road, north of the I-15 Freeway in the County of Riverside. The proposed Project is to consist of an approximately 517,720 square foot (SF) industrial warehouse building.

### **BACKGROUND**

The Temescal Valley Commerce Center (PPT 220039) Noise and Vibration Analysis (previous analysis), dated June 23, 2023, evaluated the existing noise conditions, the off-site traffic noise levels as well as the Project construction and operational noise and vibration impacts. The purpose of this memorandum is to evaluate off-site traffic noise levels based on the revised truck trip distributions, as detailed in the Temescal Valley Commerce Center Focused Traffic Assessment, prepared by Urban Crossroads, Inc. and dated April 18, 2025. These changes would result in a higher proportion of truck trips being routed on the segment of Temescal Canyon Road north of the Project site.

### **OFF-SITE TRAFFIC NOISE IMPACTS**

To assess the off-site traffic CNEL noise level impacts associated with the Project, noise contours were developed for Horizon Year 2045 without and with Project using the revised truck trip distributions in the Temescal Valley Commerce Center Focused Traffic Assessment. Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders a noise impact significant*. (16) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will typically be judged.

The Federal Interagency Committee on Noise (FICON) (17) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of

persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level ( $L_{eq}$ ).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders a noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (16) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use are exceeded, since it likely contributes to existing noise exposure exceedance.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance at noise sensitive receiver locations are consistent with guidance provided by both the Federal Highway Administration (4 p. 9) and Caltrans (18 p. 2\_48).

### **HORIZON YEAR (2045) TRAFFIC NOISE INCREASES**

Table 1 presents the Horizon Year 2045 conditions CNEL noise levels. The Horizon Year 2045 without Project exterior noise levels range from 72.2 to 80.1 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 1 shows that the Horizon Year 2045 with Project conditions will range from 72.2 to 80.2 dBA CNEL with the Project off-site traffic noise level increases ranging from 0.0 to 1.1 dBA CNEL. Based on the significance criteria for off-site traffic noise, land uses adjacent to all study area roadway segments would experience *less than significant* noise level increases on receiving land uses due to the Horizon Year 2045 with Project conditions. Appendix 1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios

**TABLE 1: HY 2045 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES**

ID	Road	Segment	Receiving Land Use <sup>1</sup>	CNEL at Receiving Land Use (dBA) <sup>2</sup>			Incremental Noise Level Increase Threshold <sup>3</sup>	
				No Project	With Project	Project Increment	Limit	Exceeded?
1	Temescal Canyon Rd.	s/o I-15	Non-Sensitive	76.4	76.4	0.0	3.0	No
2	Temescal Canyon Rd.	s/o Trilogy Pkwy.	Sensitive	76.6	76.6	0.0	1.5	No
3	Temescal Canyon Rd.	s/o Dos Lagos Dr.	Sensitive	76.9	77.0	0.1	1.5	No
4	Temescal Canyon Rd.	s/o Dawson Canyon Rd.	Non-Sensitive	76.9	77.2	0.3	3.0	No
5	Campbell Ranch Rd.	s/o Temescal Canyon Rd.	Sensitive	74.9	74.9	0.0	1.5	No
6	Temescal Canyon Rd.	e/o Campbell Ranch Rd.	Sensitive	73.1	73.1	0.0	1.5	No
7	Weirick Rd.	w/o I-15 SB Ramps	Sensitive	79.2	79.2	0.0	1.5	No
8	Dos Lagos Dr.	e/o I-15 NB Ramps	Non-Sensitive	80.1	80.2	0.1	3.0	No
9	Dawson Canyon Rd.	e/o Temescal Canyon Rd.	Non-Sensitive	73.2	74.3	1.1	3.0	No
10	Trilogy Pkwy.	w/o Trilogy Pkwy.	Sensitive	72.2	72.2	0.0	1.5	No

<sup>1</sup> Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria?

## CONCLUSIONS

The Temescal Valley Commerce Center (PPT 220039) Noise and Vibration Analysis dated June 23, 2023 determined that the Horizon Year 2025 with Project conditions would result in Project related off-site traffic noise increases ranging from 0.0 to 0.7 dBA CNEL. This Noise Assessment shows that based on the revised truck trip distributions, the Horizon Year 2045 with Project conditions will increase the Project related off-site traffic noise levels by off-site traffic noise from 0.0 to 1.1 dBA CNEL. The findings of the traffic noise analysis indicate that all the off-site study area roadway segments with the revised truck trip distributions will experience *less than significant* Project-related traffic noise increases. If you have any questions, please contact me directly at (949) 584-3148.



*This page intentionally left blank*



**APPENDIX 1:**  
**HORIZON YEAR 2045 OFF-SITE TRAFFIC NOISE CALCULATIONS**

*This page intentionally left blank*

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Temescal Canyon Rd. Road Segment: s/o I-15				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 6,407 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 468 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-5.50	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-18.83	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-13.03	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	61.7	61.3	56.8	54.4	62.5	62.8
Medium Trucks:	59.6	59.7	46.1	51.3	59.9	59.9
Heavy Trucks:	70.7	69.7	64.7	66.5	73.4	73.5
Vehicle Noise:	71.5	70.6	65.4	66.9	73.9	74.0

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	67	145	312	471	
CNEL:	69	148	320	489	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Temescal Canyon Rd. Road Segment: s/o I-15				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 10,897 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 795 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-3.19	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-16.52	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-10.73	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.0	63.6	59.2	56.7	64.8	65.1
Medium Trucks:	61.9	62.0	48.4	53.6	62.2	62.2
Heavy Trucks:	73.0	72.0	67.0	68.8	75.7	75.8
Vehicle Noise:	73.8	72.9	67.7	69.2	76.2	76.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	96	206	444	689	
CNEL:	98	211	455	711	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Temescal Canyon Rd. Road Segment: s/o I-15				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 11,522 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 841 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 82.76% Medium Trucks: 89.4% 1.0% 9.6% 3.59% Heavy Trucks: 69.5% 5.6% 25.0% 13.64%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-2.90	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-16.52	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-10.73	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.3	63.9	59.4	57.0	65.1	65.4
Medium Trucks:	61.9	62.0	48.4	53.6	62.2	62.2
Heavy Trucks:	73.0	72.0	67.0	68.8	75.7	75.8
Vehicle Noise:	73.8	73.0	67.8	69.2	76.2	76.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	96	207	445	690	
CNEL:	98	212	457	714	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Temescal Canyon Rd. Road Segment: s/o Trilog Pkwy.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 12,445 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 908 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-2.62	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	77.72	-15.95	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-10.15	-0.60	-1.20	-5.35	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.1	61.7	57.2	54.8	62.9	63.2
Medium Trucks:	60.0	60.1	46.5	51.6	60.2	60.3
Heavy Trucks:	71.0	70.0	65.1	66.8	73.7	73.9
Vehicle Noise:	71.9	71.0	65.8	67.2	74.2	74.4

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	113	244	525	1,131	
CNEL:	116	250	539	1,160	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Temescal Canyon Rd. Road Segment: s/o Trilogy Pkwy.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 20,774 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,517 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-0.39	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	77.72	-13.72	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-7.93	-0.60	-1.20	-5.35	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.3	63.9	59.4	57.0	65.1	65.4
Medium Trucks:	62.2	62.3	48.7	53.8	62.5	62.5
Heavy Trucks:	73.3	72.3	67.3	69.1	75.9	76.1
Vehicle Noise:	74.1	73.2	68.0	69.4	76.5	76.6

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	159	343	739	1,592	
CNEL:	163	352	758	1,633	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Temescal Canyon Rd. Road Segment: s/o Trilogy Pkwy.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 21,310 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,556 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 82.23% Medium Trucks: 89.4% 1.0% 9.6% 3.70% Heavy Trucks: 69.5% 5.6% 25.0% 14.06%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-0.26	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	77.72	-13.72	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-7.93	-0.60	-1.20	-5.35	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.4	64.1	59.6	57.2	65.2	65.6
Medium Trucks:	62.2	62.3	48.7	53.8	62.5	62.5
Heavy Trucks:	73.3	72.3	67.3	69.1	75.9	76.1
Vehicle Noise:	74.1	73.2	68.0	69.5	76.5	76.6

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	159	343	740	1,594	
CNEL:	164	352	759	1,635	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Temescal Canyon Rd. Road Segment: s/o Dos Lagos Dr.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 15,375 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,122 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-2.21	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	79.45	-15.54	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-9.74	-0.97	-1.20	-5.31	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.1	63.7	59.2	56.8	64.9	65.2
Medium Trucks:	61.7	61.8	48.3	53.4	62.0	62.1
Heavy Trucks:	72.3	71.3	66.4	68.1	75.0	75.2
Vehicle Noise:	73.3	72.4	67.2	68.6	75.6	75.8

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	151	326	703	1,514	
CNEL:	155	335	721	1,553	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Temescal Canyon Rd. Road Segment: s/o Dos Lagos Dr.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 19,789 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,445 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-1.11	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	79.45	-14.44	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-8.65	-0.97	-1.20	-5.31	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.2	64.8	60.3	57.9	66.0	66.3
Medium Trucks:	62.8	62.9	49.4	54.5	63.1	63.1
Heavy Trucks:	73.4	72.4	67.5	69.2	76.1	76.3
Vehicle Noise:	74.4	73.5	68.3	69.7	76.7	76.9

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	179	386	832	1,792	
CNEL:	184	396	853	1,838	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Temescal Canyon Rd. Road Segment: s/o Dos Lagos Dr.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 20,496 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,496 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 82.01% Medium Trucks: 89.4% 1.0% 9.6% 3.73% Heavy Trucks: 69.5% 5.6% 25.0% 14.26%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-0.95	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	79.45	-14.36	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-8.55	-0.97	-1.20	-5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	65.3	65.0	60.5	58.1	66.1	66.4	
Medium Trucks:	62.9	63.0	49.4	54.6	63.2	63.2	
Heavy Trucks:	73.5	72.5	67.6	69.3	76.2	76.4	
Vehicle Noise:	74.5	73.6	68.4	69.8	76.8	77.0	
Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	182	392	845	1,821			
CNEL:	187	403	867	1,868			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Temescal Canyon Rd. Road Segment: s/o Dawson Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 10,717 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 782 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-3.27	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	77.72	-16.60	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-10.80	-0.97	-1.20	-5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	61.1	60.7	56.2	53.8	61.9	62.2	
Medium Trucks:	58.9	59.0	45.5	50.6	59.2	59.3	
Heavy Trucks:	70.0	69.0	64.1	65.8	72.7	72.9	
Vehicle Noise:	70.8	70.0	64.8	66.2	73.2	73.4	
Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	105	226	487	1,049			
CNEL:	108	232	500	1,076			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Temescal Canyon Rd. Road Segment: s/o Dawson Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 24,014 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,753 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	0.24	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	77.72	-13.09	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-7.30	-0.97	-1.20	-5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.6	64.2	59.7	57.3	65.4	65.7	
Medium Trucks:	62.5	62.5	49.0	54.1	62.7	62.8	
Heavy Trucks:	73.5	72.5	67.6	69.3	76.2	76.4	
Vehicle Noise:	74.3	73.5	68.3	69.7	76.7	76.9	
Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	180	387	834	1,797			
CNEL:	184	397	855	1,843			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Temescal Canyon Rd. Road Segment: s/o Dawson Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 25,457 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,858 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.70% Medium Trucks: 89.4% 1.0% 9.6% 3.77% Heavy Trucks: 69.5% 5.6% 25.0% 14.53%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	0.49	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	77.72	-12.87	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-7.01	-0.97	-1.20	-5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	64.8	64.4	60.0	57.6	65.6	65.9	
Medium Trucks:	62.7	62.8	49.2	54.3	62.9	63.0	
Heavy Trucks:	73.8	72.8	67.9	69.6	76.5	76.6	
Vehicle Noise:	74.6	73.8	68.6	70.0	77.0	77.2	
Centerline Distance to Noise Contour (in feet)							
	70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:	188	404	871	1,876			
CNEL:	192	414	893	1,924			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Campbell Ranch Rd. Road Segment: s/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 7,133 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 521 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-5.55	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-18.88	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-13.08	-0.60	-1.20	-5.35	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	61.1	60.7	56.2	53.8	61.9	62.2	
Medium Trucks:	58.8	58.9	45.3	50.4	59.0	59.1	
Heavy Trucks:	69.4	68.4	63.4	65.2	72.0	72.2	
Vehicle Noise:	70.3	69.5	64.2	65.6	72.6	72.8	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	89	191	411	885		
	CNEL:	91	196	422	908		

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Campbell Ranch Rd. Road Segment: s/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 11,626 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 849 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-3.42	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-16.75	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-10.96	-0.60	-1.20	-5.35	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.2	62.8	58.4	56.0	64.0	64.3	
Medium Trucks:	60.9	61.0	47.4	52.5	61.2	61.2	
Heavy Trucks:	71.5	70.5	65.5	67.3	74.2	74.3	
Vehicle Noise:	72.4	71.6	66.4	67.7	74.8	74.9	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	123	264	569	1,226		
	CNEL:	126	271	584	1,258		

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Campbell Ranch Rd. Road Segment: s/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 11,894 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 868 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 82.19% Medium Trucks: 89.4% 1.0% 9.6% 3.71% Heavy Trucks: 69.5% 5.6% 25.0% 14.10%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-3.30	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-16.75	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-10.96	-0.60	-1.20	-5.35	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	63.3	63.0	58.5	56.1	64.1	64.5	
Medium Trucks:	60.9	61.0	47.4	52.5	61.2	61.2	
Heavy Trucks:	71.5	70.5	65.5	67.3	74.2	74.3	
Vehicle Noise:	72.4	71.6	66.4	67.7	74.8	74.9	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	123	265	570	1,228		
	CNEL:	126	271	585	1,260		

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Temescal Canyon Rd. Road Segment: e/o Campbell Ranch Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 3,080 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 225 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-8.68	-0.99	-1.20	-4.70	0.000	0.000
Medium Trucks:	77.72	-22.01	-0.97	-1.20	-4.88	0.000	0.000
Heavy Trucks:	82.99	-16.22	-0.97	-1.20	-5.31	0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)							
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL	
Autos:	55.6	55.3	50.8	48.4	56.5	56.8	
Medium Trucks:	53.5	53.6	40.1	45.2	53.8	53.8	
Heavy Trucks:	64.6	63.6	58.7	60.4	67.3	67.4	
Vehicle Noise:	65.4	64.6	59.4	60.8	67.8	68.0	
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dBA	60 dBA	55 dBA		
	Ldn:	46	98	212	457		
	CNEL:	47	101	218	469		

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)									
Scenario: HY Road Name: Temescal Canyon Rd. Road Segment: e/o Campbell Ranch Rd.					Project Name: Temescal Valley Comm. C Job Number: 14982				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>					
Average Daily Traffic (Adt): 10,099 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 737 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
<b>Site Data</b>				<b>Vehicle Mix</b>					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%					
				<b>Noise Source Elevations (in feet)</b>					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				<b>Lane Equivalent Distance (in feet)</b>					
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-3.52	-0.99	-1.20	-4.70	0.000	0.000		
Medium Trucks:	77.72	-16.85	-0.97	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	82.99	-11.06	-0.97	-1.20	-5.31	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	60.8	60.4	55.9	53.5	61.6	61.9			
Medium Trucks:	58.7	58.8	45.2	50.3	59.0	59.0			
Heavy Trucks:	69.8	68.8	63.8	65.6	72.4	72.6			
Vehicle Noise:	70.6	69.7	64.5	65.9	73.0	73.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			101	217	468	1,009			
CNEL:			103	223	480	1,035			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)									
Scenario: HY+P Road Name: Temescal Canyon Rd. Road Segment: e/o Campbell Ranch Rd.					Project Name: Temescal Valley Comm. C Job Number: 14982				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>					
Average Daily Traffic (Adt): 10,278 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 750 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 58 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
<b>Site Data</b>				<b>Vehicle Mix</b>					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 64.0 feet Centerline Dist. to Observer: 64.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 82.09% Medium Trucks: 89.4% 1.0% 9.6% 3.73% Heavy Trucks: 69.5% 5.6% 25.0% 14.18%					
				<b>Noise Source Elevations (in feet)</b>					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				<b>Lane Equivalent Distance (in feet)</b>					
				Autos: 57.271 Medium Trucks: 57.117 Heavy Trucks: 57.132					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-3.43	-0.99	-1.20	-4.70	0.000	0.000		
Medium Trucks:	77.72	-16.85	-0.97	-1.20	-4.88	0.000	0.000		
Heavy Trucks:	82.99	-11.06	-0.97	-1.20	-5.31	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	60.9	60.5	56.0	53.6	61.7	62.0			
Medium Trucks:	58.7	58.8	45.2	50.3	59.0	59.0			
Heavy Trucks:	69.8	68.8	63.8	65.6	72.4	72.6			
Vehicle Noise:	70.6	69.7	64.5	66.0	73.0	73.1			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			101	218	469	1,010			
CNEL:			104	223	481	1,036			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)									
Scenario: E Road Name: Weirick Rd. Road Segment: w/o I-15 SB Ramps					Project Name: Temescal Valley Comm. C Job Number: 14982				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>					
Average Daily Traffic (Adt): 18,099 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,321 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
<b>Site Data</b>				<b>Vehicle Mix</b>					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%					
				<b>Noise Source Elevations (in feet)</b>					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				<b>Lane Equivalent Distance (in feet)</b>					
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-0.99	1.88	-1.20	-4.56	0.000	0.000		
Medium Trucks:	77.72	-14.32	1.93	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-8.52	1.92	-1.20	-5.61	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.2	65.8	61.4	58.9	67.0	67.3			
Medium Trucks:	64.1	64.2	50.6	55.8	64.4	64.4			
Heavy Trucks:	75.2	74.2	69.2	71.0	77.9	78.0			
Vehicle Noise:	76.0	75.1	69.9	71.4	78.4	78.6			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			134	289	623	1,342			
CNEL:			138	296	639	1,376			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)									
Scenario: HY Road Name: Weirick Rd. Road Segment: w/o I-15 SB Ramps					Project Name: Temescal Valley Comm. C Job Number: 14982				
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>					
Average Daily Traffic (Adt): 21,160 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,545 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15					
<b>Site Data</b>				<b>Vehicle Mix</b>					
				VehicleType	Day	Evening	Night	Daily	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%					
				<b>Noise Source Elevations (in feet)</b>					
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0					
				<b>Lane Equivalent Distance (in feet)</b>					
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634					
FHWA Noise Model Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten		
Autos:	66.51	-0.31	1.88	-1.20	-4.56	0.000	0.000		
Medium Trucks:	77.72	-13.64	1.93	-1.20	-4.87	0.000	0.000		
Heavy Trucks:	82.99	-7.85	1.92	-1.20	-5.61	0.000	0.000		
Unmitigated Noise Levels (without Topo and barrier attenuation)									
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL			
Autos:	66.9	66.5	62.0	59.6	67.7	68.0			
Medium Trucks:	64.8	64.9	51.3	56.4	65.1	65.1			
Heavy Trucks:	75.9	74.9	69.9	71.7	78.6	78.7			
Vehicle Noise:	76.7	75.8	70.6	72.1	79.1	79.2			
Centerline Distance to Noise Contour (in feet)									
			70 dBA	65 dBA	60 dBA	55 dBA			
Ldn:			149	321	691	1,489			
CNEL:			153	329	709	1,527			

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Weirick Rd. Road Segment: w/o I-15 SB Ramps				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 21,250 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,551 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.85% Medium Trucks: 89.4% 1.0% 9.6% 3.78% Heavy Trucks: 69.5% 5.6% 25.0% 14.37%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-0.29	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-13.64	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-7.85	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	66.9	66.5	62.1	59.6	67.7	68.0
Medium Trucks:	64.8	64.9	51.3	56.4	65.1	65.1
Heavy Trucks:	75.9	74.9	69.9	71.7	78.6	78.7
Vehicle Noise:	76.7	75.8	70.6	72.1	79.1	79.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	149	321	691	1,489	
CNEL:	153	329	709	1,527	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Dos Lagos Dr. Road Segment: e/o I-15 NB Ramps				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 15,317 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,118 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-1.71	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-15.05	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-9.25	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	65.5	65.1	60.6	58.2	66.3	66.6
Medium Trucks:	63.4	63.5	49.9	55.0	63.7	63.7
Heavy Trucks:	74.5	73.5	68.5	70.3	77.1	77.3
Vehicle Noise:	75.3	74.4	69.2	70.6	77.7	77.8

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	120	259	557	1,200	
CNEL:	123	265	571	1,231	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Dos Lagos Dr. Road Segment: e/o I-15 NB Ramps				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 25,775 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,882 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	0.55	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-12.79	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-6.99	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.7	67.4	62.9	60.5	68.6	68.9
Medium Trucks:	65.7	65.7	52.2	57.3	65.9	66.0
Heavy Trucks:	76.7	75.7	70.8	72.5	79.4	79.6
Vehicle Noise:	77.5	76.7	71.5	72.9	79.9	80.1

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	170	366	788	1,698	
CNEL:	174	375	808	1,742	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Dos Lagos Dr. Road Segment: e/o I-15 NB Ramps				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 26,482 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 1,933 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.95% Medium Trucks: 89.4% 1.0% 9.6% 3.75% Heavy Trucks: 69.5% 5.6% 25.0% 14.30%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	0.67	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-12.72	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-6.91	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.9	67.5	63.0	60.6	68.7	69.0
Medium Trucks:	65.7	65.8	52.2	57.4	66.0	66.0
Heavy Trucks:	76.8	75.8	70.9	72.6	79.5	79.6
Vehicle Noise:	77.6	76.8	71.6	73.0	80.0	80.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	172	370	798	1,719	
CNEL:	176	380	819	1,764	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Dawson Canyon Rd. Road Segment: e/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 3,372 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 246 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-8.29	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-21.62	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-15.82	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.9	58.5	54.1	51.6	59.7	60.0
Medium Trucks:	56.8	56.9	43.3	48.5	57.1	57.1
Heavy Trucks:	67.9	66.9	61.9	63.7	70.6	70.7
Vehicle Noise:	68.7	67.8	62.6	64.1	71.1	71.3

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	44	94	203	438	
CNEL:	45	97	208	449	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY Road Name: Dawson Canyon Rd. Road Segment: e/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 5,333 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 389 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-6.30	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-19.63	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-13.83	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	60.9	60.5	56.0	53.6	61.7	62.0
Medium Trucks:	58.8	58.9	45.3	50.5	59.1	59.1
Heavy Trucks:	69.9	68.9	63.9	65.7	72.6	72.7
Vehicle Noise:	70.7	69.8	64.6	66.1	73.1	73.2

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	59	128	276	594	
CNEL:	61	131	283	609	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: HY+P Road Name: Dawson Canyon Rd. Road Segment: e/o Temescal Canyon Rd.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 6,740 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 492 vehicles Vehicle Speed: 40 mph Near/Far Lane Distance: 12 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 37.0 feet Centerline Dist. to Observer: 37.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.93% Medium Trucks: 89.4% 1.0% 9.6% 3.63% Heavy Trucks: 69.5% 5.6% 25.0% 14.44%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 36.851 Medium Trucks: 36.610 Heavy Trucks: 36.634			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	66.51	-5.27	1.88	-1.20	-4.56	0.000	0.000
Medium Trucks:	77.72	-18.81	1.93	-1.20	-4.87	0.000	0.000
Heavy Trucks:	82.99	-12.81	1.92	-1.20	-5.61	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	61.9	61.6	57.1	54.7	62.7	63.0
Medium Trucks:	59.6	59.7	46.1	51.3	59.9	59.9
Heavy Trucks:	70.9	69.9	65.0	66.7	73.6	73.7
Vehicle Noise:	71.7	70.8	65.7	67.1	74.1	74.3

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	69	150	322	694	
CNEL:	71	153	330	712	

Monday, April 28, 2025

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)							
Scenario: E Road Name: Trilogy Pkwy. Road Segment: w/o Trilogy Pkwy.				Project Name: Temescal Valley Comm. C Job Number: 14982			
SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS			
<b>Highway Data</b>				<b>Site Conditions (Hard = 10, Soft = 15)</b>			
Average Daily Traffic (Adt): 3,697 vehicles Peak Hour Percentage: 7.30% Peak Hour Volume: 270 vehicles Vehicle Speed: 45 mph Near/Far Lane Distance: 48 feet				Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15			
<b>Site Data</b>				<b>Vehicle Mix</b>			
				VehicleType	Day	Evening	Night
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 59.0 feet Centerline Dist. to Observer: 59.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 80.5% 7.2% 12.3% 81.78% Medium Trucks: 89.4% 1.0% 9.6% 3.80% Heavy Trucks: 69.5% 5.6% 25.0% 14.43%			
				<b>Noise Source Elevations (in feet)</b>			
				Autos: 0.000 Medium Trucks: 2.297 Heavy Trucks: 8.004 Grade Adjustment: 0.0			
				<b>Lane Equivalent Distance (in feet)</b>			
				Autos: 54.129 Medium Trucks: 53.966 Heavy Trucks: 53.982			
FHWA Noise Model Calculations							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-8.40	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-21.73	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-15.93	-0.60	-1.20	-5.35	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.2	57.9	53.4	51.0	59.1	59.4
Medium Trucks:	55.9	56.0	42.4	47.6	56.2	56.2
Heavy Trucks:	66.5	65.5	60.6	62.3	69.2	69.4
Vehicle Noise:	67.4	66.6	61.4	62.8	69.8	70.0

Centerline Distance to Noise Contour (in feet)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	57	123	265	571	
CNEL:	59	126	272	586	

Monday, April 28, 2025

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)**

Scenario: HY  
 Road Name: Trilogy Pkwy.  
 Road Segment: w/o Trilogy Pkwy.

Project Name: Temescal Valley Comm. C  
 Job Number: 14982

SITE SPECIFIC INPUT DATA		NOISE MODEL INPUTS				
<b>Highway Data</b>		<b>Site Conditions (Hard = 10, Soft = 15)</b>				
Average Daily Traffic (Adt):	6,165 vehicles	Autos: 15				
Peak Hour Percentage:	7.30%	Medium Trucks (2 Axles): 15				
Peak Hour Volume:	450 vehicles	Heavy Trucks (3+ Axles): 15				
Vehicle Speed:	45 mph	<b>Vehicle Mix</b>				
Near/Far Lane Distance:	48 feet	VehicleType	Day	Evening	Night	Daily
<b>Site Data</b>		Autos: 80.5% 7.2% 12.3% 81.78%				
Barrier Height:	0.0 feet	Medium Trucks: 89.4% 1.0% 9.6% 3.80%				
Barrier Type (0-Wall, 1-Berm):	0.0	Heavy Trucks: 69.5% 5.6% 25.0% 14.43%				
Centerline Dist. to Barrier:	59.0 feet	<b>Noise Source Elevations (in feet)</b>				
Centerline Dist. to Observer:	59.0 feet	Autos: 0.000				
Barrier Distance to Observer:	0.0 feet	Medium Trucks: 2.297				
Observer Height (Above Pad):	5.0 feet	Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Pad Elevation:	0.0 feet	<b>Lane Equivalent Distance (in feet)</b>				
Road Elevation:	0.0 feet	Autos: 54.129				
Road Grade:	0.0%	Medium Trucks: 53.966				
Left View:	-90.0 degrees	Heavy Trucks: 53.982				
Right View:	90.0 degrees					

**FHWA Noise Model Calculations**

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.18	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-19.51	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-13.71	-0.60	-1.20	-5.35	0.000	0.000

**Unmitigated Noise Levels (without Topo and barrier attenuation)**

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	60.5	60.1	55.6	53.2	61.3	61.6
Medium Trucks:	58.1	58.2	44.7	49.8	58.4	58.5
Heavy Trucks:	68.7	67.7	62.8	64.5	71.4	71.6
Vehicle Noise:	69.7	68.8	63.6	65.0	72.0	72.2

**Centerline Distance to Noise Contour (in feet)**

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	80	173	373	803
CNEL:	82	178	383	824

**FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (9/12/2021)**

Scenario: HY+P  
 Road Name: Trilogy Pkwy.  
 Road Segment: w/o Trilogy Pkwy.

Project Name: Temescal Valley Comm. C  
 Job Number: 14982

SITE SPECIFIC INPUT DATA		NOISE MODEL INPUTS				
<b>Highway Data</b>		<b>Site Conditions (Hard = 10, Soft = 15)</b>				
Average Daily Traffic (Adt):	6,255 vehicles	Autos: 15				
Peak Hour Percentage:	7.30%	Medium Trucks (2 Axles): 15				
Peak Hour Volume:	457 vehicles	Heavy Trucks (3+ Axles): 15				
Vehicle Speed:	45 mph	<b>Vehicle Mix</b>				
Near/Far Lane Distance:	48 feet	VehicleType	Day	Evening	Night	Daily
<b>Site Data</b>		Autos: 80.5% 7.2% 12.3% 82.04%				
Barrier Height:	0.0 feet	Medium Trucks: 89.4% 1.0% 9.6% 3.74%				
Barrier Type (0-Wall, 1-Berm):	0.0	Heavy Trucks: 69.5% 5.6% 25.0% 14.22%				
Centerline Dist. to Barrier:	59.0 feet	<b>Noise Source Elevations (in feet)</b>				
Centerline Dist. to Observer:	59.0 feet	Autos: 0.000				
Barrier Distance to Observer:	0.0 feet	Medium Trucks: 2.297				
Observer Height (Above Pad):	5.0 feet	Heavy Trucks: 8.004 Grade Adjustment: 0.0				
Pad Elevation:	0.0 feet	<b>Lane Equivalent Distance (in feet)</b>				
Road Elevation:	0.0 feet	Autos: 54.129				
Road Grade:	0.0%	Medium Trucks: 53.966				
Left View:	-90.0 degrees	Heavy Trucks: 53.982				
Right View:	90.0 degrees					

**FHWA Noise Model Calculations**

VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atten	Berm Atten
Autos:	68.46	-6.10	-0.62	-1.20	-4.69	0.000	0.000
Medium Trucks:	79.45	-19.51	-0.60	-1.20	-4.88	0.000	0.000
Heavy Trucks:	84.25	-13.71	-0.60	-1.20	-5.35	0.000	0.000

**Unmitigated Noise Levels (without Topo and barrier attenuation)**

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	60.5	60.2	55.7	53.3	61.3	61.7
Medium Trucks:	58.1	58.2	44.7	49.8	58.4	58.5
Heavy Trucks:	68.7	67.7	62.8	64.5	71.4	71.6
Vehicle Noise:	69.7	68.8	63.6	65.0	72.0	72.2

**Centerline Distance to Noise Contour (in feet)**

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	80	173	373	804
CNEL:	82	178	383	825