

# Noise Abatement Subcommittee

## Review of Noise Complaint Activity

OCTOBER 30, 2013  
Madison, Wisconsin



# AIRCRAFT MOVEMENTS

APR 13 – SEP 13

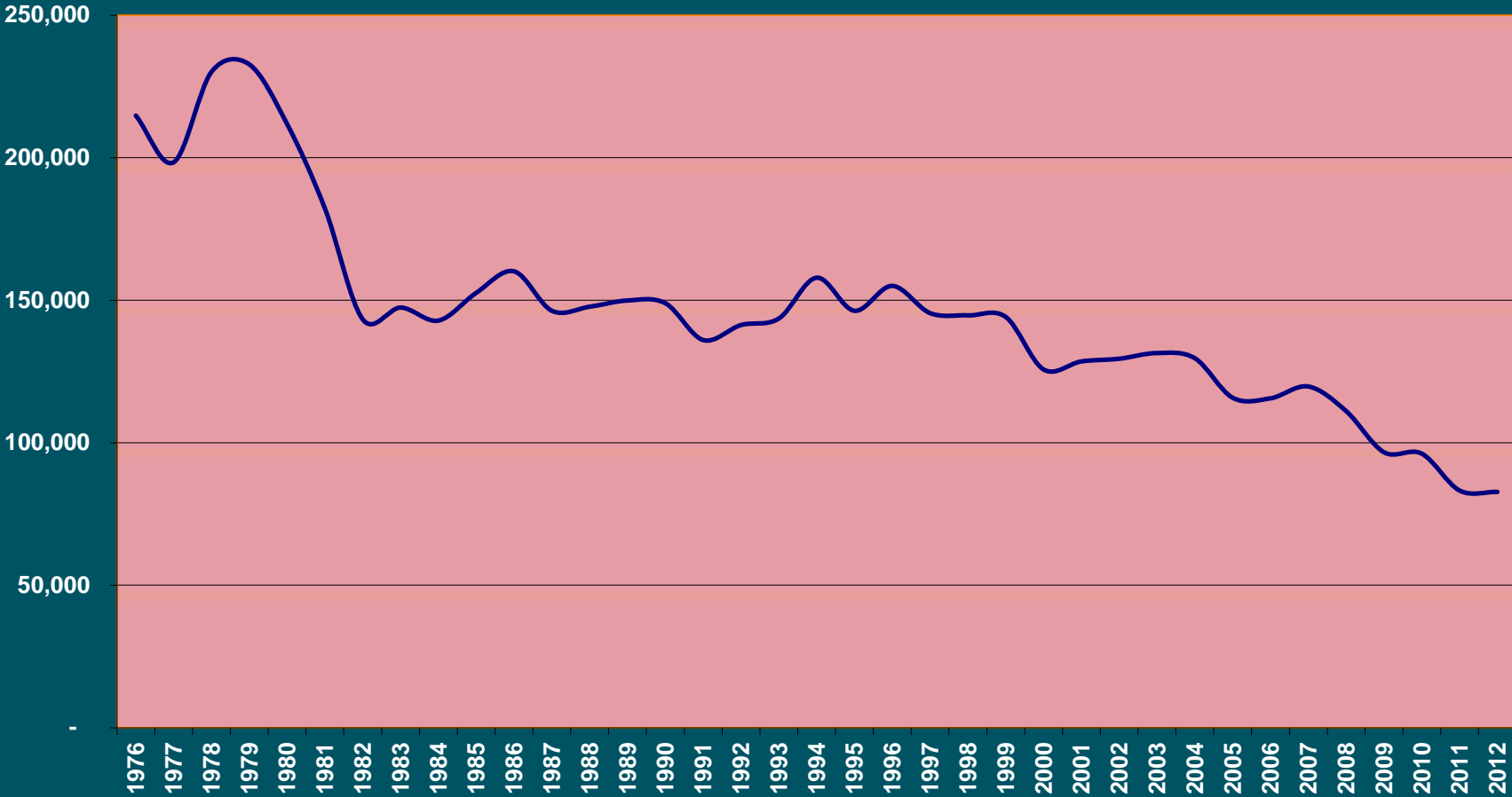
2

<b>Aircraft Movements</b>	<b>APR 13–SEP 13</b>	<b>APR 12–SEPT 12</b>	<b>% Change</b>
<i><b>Air Carrier</b></i>	<b>17,625</b>	<b>16,079</b>	<b>9.6%</b>
<i><b>Military</b></i>	<b>3,020</b>	<b>3,290</b>	<b>-8.2%</b>
<i><b>General Aviation</b></i>	<b>26,944</b>	<b>25,891</b>	<b>4.0%</b>
<i><b>Total Movements</b></i>	<b>47,589</b>	<b>45,260</b>	<b>5.1%</b>

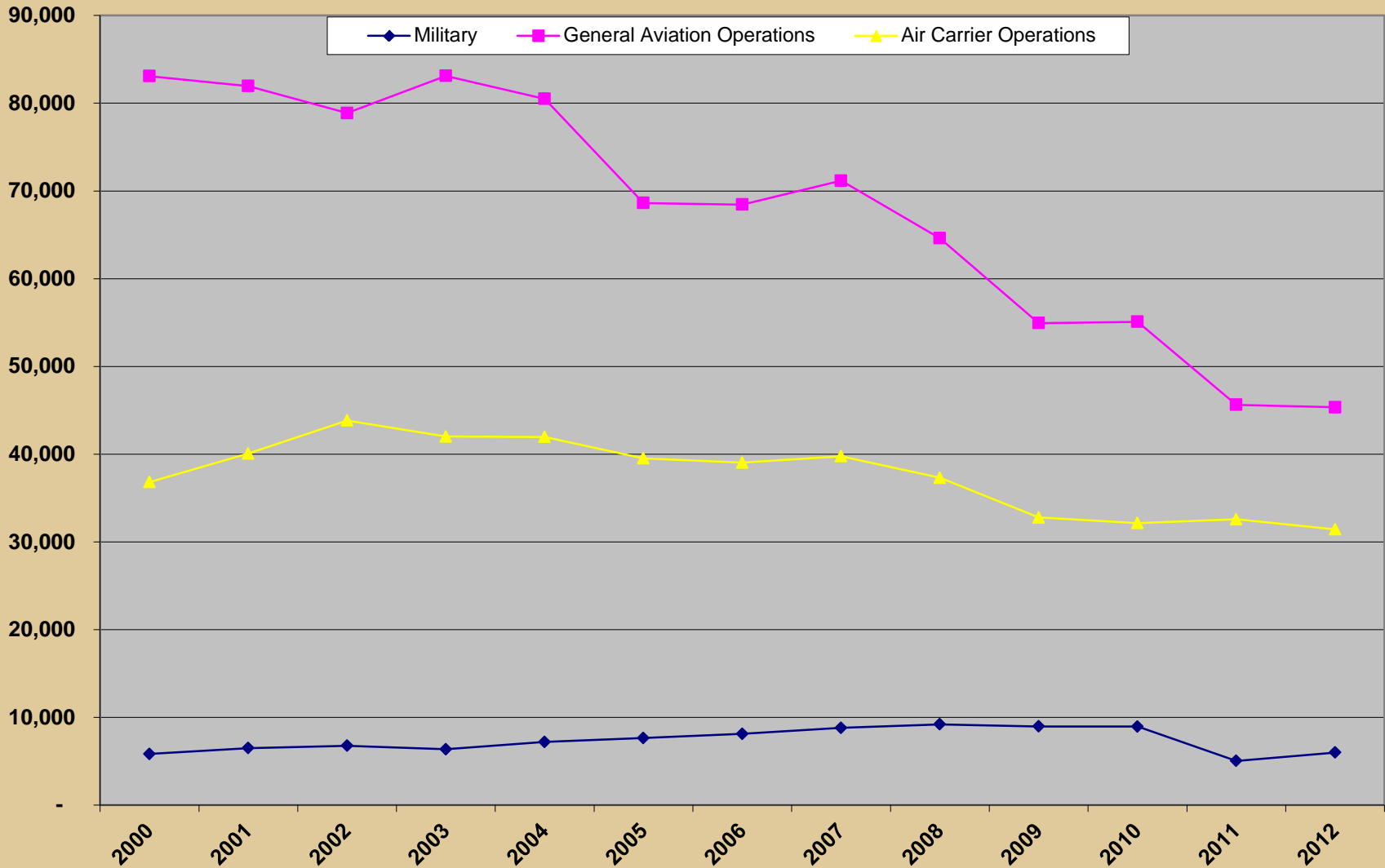


# Aircraft Operations

### Historical Total Aircraft Operations, DCRA

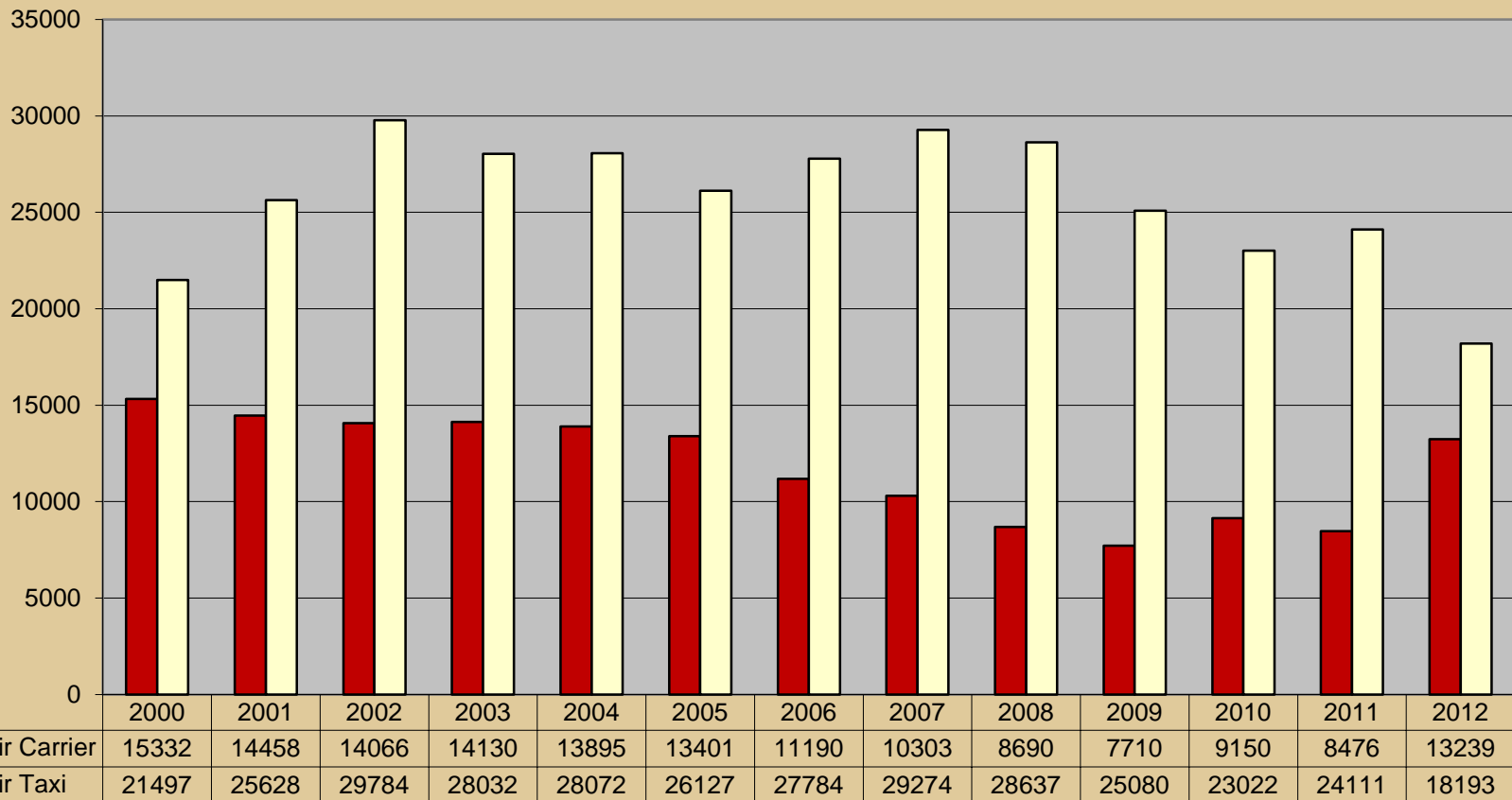


# Historical Aircraft Operations by Type



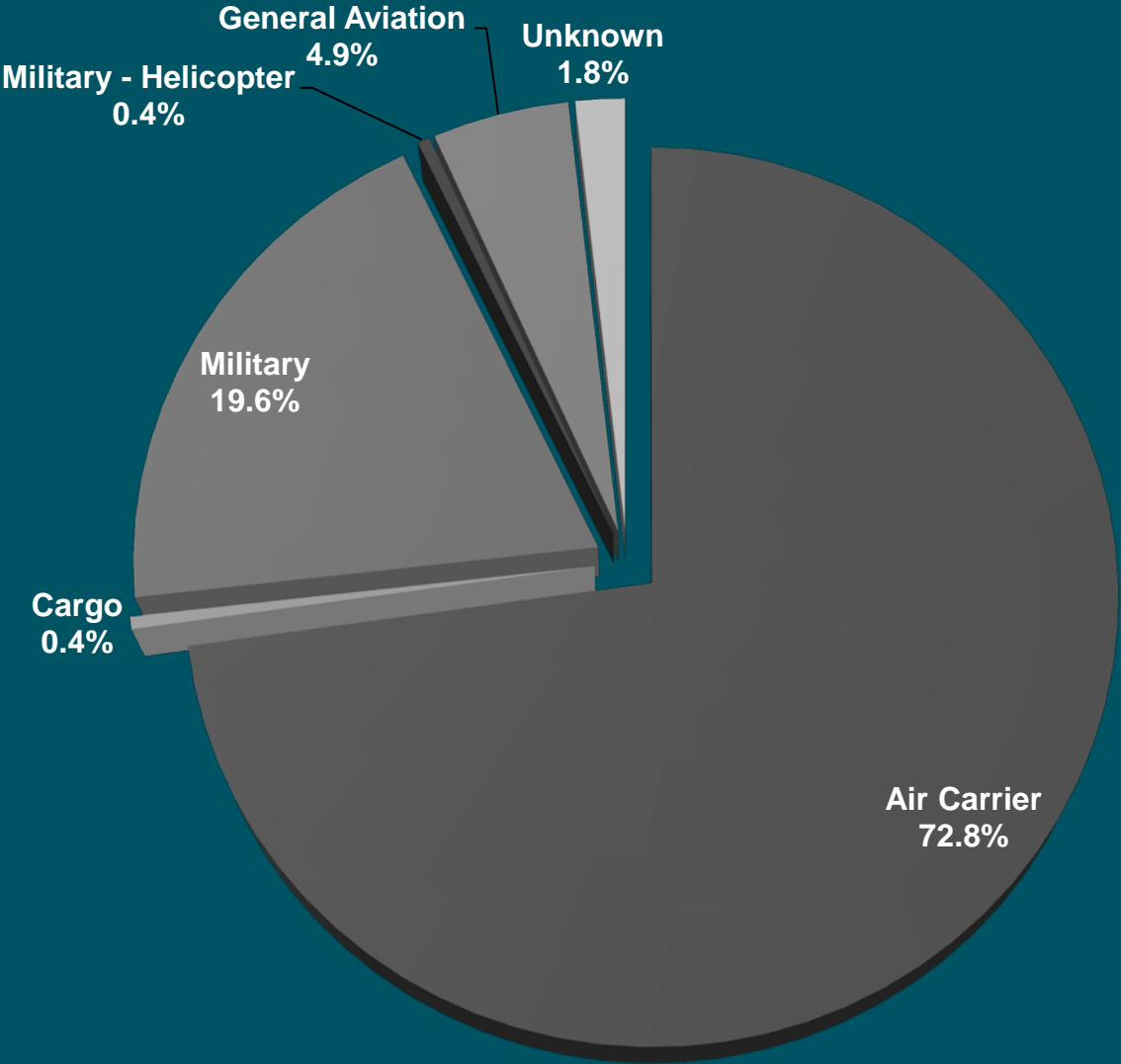
# Air Carrier (A-320, DC-9) vs Air Taxi (CRJ, ERJ)

**AC aircraft have 60 or more seats**  
**AT aircraft have 59 seats or less**



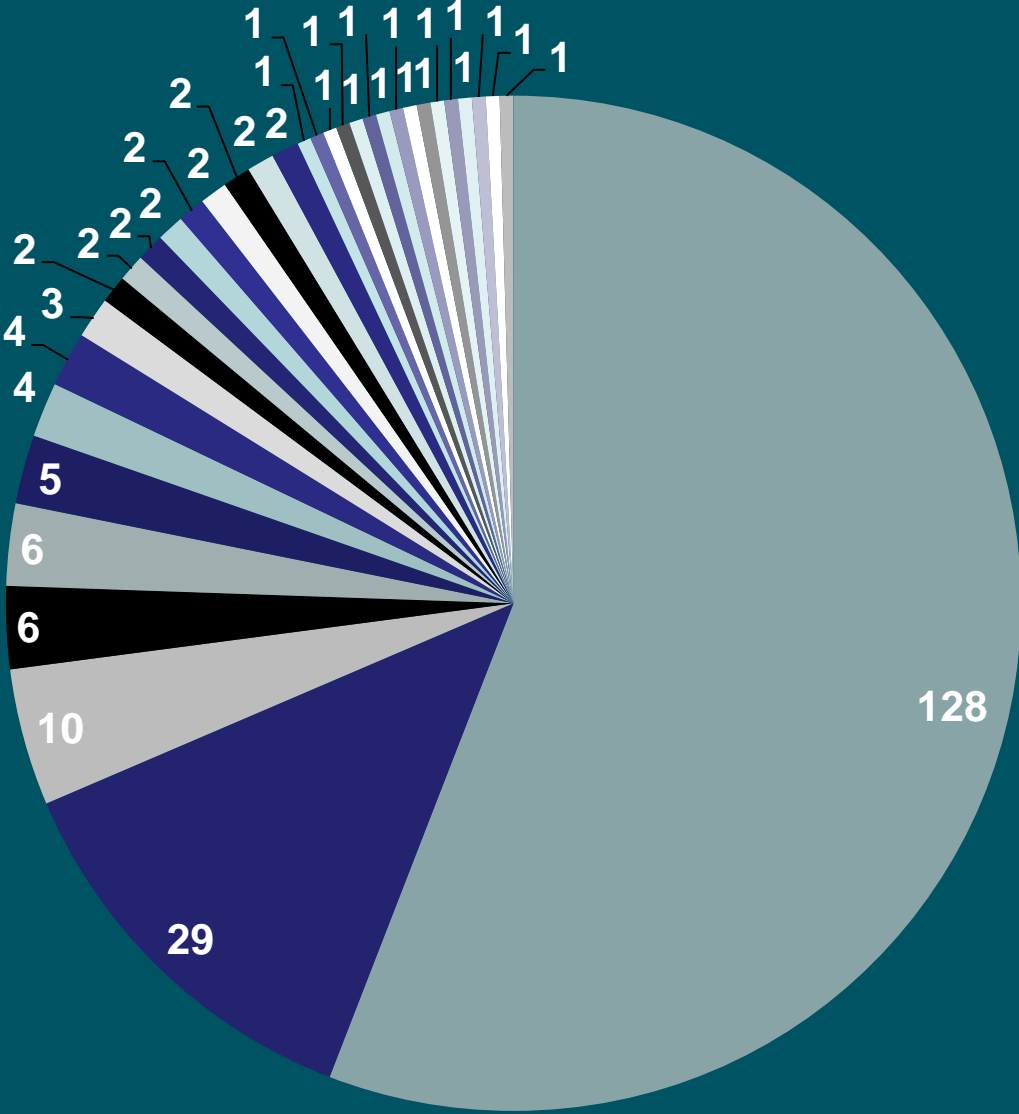
# COMPLAINTS BY AIRCRAFT TYPE

APR 13 – SEP 13



# Calls per Household

## Complaints per Household (49) : 2013 YTD (244)



# COMPLAINTS BY AREA

Area	APR 13 - SEP 13		APR 12 - SEP 12	
	Complaints	Callers	Complaints	Callers
<i>Blooming Grove</i>	0	0	0	0
<i>Burke</i>	0	0	0	0
<i>Deerfield</i>	1	1	0	0
<i>DeForest</i>	115	1	7	2
<i>Fitchburg</i>	0	0	0	0
<i>Madison</i>	103	44	40	16
<i>Marshall</i>	4	1	4	1
<i>Middleton</i>	0	0	0	0
<i>Monona</i>	0	0	0	0
<i>Stoughton</i>	0	0	0	0
<i>Windsor</i>	1	1	29	3
<i>Verona</i>	0	0	0	0
<i>Waunakee</i>	0	0	0	0
<b>Total</b>	<b>224</b>	<b>47</b>	<b>80</b>	<b>22</b>

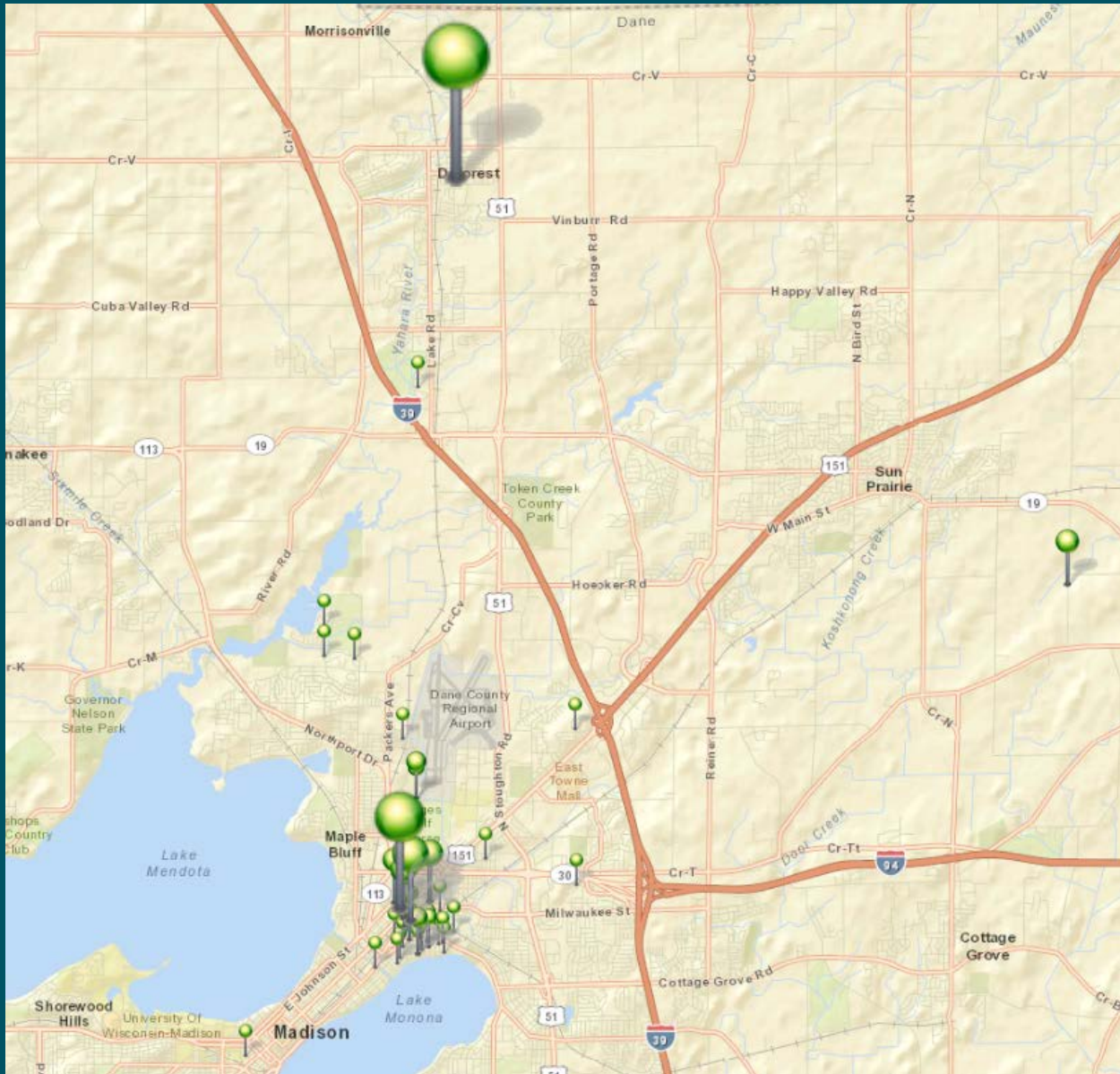




# COMPLAINT LOCATIONS

APR 13 – SEP 13

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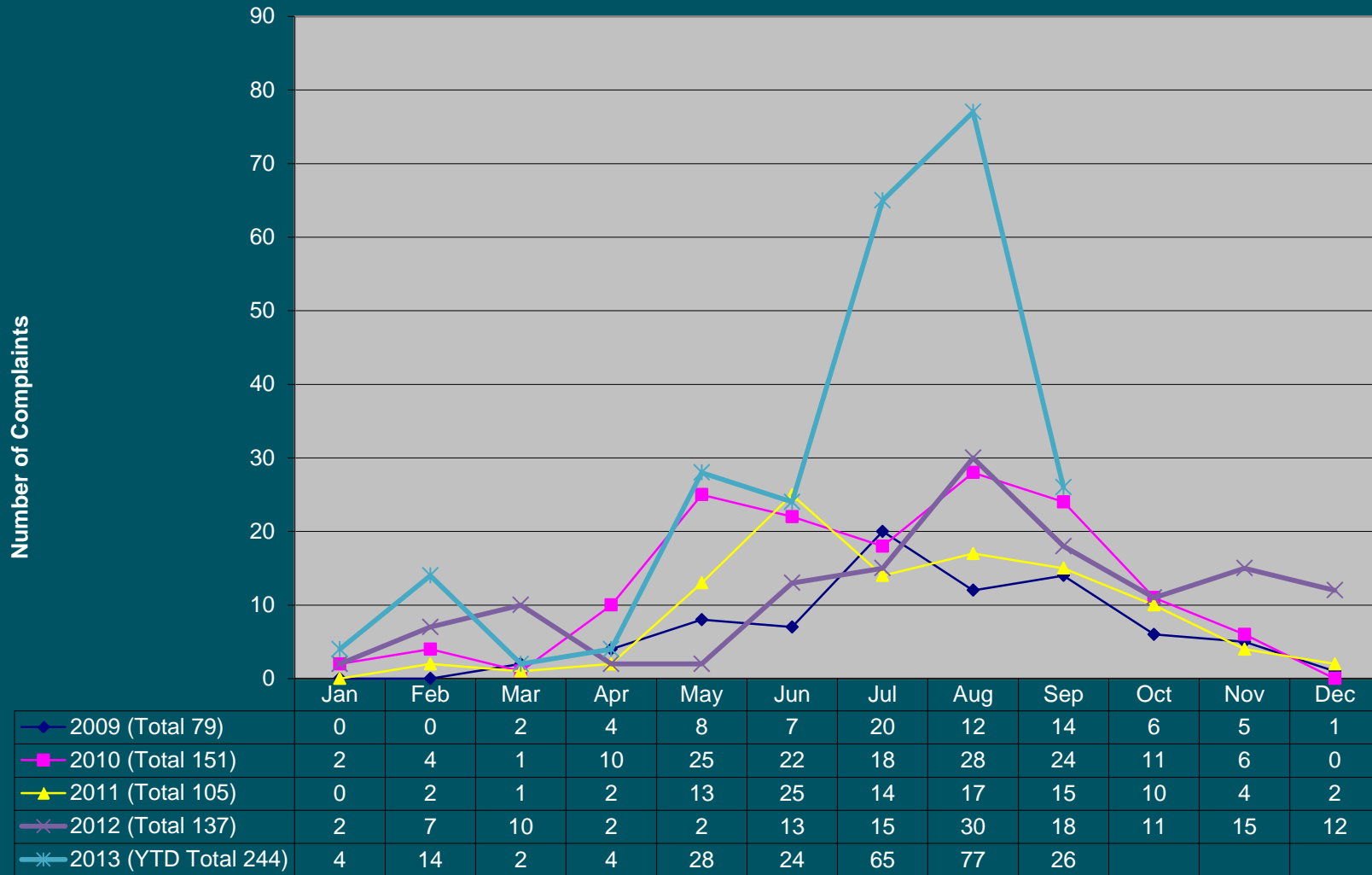
# NOISE COMPLAINT CALLS

APR 13 – SEP 13

11

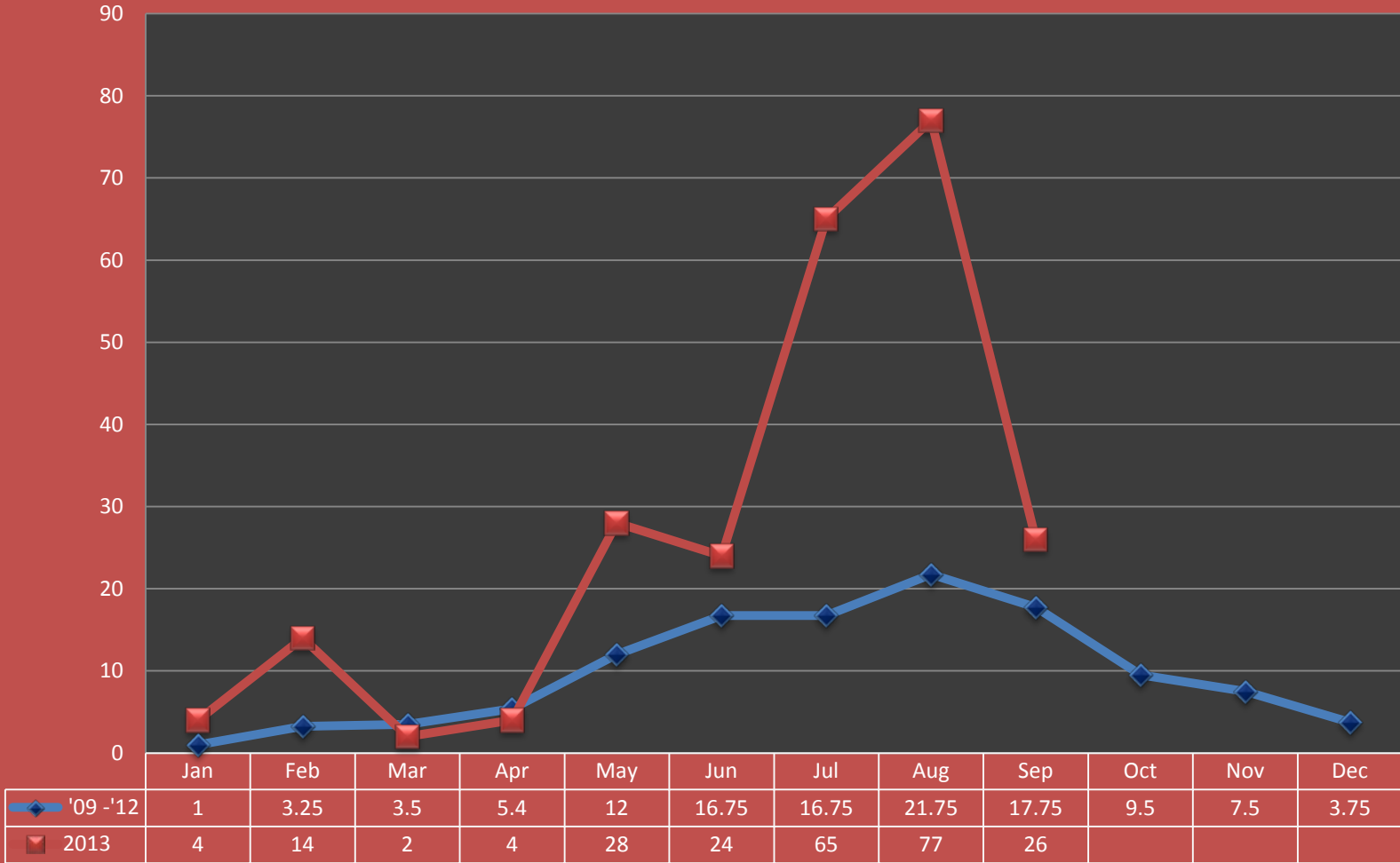
	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
DAY	4	14	18	29	46	26	137
NIGHT	0	14	6	36	31	0	87
TOTAL	4	28	24	65	77	26	224

# 2011 - 2013 Noise Complaint History



# Noise Complaint History

## Average Monthly Noise Complaints '09-'12 Average vs 2013 Complaints



# COMPLAINT HISTORY

APR 13 – SEP 13

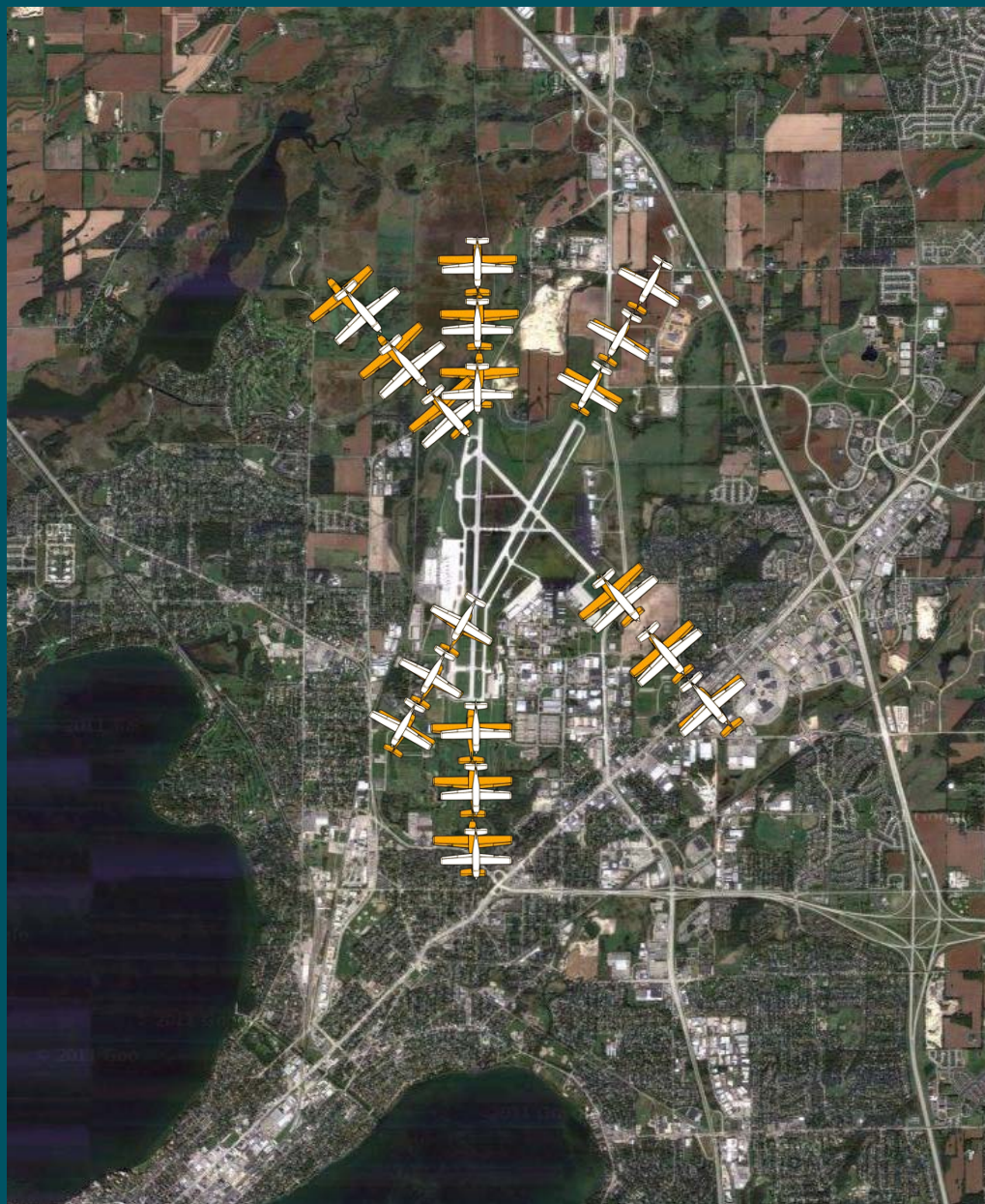
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
A P R																								A A				U			A		
M A Y				M M M M			G	A A			M M M					M		A		A A			A A A A A				A A	G			A A A A A A	G	
J U N	M M A A									A A		A A	H	A C	A M A	A A	A					A	A	A A A			A A						
J U L	M M M M G				M A A A M M M	A A A A A	A	A		A A			A A A		A A A M A		A A A A					A A A		M U			A A A A A A A			M	A A A A A A A A A A A	A A A A A A A A A A M	
A U G		A A A A A	A G	A G	A A	A A A A A	A M	A A				A A A A A A		A G			A A A A	G A					A A A M G A M A	A A A M G A A M M M	M M M M M M		A					A	
S E P	A A	A A	A	A	A A	A M A		A A A A										U M M					A	A	A		A A					A A A	

A = Airline; G = General Aviation; M = Military Fixed Wing; H = Military Helicopter; U = Unknown



# WIND CONDITIONS SUMMARY

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- WINDS FROM THE SOUTH  
THAT ARE GREATER THAN THE KNOTS
- VISIBILITY GREATER THAN 3 MILES
- RUNWAY CONDITION IS DRY
- PILOT COMPLIES WITH VOLUNTARY CONTRA FLOW OPERATION

# Wisconsin Wind Data\*

\*National Weather Service

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Month	Prevailing Wind	Greater than 5 kts
Jan	WNW – 11.5	94.0%
Feb	WNW – 12	93.4%
Mar	NW – 13	93.9%
Apr	S – 11.4	93.6%
May	S – 10.4	93.0%
Jun	S – 9.7	91.6%
Jul	S – 9.2	90.1%
Aug	S – 9.1	88.9%
Sep	S – 9.8	90.1%
Oct	S – 10.4	92.2%
Nov	S – 10.7	94.3%
Dec	WNW – 12.4	94.0%
Annual	S – 12.4	92.4%

# NOISE ABATEMENT COMPLIANCE AUDIT

WEATHER / RUNWAY DATA	
WINDS AT 5 KNOTS OR HIGHER <sup>1</sup>	76.94%
VISIBILITY AT 5 STATUTE MILES OR LESS	4.82%
RUNWAYS CLOSED <sup>2</sup>	18/36 = 58:40 3/21 = 80:35 14/32 = 84:18
<sup>1</sup> – Based on METAR weather observations at the time of recorded aircraft operations. <sup>2</sup> – Runway closures primarily due to runway maintenance	





## RUNWAY USE

Aircraft observed departing to the North	36.78%
Aircraft observed arriving from the North	53.51%
Aircraft observed departing to the South	63.22%
Aircraft observed arriving from the South	46.49%

## PASSUR FLIGHT TRACKING

**17,906** operations recorded by Passur flight monitoring system

**683** Passur observations of departures to the north and arrivals from the north when conditions allow for implementation of Noise Abatement Procedures

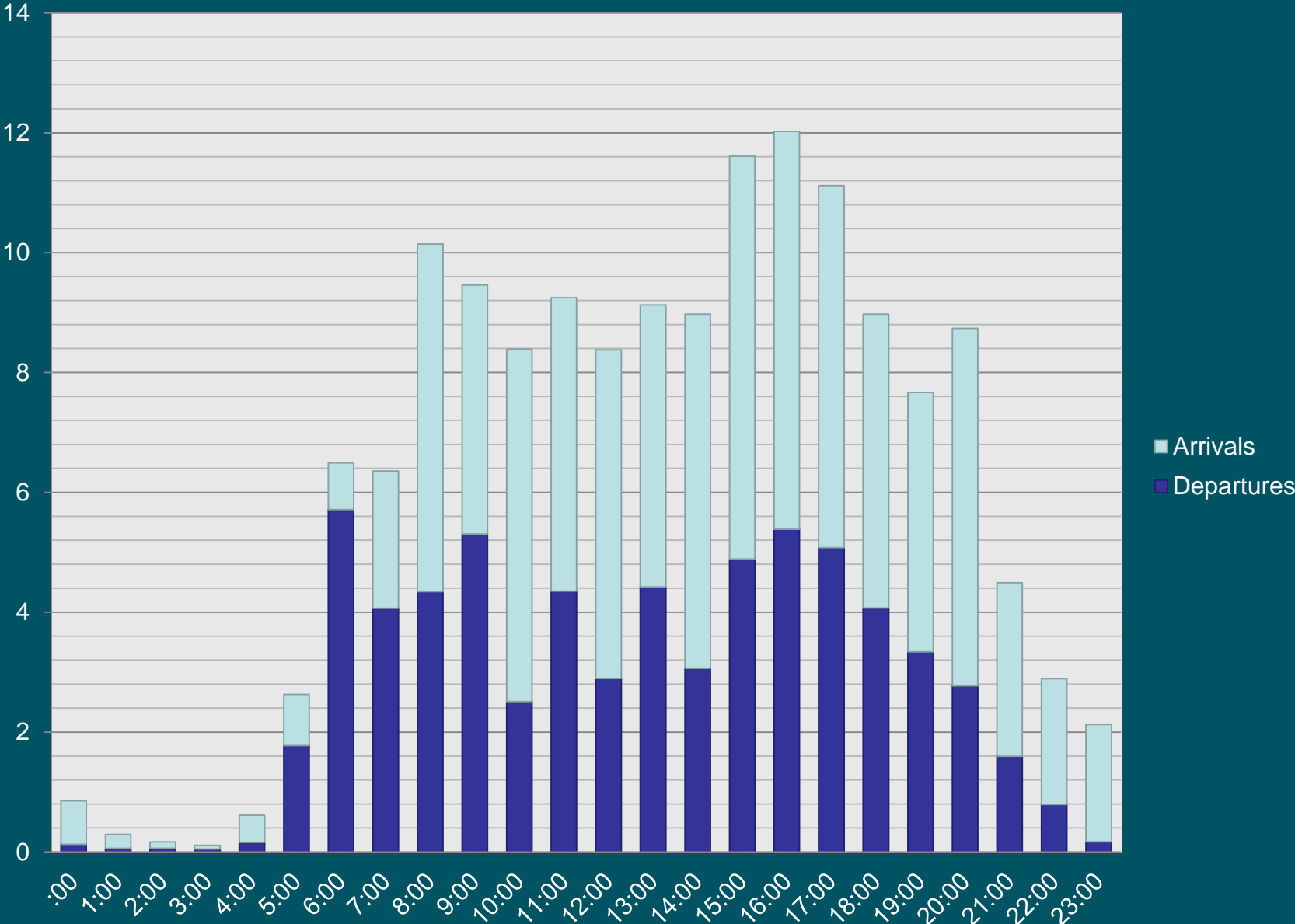
**\*\* With 100% compliance of Noise Abatement Procedures, there are times aircraft are required depart to the south and arrive from the south. \*\***

<b>RUNWAY USE FACTORS</b>			
	<b>Wind</b>	<b>Visibility</b>	<b>Ceiling</b>
<b>South Departure</b>	68.54%	3.28%	2.49%
<b>South Arrival</b>	60.77%	6.67%	19.12%

**\*\* Safety, traffic, airline requirements, and weather are all components which are factored into a pilot's decision when landing and taking off. \*\***

# AVERAGE HOURLY OPERATIONS

APR 13 – SEP 13



# 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?



# 2008 Noise Contours

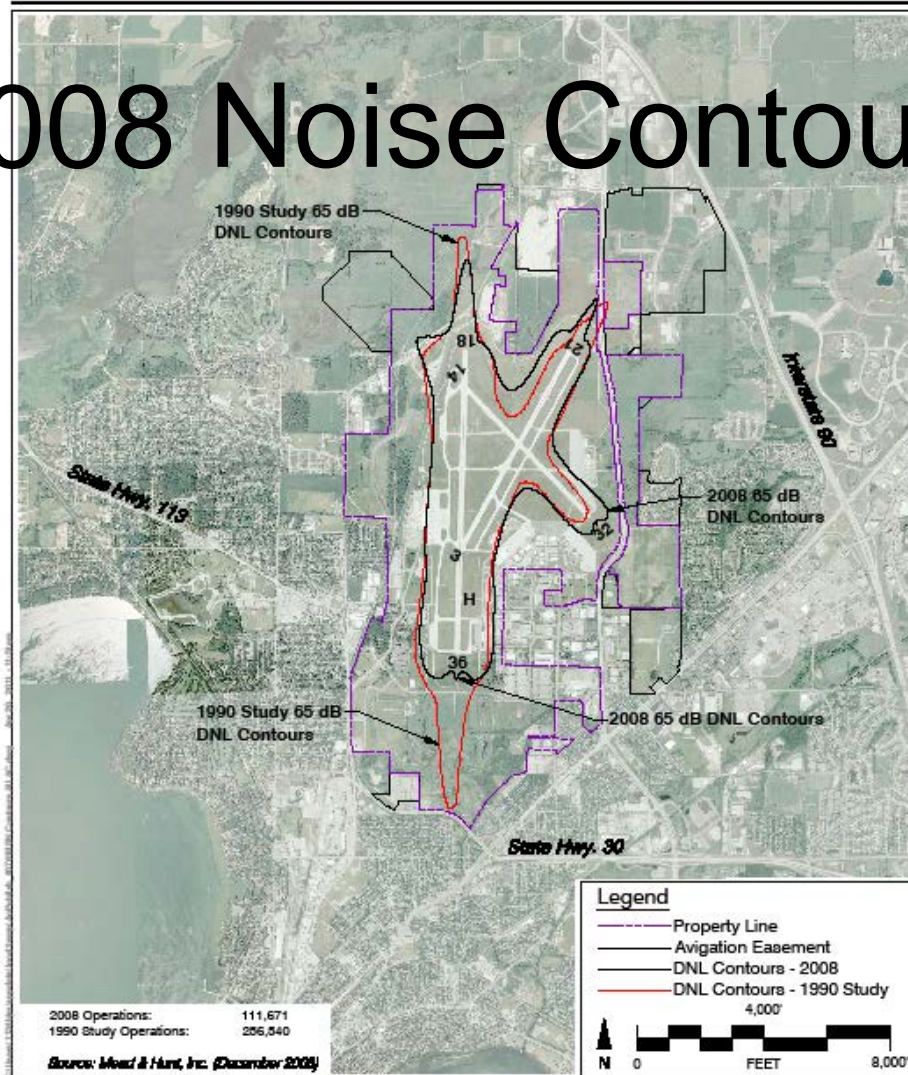


Exhibit 7

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



# 1991 Forecast vs 2008 Actual

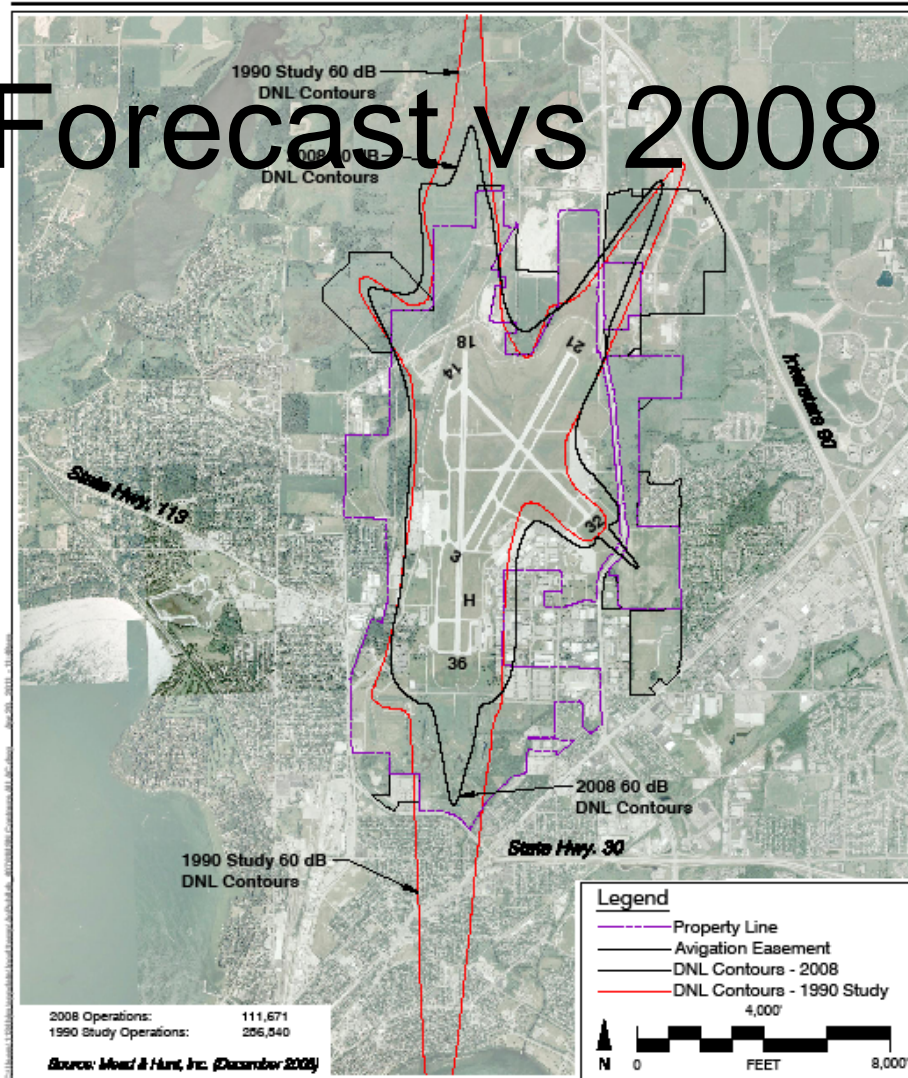


Exhibit 7

**2008 All Aircraft**  
 Comparison with the 1990 Noise Compatibility Study (Study Year 2010) Contours  
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