Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Skypark EIR	Scenario:	Existing
Analyst:	Ryan Chiene	Job #:	148449
Roadway:	SR-18		
Road Segment:	Kuffel Canyon Road to SR-330		

PROJECT DATA			
Centerline Dist to Barrier:	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**5.5**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	11500
Peak Hour Traffic:	**1150**
Vehicle Speed:	45
Centerline Separation:	24

NOISE INPUTS

Site conditions:**SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

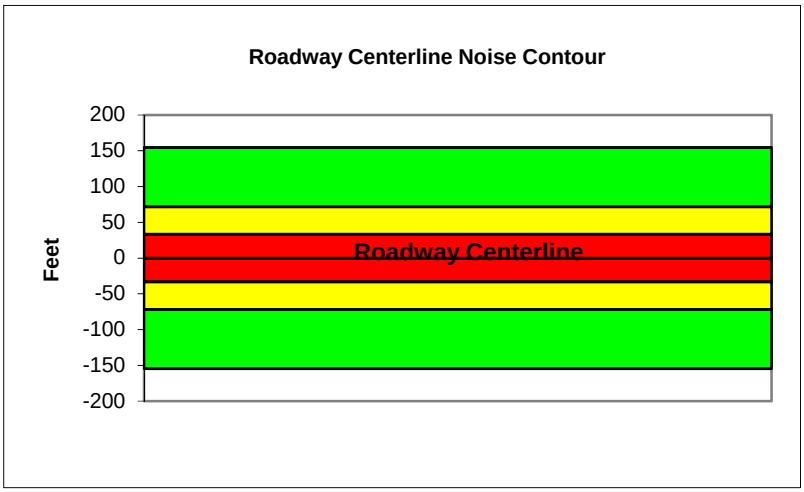
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.8	59.6	57.8	51.7	60.4	61.0
Medium Trucks:	59.1	51.0	44.7	43.1	51.6	51.8
Heavy Trucks:	63.6	51.7	42.6	43.9	53.4	53.5
Vehicle Noise:	**66.0**	**60.9**	**58.2**	**53.0**	**61.6**	**62.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	154
65 dBA	72
70 dBA	33
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Skypark EIR	Scenario:	Existing Plus Project
Analyst:	Ryan Chiene	Job #:	148449
Roadway:	SR-18		
Road Segment:	Kuffel Canyon Road to SR-330		

PROJECT DATA		SITE DATA	
Centerline Dist to Barrier:	**0**	Road Grade:	0
Barrier (0=wall, 1= berm):	**0**	Average Daily Traffic:	12486
Receiver Barrier Dist:	**0**	Peak Hour Traffic:	**1248.6**
Centerline Dist. To Observer:	**100**	Vehicle Speed:	45
Barrier Near Lane CL Dist:	**0**	Centerline Separation:	24
Barrier Far lane CL Dist:	**0**	**NOISE INPUTS**	
Pad Elevation:	**0.5**	Site conditions:	**SOFT SITE**
Road Elevation:	**0**	**FLEET MIX**	
Observer Height (above grade):	**5.5**		
Barrier Height:	**0**		
Rt View: **90**	Lft View: **-90**		

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

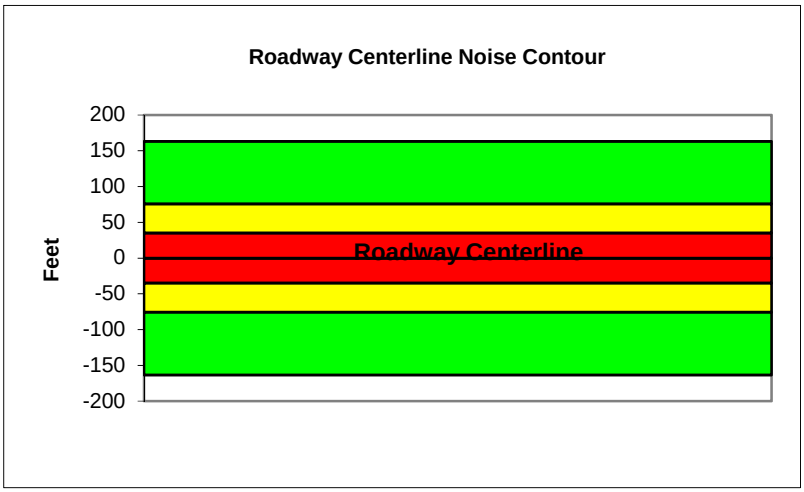
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.2	60.0	58.2	52.1	60.8	61.4
Medium Trucks:	59.5	51.4	45.0	43.4	51.9	52.2
Heavy Trucks:	64.0	52.1	43.0	44.2	53.8	53.9
Vehicle Noise:	**66.3**	**61.3**	**58.5**	**53.4**	**62.0**	**62.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	163
65 dBA	76
70 dBA	35
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Skypark EIR	Scenario:	Future
Analyst:	Ryan Chiene	Job #:	148449
Roadway:	SR-18		
Road Segment:	Kuffel Canyon Road to SR-330		

PROJECT DATA

Centerline Dist to Barrier:	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**5.5**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	34500
Peak Hour Traffic:	**3450**
Vehicle Speed:	45
Centerline Separation:	24

NOISE INPUTS

Site conditions:**SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

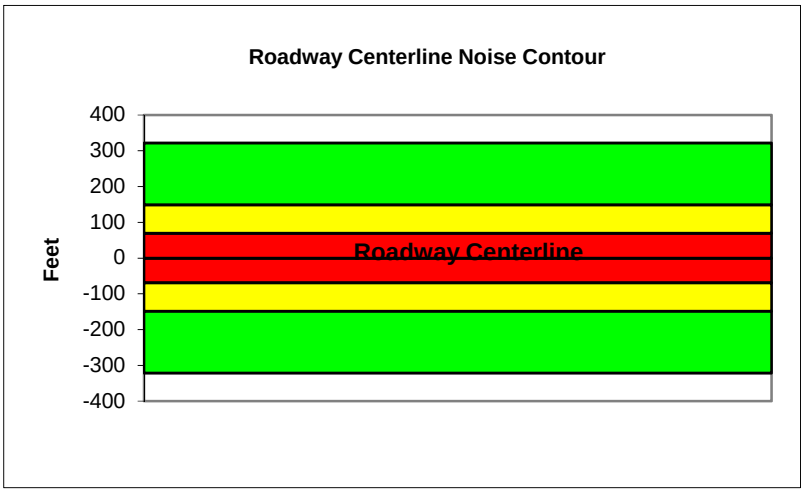
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.6	64.4	62.6	56.5	65.2	65.8
Medium Trucks:	63.9	55.8	49.4	47.9	56.3	56.6
Heavy Trucks:	68.4	56.5	47.4	48.6	58.2	58.3
Vehicle Noise:	**70.7**	**65.7**	**63.0**	**57.8**	**66.4**	**66.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	321
65 dBA	149
70 dBA	69
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Skypark EIR	Scenario:	Future Plus Project
Analyst:	Ryan Chiene	Job #:	148449
Roadway:	SR-18		
Road Segment:	Kuffel Canyon Road to SR-330		

PROJECT DATA		SITE DATA	
Centerline Dist to Barrier:	**0**	Road Grade:	0
Barrier (0=wall, 1= berm):	**0**	Average Daily Traffic:	35486
Receiver Barrier Dist:	**0**	Peak Hour Traffic:	**3548.6**
Centerline Dist. To Observer:	**100**	Vehicle Speed:	45
Barrier Near Lane CL Dist:	**0**	Centerline Separation:	24
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**5.5**		
Barrier Height:	**0**		
Rt View: **90**	Lft View: **-90**		

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

NOISE INPUTS

Site conditions:**SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.7	64.5	62.7	56.6	65.3	65.9
Medium Trucks:	64.0	55.9	49.6	48.0	56.5	56.7
Heavy Trucks:	68.5	56.6	47.5	48.8	58.3	58.4
Vehicle Noise:	**70.9**	**65.8**	**63.1**	**57.9**	**66.5**	**67.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	328
65 dBA	152
70 dBA	71
Mitigated	
60 dBA	
65 dBA	
70 dBA