
APPENDIX D13

Input and Results of Traffic Noise Analysis with HUD Model

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DNL Calculator

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DNL Calculator

Site ID	NAL-1 EXISTING
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Hollister Avenue
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Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	58	58	58
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	14800	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	66	-Infinity	-Infinity
Calculate Road #1 DNL	66	Reset	

Add Road Source	Add Rail Source
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Airport Noise Level	
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Loud Impulse Sounds?	☐ Yes ☐ No
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Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
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DNL Calculator

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Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Hollister Avenue
----------------	------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	58	58	58
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	16933	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	66	-Infinity	-Infinity
Calculate Road #1 DNL	66	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds? ☐ Yes ☒ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

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DNL Calculator

Site ID	NAL-1 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Hollister Avenue
----------------	------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	58	58	58
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	24188	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	68	-Infinity	-Infinity
Calculate Road #1 DNL	68	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds? ☐ Yes ☒ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

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DNL Calculator

Site ID	NAL-2 EXISTING
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US 101
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Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	219	219	219
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	116030	2815	4592
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	70	64	73
Calculate Road #1 DNL	75	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	427	427	427
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	7689	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	51	-Infinity	-Infinity
Calculate Road #2 DNL	51	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

75

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

Mitigation Options

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DNL Calculator

Site ID	NAL-2 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US 101
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Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	219	219	219
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	132750	3220	5253
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	71	65	74
Calculate Road #1 DNL	76	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
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Effective Distance	427	427	427
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	8797	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	51	-Infinity	-Infinity
Calculate Road #2 DNL	51	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

76

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

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DNL Calculator

Site ID	NAL-2 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US 101
----------------	--------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	219	219	219
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	140005	3220	5253
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	71	65	74
Calculate Road #1 DNL	76	Reset	

Road # 2 Name:	Calle Real
----------------	------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	427	427	427
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	16052	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	54	-Infinity	-Infinity
Calculate Road #2 DNL	54	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

76

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

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DNL Calculator

Site ID	NAL-3 EXISTING
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	North San Antonio Road
----------------	------------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	760	760	760
Distance to Stop Sign	402	402	402
Average Speed	25	25	25
Average Daily Trips (ADT)	3128	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	37	-Infinity	-Infinity
Calculate Road #1 DNL	37	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds? ☐ Yes ☒ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

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Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	North San Antonio Road
----------------	------------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	760	760	760
Distance to Stop Sign	402	402	402
Average Speed	25	25	25
Average Daily Trips (ADT)	3578	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	37	-Infinity	-Infinity
Calculate Road #1 DNL	37	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

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Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	North San Antonio Road
----------------	------------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	760	760	760
Distance to Stop Sign	402	402	402
Average Speed	25	25	25
Average Daily Trips (ADT)	10833	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	42	-Infinity	-Infinity
Calculate Road #1 DNL	42	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
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Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

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 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

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DNL Calculator

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Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	NAL-4 EXISTING
Record Date	09/12/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1			
Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	120	120	120
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	12867	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	61	-Infinity	-Infinity
Calculate Road #1 DNL	61	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
Loud Impulse Sounds?	☐ Yes ☐ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

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Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

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DNL Calculator

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DNL Calculator

Site ID	NAL-4 2050-NP
Record Date	09/12/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	120	120	120
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	26894	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	65	-Infinity	-Infinity
Calculate Road #1 DNL	65	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☐ No
----------------------	--

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

Site ID	NAL-4 2050-WP
Record Date	09/12/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	120	120	120
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	34139	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	66	-Infinity	-Infinity
Calculate Road #1 DNL	66	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☐ No
----------------------	--

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
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DNL Calculator

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DNL Calculator

Site ID	NAL-5 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	148	148	148
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3128	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	49	-Infinity	-Infinity
Calculate Road #1 DNL	49	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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Tools and Guidance

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Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

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DNL Calculator

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DNL Calculator

Site ID	NAL-5 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	148	148	148
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3578	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	49	-Infinity	-Infinity
Calculate Road #1 DNL	49	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds? ☐ Yes ☒ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
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Tools and Guidance

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DNL Calculator

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DNL Calculator

Site ID	NAL-5 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	148	148	148
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	10833	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			11
Vehicle DNL	54	-Infinity	-Infinity
Calculate Road #1 DNL	54	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

Site ID	NAL-6 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	159	159	159
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	12867	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	60	-Infinity	-Infinity
Calculate Road #1 DNL	60	Reset	

Road # 2 Name:	El Sueno Road
----------------	---------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	69	69	69
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3128	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	54	-Infinity	-Infinity
Calculate Road #2 DNL	54	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

61

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

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DNL Calculator

Site ID	NAL-6 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	159	159	159
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	26894	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	63	-Infinity	-Infinity
Calculate Road #1 DNL	63	Reset	

Road # 2 Name:	El Sueno Road
----------------	---------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	69	69	69
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3578	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	54	-Infinity	-Infinity
Calculate Road #2 DNL	54	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

63

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

Site ID	NAL-6 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Cathedral Oaks Road
----------------	---------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	159	159	159
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	34149	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	64	-Infinity	-Infinity
Calculate Road #1 DNL	64	Reset	

Road # 2 Name:	El Sueno Road
----------------	---------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	69	69	69
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	10833	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			3
Vehicle DNL	59	-Infinity	-Infinity
Calculate Road #2 DNL	59	Reset	

Add Road Source
Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ No

Combined DNL for all Road and Rail sources

65

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Calculate
Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

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Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

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DNL Calculator

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DNL Calculator

Site ID	NAL-7 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	537	537	537
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3128	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	40	-Infinity	-Infinity
Calculate Road #1 DNL	40	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

Site ID	NAL-7 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	537	537	537
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	3578	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	41	-Infinity	-Infinity
Calculate Road #1 DNL	41	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
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DNL Calculator

Site ID	NAL-7 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	537	537	537
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	10833	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	46	-Infinity	-Infinity
Calculate Road #1 DNL	46	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

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DNL Calculator

Site ID	NAL-8 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	105	105	105
Distance to Stop Sign	193	193	193
Average Speed	25	25	25
Average Daily Trips (ADT)	3128	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	47	-Infinity	-Infinity
Calculate Road #1 DNL	47	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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DNL Calculator

Site ID	NAL-8 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	105	105	105
Distance to Stop Sign	193	193	193
Average Speed	25	25	25
Average Daily Trips (ADT)	3578	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	47	-Infinity	-Infinity
Calculate Road #1 DNL	47	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds?	☐ Yes ☒ No
----------------------	---

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
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DNL Calculator

Site ID	NAL-8 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	Camino del Remedio
----------------	--------------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	105	105	105
Distance to Stop Sign	193	193	193
Average Speed	25	25	25
Average Daily Trips (ADT)	10833	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			6
Vehicle DNL	52	-Infinity	-Infinity
Calculate Road #1 DNL	52	Reset	

Add Road Source	Add Rail Source
-----------------	-----------------

Airport Noise Level	
---------------------	--

Loud Impulse Sounds? ☐ Yes ☒ No

Combined DNL for all Road and Rail sources	0
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
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DNL Calculator

Site ID	NAL-9 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
----------------	----------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	490	490	490
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	116030	2815	4592
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	65	59	68
Calculate Road #1 DNL	70	Reset	

Road # 2 Name:	Calle Real
----------------	------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	7689	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	49	-Infinity	-Infinity
Calculate Road #2 DNL	49	Reset	

Road #2 Name:

Hollister Avenue

Road #3 Name. **Road #3**

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	14800	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	52	-Infinity	-Infinity
Calculate Road #3 DNL	52	Reset	

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources**70**

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
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- **Mitigation**
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DNL Calculator

Site ID	NAL-9 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
----------------	----------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	490	490	490
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	132750	3220	5253
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	66	59	69
Calculate Road #1 DNL	71	Reset	

Road # 2 Name:	Calle Real
----------------	------------

Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	8797	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	49	-Infinity	-Infinity
Calculate Road #2 DNL	49	Reset	

Road # 2 Name:	Hollister Avenue
----------------	---

Road #3 Name. **Road #3**

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	16933	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	52	-Infinity	-Infinity
Calculate Road #3 DNL	52	Reset	

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources**71**

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

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- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	NAL-9 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
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Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	490	490	490
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	140005	3220	5253
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	66	59	69
Calculate Road #1 DNL	71	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	16052	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	52	-Infinity	-Infinity
Calculate Road #2 DNL	52	Reset	

Road #2 Name:

Hollister Avenue

Road #3 Name.

Road #3

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	580	580	580
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	24188	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	54	-Infinity	-Infinity
Calculate Road #3 DNL	54	Reset	

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources

71

Combined DNL including Airport

N/A

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

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DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	NAL-10 Existing
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
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Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	1295	1295	1295
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	116030	2815	4592
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	59	52	62
Calculate Road #1 DNL	64	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	1389	1389	1389
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	7689	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	43	-Infinity	-Infinity
Calculate Road #2 DNL	43	Reset	

Road # 2 Name:	Hollister Avenue
----------------	---

Road #3 Name. **Road #3**

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	118	118	118
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	14800	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			7
Vehicle DNL	61	-Infinity	-Infinity
Calculate Road #3 DNL	61	Reset	

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
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Tools and Guidance

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- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	NAL-10 2050 NP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
----------------	----------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	1295	1295	1295
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	114309	2773	4523
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	59	52	61
Calculate Road #1 DNL	64	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	1389	1389	1389
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	8797	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	44	-Infinity	-Infinity
Calculate Road #2 DNL	44	Reset	

Road #2 Name:

Hollister Avenue

Road #3 Name.

Road #3

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	118	118	118
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	16933	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			7
Vehicle DNL	62	-Infinity	-Infinity
Calculate Road #3 DNL	62	Reset	

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

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 - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
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Tools and Guidance

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DNL Calculator

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- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	NAL-10 2050 WP
Record Date	08/07/2024
User's Name	UltraSystems

Road # 1 Name:	US Highway 101
----------------	----------------

Road #1

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	1295	1295	1295
Distance to Stop Sign			
Average Speed	65	65	65
Average Daily Trips (ADT)	121564	2773	4523
Night Fraction of ADT	15	15	15
Road Gradient (%)			1
Vehicle DNL	59	52	61
Calculate Road #1 DNL	64	Reset	

Road # 2 Name:	Calle Real
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Road #2

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
--------------	--	---	--

Effective Distance	1389	1389	1389
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	16052	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	46	-Infinity	-Infinity
Calculate Road #2 DNL	46	Reset	

Road #2 Name:

Hollister Avenue

Road #3 Name. **Road #3**

Vehicle Type	Cars ☒	Medium Trucks ☒	Heavy Trucks ☒
Effective Distance	118	118	118
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	24188	0	0
Night Fraction of ADT	15	15	15
Road Gradient (%)			7
Vehicle DNL	63	-Infinity	-Infinity
Calculate Road #3 DNL	63	Reset	

Add Road Source

Add Rail Source

Airport Noise Level

Loud Impulse Sounds?

☐ Yes ☒ NoCombined DNL for all
Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

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