

# Noise Abatement Subcommittee Review of Noise Complaint Activity

APRIL 30, 2019

Madison, Wisconsin



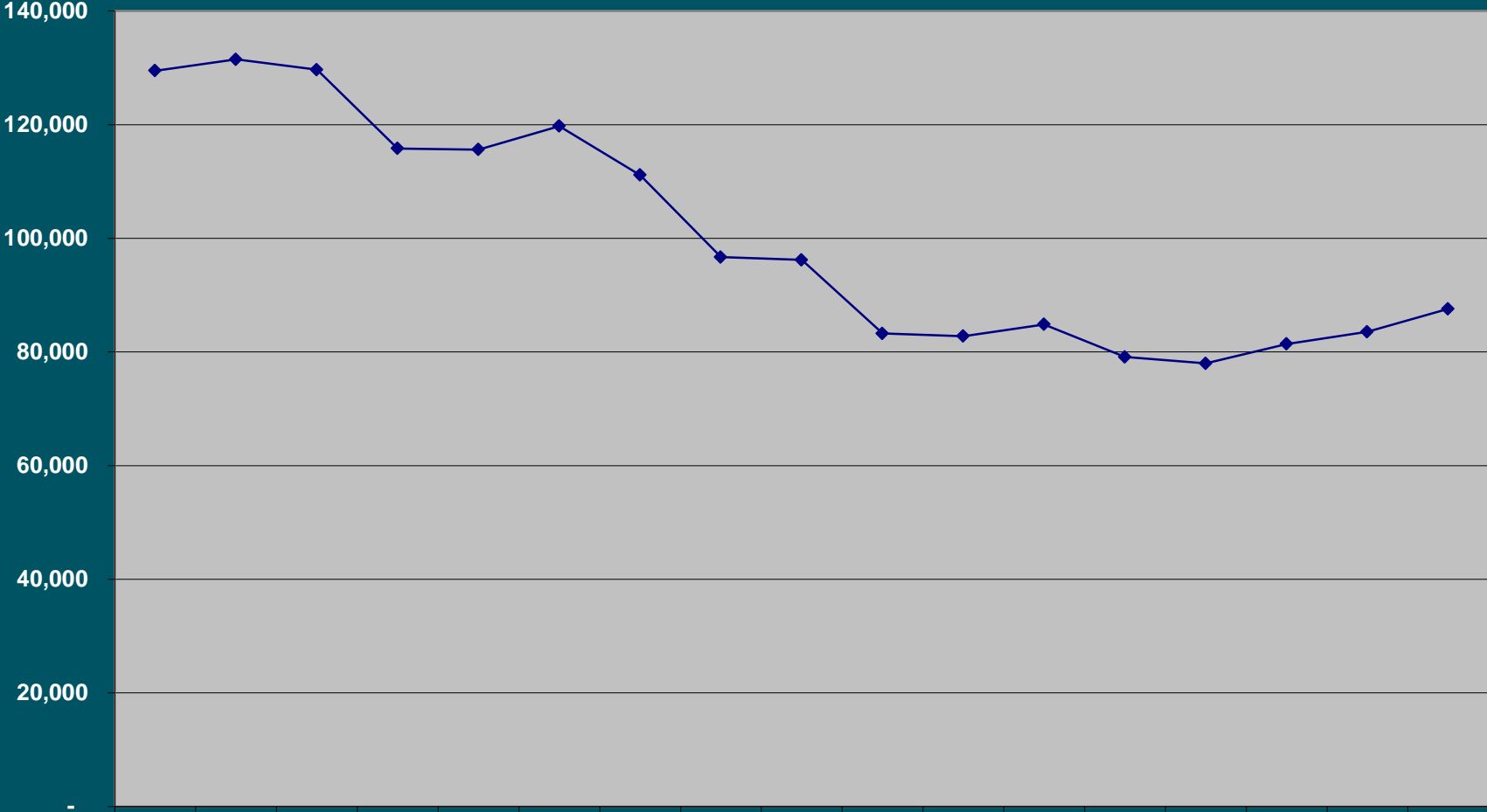
# AIRCRAFT MOVEMENTS

OCT 18 – MAR 19

<b>Aircraft Movements</b>	<b>OCT 18 – MAR 19</b>	<b>OCT 17 – MAR 18</b>	<b>% Change</b>
<i><b>Air Carrier</b></i>	<b>17,524</b>	<b>15,028</b>	<b>17%</b>
<i><b>Military</b></i>	<b>2,490</b>	<b>1,898</b>	<b>25%</b>
<i><b>General Aviation</b></i>	<b>19,029</b>	<b>21,940</b>	<b>-13%</b>
<i><b>Total Movements</b></i>	<b>39,043</b>	<b>38,940</b>	<b>0%</b>

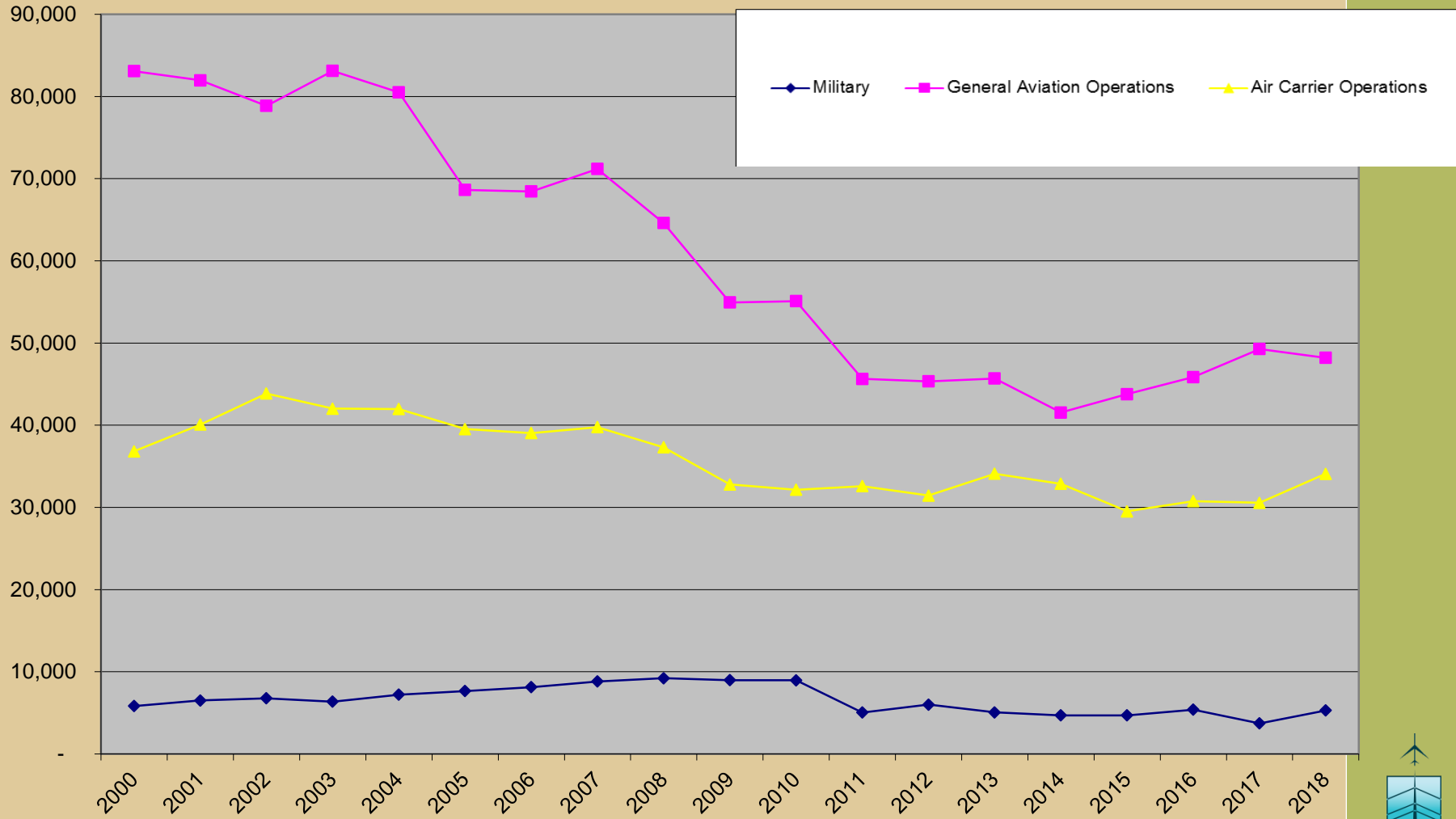


# Aircraft Operations



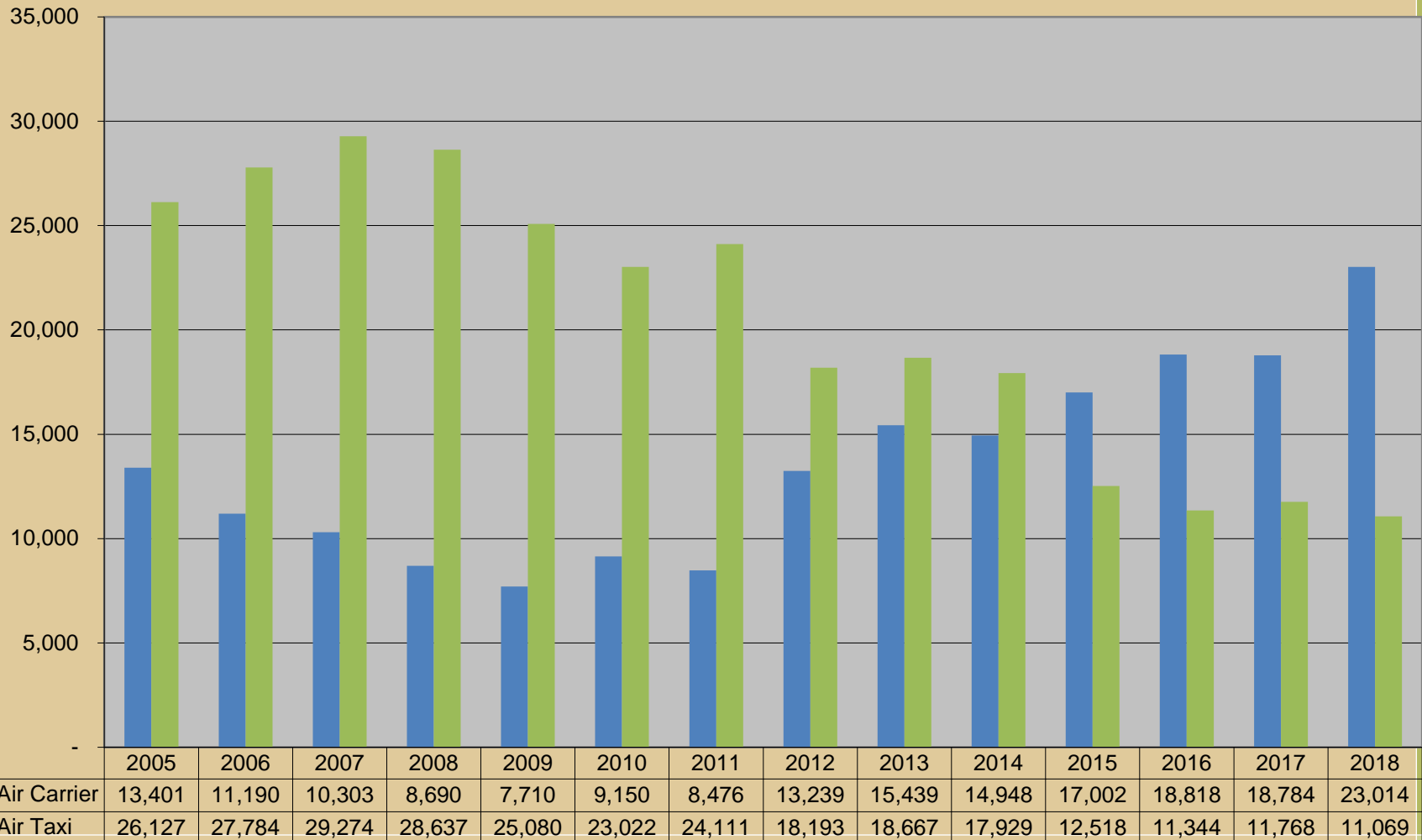
—◆ Aircraft Operations	129,49	131,49	129,67	115,81	115,61	119,76	111,13	96,700	96,205	83,263	82,777	84,860	79,116	77,996	81,403	83,539	87,578
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# Historical Aircraft Operations by Type



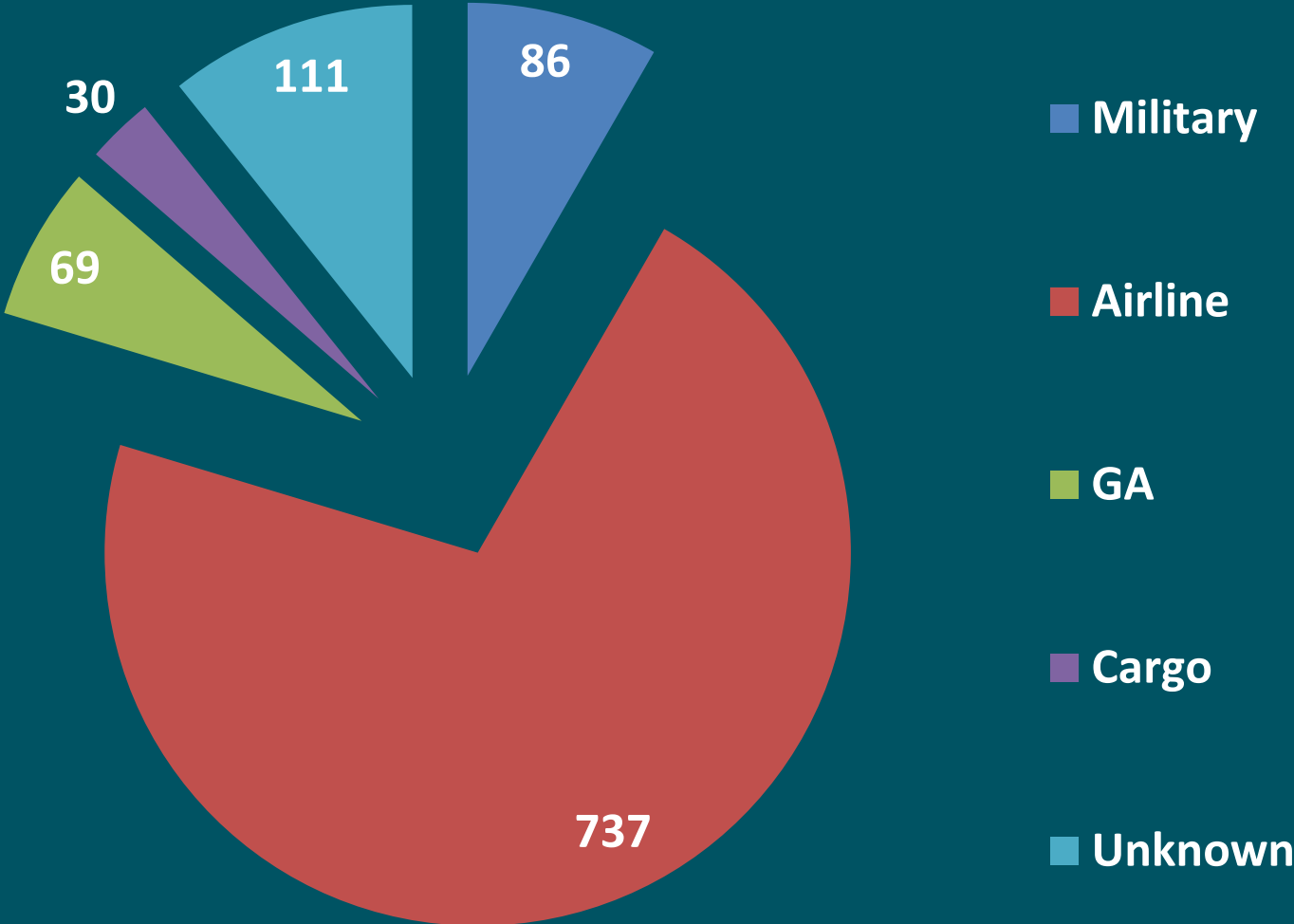
# Air Carrier (A-320, B717) vs Air Taxi (CRJ, ERJ)

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



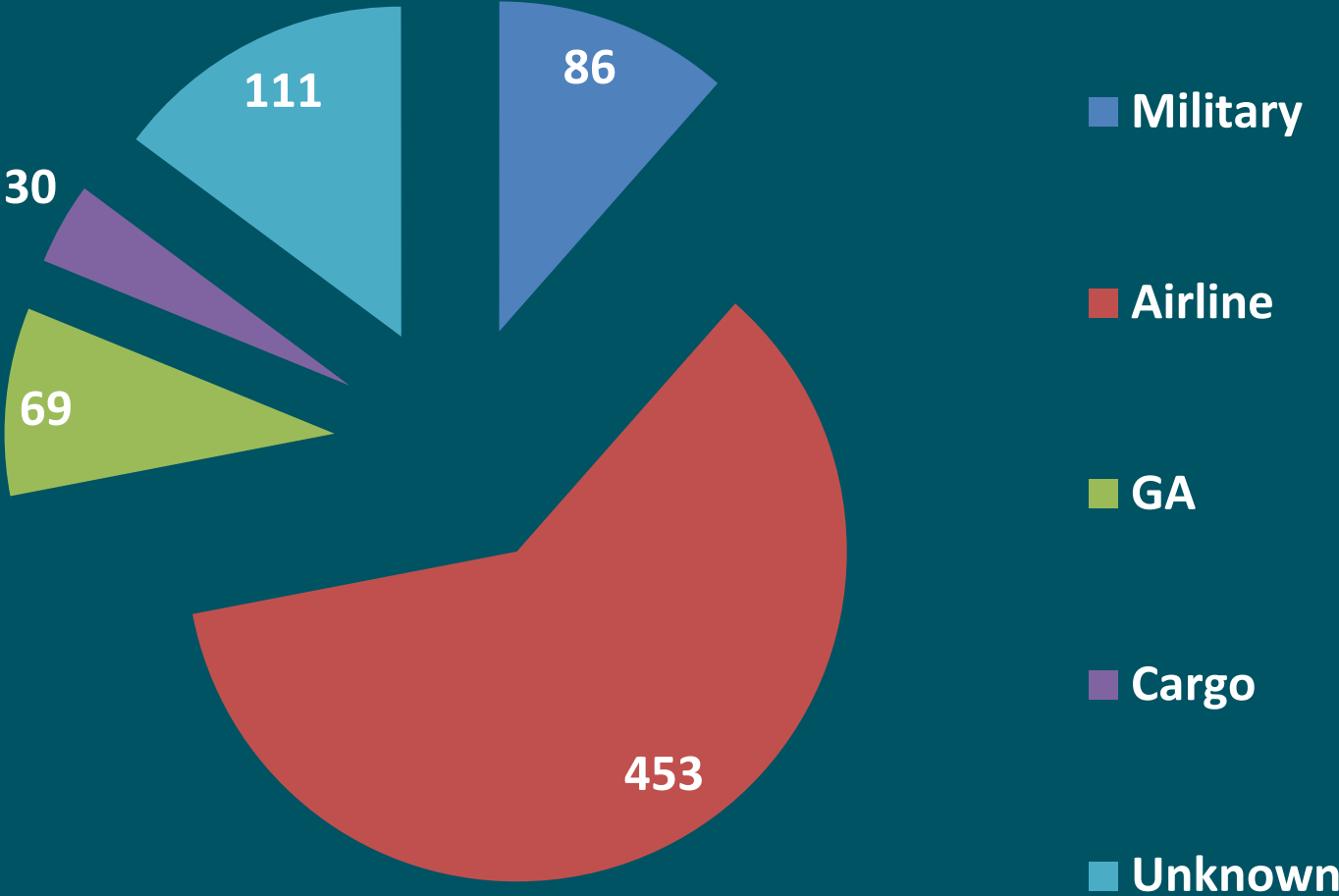
# Complaints by Aircraft Type

OCT 18 – MAR 19



# Complaints by Aircraft Type, revised

OCT 18 – MAR 19



# COMPLAINTS BY AREA

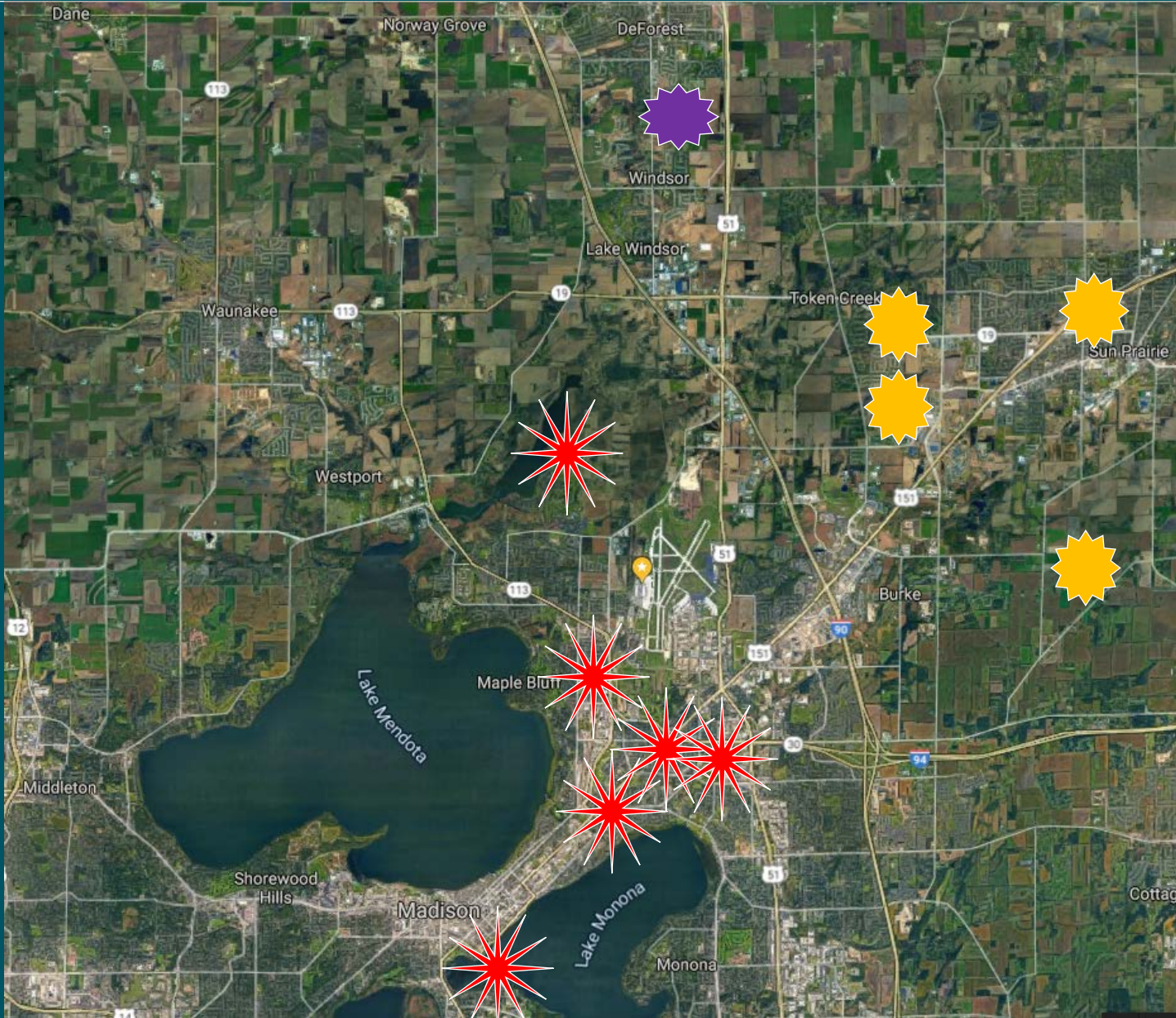
Area	OCT 18 – MAR 19		OCT 17 – MAR 18	
	Complaints	Households	Complaints	Households
<i>DeForest</i>	459	1	569	1
<i>Madison</i>	533	18	105	22
<i>Sun Prairie</i>	39	4	4	3
<i>Oregon</i>	2	1	0	0
<i>Total</i>	1033	24	681	26





# COMPLAINT LOCATIONS

OCT 18 – MAR 19



# NOISE COMPLAINT CALLS

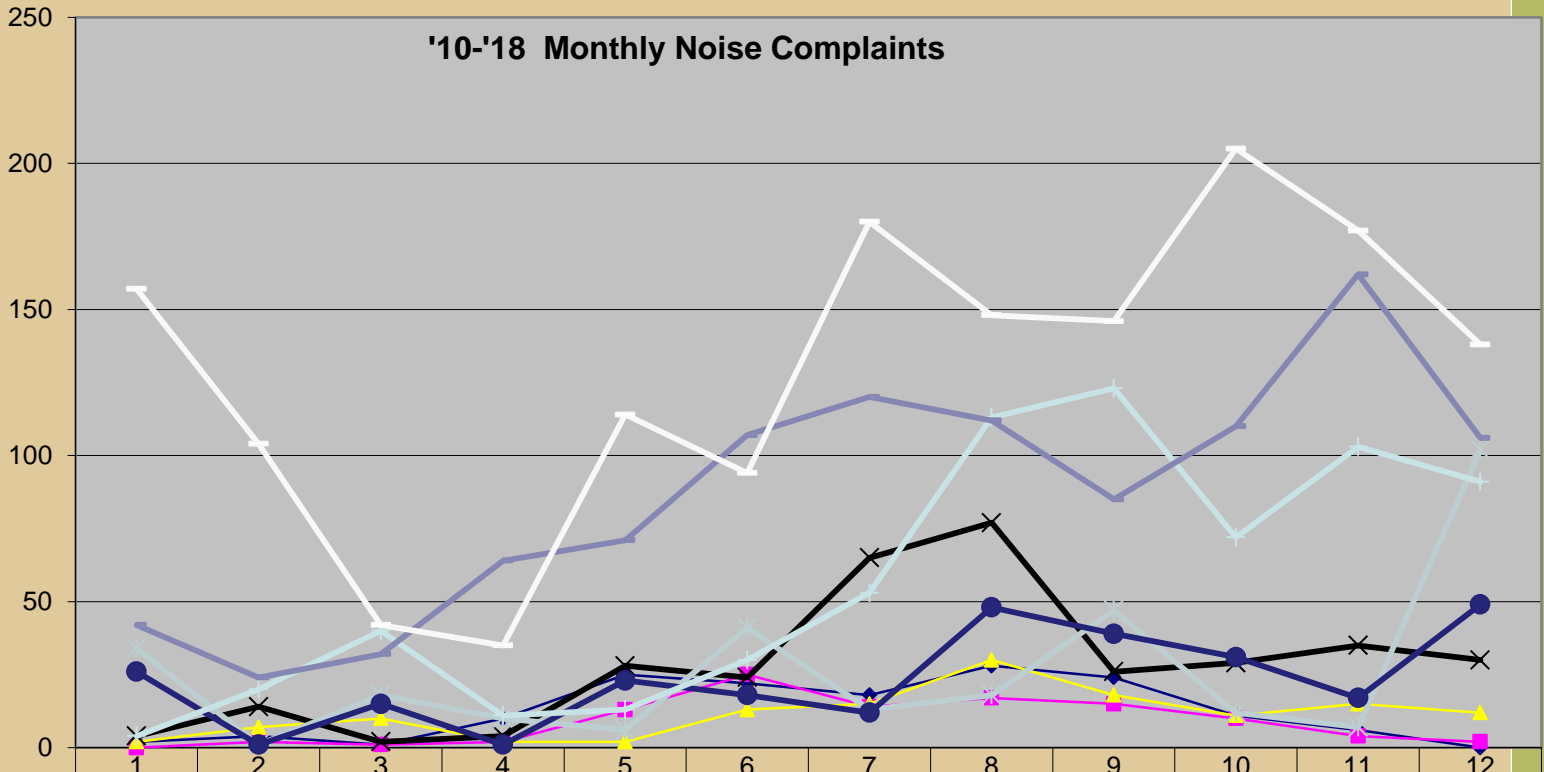
OCT 18 – MAR 19

	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
<b>DAY</b>	<b>100</b>	<b>80</b>	<b>65</b>	<b>92</b>	<b>57</b>	<b>138</b>	<b>532</b>
<b>NIGHT</b>	<b>105</b>	<b>97</b>	<b>73</b>	<b>164</b>	<b>23</b>	<b>39</b>	<b>501</b>
<b>TOTAL</b>	<b>205</b>	<b>177</b>	<b>138</b>	<b>256</b>	<b>80</b>	<b>177</b>	<b>1033</b>



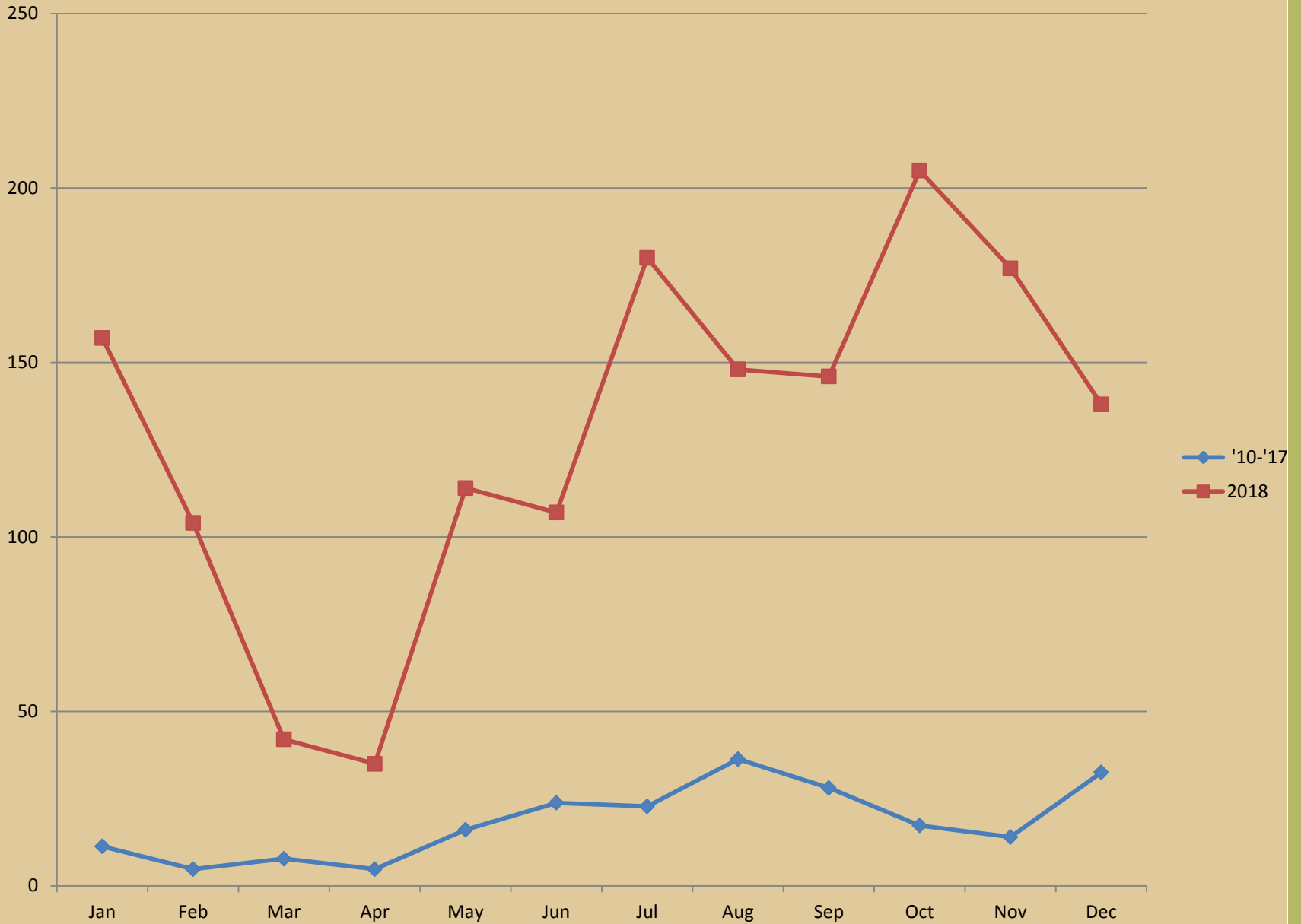
# 2010 - 2018 Noise Complaint History

Number of Complaints



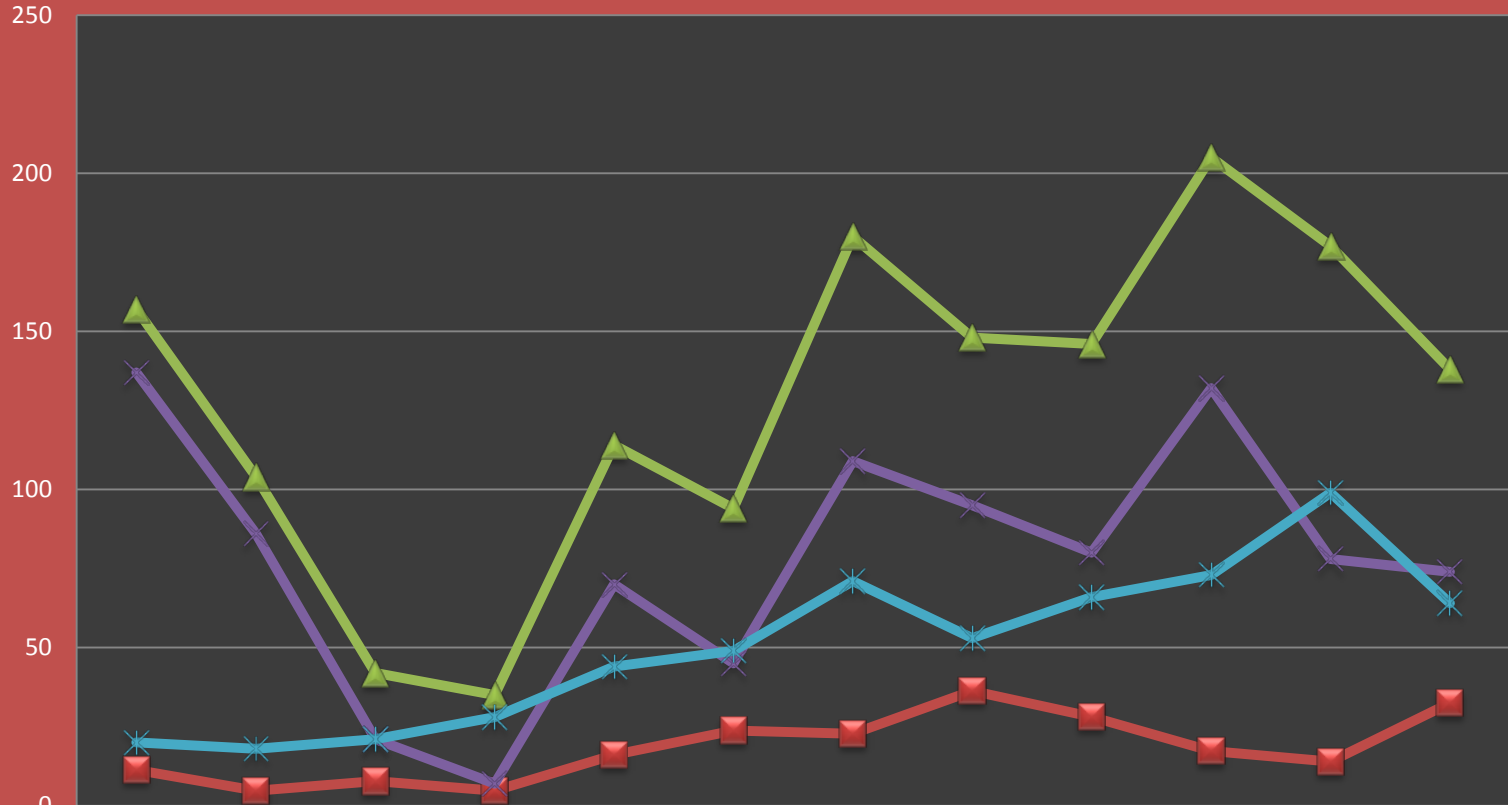
	1	2	3	4	5	6	7	8	9	10	11	12
◆ 2010 (Total 151)	2	4	1	10	25	22	18	28	24	11	6	0
■ 2011 (Total 105)	0	2	1	2	13	25	14	17	15	10	4	2
▲ 2012 (Total 137)	2	7	10	2	2	13	15	30	18	11	15	12
✕ 2013 (Total 338)	4	14	2	4	28	24	65	77	26	29	35	30
◆ 2014 (Total 309)	34	1	18	10	6	41	13	18	47	12	7	102
● 2015 (Total 280)	26	1	15	1	23	18	12	48	39	31	17	49
◆ 2016 (Total 673)	4	20	40	11	13	30	53	113	123	72	103	91
■ 2017 (Total 1035)	42	24	32	64	71	107	120	112	85	110	162	106
— 2018 (Total 1540)	157	104	42	35	114	94	180	148	146	205	177	138

# Noise Complaint History



# Noise Complaint History

## Average Monthly Noise Complaints '10-'17 Average vs 2018



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ Avg '10-'17	11.3	4.8	7.8	4.8	16.1	23.8	22.8	36.3	28.1	17.3	14	32.5
▲ 2018	157	104	42	35	114	94	180	148	146	205	177	138
✕ Single Person	137	86	21	7	70	45	109	95	80	132	78	74
* Rest	20	18	21	28	44	49	71	53	66	73	99	64



	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
OCT		M U	U U	M					C C C	M M M U U C		C	M C	C	M	C M		C				M	M	U M					MU C	M	C
NOV	HH AA AA AA A	A A A	A U	U	A U	M G U				U	U U U		M	U	M U	G M U			U	U U	M U A					M		GU UM	MM U	A U M	
DEC		A	M M U		U	G G G			U U U	U	U	U	U U U					M M M M M	UM UM MU U	M	M U		U			U	U	MU M		U	
JAN		M M U U	M U	M	M M U				M M U		U	U		U U	M M U	M	M U			U						U					
FEB			U	U U U U						AU			U M						UM U	U	M M U	M					UM	U			
MAR	M M	M U M	M U	U	M M M M U	U M U						M	U	M U U			A	M	AM MU MU	U	A M U M		A		M	M M U M U	M M U M	A M			

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



# 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>	83.66%
VISIBILITY AT 5 STATUTE MILES OR LESS	6.98%
RUNWAYS CLOSED <sup>2</sup>	18/36 = 50:50 3/21 = 210.50 14/32 = 277.75
<sup>1</sup> – Based on METAR weather observations at the time of recorded aircraft operations. <sup>2</sup> – Runway closures primarily due to snow and ice control procedures	

# NOISE ABATEMENT COMPLIANCE AUDIT

RUNWAY USE	
Aircraft observed departing to the North	44.52%
Aircraft observed arriving from the North	40.51%
Aircraft observed departing to the South	59.83%
Aircraft observed arriving from the South	55.14%

PASSUR FLIGHT TRACKING	
<b>3,556</b> operations recorded by Passur flight monitoring system	

# NOISE ABATEMENT COMPLIANCE AUDIT

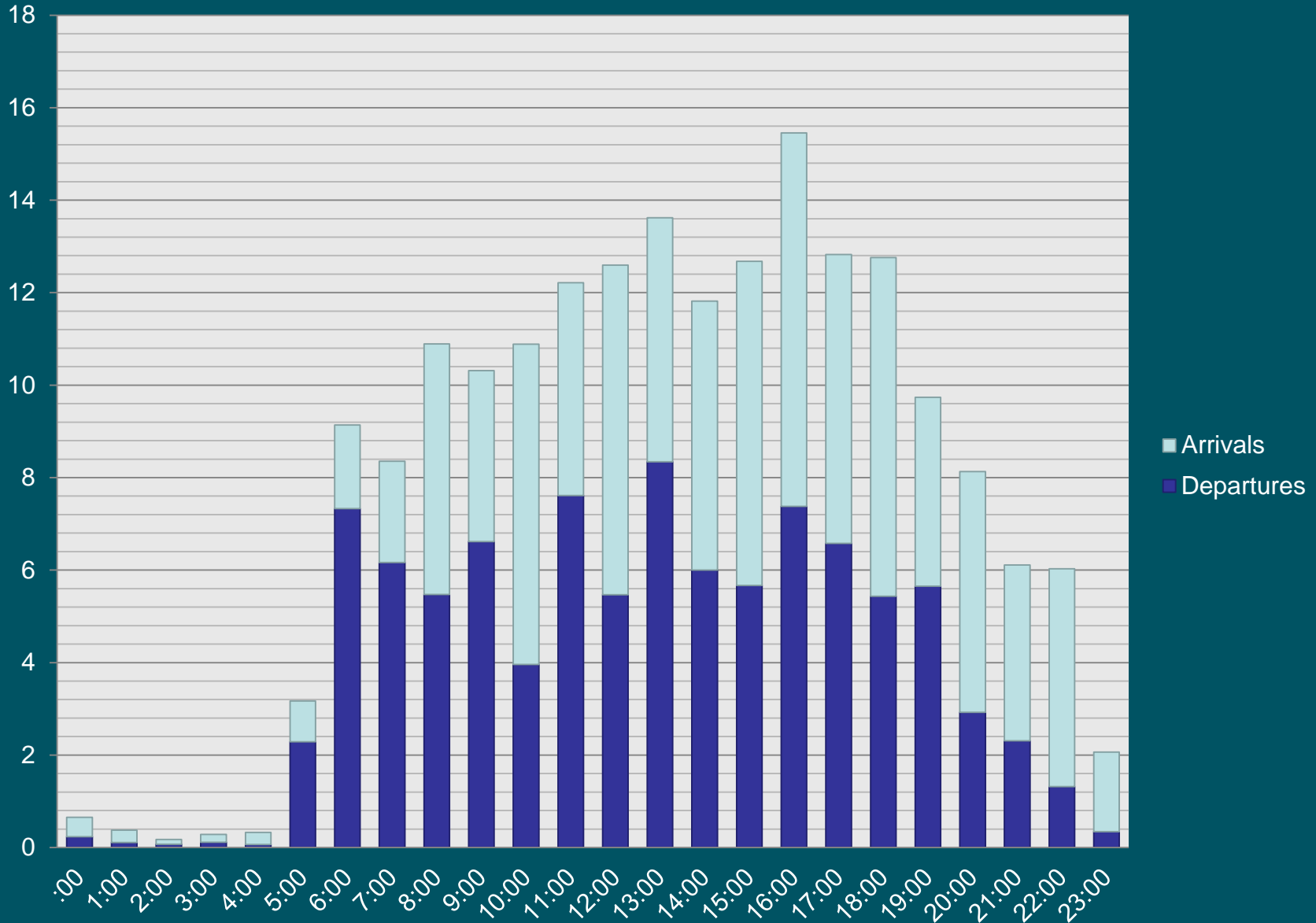
**\*\* With 100% compliance of Noise Abatement Procedures, there are times aircraft are required depart to the south and arrive from the south. \*\***

RUNWAY USE FACTORS			
	Wind	Visibility	Ceiling
South Departure	78.22%	16.25%	0.00%
South Arrival	76.34%	8.81%	27.17%

**\*\* 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

OCT 18 – MAR 19



# 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**



