



Noise Compatibility

2010 Year End Report

March 7, 2011

Noise Highlights of 2010

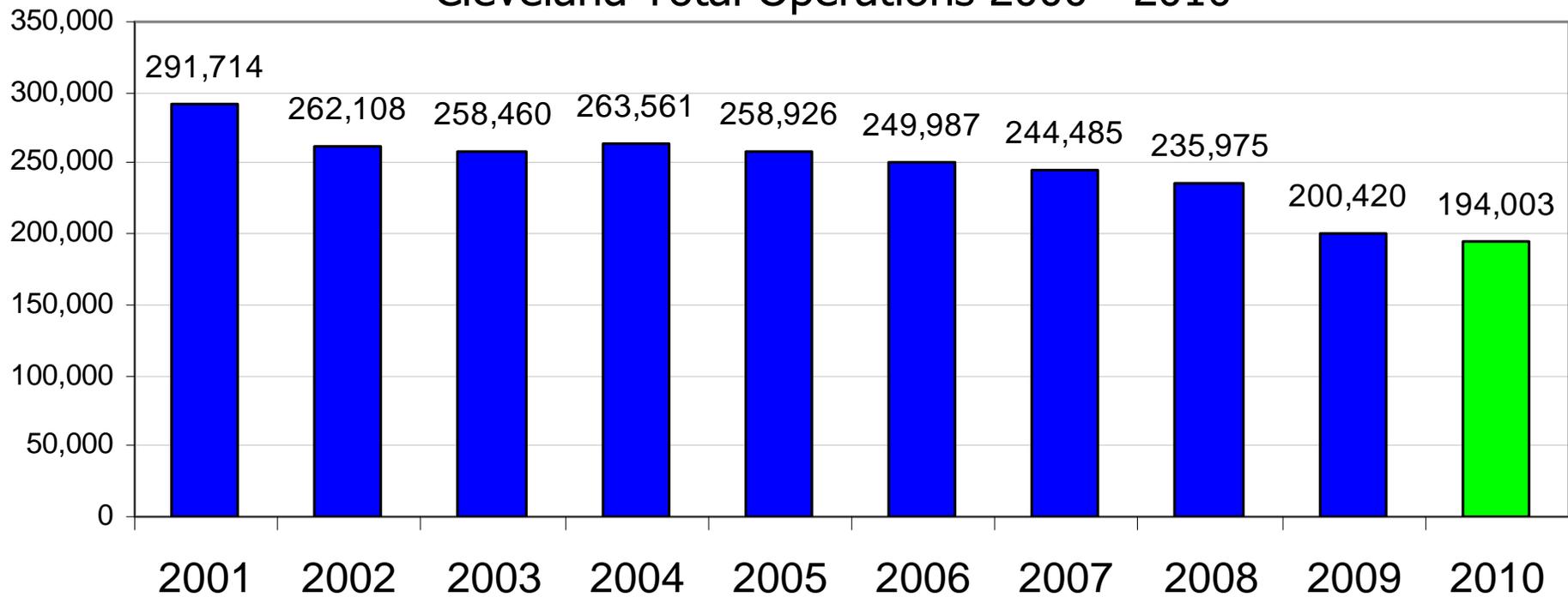


- Airport operations for Year 2010 were down 3.2%, compared to Year 2009
- Operations of aircraft meeting Stage 3 requirements through presence of a hush kit for Year 2010 increased 76.3%, compared to Year 2009.
- Runway 10/28 was closed as follows:
 - from Feb 27 to Mar 2 for survey and boring
 - from Aug 11 to 13 between 7:00 AM and 5:00 PM due to NASA activity
 - From Sep 1-3 between 8:00 AM and 4:00 PM due to NASA activity
- Runway 6L/24R available for only a portion of its length, when it was not closed entirely, due to construction between 12:00 noon, Sep 2 and 5:00 PM, Sep 6
- No other runways were closed during twelve consecutive hours of active operation
- Noise Complaints for Year 2010 were down 47.3%, compared to Year 2009.
- Noise Compatibility Plan Update (FAR Part 150 Study)
 - There is a dedicated public website at www.CLEnoisestudy.com and a dedicated Part 150 Hotline number at 216.898.6788

Aircraft Operations



Cleveland Total Operations 2000 - 2010



There were 194,003 landings and takeoffs in 2010; this is 17.8% below 2008 and 3.2% below 2009

Source: FAA Control Tower Traffic Count Reports

Fleet Mix

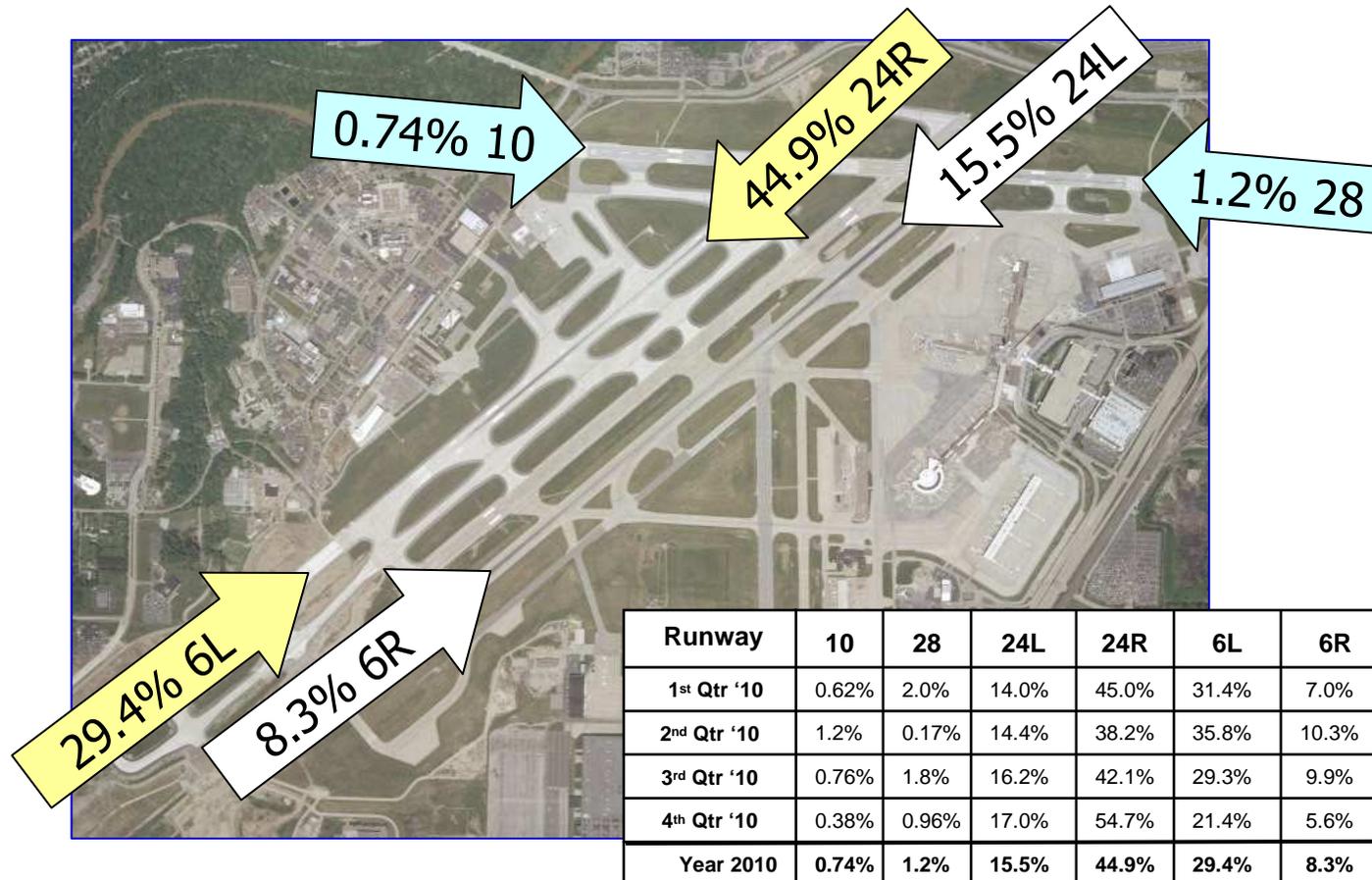


Landings & Takeoffs

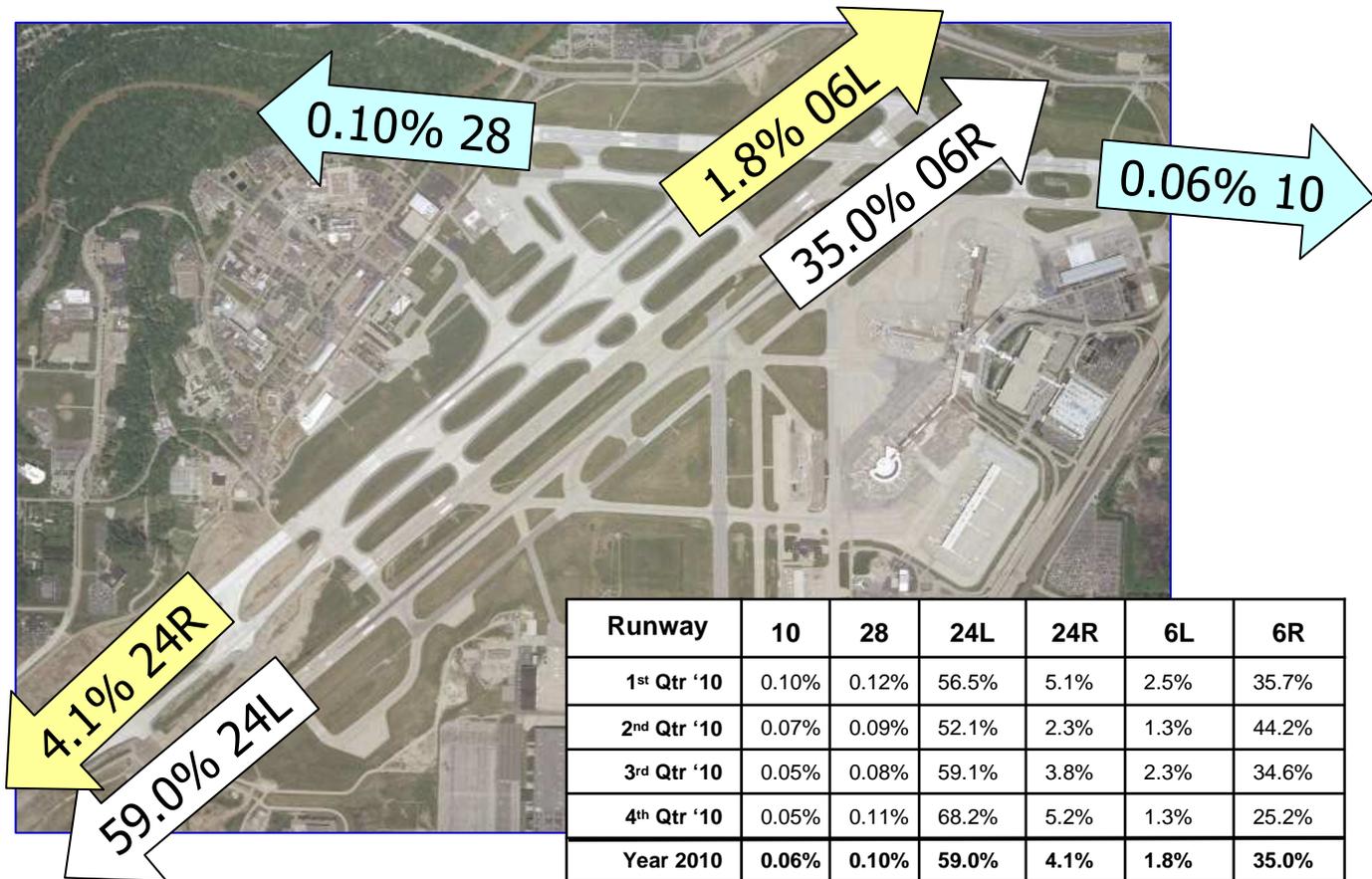
	2010 Activity		2009 Activity	
Commercial				
-Stage 2 with hush kit	594	0.31%	337	0.17%
-Heavy (Includes all B757s)	5,738	2.96%	4,042	2.02%
-Other Stage 3	48,229	24.86%	54,929	27.40%
-Regional Jet	98,706	50.88%	99,684	49.74%
-Turboprop	28,646	14.77%	29,863	14.90%
Air Taxi	2,997	1.54%	3,472	1.73%
General Aviation	8,730	4.50%	7,813	3.90%
Military	363	0.19%	280	0.14%
Total	194,003	100.00%	200,420	100.00%

All aircraft above are Stage 3 certified with the exception of some Military aircraft and about 2% of General Aviation aircraft, counting helicopters. A hush kit reduces noise enough to meet Stage 3 levels, but well short of the noise level of typical aircraft originally manufactured as Stage 3.

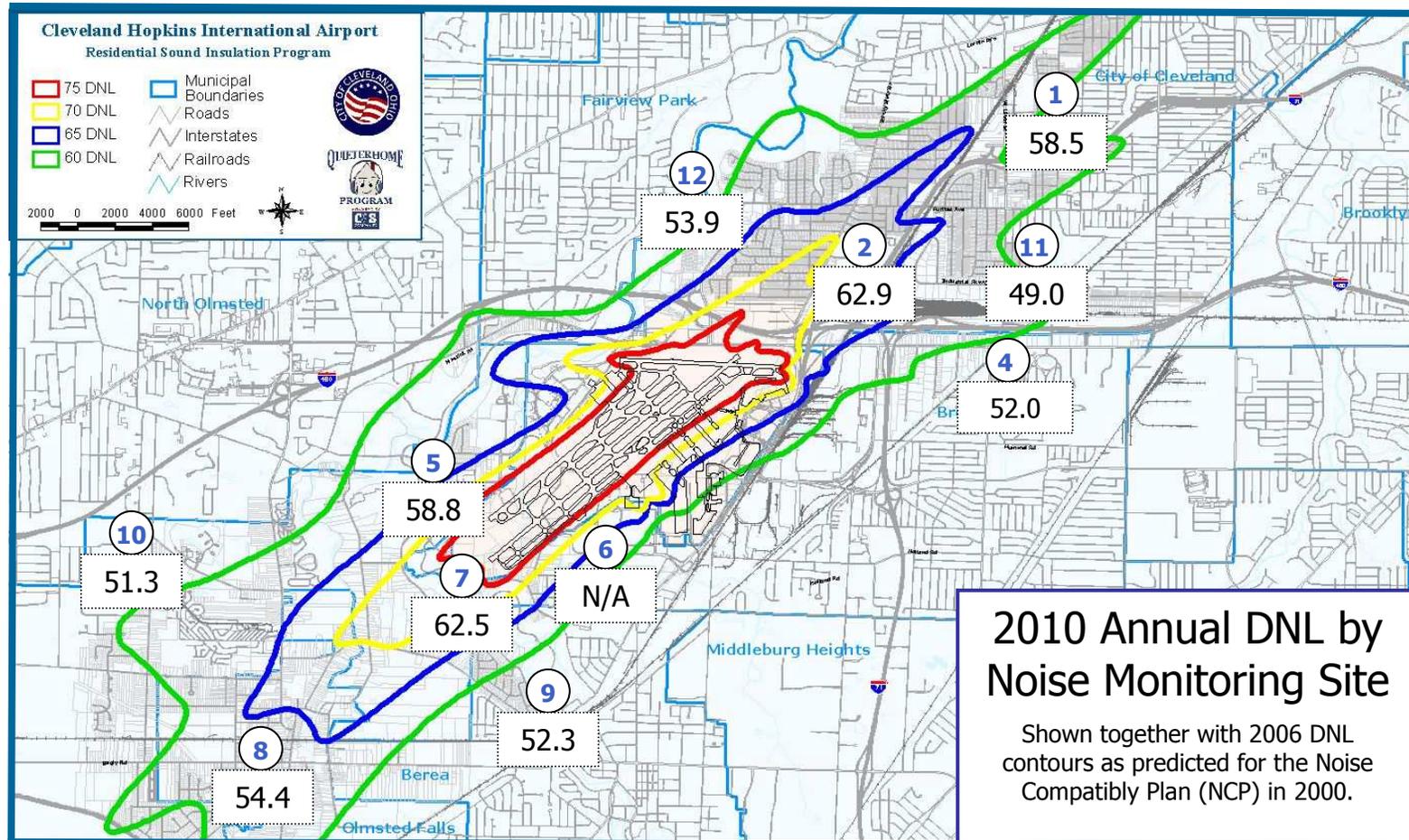
Runway Use: Year 2010 Landings



Runway Use: Year 2010 Take-Offs

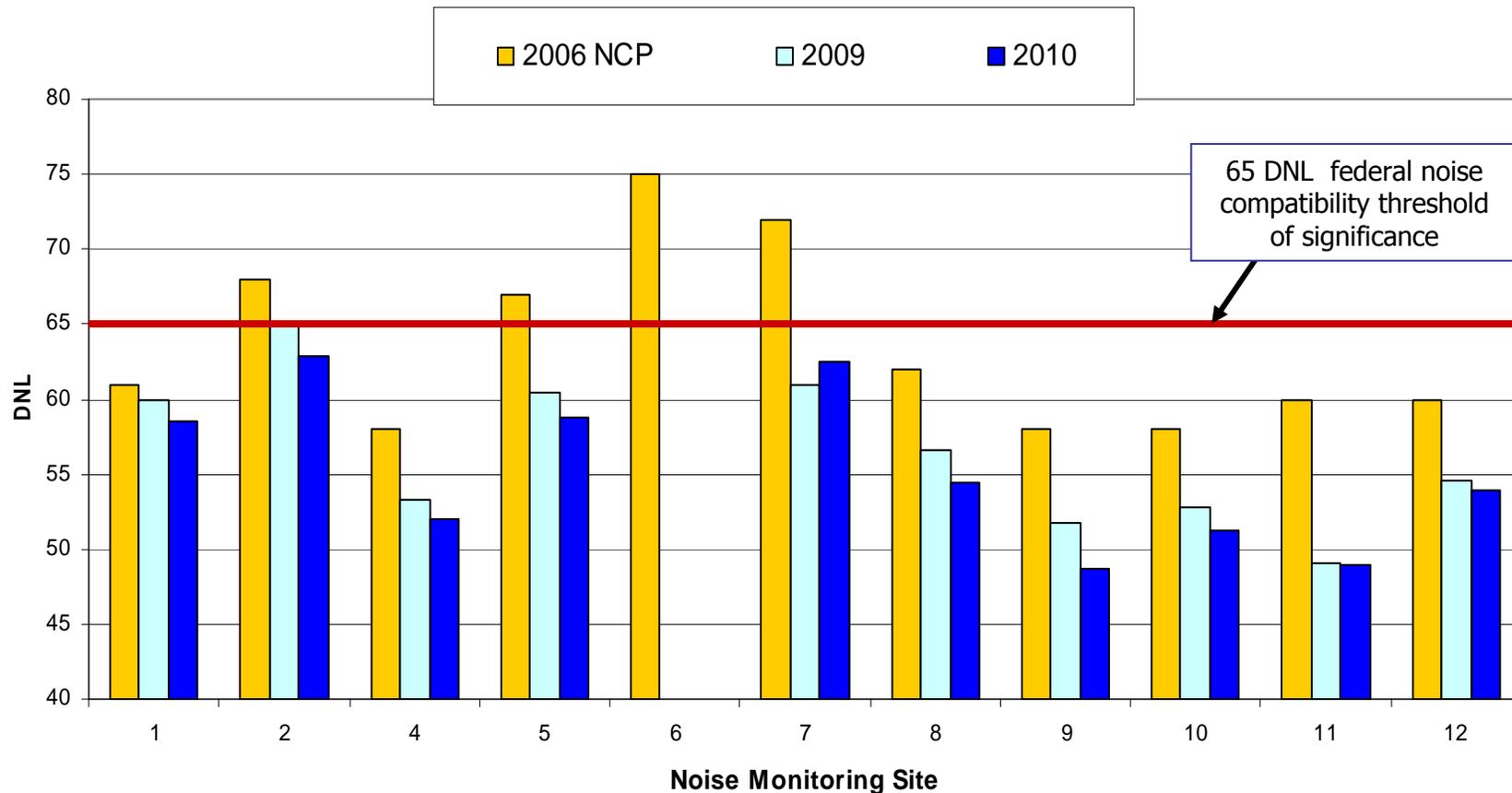


Aircraft Noise: 2010 Annual DNL



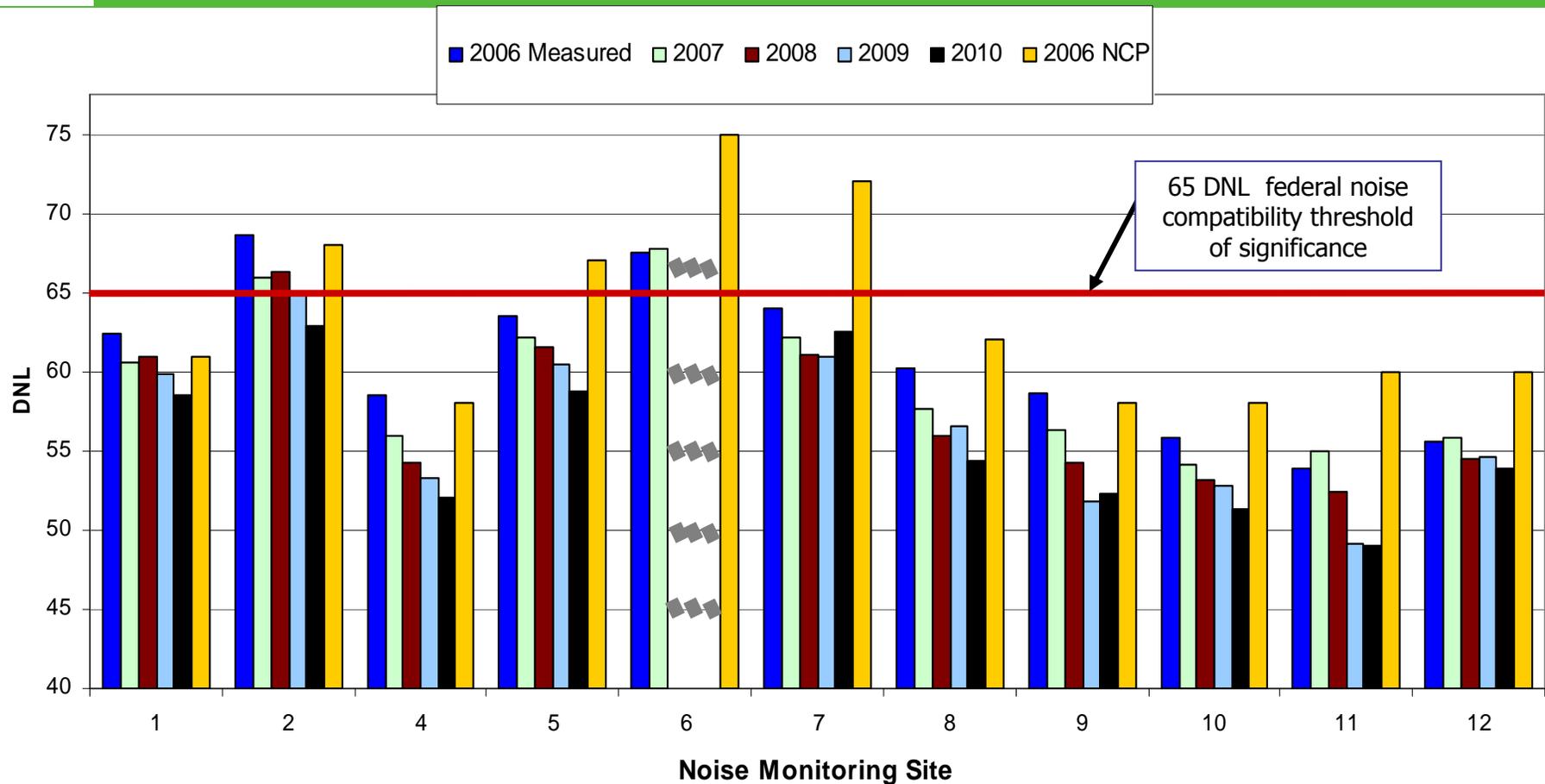
Due to outages and malfunctions, the DNL calculations for NMS01, NMS02, NMS04, NMS09, and NMS10 were for 299, 349, 358, 173, and 342 days, respectively. The DNL calculation was for at least 363 days for the remaining five sites.

DNL Change from 2009 to 2010



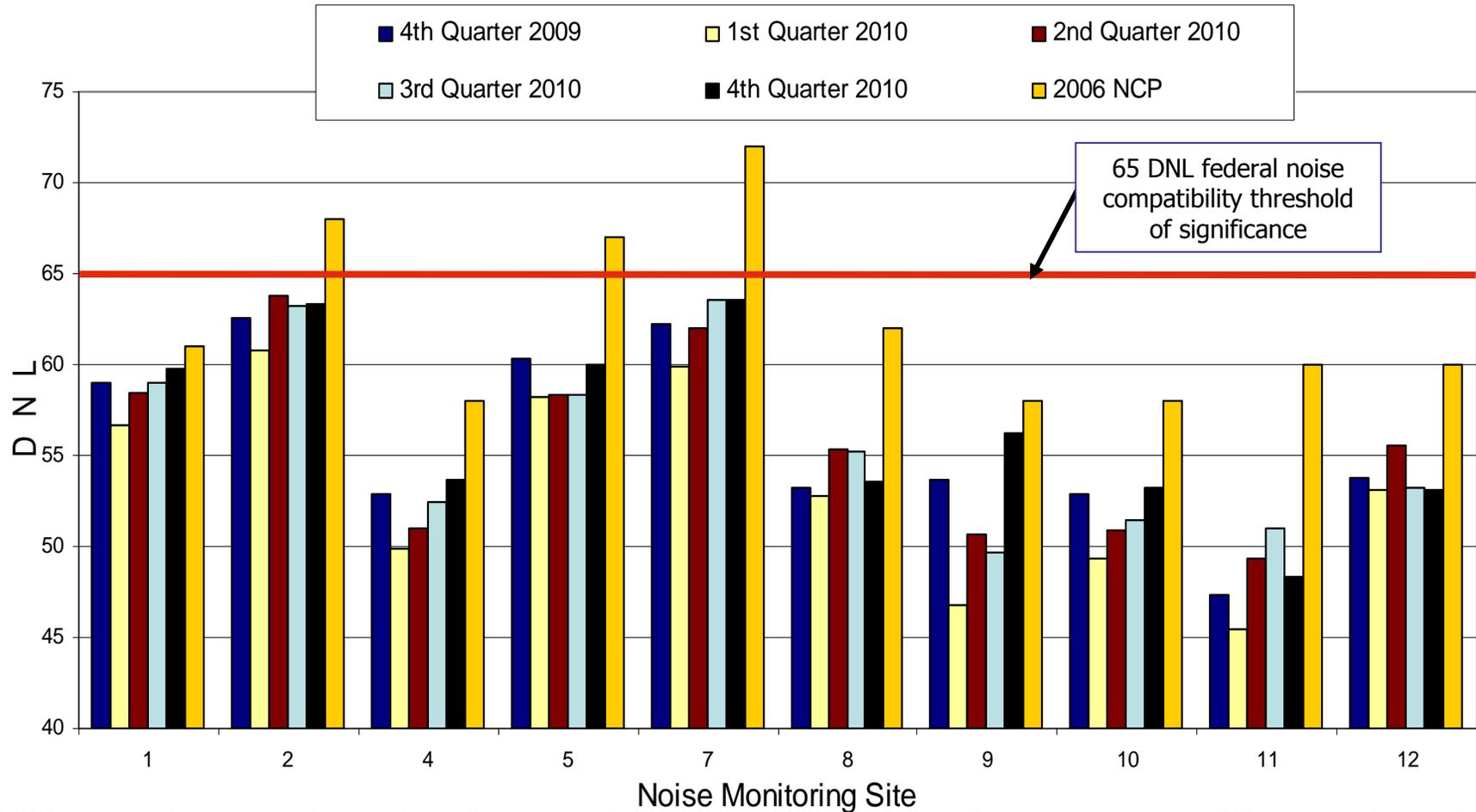
NMS06 was disconnected from power, dismantled and placed in storage in November 2008 due to runway expansion.

DNL Comparison by Year



Noise Monitoring Site
NMS06 was disconnected from power, dismantled and placed in storage in November 2008 due to runway expansion. Less than 6 months of data is available from 2008.

Five Qtr DNL Comparison

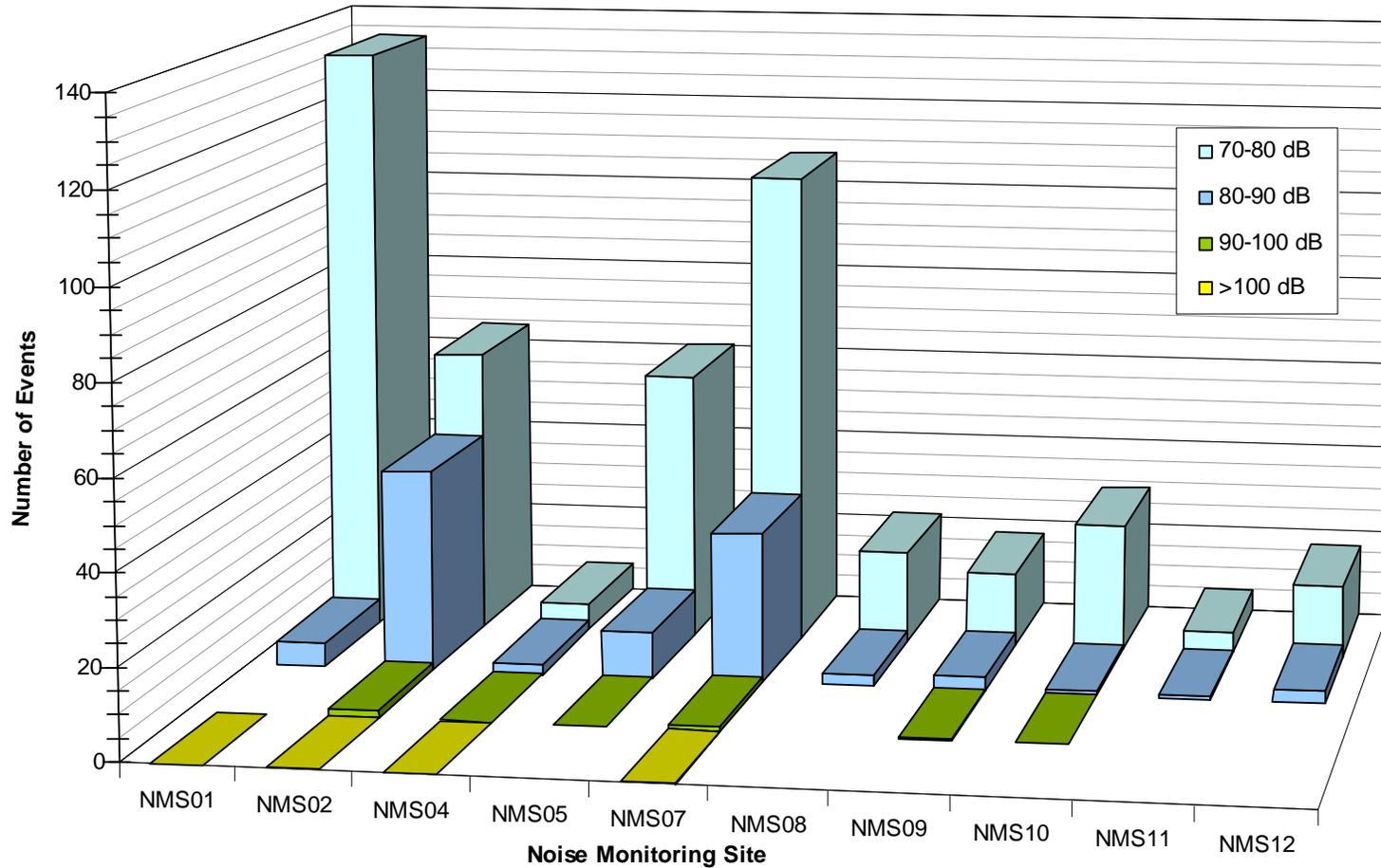


NMS09 data was available only sporadically over Oct and Nov, but was available for nearly all of Dec. Accordingly, only Dec was used to calculate the DNL shown here. By comparing runway use, it is estimated that actual DNL at NMS09 for the entire quarter was slightly lower. For NMS10, 20 days of Dec data were unavailable. For NMS01, 10 data was unavailable for the first half of October. The reported values for NMS01 and NMS10 are averaged over all remaining days.

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Distribution of Noise Events

Distribution of Lmax Averaged by Day, 4th Quarter, 2010



Averages are taken over only the same days used for the calculation of DNL.

Top 3 Lmaxs at each NMS, 4th Qtr, (1 of 2)



NMS	Lmax (dB)	Aircraft	Operation	Time and date	Sound Exposure Level (dB)	Duration (sec)
NMS01	108.5	Military C5 transport	Arrival on Rwy 24L	10/30/2010 12:08 p.m.	112.5	58.0
NMS01	88.4	DC9-50	Arrival on Rwy 24L	10/26/2010 7:26 p.m.	96.2	28.5
NMS01	88.0	Airbus A300-600	Arrival on Rwy 24L	11/17/2010 5:55 a.m.	95.1	36.0
NMS02	108.9	Military C5 transport	Arrival on Rwy 24L	10/30/2010 12:09 p.m.	113.2	33.5
NMS02	97.2	Boeing 727-200	Arrival on Rwy 24L	12/27/2010 11:23 p.m.	99.9	16.5
NMS02	97.0	DC9-50	Arrival on Rwy 24L	10/28/2010 12:36 a.m.	100.2	14.5
NMS04	101.0	Military C5 transport	Departure off Rwy 6R	10/31/2010 7:55 p.m.	108.0	41.0
NMS04	94.8	Boeing 727-200	Arrival on Rwy 28	11/17/2010 5:07 a.m.	100.6	30.0
NMS04	94.7	Boeing 727-200	Arrival on Rwy 28	11/26/2010 5:13 a.m.	101.6	27.5
NMS05	99.4	Learjet 25	Departure off Rwy 6L	10/ 4/2010 10:02 a.m.	106.5	56.5
NMS05	95.8	DC9-50	Departure off Rwy 24R	12/31/2010 8:35 a.m.	102.2	39.5
NMS05	92.5	DC9-50	Departure off Rwy 24L	12/24/2010 8:21 a.m.	97.6	34.0
NMS07	102.8	Boeing 727-200	Departure off Rwy 24L	10/11/2010 11:46 p.m.	107.5	35.0
NMS07	101.8	Boeing 727-200	Departure off Rwy 24L	11/30/2010 7:16 p.m.	108.4	39.0
NMS07	101.2	Boeing 727-200	Departure off Rwy 24L	12/13/2010 5:53 p.m.	106.5	42.0

Sound Exposure Level is a measure that takes into account all noise over the entire duration of an event.

Top 3 Lmaxs at each NMS, 4th Qtr, (2 of 2)



NMS	Lmax (dB)	Aircraft	Operation	Time and date	Sound Exposure Level (dB)	Duration (sec)
NMS08	86.6	Boeing 737-800	Arrival on Rwy 6R	10/31/2010 3:51 p.m.	94.5	23.0
NMS08	86.6	Boeing 727-200	Departure off Rwy 24L	11/30/2010 7:16 p.m.	94.4	46.5
NMS08	85.3	Boeing 727-200	Arrival on Rwy 6R	10/ 1/2010 5:10 a.m.	93.1	25.5
NMS09	95.9	Boeing 727-200	Departure off Rwy 24L	12/29/2010 11:01 p.m.	104.1	59.0
NMS09	92.7	DC9-50	Departure off Rwy 24L	12/28/2010 8:17 a.m.	100.2	35.5
NMS09	92.2	Boeing 737-200	Departure off Rwy 24L	12/28/2010 10:20 a.m.	100.0	31.5
NMS10	93.0	Boeing 727-200	Departure off Rwy 24L	10/28/2010 10:57 p.m.	101.0	51.0
NMS10	91.5	Boeing 727-200	Departure off Rwy 24L	10/14/2010 11:05 p.m.	98.2	28.0
NMS10	91.1	Boeing 727-200	Departure off Rwy 24L	11/18/2010 10:51 p.m.	99.9	72.5
NMS11	89.2	Boeing 727-200	Departure off Rwy 6R	10/ 5/2010 11:02 p.m.	96.8	89.2
NMS11	87.0	Helicopter	Departure near NE corner of airfield*	10/28/2010 10:33 a.m.	94.7	25.5
NMS11	86.3	Boeing 727-200	Departure off Rwy 6R	11/ 5/2010 12:14 a.m.	94.5	24.5
NMS12	88.5	Learjet 25	Departure off Rwy 6L	10/ 4/2010 10:03 a.m.	95.5	36.5
NMS12	88.0	DC9-50	Departure off Rwy 24R	12/29/2010 6:22 p.m.	96.1	35.5
NMS12	86.7	DC9-50	Departure off Rwy 24R	12/31/2010 8:34 a.m.	96.4	61.0

*The helicopter lift-off may be outside the airport. It eventually lands at or near Burke Lakefront Airport.

Sound Exposure Level is a measure that takes into account all noise over the entire duration of an event.

Noise Hotline



City	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual	%	Callers	%
Berea	0	0	0	5	5	1.64%	1	1.43%
Brook Park	1	8	0	2	11	3.62%	6	8.57%
Cleveland	33	60	38	13	144	47.37%	30	42.86%
Fairview Park	2	24	7	1	34	11.18%	17	24.29%
Lakewood	0	0	0	0	0	0.00%	0	0.00%
Middleburg Hts.	0	0	0	0	0	0.00%	0	0.00%
North Olmsted	0	0	1	0	1	0.33%	1	1.43%
Olmsted Falls	0	0	0	0	0	0.00%	0	0.00%
Olmsted Twp.	0	2	3	0	6	1.64%	4	5.71%
Parma	1	0	0	0	1	0.33%	1	1.43%
Parma Heights	0	0	0	0	0	0.00%	0	0.00%
Rocky River	14	63	24	0	101	32.22%	8	11.43%
Westlake	0	0	0	0	0	0.00%	0	0.00%
Other	1	0	1	0	2	0.66%	2	2.86%
Total 2010	52	157	74	21	304	100.0%	70	100.0%
Total 2009	53	169	284	71	577	100.0%	171	100.0%

There was a 47.3% reduction in noise complaints for Year 2010, as compared to Year 2009

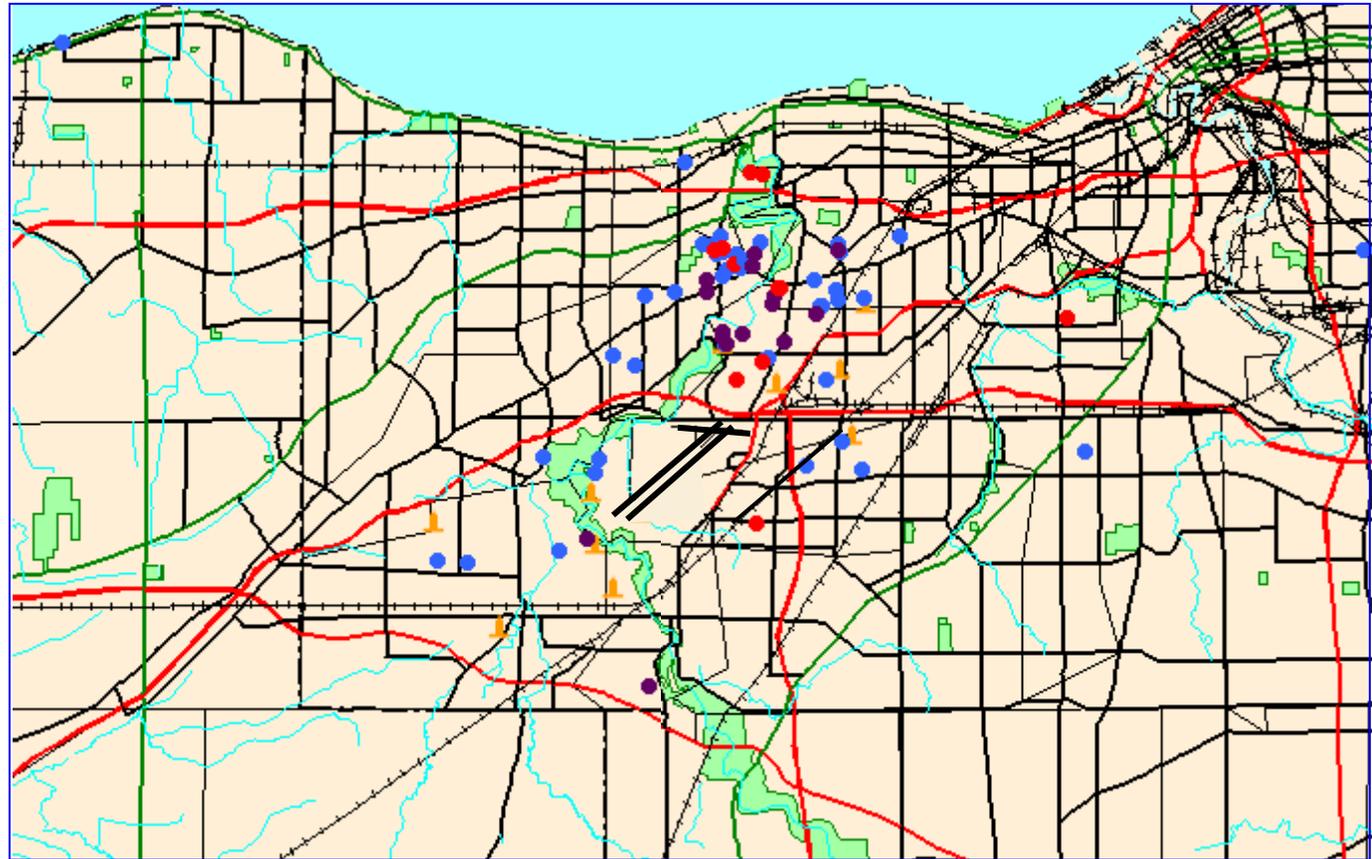
2010 Annual Complaint Map



LEGEND

Complaints per household

-  1 complaint
-  2 to 5 complaints
-  6 or more
-  Noise Monitoring Station



2011 Forward Plan



- Noise Compatibility Plan Update (FAR Part 150 Study)
 - Study to be submitted to the FAA for approval
 - Implementation of recommendations expected this year.
- Labor Day Air show to be held at Burke Lakefront Airport featuring the U.S. Air Force Thunderbirds
- Airport perimeter road construction is now completed
- Planned Runway 10/28 project to start in spring of 2011
- Master Plan will be finalized and submitted to the FAA for approval

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