

**APPENDIX H**  
**NOISE**

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> [DNL Calculator](#)

# 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

<b>Site ID</b>	Sidney Circle Drive Neighborhood Development
<b>Record Date</b>	12/07/2016
<b>User's Name</b>	Genevieve Kaiser, Tetra Tech, Inc.

<b>Road # 1 Name:</b>	<b>Interstate Route 88</b>
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<b>Road #1</b>	<b>Vehicle Type</b>	<b>Cars <input checked="" type="checkbox"/></b>	<b>Medium Trucks <input checked="" type="checkbox"/></b>	<b>Heavy Trucks <input checked="" type="checkbox"/></b>
Effective Distance		700	700	700
Distance to Stop Sign				
Average Speed		67	67	67
Average Daily Trips (ADT)		5563	1841	2748
Night Fraction of ADT		15	15	15
Road Gradient (%)				2
Vehicle DNL		50.2	45.4	64.5
<b>Calculate Road #1 DNL</b>		64.7	<b>Reset</b>	

<b>Add Road Source</b>	<b>Add Rail Source</b>
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Airport Noise Level	0
Loud Impulse Sounds?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Combined DNL for all Road and Rail sources	<b>64.7</b>
Combined DNL including Airport	<b>N/A</b>

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Calculate

## 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 \(/resource/3822/day-night-noise-level-assessment-tool-user-guide/\)](/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

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





**New York State Department of Transportation  
Classification Count Average Weekday Data Report**

ROUTE #: I 88 ROAD NAME:  
 COUNTY NAME: Delaware  
 REGION CODE: 9  
 FROM: ACC RT 8 EXIT 9 SIDNEY  
 TO: OTSEGO CO LN  
 REF-MARKER: 88193031025  
 END MILEPOINT: 0310621  
 FUNC-CLASS: 01  
 STATION NO: 0043  
 COUNT TAKEN BY: ORG CODE: TST INITIALS: ---  
 PROCESSED BY: ORG CODE: DOT INITIALS: SJW

YEAR: 2009  
 MONTH: November

STATION: 930043

DIRECTION	East	West	TOTAL
NUMBER OF VEHICLES	5080	5072	10152
NUMBER OF AXLES	13168	12914	26082
% HEAVY VEHICLES (F4-F13)	27.99%	26.14%	27.07%
% TRUCKS AND BUSES (F3-F13)	46.48%	43.93%	45.20%
AXLE CORRECTION FACTOR	0.77	0.79	0.78

BATCH ID: DOT-SJWr9ww44

VEHICLE CLASS	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	TOTAL
NO. OF AXLES	2	2	2	2.5	2	3	4	3.5	5	6	5	6	8.75	
ENDING HOUR	1:00	0	18	7	5	1	0	2	26	0	1	0	0	60
	2:00	0	9	5	3	1	0	1	27	1	0	0	0	47
	3:00	0	5	1	5	1	0	0	3	21	0	1	0	37
	4:00	0	9	3	4	1	1	0	0	20	0	2	0	40
	5:00	0	13	8	7	3	0	0	2	29	1	3	0	66
	6:00	0	49	23	7	6	0	0	4	32	0	6	0	127
	7:00	0	128	69	8	16	0	0	7	31	1	1	0	261
	8:00	0	223	67	8	16	4	0	5	35	2	1	0	361
	9:00	0	184	62	7	22	1	0	6	32	1	0	0	316
	10:00	0	168	60	11	12	2	1	6	34	3	0	0	298
DIRECTION	11:00	1	161	56	11	12	2	0	8	35	6	0	0	293
East	12:00	0	164	61	14	11	2	1	8	36	6	0	0	305
	13:00	0	183	54	11	16	2	0	7	46	6	0	0	325
	14:00	0	166	66	13	12	2	0	6	45	5	0	0	315
	15:00	0	194	68	16	12	4	0	10	41	7	0	0	353
	16:00	0	227	87	14	11	1	0	5	32	6	0	0	384
	17:00	0	242	73	10	13	1	0	6	38	3	0	0	386
	18:00	0	200	56	10	11	0	0	3	37	5	0	0	322
	19:00	0	132	41	10	8	0	0	5	35	1	0	0	232
	20:00	0	76	20	11	5	0	0	3	36	1	0	0	152
	21:00	0	64	19	7	4	0	0	3	37	1	0	0	135
	22:00	0	54	17	9	3	0	0	4	32	0	1	0	120
	23:00	0	30	9	5	3	0	0	5	31	0	3	0	86
	24:00	0	19	7	6	0	0	0	1	22	1	3	0	59
<b>TOTAL VEHICLES</b>	<b>1</b>	<b>2718</b>	<b>939</b>	<b>212</b>	<b>200</b>	<b>22</b>	<b>2</b>	<b>110</b>	<b>790</b>	<b>57</b>	<b>22</b>	<b>0</b>	<b>7</b>	<b>5080</b>
<b>TOTAL AXLES</b>	<b>2</b>	<b>5436</b>	<b>1878</b>	<b>530</b>	<b>400</b>	<b>66</b>	<b>8</b>	<b>385</b>	<b>3950</b>	<b>342</b>	<b>110</b>	<b>0</b>	<b>61</b>	<b>13168</b>
ENDING HOUR	1:00	0	15	4	2	1	0	0	3	12	1	0	0	39
	2:00	0	12	2	2	1	0	0	2	9	0	1	0	30
	3:00	0	7	2	2	0	0	0	1	14	1	1	0	28
	4:00	0	7	5	3	1	0	0	2	15	1	2	0	36
	5:00	0	17	8	5	0	0	0	4	16	2	1	0	53
	6:00	0	36	19	2	4	1	0	3	22	0	4	0	91
	7:00	0	108	49	7	9	0	0	5	32	2	2	0	214
	8:00	0	186	54	9	11	0	0	8	30	2	0	0	300
	9:00	0	149	52	7	16	2	0	7	33	2	0	0	268
	10:00	0	144	53	8	12	2	0	6	36	1	0	0	262
DIRECTION	11:00	0	156	56	10	15	1	0	7	44	2	1	0	292
West	12:00	2	179	57	12	13	2	0	7	49	2	0	0	323
	13:00	0	181	63	12	16	2	0	6	48	1	0	0	329
	14:00	0	175	56	13	17	2	1	13	54	3	0	0	334
	15:00	0	216	66	10	11	0	0	6	42	2	0	0	353
	16:00	0	259	91	15	17	3	0	5	49	1	0	0	440
	17:00	0	292	84	10	18	1	0	10	50	2	1	0	468
	18:00	0	253	62	8	13	0	0	9	42	1	1	0	389
	19:00	0	136	38	7	11	0	0	5	40	1	0	0	238
	20:00	0	104	26	7	5	1	0	4	33	0	1	0	181
	21:00	0	76	21	3	4	0	0	5	38	0	3	0	150
	22:00	0	63	10	3	2	0	0	2	23	0	3	0	106
	23:00	0	40	13	4	2	0	0	1	23	0	4	0	87
	24:00	0	31	11	5	1	0	0	1	11	0	1	0	61
<b>TOTAL VEHICLES</b>	<b>2</b>	<b>2842</b>	<b>902</b>	<b>167</b>	<b>200</b>	<b>17</b>	<b>1</b>	<b>122</b>	<b>765</b>	<b>27</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>5072</b>
<b>TOTAL AXLES</b>	<b>4</b>	<b>5684</b>	<b>1804</b>	<b>418</b>	<b>400</b>	<b>51</b>	<b>4</b>	<b>427</b>	<b>3825</b>	<b>162</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>12914</b>
<b>GRAND TOTAL VEHICLES</b>	<b>3</b>	<b>5560</b>	<b>1841</b>	<b>379</b>	<b>400</b>	<b>39</b>	<b>3</b>	<b>232</b>	<b>1555</b>	<b>84</b>	<b>49</b>	<b>0</b>	<b>7</b>	<b>10152</b>
<b>GRAND TOTAL AXLES</b>	<b>6</b>	<b>11120</b>	<b>3682</b>	<b>948</b>	<b>800</b>	<b>117</b>	<b>12</b>	<b>812</b>	<b>7775</b>	<b>504</b>	<b>245</b>	<b>0</b>	<b>61</b>	<b>26082</b>

**VEHICLE CLASSIFICATION CODES:**

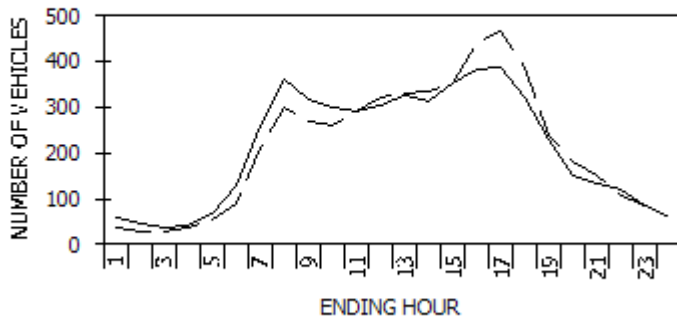
- F1. Motorcycles
- F2. Autos\*
- F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes\*
- F4. Buses
- F5. 2 Axle, 6-Tire Single Unit Trucks
- F6. 3 Axle Single Unit Trucks
- F7. 4 or More Axle Single Unit Trucks
- F8. 4 or Less Axle Vehicles, One Unit is a Truck
- F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
- F10. 6 or More Double Unit Vehicles, One Unit is a Truck
- F11. 5 or Less Axle Multi-Unit Trucks
- F12. 6 Axle Multi-Unit Trucks
- F13. 7 or More Axle Multi-Unit Trucks

\* INCLUDING THOSE HAULING TRAILERS

**FUNCTIONAL CLASS CODES:**

RURAL	URBAN	SYSTEM
01	11	PRINCIPAL ARTERIAL-INTERSTATE
02	12	PRINCIPAL ARTERIAL-EXPRESSWAY
02	14	PRINCIPAL ARTERIAL-OTHER
06	16	MINOR ARTERIAL
07	17	MAJOR COLLECTOR
08	17	MINOR COLLECTOR
09	19	LOCAL SYSTEM

**TRAFFIC FLOW BY DIRECTION**



--- East      - - West

**PEAK HOUR DATA**

DIRECTION	HOUR	COUNT	2-WAY	HOUR	COUNT
East	17	386	A.M.	8	661
West	17	468	P.M.	17	854

New York State Department of Transportation  
Speed Count Average Weekday Report

Station: 930043  
Route #: I 88 Road name:  
From: ACC RT 8 EXIT 9 SIDNEY  
To: OTSEGO CO LN  
Direction: East  
Lanes: 1, 2

Start date: Tue 11/03/2009 14:00  
End date: Mon 11/09/2009 15:45  
County: Delaware  
Town: SIDNEY  
Speed limit: 65  
LION#:

Count duration: 146 hours  
Functional class: 1  
Factor group: 40  
Batch ID: DOT-SJWr9ww44  
Count taken by: Org: TST Init: ---  
Processed by: Org: DOT Init: SJW

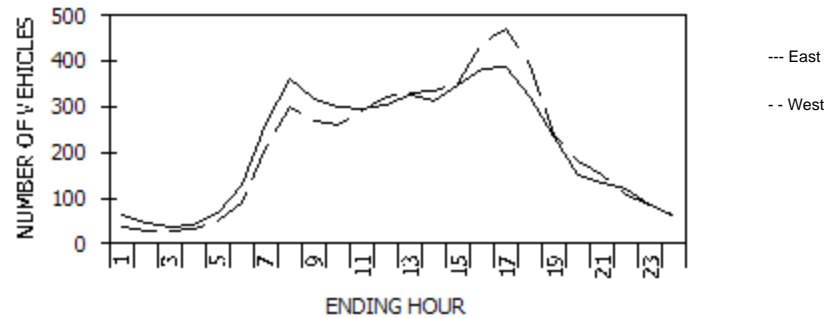
Speeds, mph

Hour	0.0-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-80.0	80.1-85.0	85.1-115.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	% Exc 70.0	% Exc 75.0	Avg	50th%	85th%	Total
1:00	1	0	0	0	0	1	3	19	25	11	1	0	0	96.7	91.8	60.7	19.7	1.6	63.5	66.4	71.3	61
2:00	0	0	0	0	0	2	3	16	18	7	1	0	0	95.7	89.4	55.3	17.0	2.1	65.1	65.7	70.7	47
3:00	1	0	0	0	0	1	3	14	14	4	1	0	0	94.7	86.8	50.0	13.2	2.6	61.2	65.0	69.8	38
4:00	1	0	0	0	0	1	4	11	16	7	1	0	0	95.1	85.4	58.5	19.5	2.4	62.0	66.1	71.4	41
5:00	1	0	0	0	0	1	5	20	26	11	2	0	0	97.0	89.4	59.1	19.7	3.0	63.5	66.2	71.5	66
6:00	0	0	0	0	0	0	5	29	49	35	8	1	1	100.0	96.1	73.4	35.2	7.8	67.9	68.1	73.7	128
7:00	2	0	0	0	0	0	6	36	93	101	20	4	1	99.2	97.0	83.3	47.9	9.5	68.0	69.8	74.3	263
8:00	1	0	0	0	0	1	7	48	122	149	28	4	1	99.4	97.5	84.2	50.4	9.1	68.9	70.1	74.3	361
9:00	3	0	0	0	0	0	7	47	118	114	22	4	2	99.1	96.8	82.0	44.8	8.8	67.5	69.4	74.2	317
10:00	1	0	0	0	0	1	4	49	118	106	16	3	1	99.3	98.0	81.6	42.1	6.7	68.2	69.1	73.9	299
11:00	2	0	0	0	0	0	7	56	122	84	18	4	2	99.3	96.9	78.0	36.6	8.1	67.3	68.4	73.8	295
12:00	2	0	0	0	0	2	8	52	128	91	19	2	0	98.7	96.1	78.9	36.8	6.9	67.1	68.5	73.7	304
13:00	1	0	0	0	0	1	8	54	141	98	17	2	3	99.4	96.9	80.3	36.9	6.8	67.9	68.5	73.7	325
14:00	1	0	0	0	0	1	7	58	121	101	20	5	1	99.4	97.1	78.7	40.3	8.3	68.0	68.8	74.0	315
15:00	2	0	0	0	0	0	6	56	140	120	20	6	0	99.4	97.7	81.7	41.7	7.4	67.8	69.0	73.9	350
16:00	2	0	0	0	0	1	7	60	157	135	17	4	2	99.2	97.4	81.8	41.0	6.0	67.8	69.0	73.8	385
17:00	1	0	0	0	0	1	7	56	155	137	24	5	1	99.5	97.7	83.2	43.2	7.8	68.5	69.2	74.0	387
18:00	2	0	0	0	0	0	7	56	128	111	18	1	0	99.4	97.2	79.9	40.2	5.9	67.4	68.8	73.7	323
19:00	1	0	0	0	0	1	5	45	82	85	13	1	0	99.1	97.0	77.7	42.5	6.0	67.7	69.0	73.8	233
20:00	1	0	0	0	0	1	3	33	57	44	9	4	0	98.7	96.7	75.0	37.5	8.6	67.1	68.4	73.9	152
21:00	1	0	0	0	0	0	4	29	51	41	7	2	0	99.3	96.3	74.8	37.0	6.7	66.9	68.3	73.7	135
22:00	1	0	0	0	0	2	2	33	48	28	7	1	0	97.5	95.9	68.9	29.5	6.6	65.9	67.4	73.2	122
23:00	1	0	0	0	0	0	3	20	39	18	2	0	0	98.8	95.2	71.1	24.1	2.4	65.1	67.3	72.1	83
24:00	0	0	0	0	0	1	4	21	23	8	2	0	0	98.3	91.5	55.9	16.9	3.4	65.4	65.8	70.8	59
Avg. Daily Total	29	0	0	0	0	19	125	918	1991	1646	293	53	15	99.1	96.6	78.6	39.4	7.1	67.5	68.7	73.8	5089
Percent	0.6%	0.0%	0.0%	0.0%	0.0%	0.4%	2.5%	18.0%	39.1%	32.3%	5.8%	1.0%	0.3%									
Cum. Percent	0.6%	0.6%	0.6%	0.6%	0.6%	0.9%	3.4%	21.4%	60.6%	92.9%	98.7%	99.7%	100.0%									
Average hour	1	0	0	0	0	1	5	38	83	69	12	2	1									212

	Avg. Speed	50th% Speed	85th% Speed
East	67.5	68.7	73.8
West	66.2	67.5	73.0

Peak Hour Data					
Direction	Hour	Count	2-way A.M. P.M.	Hour	Count
East	17	387		8	663
West	17	469		17	856

TRAFFIC FLOW BY DIRECTION





New York State Department of Transportation  
Speed Count Average Weekday Report

Station: 930043  
Route #: 1 88 Road name:  
From: ACC RT 8 EXIT 9 SIDNEY  
To: OTSEGO CO LN  
Direction: West  
Lanes: 1, 2

Start date: Tue 11/03/2009 14:00  
End date: Mon 11/09/2009 15:45  
County: Delaware  
Town: SIDNEY  
Speed limit: 65  
LION#:

Count duration: 146 hours  
Functional class: 1  
Factor group: 40  
Batch ID: DOT-SJWr9ww44  
Count taken by: Org: TST Init: ---  
Processed by: Org: DOT Init: SJW

Speeds, mph

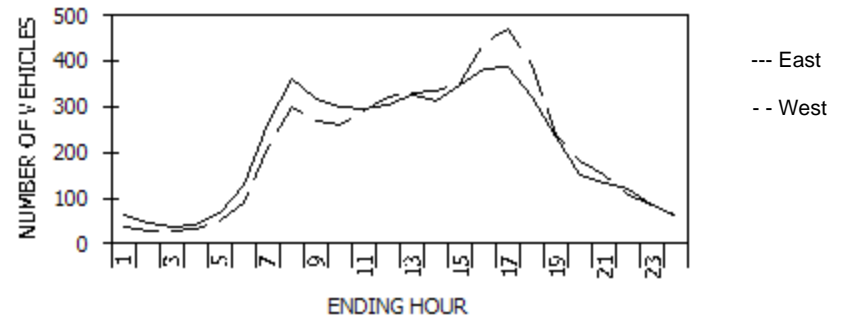
Hour	0.0-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-80.0	80.1-85.0	85.1-115.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	% Exc 70.0	% Exc 75.0	Avg	50th%	85th%	Total
1:00	1	0	0	0	0	1	2	15	13	6	1	0	0	94.9	89.7	51.3	17.9	2.6	61.7	65.2	71.0	39
2:00	0	0	0	0	0	0	2	11	11	5	0	0	0	100.0	93.1	55.2	17.2	0.0	65.5	65.7	70.7	29
3:00	0	0	0	0	0	1	1	14	7	3	0	0	0	96.2	92.3	38.5	11.5	0.0	64.1	64.0	69.4	26
4:00	0	0	0	0	0	1	1	12	13	6	0	0	0	97.0	93.9	57.6	18.2	0.0	65.5	66.0	70.9	33
5:00	1	0	0	0	0	0	5	19	18	9	0	0	0	98.1	88.5	51.9	17.3	0.0	62.5	65.3	70.7	52
6:00	1	0	0	0	0	2	5	28	35	18	2	0	0	96.7	91.2	60.4	22.0	2.2	64.3	66.4	71.8	91
7:00	1	0	0	0	0	1	8	48	88	60	7	0	0	99.1	95.3	72.8	31.5	3.3	66.6	67.8	73.0	213
8:00	1	0	0	0	0	1	5	54	125	94	16	4	2	99.3	97.7	79.8	38.4	7.3	68.0	68.6	73.8	302
9:00	2	0	0	0	0	2	9	64	105	72	12	2	1	98.5	95.2	71.4	32.3	5.6	66.3	67.8	73.3	269
10:00	1	0	0	0	0	2	9	58	99	77	14	0	1	98.9	95.4	73.2	35.2	5.7	67.1	68.1	73.5	261
11:00	1	0	0	0	0	3	11	64	116	81	14	2	1	98.6	94.9	73.0	33.4	5.8	67.0	68.0	73.4	293
12:00	2	0	0	0	1	2	17	80	120	84	15	3	0	98.5	93.2	68.5	31.5	5.6	66.1	67.6	73.2	324
13:00	2	0	0	0	0	2	11	75	141	88	11	1	1	98.8	95.5	72.9	30.4	3.9	66.5	67.7	73.0	332
14:00	3	0	0	0	0	3	19	83	131	79	12	2	1	98.2	92.5	67.6	28.2	4.5	65.5	67.3	72.8	333
15:00	0	0	0	0	0	2	14	82	150	84	18	1	1	99.4	95.5	72.2	29.5	5.7	67.3	67.6	73.1	352
16:00	3	0	0	0	1	4	19	98	167	128	17	3	1	98.2	93.9	71.7	33.8	4.8	66.3	67.9	73.3	441
17:00	2	0	0	0	0	4	23	103	183	132	20	2	0	98.7	93.8	71.9	32.8	4.7	66.6	67.9	73.2	469
18:00	1	0	0	0	0	5	22	96	147	102	15	1	2	98.5	92.8	68.3	30.7	4.6	66.6	67.5	73.1	391
19:00	2	0	0	0	1	2	10	71	89	55	8	2	0	97.9	93.8	64.2	27.1	4.2	65.3	67.0	72.7	240
20:00	1	0	0	0	0	2	6	50	73	41	5	2	0	98.3	95.0	67.2	26.7	3.9	66.0	67.2	72.6	180
21:00	1	0	0	0	1	1	10	47	57	29	5	0	0	98.0	91.4	60.3	22.5	3.3	64.9	66.4	72.0	151
22:00	1	0	0	0	0	1	11	39	34	14	5	1	0	98.1	87.7	50.9	18.9	5.7	63.9	65.2	71.5	106
23:00	0	0	0	0	0	1	7	30	31	15	2	1	0	98.9	90.8	56.3	20.7	3.4	65.7	65.9	71.7	87
24:00	1	0	0	0	0	0	4	22	20	14	1	0	0	98.4	91.9	56.5	24.2	1.6	63.7	66.0	72.1	62
Avg. Daily Total	28	0	0	0	4	43	231	1263	1973	1296	200	27	11	98.5	94.0	69.1	30.2	4.7	66.2	67.5	73.0	5076
Percent	0.6%	0.0%	0.0%	0.0%	0.1%	0.8%	4.6%	24.9%	38.9%	25.5%	3.9%	0.5%	0.2%									
Cum. Percent	0.6%	0.6%	0.6%	0.6%	0.6%	1.5%	6.0%	30.9%	69.8%	95.3%	99.3%	99.8%	100.0%									
Average hour	1	0	0	0	0	2	10	53	82	54	8	1	0									212

TRAFFIC FLOW BY DIRECTION

Direction	Avg. Speed	50th% Speed	85th% Speed
East	67.5	68.7	73.8
West	66.2	67.5	73.0

Peak Hour Data					
Direction	Hour	Count	2-way A.M. P.M.	Hour	Count
East	17	387		8	663
West	17	469		17	856



New York State Department of Transportation  
Classification Count Average Weekday Data Report

ROUTE #: I 88 ROAD NAME:  
 COUNTY NAME: Delaware  
 REGION CODE: 9  
 FROM: ACC RT 8 EXIT 9 SIDNEY  
 TO: OTSEGO CO LN  
 REF-MARKER: 88193031025  
 END MILEPOINT: 0310621  
 FUNC-CLASS: 01  
 STATION NO: 0043  
 COUNT TAKEN BY: ORG CODE: TST INITIALS: ---  
 PROCESSED BY: ORG CODE: DOT INITIALS: SJW

YEAR: 2009  
 MONTH: November

STATION: 930043

DIRECTION	East	West	TOTAL
NUMBER OF VEHICLES	5080	5072	10152
NUMBER OF AXLES	13168	12914	26082
% HEAVY VEHICLES (F4-F13)	27.99%	26.14%	27.07%
% TRUCKS AND BUSES (F3-F13)	46.48%	43.93%	45.20%
AXLE CORRECTION FACTOR	0.77	0.79	0.78

BATCH ID: DOT-SJWr9ww44

VEHICLE CLASS	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	TOTAL
NO. OF AXLES	2	2	2	2.5	2	3	4	3.5	5	6	5	6	8.75	
ENDING HOUR	1:00	0	18	7	5	1	0	2	26	0	1	0	0	60
	2:00	0	9	5	3	1	0	1	27	1	0	0	0	47
	3:00	0	5	1	5	1	0	3	21	0	1	0	0	37
	4:00	0	9	3	4	1	1	0	20	0	2	0	0	40
	5:00	0	13	8	7	3	0	2	29	1	3	0	0	66
	6:00	0	49	23	7	6	0	4	32	0	6	0	0	127
	7:00	0	128	69	8	16	0	7	31	1	1	0	0	261
	8:00	0	223	67	8	16	4	5	35	2	1	0	0	361
	9:00	0	184	62	7	22	1	6	32	1	0	0	1	316
	10:00	0	168	60	11	12	2	1	34	3	0	0	1	298
DIRECTION	11:00	1	161	56	11	12	2	0	35	6	0	0	1	293
East	12:00	0	164	61	14	11	2	1	36	6	0	0	2	305
	13:00	0	183	54	11	16	2	0	46	6	0	0	0	325
	14:00	0	166	66	13	12	2	0	45	5	0	0	0	315
	15:00	0	194	68	16	12	4	10	41	7	0	0	1	353
	16:00	0	227	87	14	11	1	0	32	6	0	0	1	384
	17:00	0	242	73	10	13	1	0	38	3	0	0	0	386
	18:00	0	200	56	10	11	0	0	37	5	0	0	0	322
	19:00	0	132	41	10	8	0	0	35	1	0	0	0	232
	20:00	0	76	20	11	5	0	0	36	1	0	0	0	152
	21:00	0	64	19	7	4	0	0	37	1	0	0	0	135
	22:00	0	54	17	9	3	0	0	32	0	1	0	0	120
	23:00	0	30	9	5	3	0	0	31	0	3	0	0	86
	24:00	0	19	7	6	0	0	0	22	1	3	0	0	59
TOTAL VEHICLES	1	2718	939	212	200	22	2	110	790	57	22	0	7	5080
TOTAL AXLES	2	5436	1878	530	400	66	8	385	3950	342	110	0	61	13168
ENDING HOUR	1:00	0	15	4	2	1	0	0	3	12	1	0	0	39
	2:00	0	12	2	2	1	0	0	9	0	1	0	0	30
	3:00	0	7	2	2	0	0	0	14	1	1	0	0	28
	4:00	0	7	5	3	1	0	0	15	1	2	0	0	36
	5:00	0	17	8	5	0	0	0	16	2	1	0	0	53
	6:00	0	36	19	2	4	1	0	22	0	4	0	0	91
	7:00	0	108	49	7	9	0	0	32	2	2	0	0	214
	8:00	0	186	54	9	11	0	0	30	2	0	0	0	300
	9:00	0	149	52	7	16	2	0	33	2	0	0	0	268
	10:00	0	144	53	8	12	2	0	36	1	0	0	0	262
	11:00	0	156	56	10	15	1	0	44	2	1	0	0	292
DIRECTION	12:00	2	179	57	12	13	2	0	49	2	0	0	0	323
West	13:00	0	181	63	12	16	2	0	48	1	0	0	0	329
	14:00	0	175	56	13	17	2	1	54	3	0	0	0	334
	15:00	0	216	66	10	11	0	0	42	2	0	0	0	353
	16:00	0	259	91	15	17	3	0	49	1	0	0	0	440
	17:00	0	292	84	10	18	1	0	50	2	1	0	0	468
	18:00	0	253	62	8	13	0	0	42	1	1	0	0	389
	19:00	0	136	38	7	11	0	0	40	1	0	0	0	238
	20:00	0	104	26	7	5	1	0	33	0	1	0	0	181
	21:00	0	76	21	3	4	0	0	38	0	3	0	0	150
	22:00	0	63	10	3	2	0	0	23	0	3	0	0	106
	23:00	0	40	13	4	2	0	0	23	0	4	0	0	87
	24:00	0	31	11	5	1	0	0	11	0	1	0	0	61
TOTAL VEHICLES	2	2842	902	167	200	17	1	122	765	27	27	0	0	5072
TOTAL AXLES	4	5684	1804	418	400	51	4	427	3825	162	135	0	0	12914
GRAND TOTAL VEHICLES	3	5560	1841	379	400	39	3	232	1555	84	49	0	7	10152
GRAND TOTAL AXLES	6	11120	3682	948	800	117	12	812	7775	504	245	0	61	26082

VEHICLE CLASSIFICATION CODES:

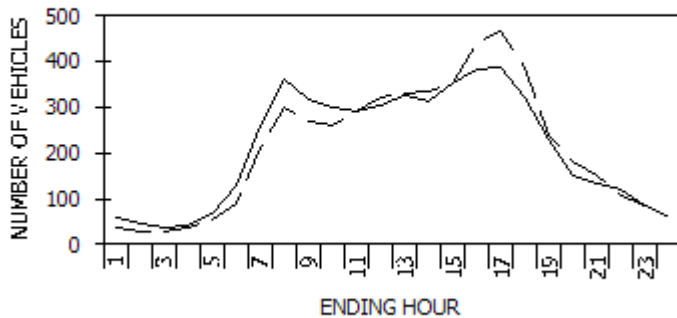
- F1. Motorcycles
- F2. Autos\*
- F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes\*
- F4. Buses
- F5. 2 Axle, 6-Tire Single Unit Trucks
- F6. 3 Axle Single Unit Trucks
- F7. 4 or More Axle Single Unit Trucks
- F8. 4 or Less Axle Vehicles, One Unit is a Truck
- F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
- F10. 6 or More Double Unit Vehicles, One Unit is a Truck
- F11. 5 or Less Axle Multi-Unit Trucks
- F12. 6 Axle Multi-Unit Trucks
- F13. 7 or More Axle Multi-Unit Trucks

\* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:

- | RURAL | URBAN | SYSTEM                        |
|-------|-------|-------------------------------|
| 01    | 11    | PRINCIPAL ARTERIAL-INTERSTATE |
| 02    | 12    | PRINCIPAL ARTERIAL-EXPRESSWAY |
| 02    | 14    | PRINCIPAL ARTERIAL-OTHER      |
| 06    | 16    | MINOR ARTERIAL                |
| 07    | 17    | MAJOR COLLECTOR               |
| 08    | 17    | MINOR COLLECTOR               |
| 09    | 19    | LOCAL SYSTEM                  |

TRAFFIC FLOW BY DIRECTION



--- East                      - - West

PEAK HOUR DATA

DIRECTION	HOUR	COUNT	2-WAY	HOUR	COUNT
East	17	386	A.M.	8	661
West	17	468	P.M.	17	854

New York State Department of Transportation  
Speed Count Average Weekday Report

Station: 930043  
Route #: 1 88 Road name:  
From: ACC RT 8 EXIT 9 SIDNEY  
To: OTSEGO CO LN  
Direction: East  
Lanes: 1, 2

Start date: Tue 11/03/2009 14:00  
End date: Mon 11/09/2009 15:45  
County: Delaware  
Town: SIDNEY  
Speed limit: 65  
LION#:

Count duration: 146 hours  
Functional class: 1  
Factor group: 40  
Batch ID: DOT-SJWr9ww44  
Count taken by: Org: TST Init: ---  
Processed by: Org: DOT Init: SJW

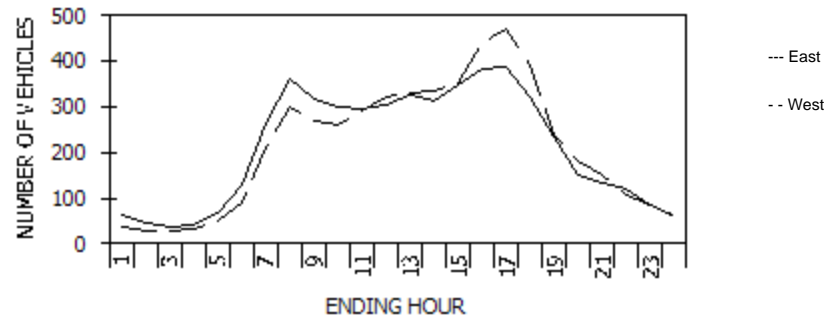
Speeds, mph

Hour	0.0-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-80.0	80.1-85.0	85.1-115.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	% Exc 70.0	% Exc 75.0	Avg	50th%	85th%	Total
1:00	1	0	0	0	0	1	3	19	25	11	1	0	0	96.7	91.8	60.7	19.7	1.6	63.5	66.4	71.3	61
2:00	0	0	0	0	0	2	3	16	18	7	1	0	0	95.7	89.4	55.3	17.0	2.1	65.1	65.7	70.7	47
3:00	1	0	0	0	0	1	3	14	14	4	1	0	0	94.7	86.8	50.0	13.2	2.6	61.2	65.0	69.8	38
4:00	1	0	0	0	0	1	4	11	16	7	1	0	0	95.1	85.4	58.5	19.5	2.4	62.0	66.1	71.4	41
5:00	1	0	0	0	0	1	5	20	26	11	2	0	0	97.0	89.4	59.1	19.7	3.0	63.5	66.2	71.5	66
6:00	0	0	0	0	0	0	5	29	49	35	8	1	1	100.0	96.1	73.4	35.2	7.8	67.9	68.1	73.7	128
7:00	2	0	0	0	0	0	6	36	93	101	20	4	1	99.2	97.0	83.3	47.9	9.5	68.0	69.8	74.3	263
8:00	1	0	0	0	0	1	7	48	122	149	28	4	1	99.4	97.5	84.2	50.4	9.1	68.9	70.1	74.3	361
9:00	3	0	0	0	0	0	7	47	118	114	22	4	2	99.1	96.8	82.0	44.8	8.8	67.5	69.4	74.2	317
10:00	1	0	0	0	0	1	4	49	118	106	16	3	1	99.3	98.0	81.6	42.1	6.7	68.2	69.1	73.9	299
11:00	2	0	0	0	0	0	7	56	122	84	18	4	2	99.3	96.9	78.0	36.6	8.1	67.3	68.4	73.8	295
12:00	2	0	0	0	0	2	8	52	128	91	19	2	0	98.7	96.1	78.9	36.8	6.9	67.1	68.5	73.7	304
13:00	1	0	0	0	0	1	8	54	141	98	17	2	3	99.4	96.9	80.3	36.9	6.8	67.9	68.5	73.7	325
14:00	1	0	0	0	0	1	7	58	121	101	20	5	1	99.4	97.1	78.7	40.3	8.3	68.0	68.8	74.0	315
15:00	2	0	0	0	0	0	6	56	140	120	20	6	0	99.4	97.7	81.7	41.7	7.4	67.8	69.0	73.9	350
16:00	2	0	0	0	0	1	7	60	157	135	17	4	2	99.2	97.4	81.8	41.0	6.0	67.8	69.0	73.8	385
17:00	1	0	0	0	0	1	7	56	155	137	24	5	1	99.5	97.7	83.2	43.2	7.8	68.5	69.2	74.0	387
18:00	2	0	0	0	0	0	7	56	128	111	18	1	0	99.4	97.2	79.9	40.2	5.9	67.4	68.8	73.7	323
19:00	1	0	0	0	0	1	5	45	82	85	13	1	0	99.1	97.0	77.7	42.5	6.0	67.7	69.0	73.8	233
20:00	1	0	0	0	0	1	3	33	57	44	9	4	0	98.7	96.7	75.0	37.5	8.6	67.1	68.4	73.9	152
21:00	1	0	0	0	0	0	4	29	51	41	7	2	0	99.3	96.3	74.8	37.0	6.7	66.9	68.3	73.7	135
22:00	1	0	0	0	0	2	2	33	48	28	7	1	0	97.5	95.9	68.9	29.5	6.6	65.9	67.4	73.2	122
23:00	1	0	0	0	0	0	3	20	39	18	2	0	0	98.8	95.2	71.1	24.1	2.4	65.1	67.3	72.1	83
24:00	0	0	0	0	0	1	4	21	23	8	2	0	0	98.3	91.5	55.9	16.9	3.4	65.4	65.8	70.8	59
Avg. Daily Total	29	0	0	0	0	19	125	918	1991	1646	293	53	15	99.1	96.6	78.6	39.4	7.1	67.5	68.7	73.8	5089
Percent	0.6%	0.0%	0.0%	0.0%	0.0%	0.4%	2.5%	18.0%	39.1%	32.3%	5.8%	1.0%	0.3%									
Cum. Percent	0.6%	0.6%	0.6%	0.6%	0.6%	0.9%	3.4%	21.4%	60.6%	92.9%	98.7%	99.7%	100.0%									
Average hour	1	0	0	0	0	1	5	38	83	69	12	2	1									212

	Avg. Speed	50th% Speed	85th% Speed
East	67.5	68.7	73.8
West	66.2	67.5	73.0

Peak Hour Data					
Direction	Hour	Count	2-way A.M. P.M.	Hour	Count
East	17	387		8	663
West	17	469		17	856

TRAFFIC FLOW BY DIRECTION



New York State Department of Transportation  
Speed Count Average Weekday Report

Station: 930043  
Route #: 1 88 Road name:  
From: ACC RT 8 EXIT 9 SIDNEY  
To: OTSEGO CO LN  
Direction: West  
Lanes: 1, 2

Start date: Tue 11/03/2009 14:00  
End date: Mon 11/09/2009 15:45  
County: Delaware  
Town: SIDNEY  
Speed limit: 65  
LION#:

Count duration: 146 hours  
Functional class: 1  
Factor group: 40  
Batch ID: DOT-SJWr9ww44  
Count taken by: Org: TST Init: ---  
Processed by: Org: DOT Init: SJW

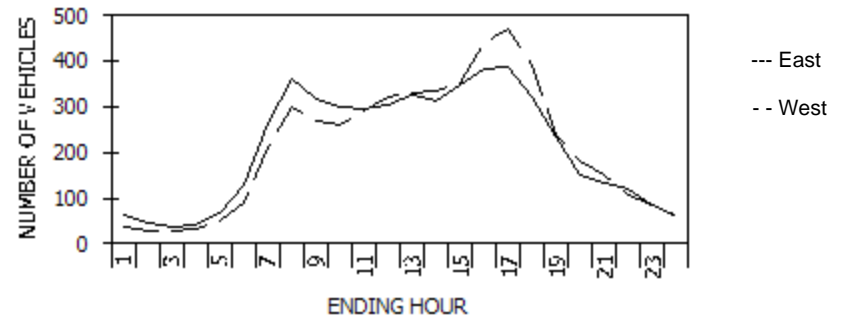
Speeds, mph

Hour	0.0-30.0	30.1-35.0	35.1-40.0	40.1-45.0	45.1-50.0	50.1-55.0	55.1-60.0	60.1-65.0	65.1-70.0	70.1-75.0	75.1-80.0	80.1-85.0	85.1-115.0	% Exc 55.0	% Exc 60.0	% Exc 65.0	% Exc 70.0	% Exc 75.0	Avg	50th%	85th%	Total
1:00	1	0	0	0	0	1	2	15	13	6	1	0	0	94.9	89.7	51.3	17.9	2.6	61.7	65.2	71.0	39
2:00	0	0	0	0	0	0	2	11	11	5	0	0	0	100.0	93.1	55.2	17.2	0.0	65.5	65.7	70.7	29
3:00	0	0	0	0	0	1	1	14	7	3	0	0	0	96.2	92.3	38.5	11.5	0.0	64.1	64.0	69.4	26
4:00	0	0	0	0	0	1	1	12	13	6	0	0	0	97.0	93.9	57.6	18.2	0.0	65.5	66.0	70.9	33
5:00	1	0	0	0	0	0	5	19	18	9	0	0	0	98.1	88.5	51.9	17.3	0.0	62.5	65.3	70.7	52
6:00	1	0	0	0	0	2	5	28	35	18	2	0	0	96.7	91.2	60.4	22.0	2.2	64.3	66.4	71.8	91
7:00	1	0	0	0	0	1	8	48	88	60	7	0	0	99.1	95.3	72.8	31.5	3.3	66.6	67.8	73.0	213
8:00	1	0	0	0	0	1	5	54	125	94	16	4	2	99.3	97.7	79.8	38.4	7.3	68.0	68.6	73.8	302
9:00	2	0	0	0	0	2	9	64	105	72	12	2	1	98.5	95.2	71.4	32.3	5.6	66.3	67.8	73.3	269
10:00	1	0	0	0	0	2	9	58	99	77	14	0	1	98.9	95.4	73.2	35.2	5.7	67.1	68.1	73.5	261
11:00	1	0	0	0	0	3	11	64	116	81	14	2	1	98.6	94.9	73.0	33.4	5.8	67.0	68.0	73.4	293
12:00	2	0	0	0	1	2	17	80	120	84	15	3	0	98.5	93.2	68.5	31.5	5.6	66.1	67.6	73.2	324
13:00	2	0	0	0	0	2	11	75	141	88	11	1	1	98.8	95.5	72.9	30.4	3.9	66.5	67.7	73.0	332
14:00	3	0	0	0	0	3	19	83	131	79	12	2	1	98.2	92.5	67.6	28.2	4.5	65.5	67.3	72.8	333
15:00	0	0	0	0	0	2	14	82	150	84	18	1	1	99.4	95.5	72.2	29.5	5.7	67.3	67.6	73.1	352
16:00	3	0	0	0	1	4	19	98	167	128	17	3	1	98.2	93.9	71.7	33.8	4.8	66.3	67.9	73.3	441
17:00	2	0	0	0	0	4	23	103	183	132	20	2	0	98.7	93.8	71.9	32.8	4.7	66.6	67.9	73.2	469
18:00	1	0	0	0	0	5	22	96	147	102	15	1	2	98.5	92.8	68.3	30.7	4.6	66.6	67.5	73.1	391
19:00	2	0	0	0	1	2	10	71	89	55	8	2	0	97.9	93.8	64.2	27.1	4.2	65.3	67.0	72.7	240
20:00	1	0	0	0	0	2	6	50	73	41	5	2	0	98.3	95.0	67.2	26.7	3.9	66.0	67.2	72.6	180
21:00	1	0	0	0	1	1	10	47	57	29	5	0	0	98.0	91.4	60.3	22.5	3.3	64.9	66.4	72.0	151
22:00	1	0	0	0	0	1	11	39	34	14	5	1	0	98.1	87.7	50.9	18.9	5.7	63.9	65.2	71.5	106
23:00	0	0	0	0	0	1	7	30	31	15	2	1	0	98.9	90.8	56.3	20.7	3.4	65.7	65.9	71.7	87
24:00	1	0	0	0	0	0	4	22	20	14	1	0	0	98.4	91.9	56.5	24.2	1.6	63.7	66.0	72.1	62
Avg. Daily Total	28	0	0	0	4	43	231	1263	1973	1296	200	27	11	98.5	94.0	69.1	30.2	4.7	66.2	67.5	73.0	5076
Percent	0.6%	0.0%	0.0%	0.0%	0.1%	0.8%	4.6%	24.9%	38.9%	25.5%	3.9%	0.5%	0.2%									
Cum. Percent	0.6%	0.6%	0.6%	0.6%	0.6%	1.5%	6.0%	30.9%	69.8%	95.3%	99.3%	99.8%	100.0%									
Average hour	1	0	0	0	0	2	10	53	82	54	8	1	0									212

TRAFFIC FLOW BY DIRECTION

	Avg. Speed	50th% Speed	85th% Speed
East	67.5	68.7	73.8
West	66.2	67.5	73.0

Peak Hour Data					
Direction	Hour	Count	2-way A.M. P.M.	Hour	Count
East	17	387		8	663
West	17	469		17	856



# Airport Noise Worksheet

**Use this worksheet to identify information needed to evaluate a site’s exposure to aircraft noise.**

Name and Location of Project: Circle Drive Neighborhood Development Project  
 Intersection of Circle Drive and West Main Street, Village of Sidney, Delaware County, New York 13838

Date: December 7, 2016

Name of Airport: Sidney Municipal Airport

Person completing worksheet: Cliff Jarman

Determine if the proposed site/project is within 15 miles of a civil or military airport.

- No. Attach a map identifying the location of the proposed project site and the location of any airports. This worksheet is not required.
- Yes. Attach a map identifying the location of the proposed project site and the location of any airports. Continue

Determine the number of operations at the airport by:

- Going to: <http://www.gcr1.com/5010web/>
- Type in the name of the city press search
- Find your airport.
- Open the report under “Print 5010”

Determine if the annual number of operations for air carriers #100, air taxis #102, military #105, and general aviation #103 plus #104 exceeds thresholds.

Operations	Annual #	Threshold	Yes	No
Annual air carrier	0	9000 or more		X
Annual air taxi	800	18,000 or more		X
Annual military operations	0	18,000 or more		X
Annual general aviation	7,800	72,000 or more		X

If you answer “No” on each of the questions above, it is assumed that the noise attributed to the airplanes will not extend beyond the boundaries of the airport. Maintain the documentation in your Environmental Review Record. You are finished with the evaluation of airport noise for this airport.

If you have marked any question in #3 with “Yes.” Contact the airport manager and ask them if the airport has noise contour maps. Are contour maps available?

- Yes. Locate your project on the noise contour map. If there are no roads or railroads that are being considered for noise, utilize the information from the contour map to determine if the site is acceptable. If roads or railroads are being considered input the information obtained from the airport noise contours, along with the road and railroad information in the HUD [Noise Assessment Guidelines](#) (NAG) or the online tool at <https://www.hudexchange.info/environmental-review/dnl-calculator>.
- No. Construct the approximate DNL contours by using the guidance on page 52 and 53 of the [NAG](#). You will need to obtain the following information from the airport:
- 1). The number of nighttime jet operations (10pm to 7 am)
  - 2). The number of daytime jet operations (7 am to 10 pm)
  - 3). The flight paths of the major runways.
  - 4). Any available information about expected changes in airport traffic (e.g. will the number of operations increase or decrease in the next 10 to 15 years).

**Contact your HUD Representative if you need assistance**