

Noise Abatement Subcommittee

Review of Noise Complaint Activity

APRIL 2011

Madison, Wisconsin

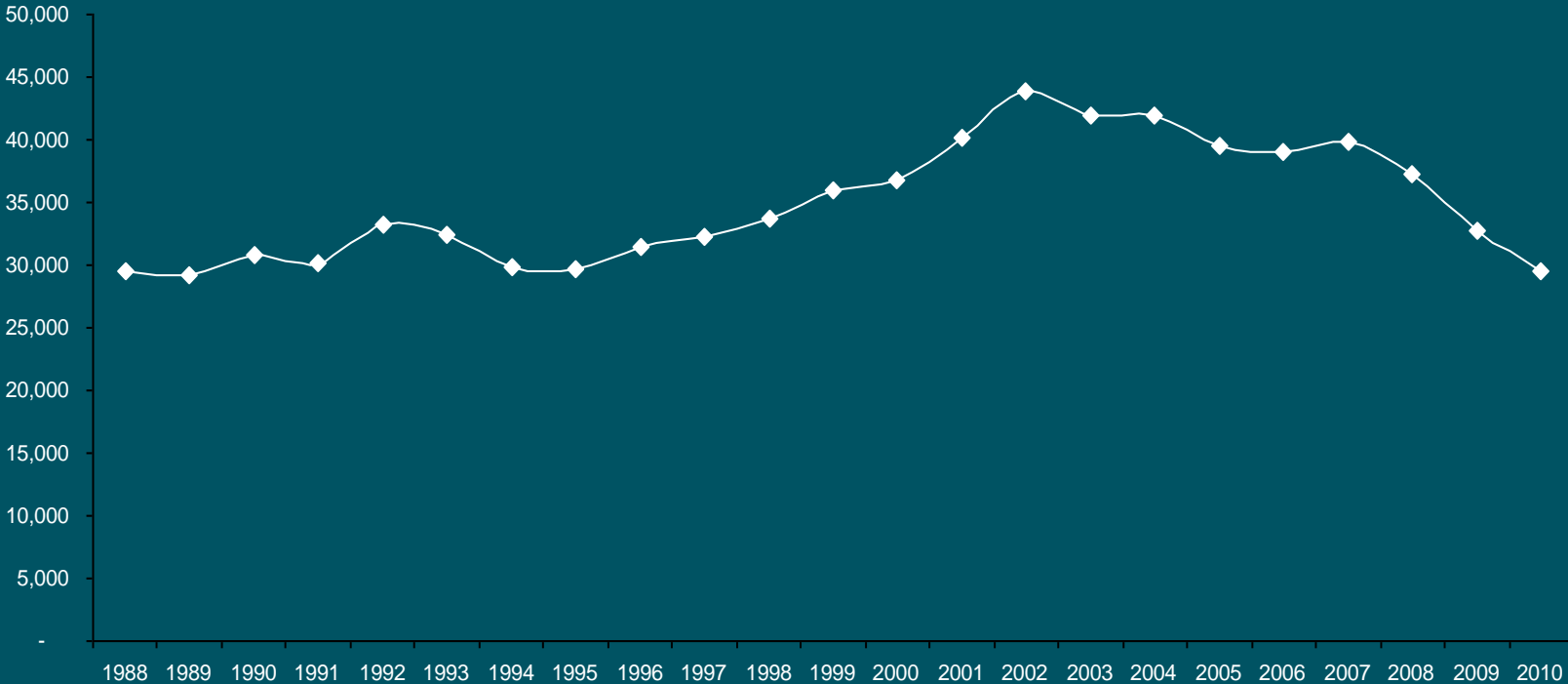


Agenda

- Data
- Changes Since October
- Past Studies
- Future processes
- Questions

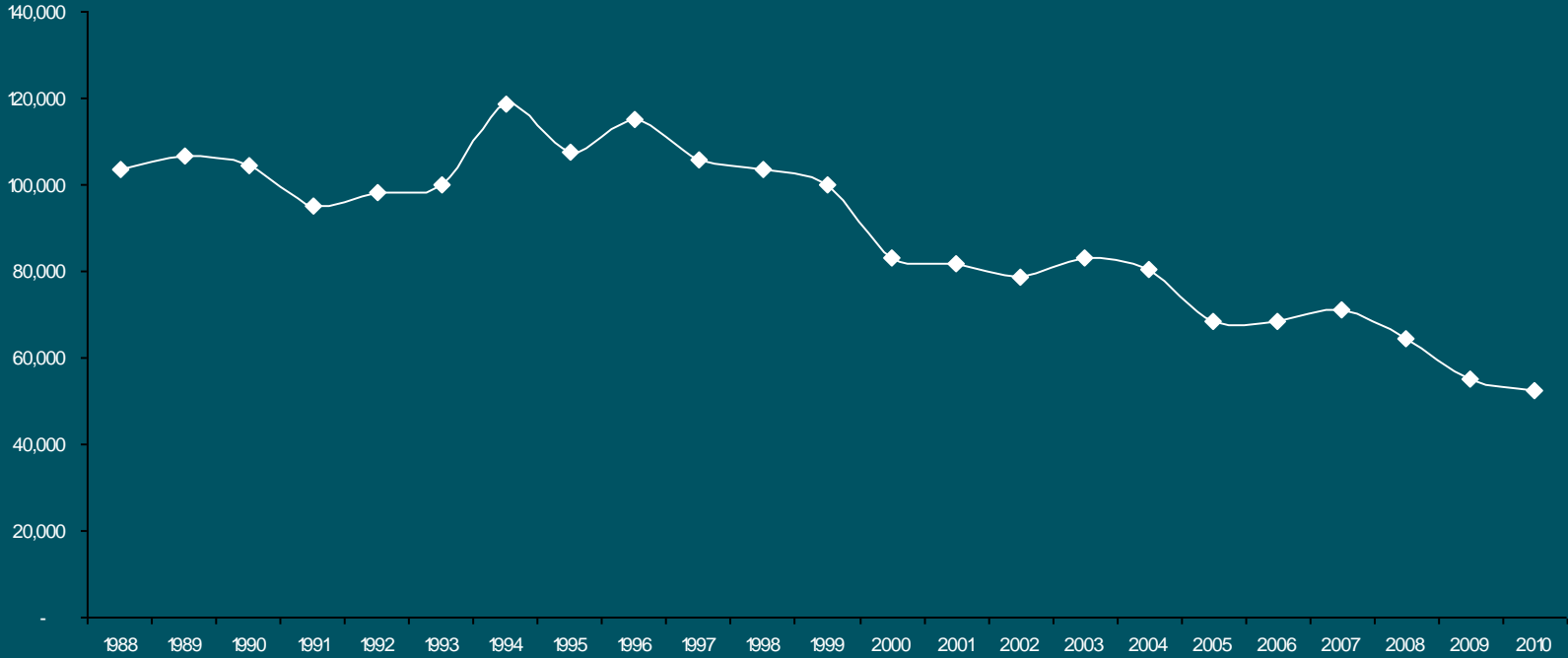
AIRCRAFT MOVEMENTS

Annual Commercial Air Carrier Operations



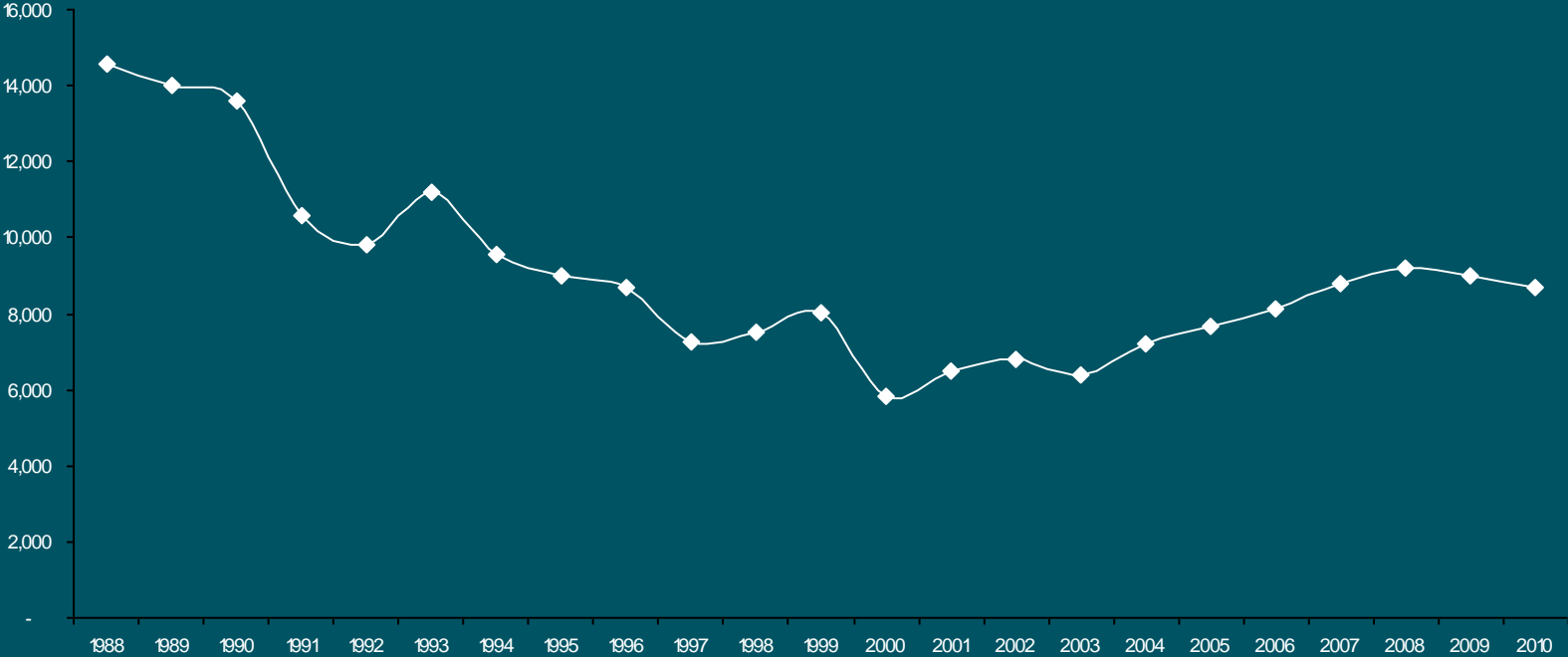
AIRCRAFT MOVEMENTS

Annual GA Aircraft Operations



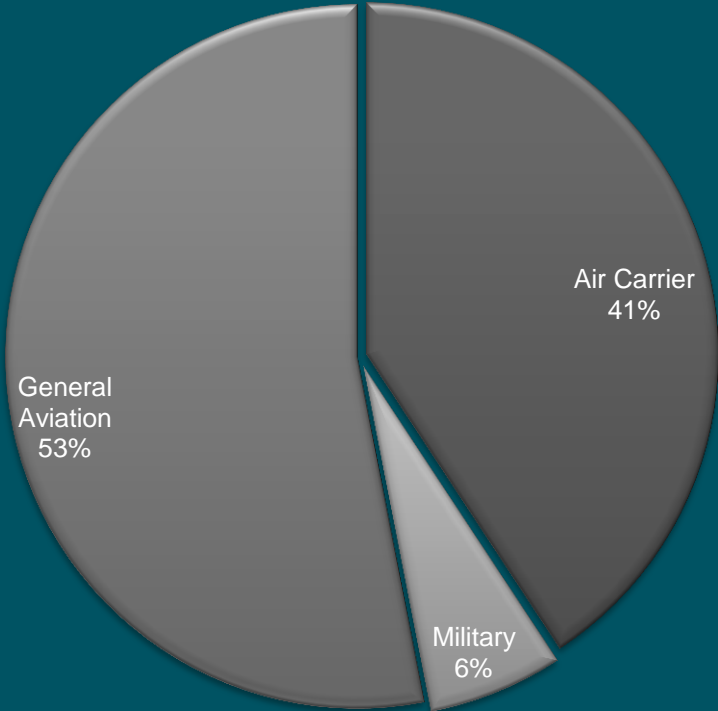
AIRCRAFT MOVEMENTS

Annual Military Operations



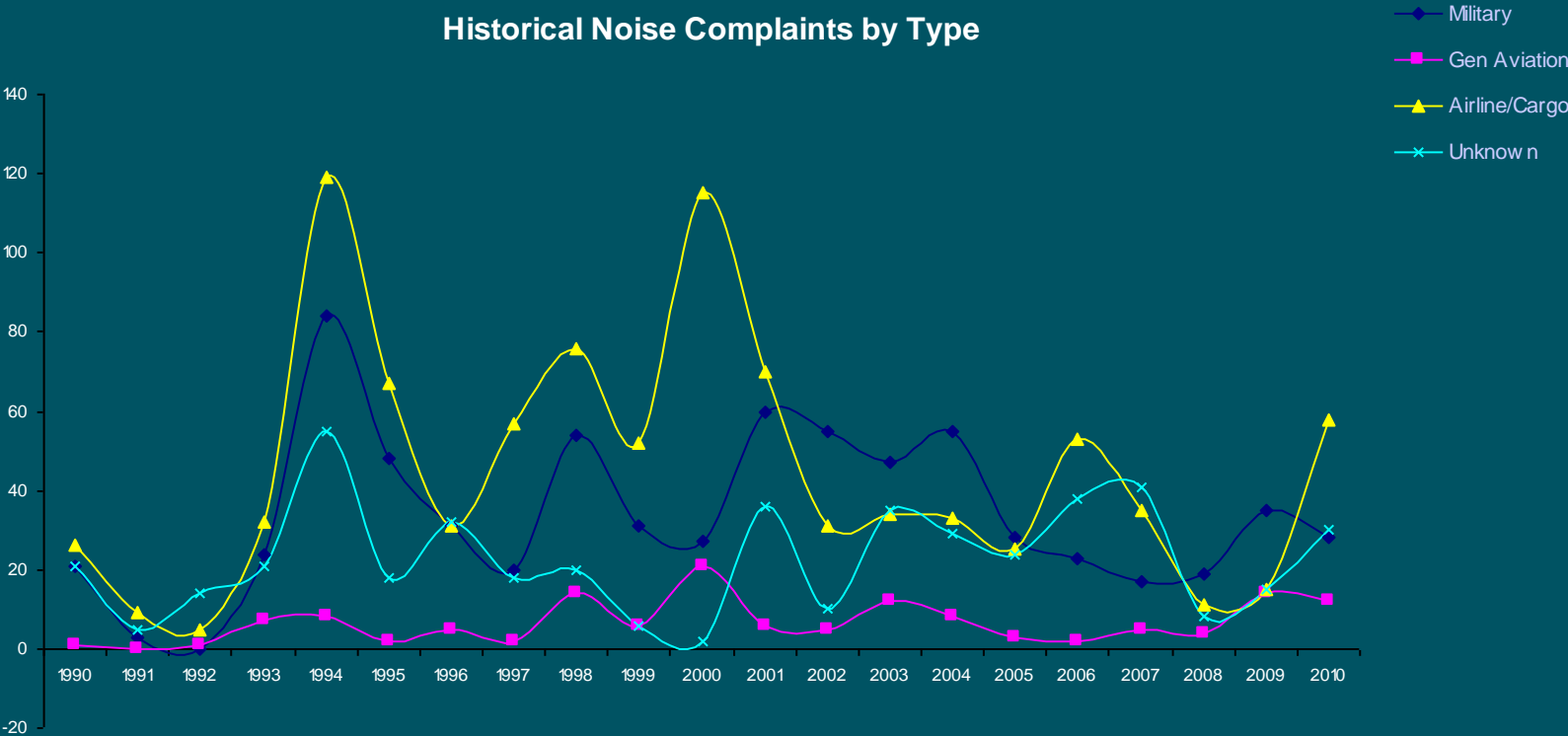
AIRCRAFT MOVEMENTS

Aircraft Movements	OCT 10 - MAR 11	OCT 09 - MAR 10	Change
<i>Air Carrier</i>	16,010	16,156	-0.9%
<i>Military</i>	2,430	4,037	-39.8%
<i>General Aviation</i>	20,849	24,967	-16.5%
Total Movements	39,289	45,160	-13.0%



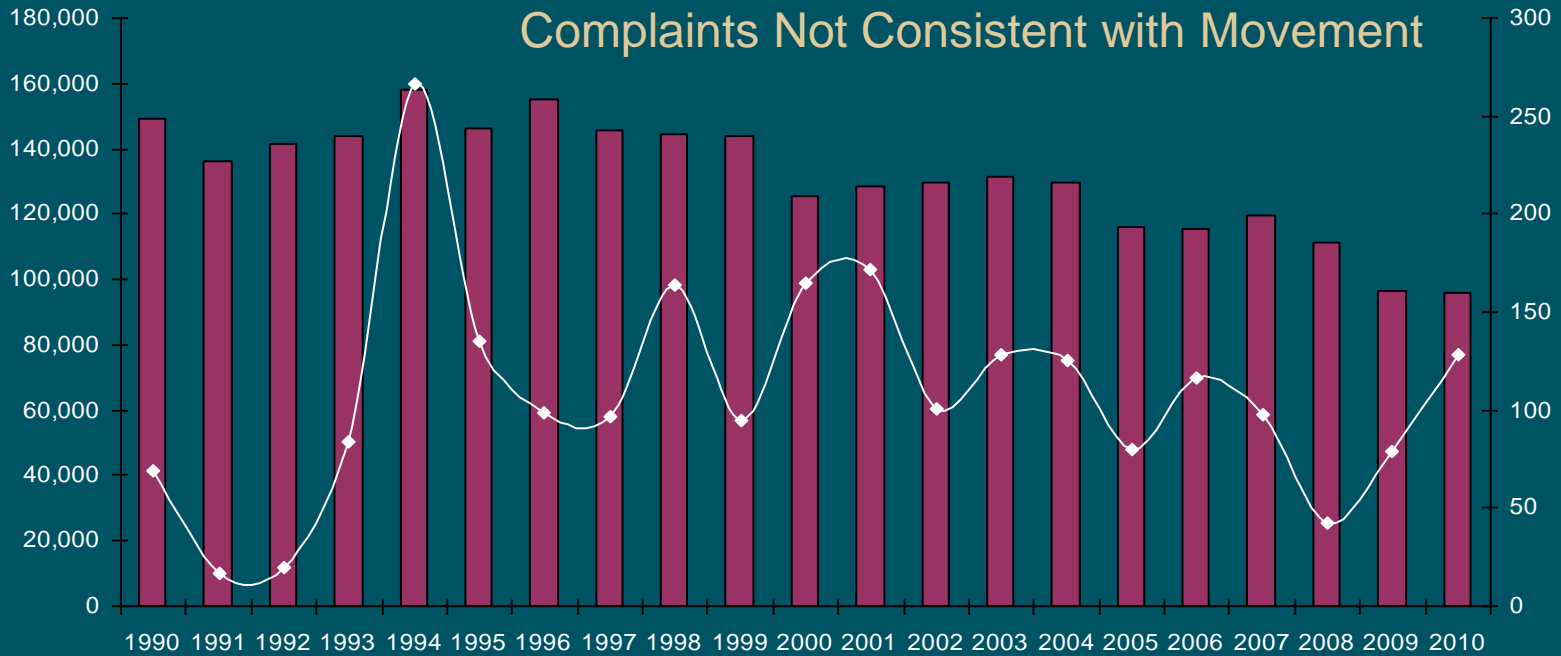
NOISE COMPLAINTS

Historical Noise Complaints by Type



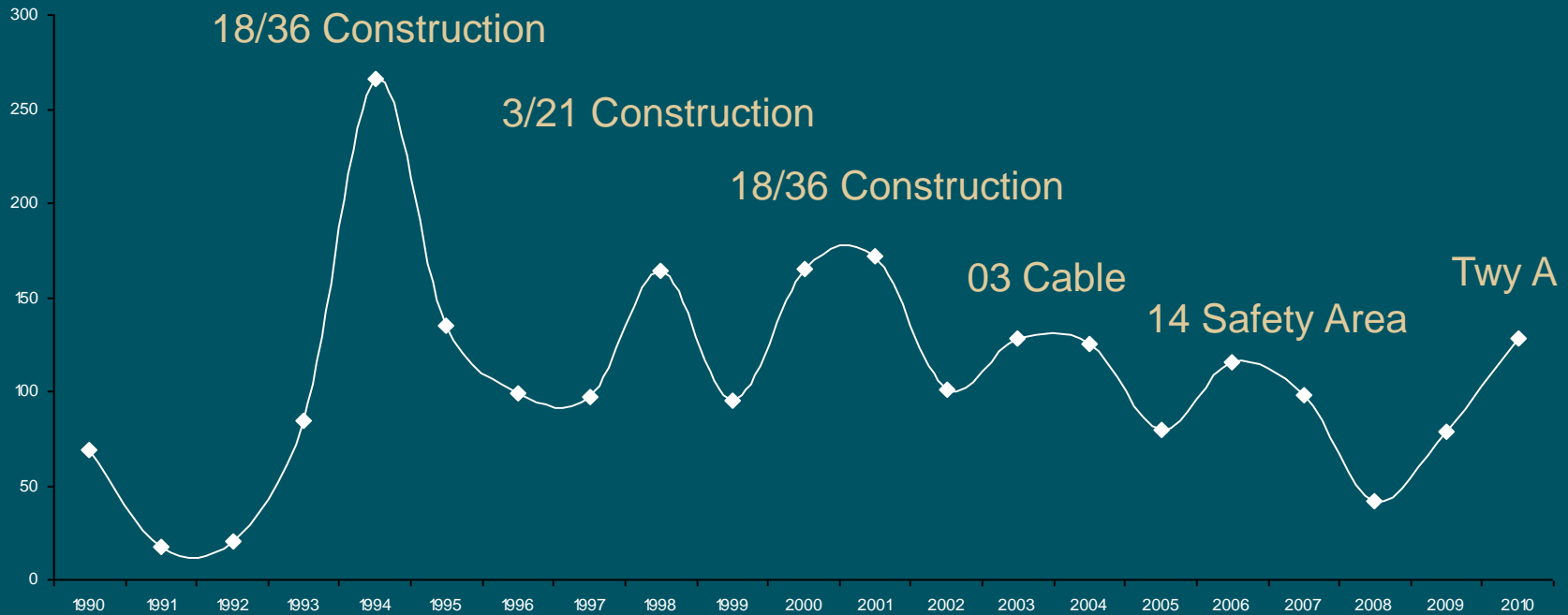
NOISE COMPLAINTS

Noise Complaints by Year vs Total Movements



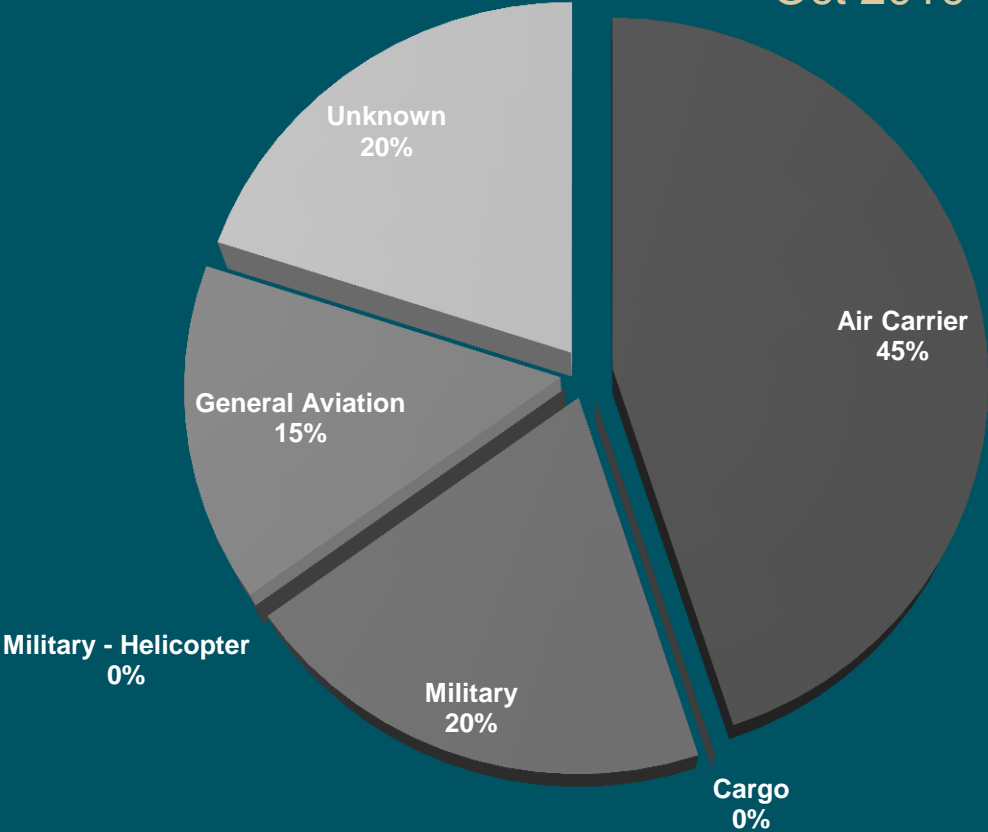
NOISE COMPLAINTS

Total Historical Number of Noise Complaints



COMPLAINTS BY AIRCRAFT TYPE

Oct 2010 – March 2011

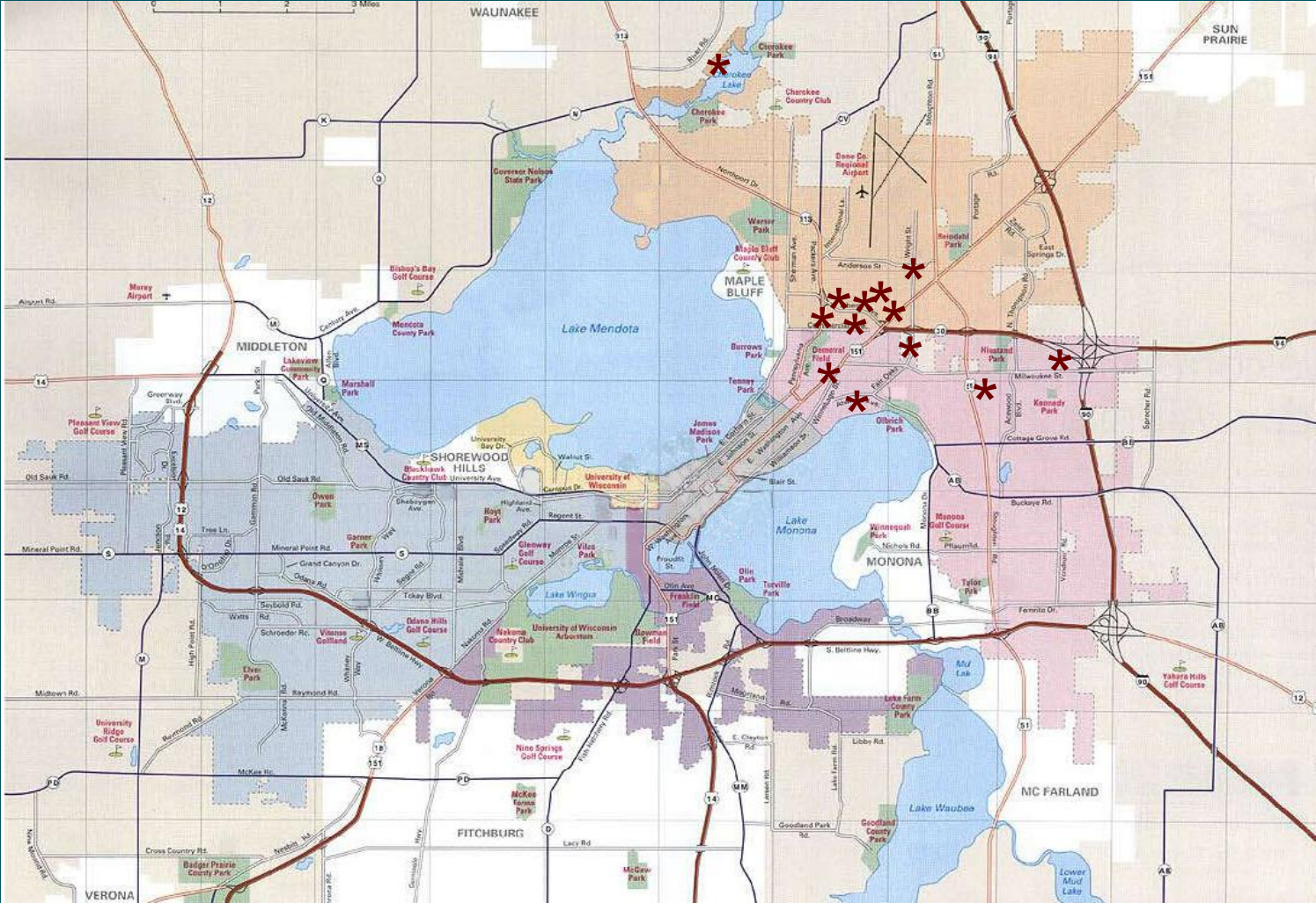


COMPLAINTS BY AREA

Area	OCT 10 – MAR 11		OCT 09 – MAR 10	
	Complaints	Callers	Complaints	Callers
<i>Blooming Grove</i>	0	0	0	0
<i>Burke</i>	0	0	0	0
<i>Cottage Grove</i>	0	0	0	0
<i>DeForest</i>	0	0	0	0
<i>Fitchburg</i>	0	0	1	1
<i>Madison</i>	20	13	17	7
<i>McFarland</i>	0	0	0	0
<i>Middleton</i>	0	0	0	0
<i>Monona</i>	0	0	0	0
<i>Stoughton</i>	0	0	0	0
<i>Windsor</i>	0	0	0	0
<i>Verona</i>	0	0	1	1
<i>Waunakee</i>	0	0	0	0
Total	20	13	19	9

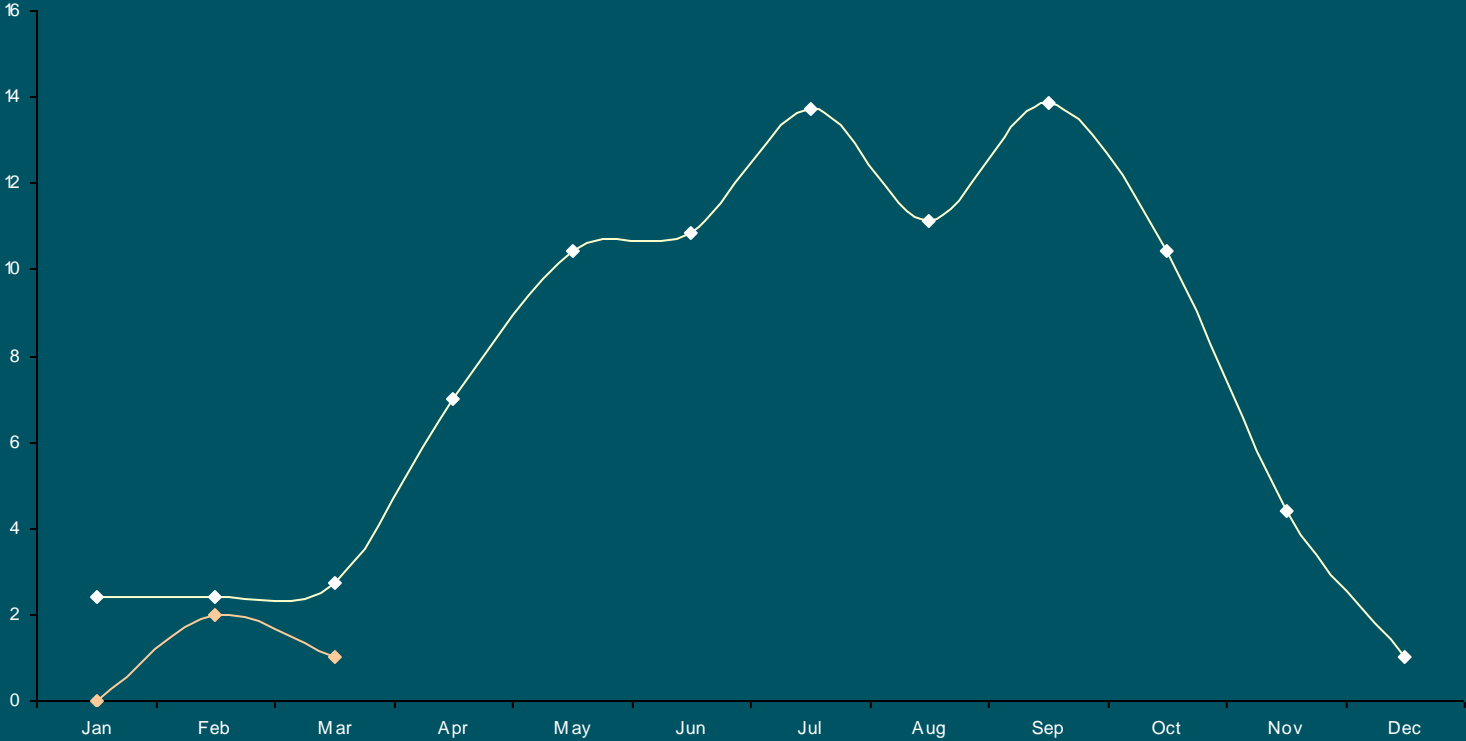


COMPLAINT LOCATION

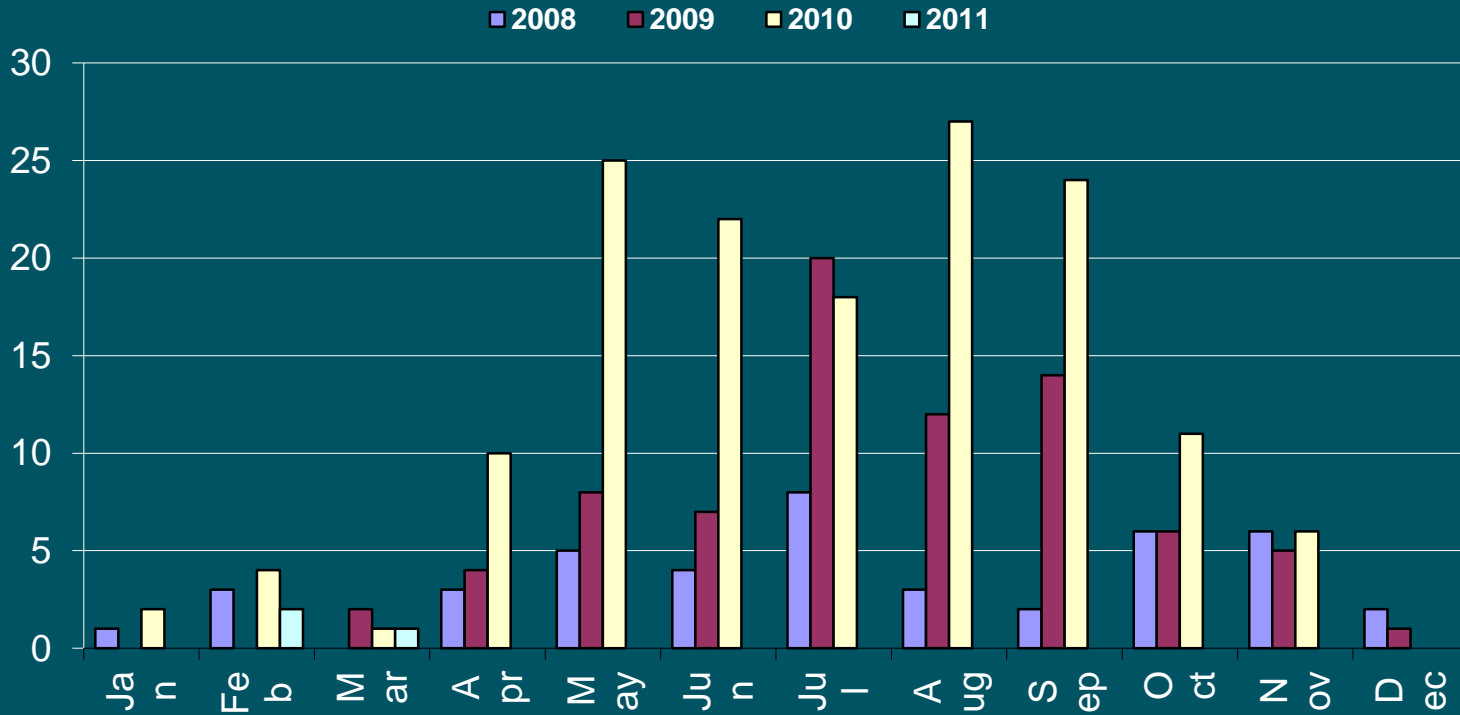


NOISE COMPLAINTS

Average Monthly Noise Complaints '04-'10 Average vs 2011 Complaints



COMPLAINTS BY MONTH



Date	2008*	2009**	2010***	2011
Jan	1	0	2	0
Feb	3	0	4	2
Mar	0	2	1	1
Apr	3	4	10	0
May	5	8	25	0
Jun	4	7	22	0
Jul	8	20	18	0
Aug	3	12	27	0
Sep	2	14	24	0
Oct	6	6	11	0
Nov	6	5	6	0
Dec	2	1	0	0
Total	43	79	150	3

Calls from 1 caller:

* 196

** 164

*** 32

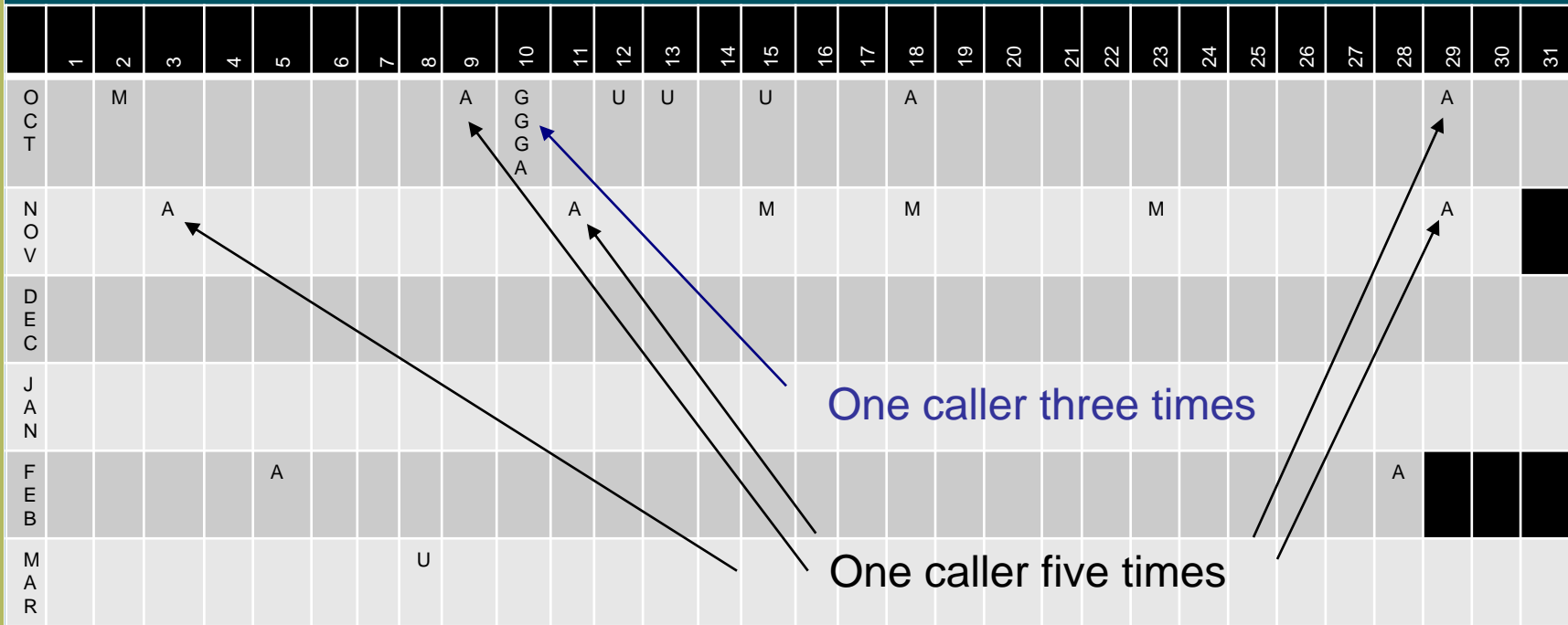


NOISE COMPLAINT CALLS

	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
DAY	7	3			1		11
NIGHT	4	3			1	1	9
TOTAL	11	6	0	0	2	1	20



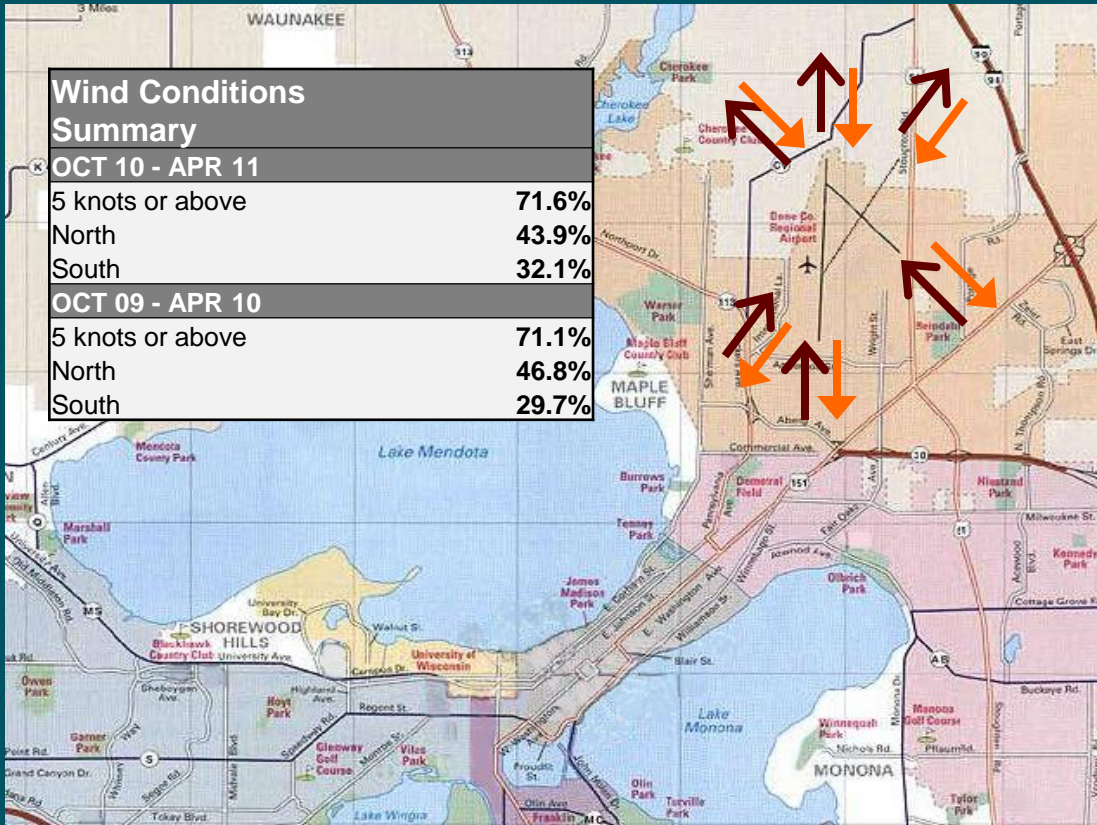
COMPLAINT HISTORY



A = Airline
 C = Cargo
 G = General Aviation
 M = Military
 U = Unknown



WIND CONDITIONS SUMMARY



Direction of aircraft with winds from the north.



Direction of aircraft with winds from the south.

* Wind Direction percentages do not add up to 100% due to wind directions reported as calm or variable

Full time weather data

NOISE ABATEMENT COMPLIANCE AUDIT

WEATHER / RUNWAY DATA	
WINDS AT 5 KNOTS OR HIGHER ¹	74.73%
VISIBILITY AT 5 SM OR LESS ¹	20.69%
RUNWAYS CLOSED ²	18/36 = 46:55 3/21 = 418:43 14/32 = 790:31

¹ - Based on METAR weather observations at the time of recorded aircraft operations.
² - Runway closures primarily due to snow removal operations and runway maintenance.



NOISE ABATEMENT COMPLIANCE AUDIT (OCT-MAR)

RUNWAY USE			
Aircraft observed departing to the North			43.85%
Aircraft observed arriving from the North			49.48%
Aircraft observed departing to the South			56.15%
Aircraft observed arriving from the South			50.52%
	Wind	Visibility	Ceiling
South Departure	78.28%	25.76%	30.60%
South Arrival	74.88%	20.17%	24.62%
16,358 individual aircraft from Passur			
1,023 non-compliant observations		93.75% Compliance	
47 actual non-compliant		99.73% Compliance	



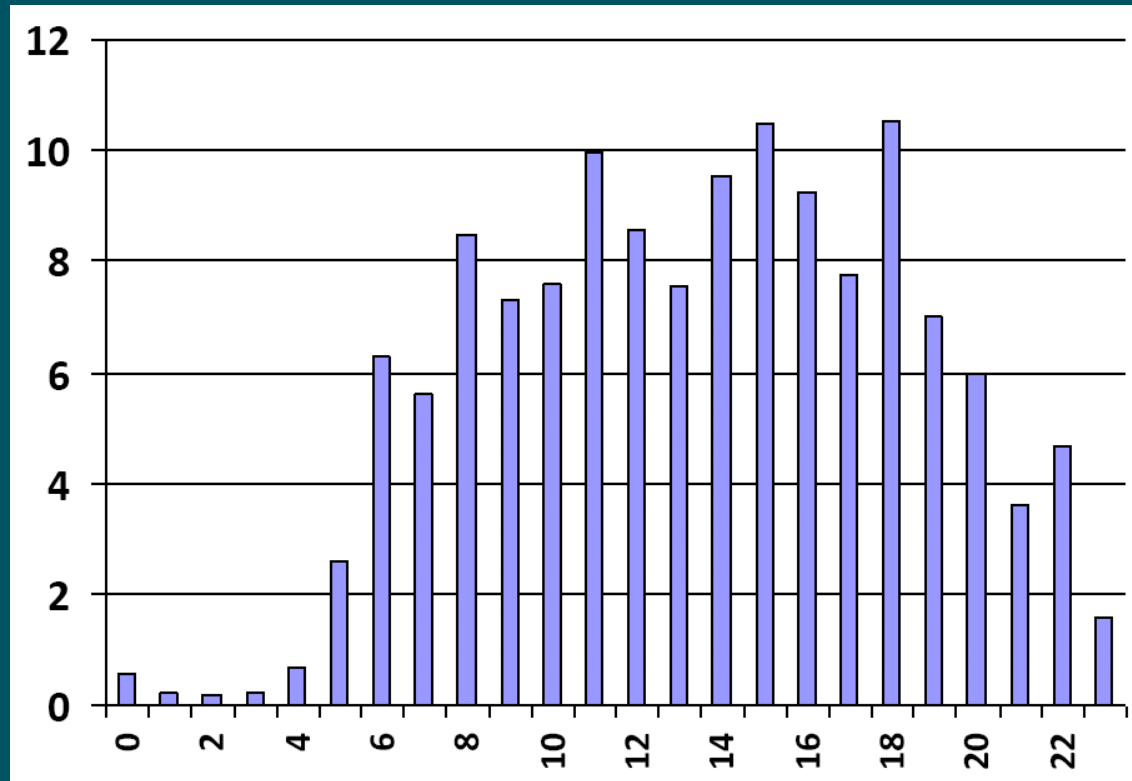
Wisconsin Wind Data

Month	Prevailing Wind	% Calm
Jan	WNW – 11.5	6.0
Feb	WNW – 12	6.9
Mar	NW – 13	6.1
Apr	S – 11.4	6.4
May	S – 10.4	7.0
Jun	S – 9.7	8.4
Jul	S – 9.2	9.9
Aug	S – 9.1	11.1
Sep	S – 9.8	9.9
Oct	S – 10.4	7.8
Nov	S – 10.7	5.7
Dec	WNW – 12.4	6.0
Annual	S – 12.4	7.6

AVERAGE HOURLY OPERATIONS (OCT-MAR)

Average Operations by Hour

Hour	Average Operations
0 :00	0.571
1 :00	0.209
2 :00	0.159
3 :00	0.209
4 :00	0.692
5 :00	2.599
6 :00	6.264
7 :00	5.599
8 :00	8.500
9 :00	7.302
10 :00	7.571
11 :00	9.945
12 :00	8.571
13 :00	7.555
14 :00	9.522
15 :00	10.489
16 :00	9.264
17 :00	7.769
18 :00	10.533
19 :00	7.000
20 :00	5.973
21 :00	3.599
22 :00	4.681
23 :00	1.582



Changes Since October

- Construction
- Education
- Schedule

Past Studies

- Noise Exposure Map (NEM)
Compatability Study - 1990
- Airport Noise Contour Study – Mead
and Hunt

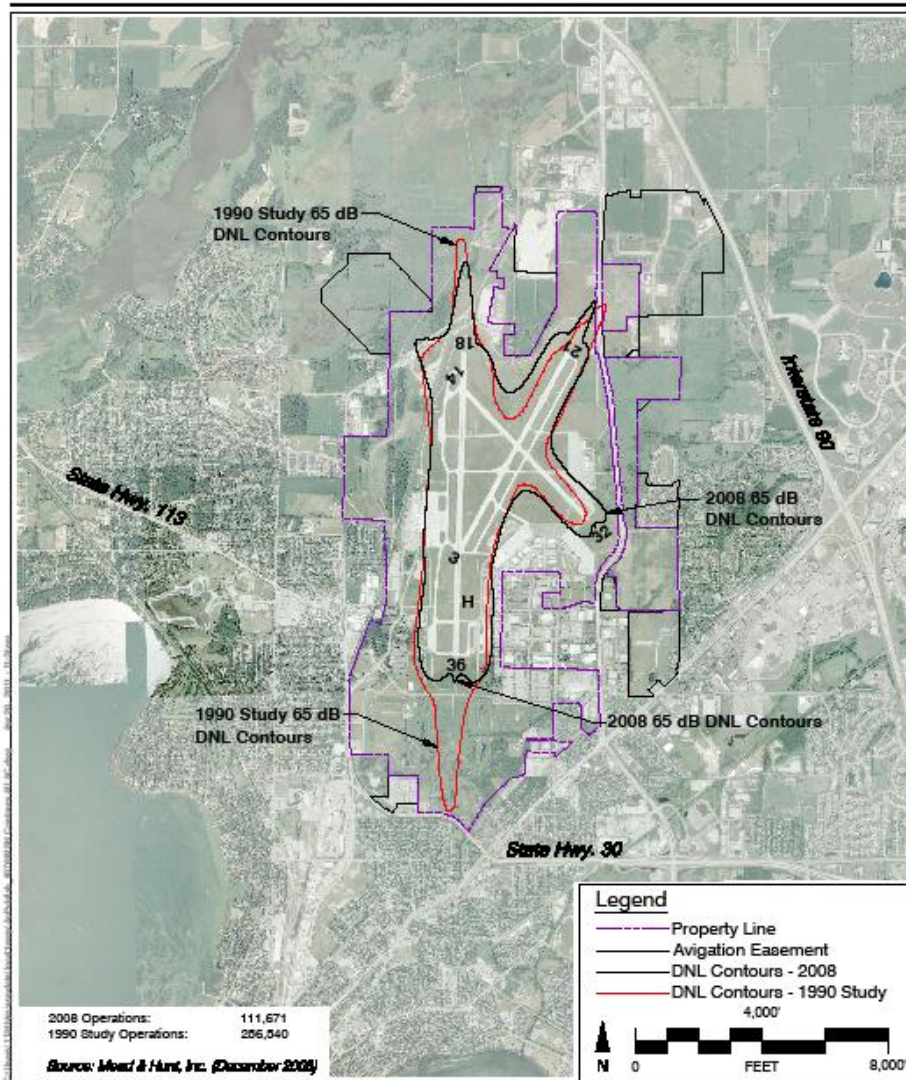


Exhibit 7

2008 All Aircraft
 Comparison with the 1990 Noise Compatibility Study (Study Year 2010) Contours
 Dane County Regional Airport



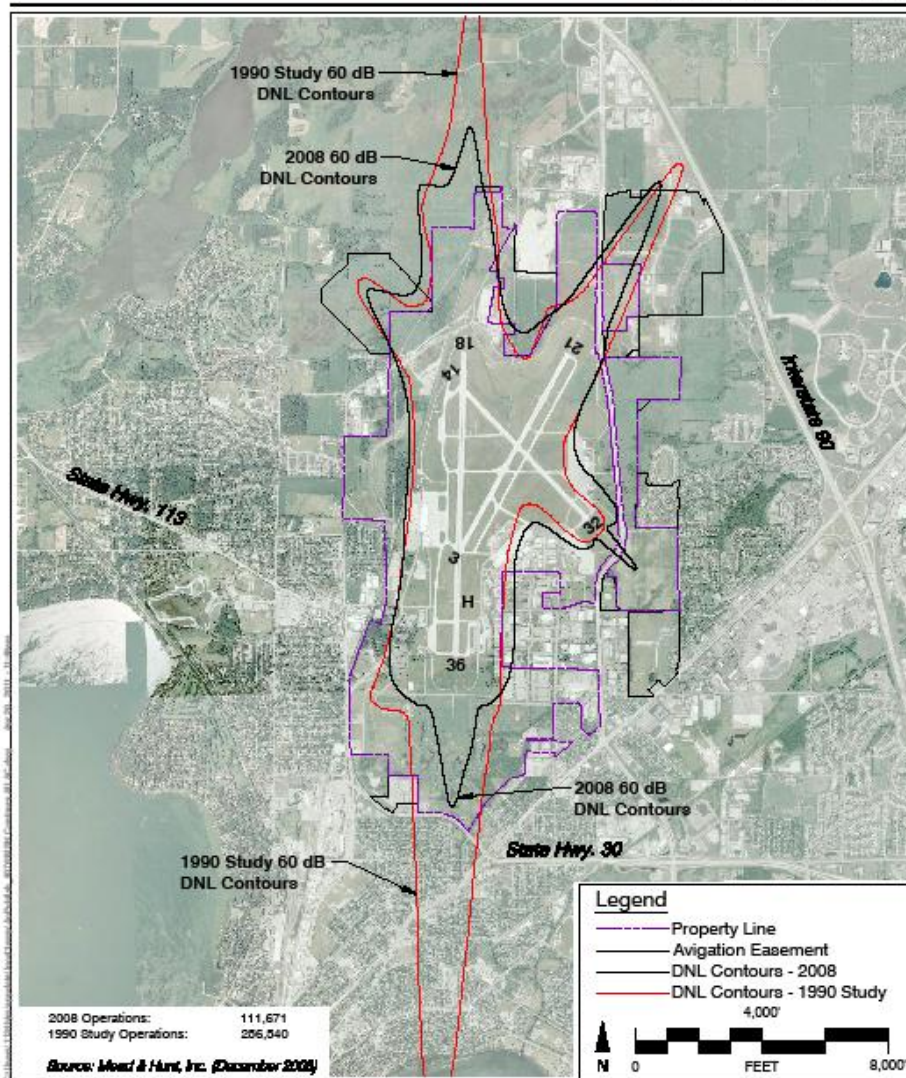


Exhibit 7

2008 All Aircraft
 Comparison with the 1990 Noise Compatibility Study (Study Year 2010) Contours
 Dane County Regional Airport



Noise Abatement Plan*

- Climb traffic off Rwy 31 to 2,500' MSL prior to turn – Implemented/Ongoing
- Visual Corridor for rotorcraft – Implemented/Ongoing
- Hush House for F-16 - 1992
- Build Rwy 3 – 21 – 1997/98
- North Departures and southern arrivals – Implemented/Ongoing
- Restrict right turns from Rwy 3 until 2,500' MSL – Implemented/Ongoing
- Require 10 degree left turn for Rwy 21 departures – Implemented/Ongoing
- Counter Flow ATC Operations – Implemented/Ongoing

*1990 NEM Study

Future Processes

- Proactive Communication with Construction
 - Press Release
 - Airport Home Page
 - City/County Websites
 - Area Notifications
 - “Neighbor” Notifications
 - Outreach in Local Media
- Cooperative Thinking

CONTACT INFORMATION

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24 Hour Aircraft Noise Line: **246-5841**

Online Form: <http://www.msnaairport.com/community/noise.aspx>

Madison Automated Weather: **249-0615**



Questions?