

# Noise Abatement Subcommittee Review of Noise Complaint Activity

APRIL 24, 2017

Madison, Wisconsin



# AIRCRAFT MOVEMENTS

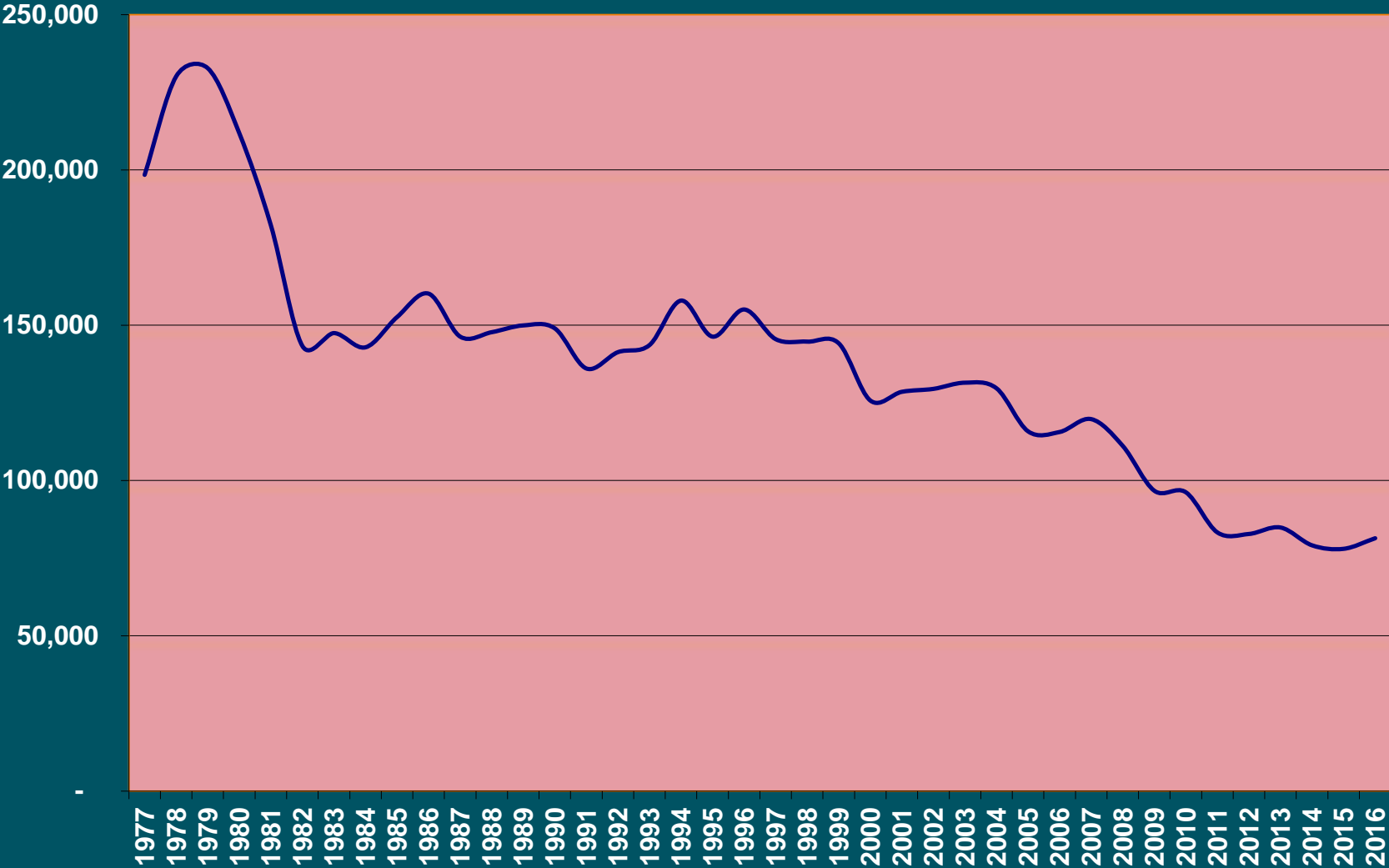
OCT 16 – MAR 17

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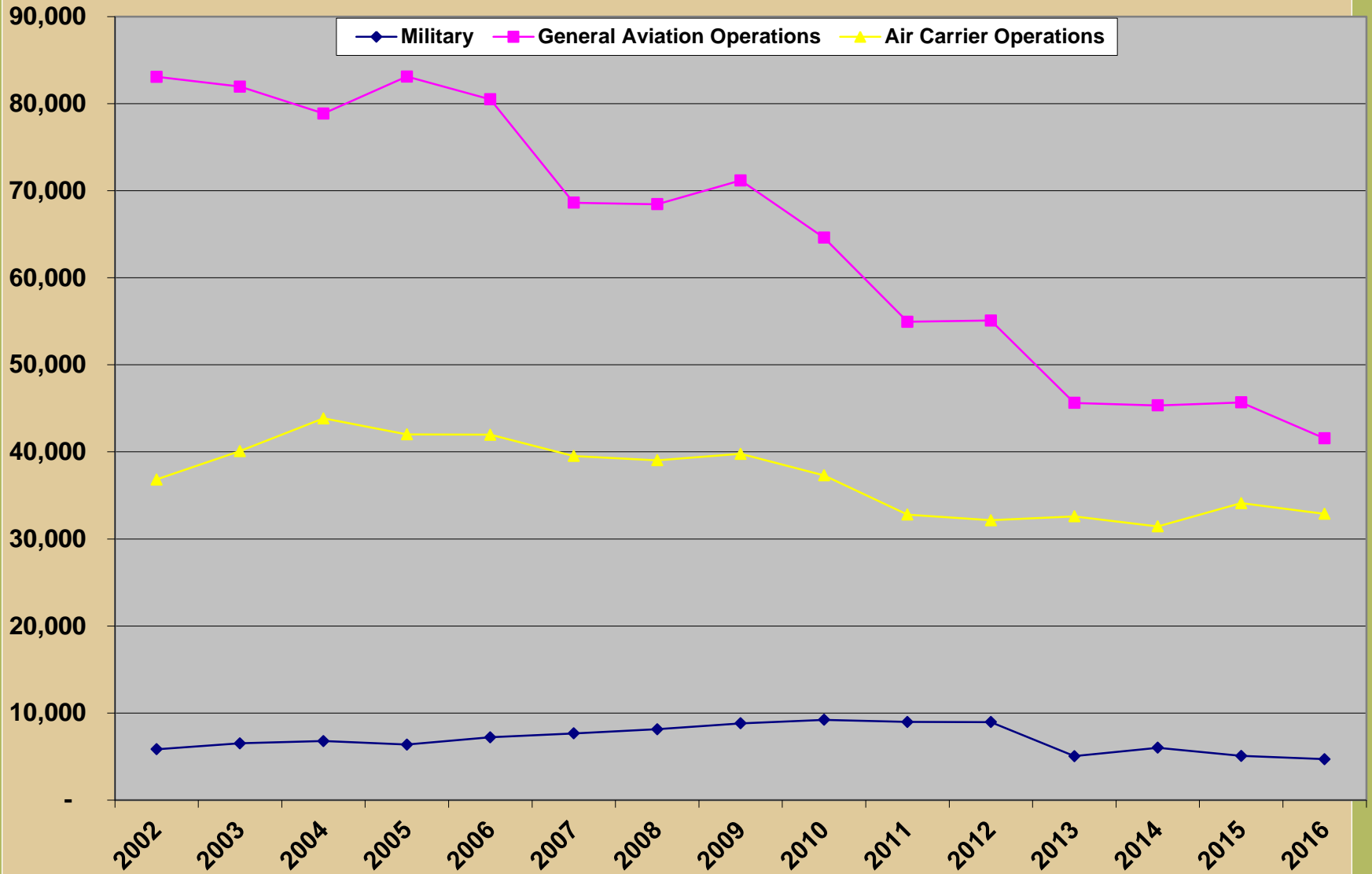
<b>Aircraft Movements</b>	<b>OCT 16 – MAR 17</b>	<b>OCT 15 – MAR 16</b>	<b>% Change</b>
<i><b>Air Carrier</b></i>	<b>12,935</b>	<b>14,176</b>	<b>- 9 %</b>
<i><b>Military</b></i>	<b>2,130</b>	<b>2,711</b>	<b>- 21 %</b>
<i><b>General Aviation</b></i>	<b>20,726</b>	<b>21,332</b>	<b>- 3%</b>
<i><b>Total Movements</b></i>	<b>36,412</b>	<b>38,216</b>	<b>- 4%</b>

# Aircraft Operations

### Historical Total Aircraft Operations, DCRA

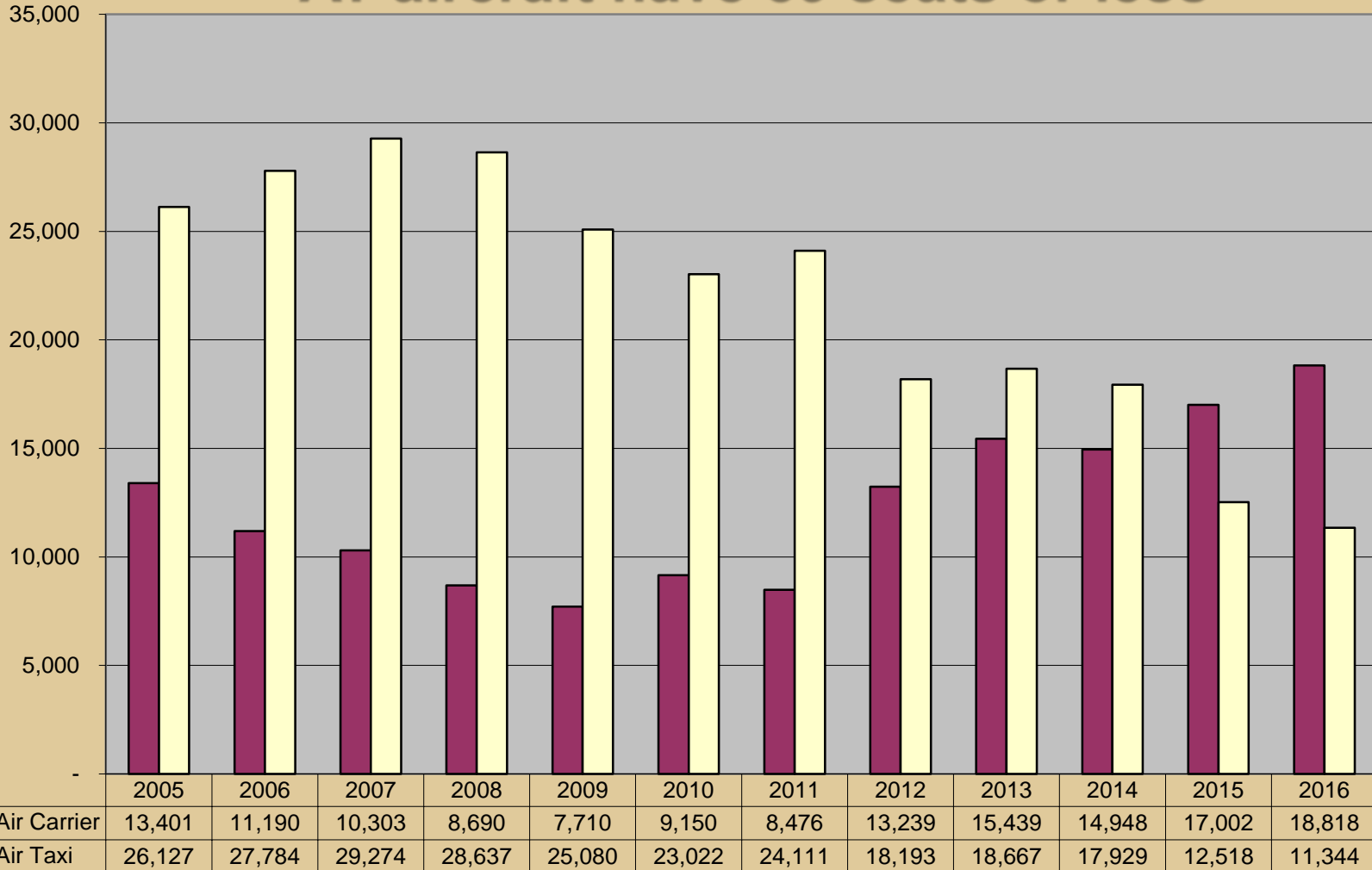


# Historical Aircraft Operations by Type



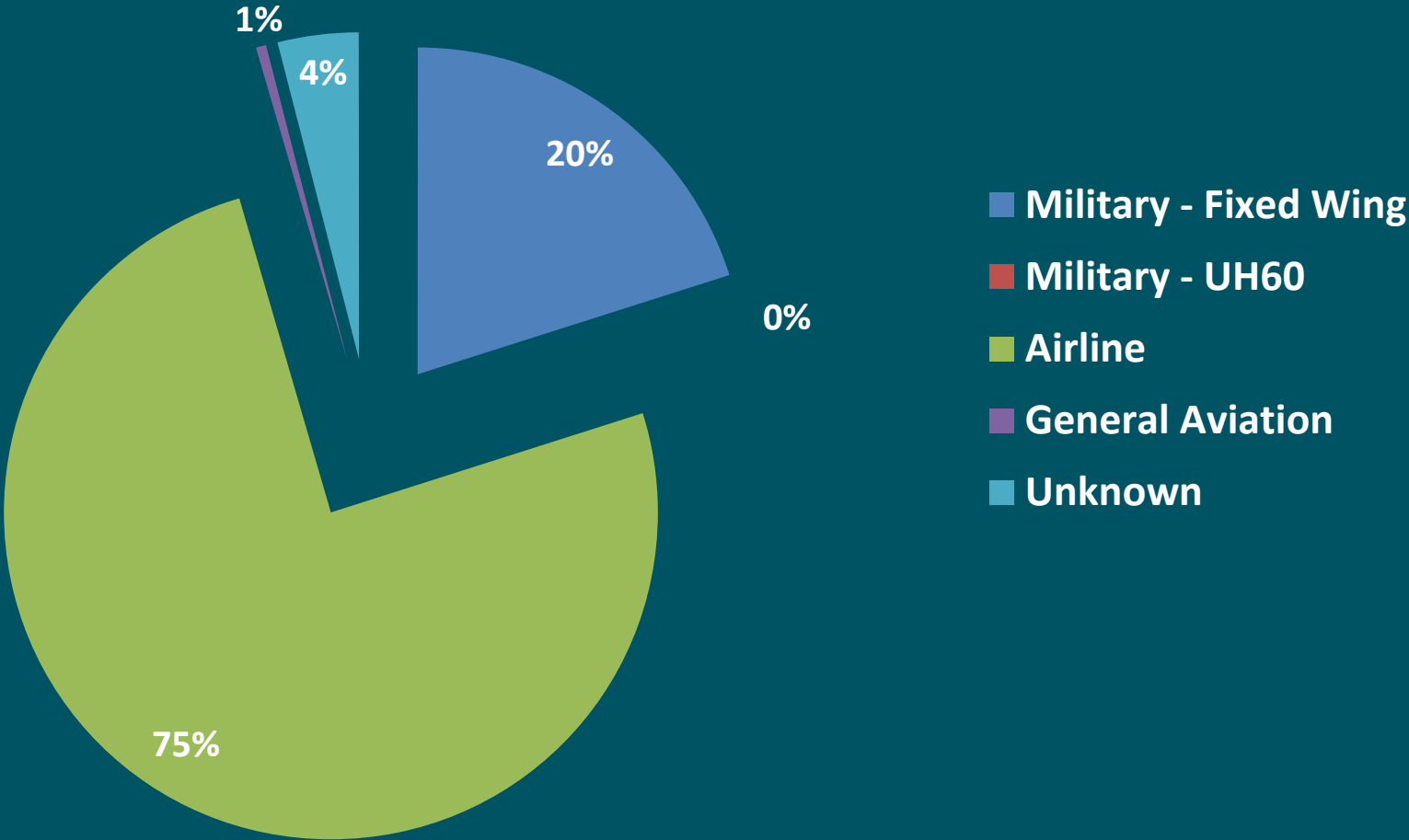
# Air Carrier (A-320, B717) vs Air Taxi (CRJ, ERJ)

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



# Complaints by Aircraft Type

OCT 16 – MAR 17



# Complaints by Area

OCT 16 – MAR 17

Area	OCT 16 – MAR 17		OCT 15 – MAR 17	
	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>	272	1	42	1
<i>Fitchburg</i>	0	0	0	0
<i>Madison</i>	80	26	95	32
<i>McFarland</i>	0	0	0	0
<i>Middleton</i>	0	0	0	0
<i>Monona</i>	0	0	0	0
<i>Sun Prairie</i>	12	2	24	1
<i>Windsor</i>	0	0	0	0
<i>Verona</i>	0	0	0	0
<i>Waunakee</i>	0	0	0	0
<b>Total</b>	<b>364</b>	<b>29</b>	<b>161</b>	<b>34</b>

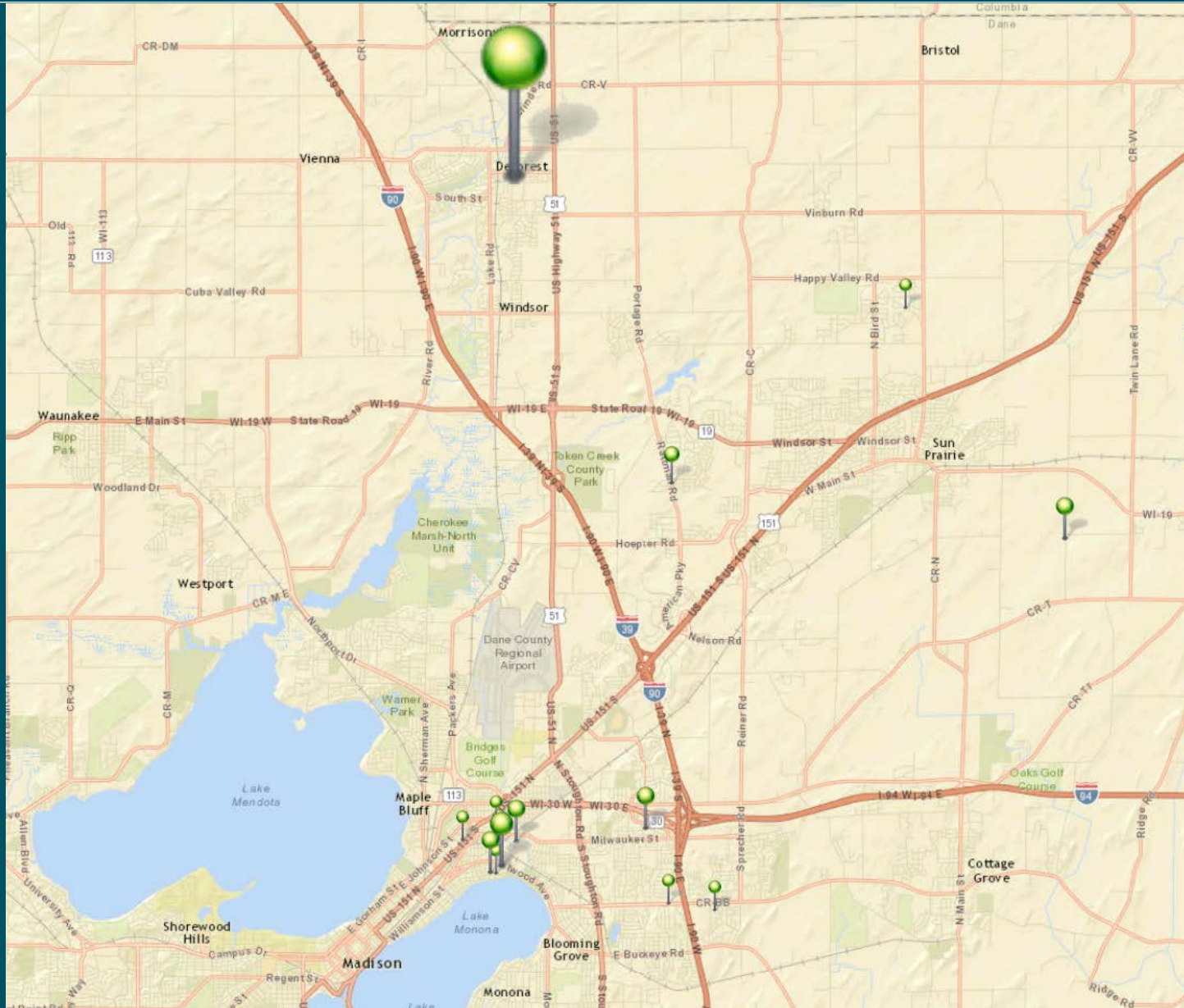




# COMPLAINT LOCATIONS

OCT 14 – MAR 15

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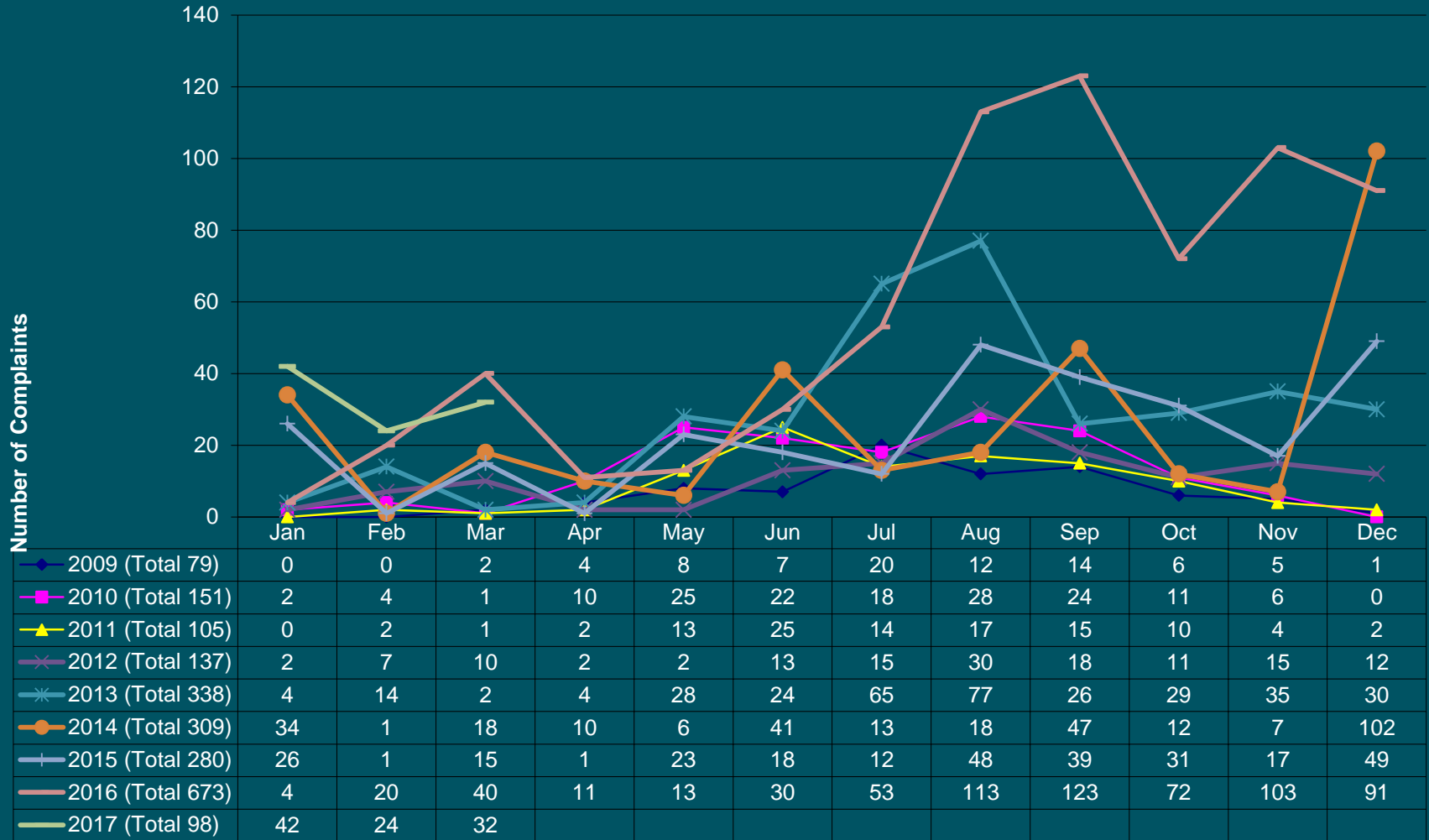
# NOISE COMPLAINT CALLS

OCT 16 – MAR 17

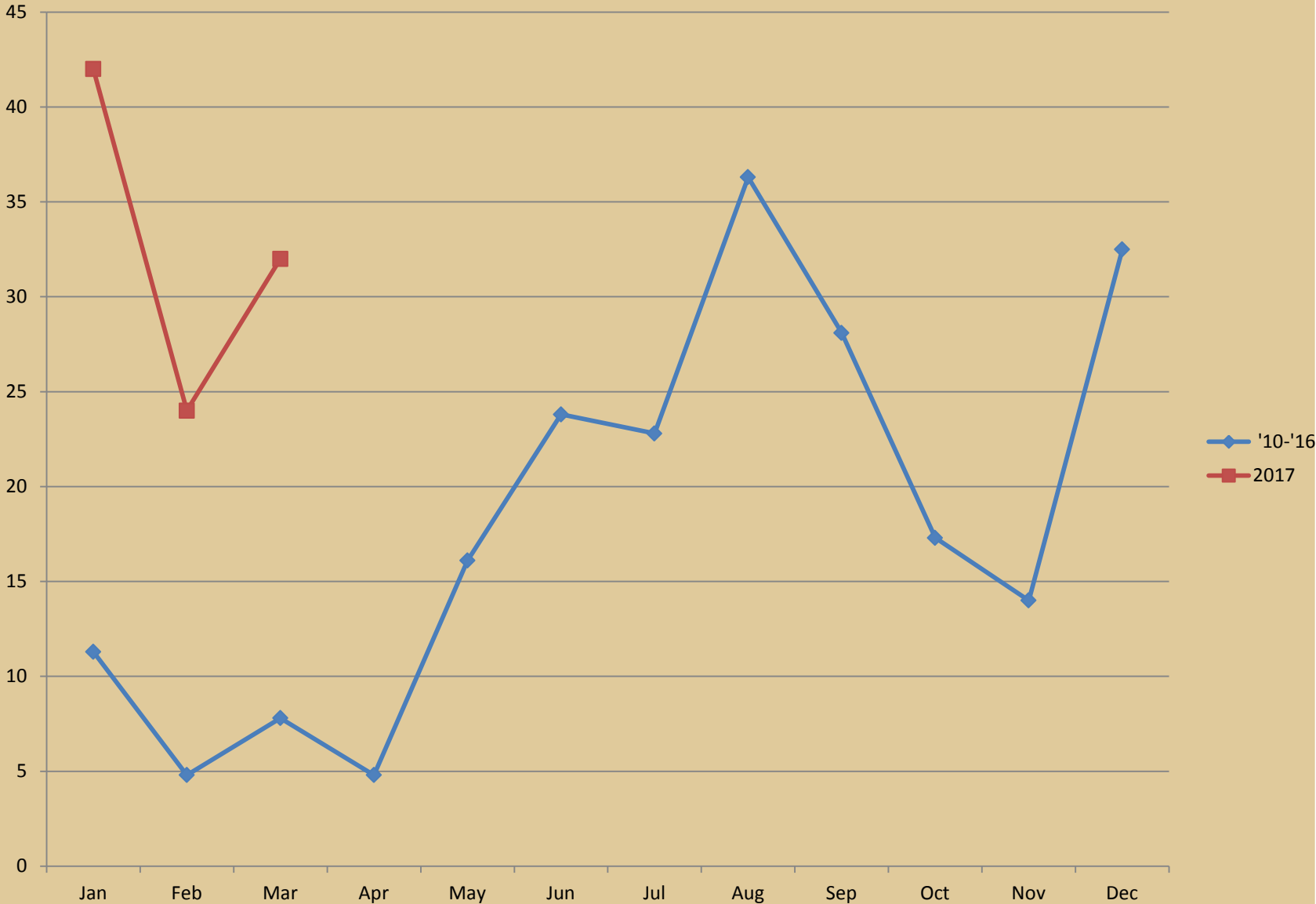
	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
<b>DAY</b>	68	102	91	39	16	27	343
<b>NIGHT</b>	4	1	0	3	8	5	21
<b>TOTAL</b>	72	103	91	42	24	32	364



# 2009 - 2017 Noise Complaint History



# Noise Complaint History



	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			AAAAA	AAAAA	AAAA	AAAA	AAAA				UMM			AAAA	15		9	GAAAA					G	MC			AA	AA AA	U	AA	AA
NOV								AUU7M	AUU5M					MAAAAA	AA AA AA AA AA	MAA	AAAAA					AAAAA			AAAAA	AA 42	AA		UA A		
DEC				AAAAU	AAAAA							UM52	M10	MAAM					A		M						M	MM MM MM MM M			
JAN			M				AAA	A				M		UA				MAAA	MM MM MM 10	AAA	AA		UA					MM MM	AAAAA	A	
FEB		A		U						AAA			M							AAAAA	U A A A A A	M U				MMM					
MAR	UG		MAA		MM							AAA									UMMM	M M				MM MM MM	MM			MM 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>	81.67%
VISIBILITY AT 5 STATUTE MILES OR LESS	11.23%
RUNWAYS CLOSED <sup>2</sup>	18/36 = 44:30 3/21 = 272:45 14/32 = 288:15
<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	40.46%
Aircraft observed arriving from the North	41.33%
Aircraft observed departing to the South	58.77%
Aircraft observed arriving from the South	56.60%

## PASSUR FLIGHT TRACKING

**13,936** operations recorded by Passur flight monitoring system

18 operations non-compliant with Noise Abatement Program



# NOISE ABATEMENT COMPLIANCE AUDIT

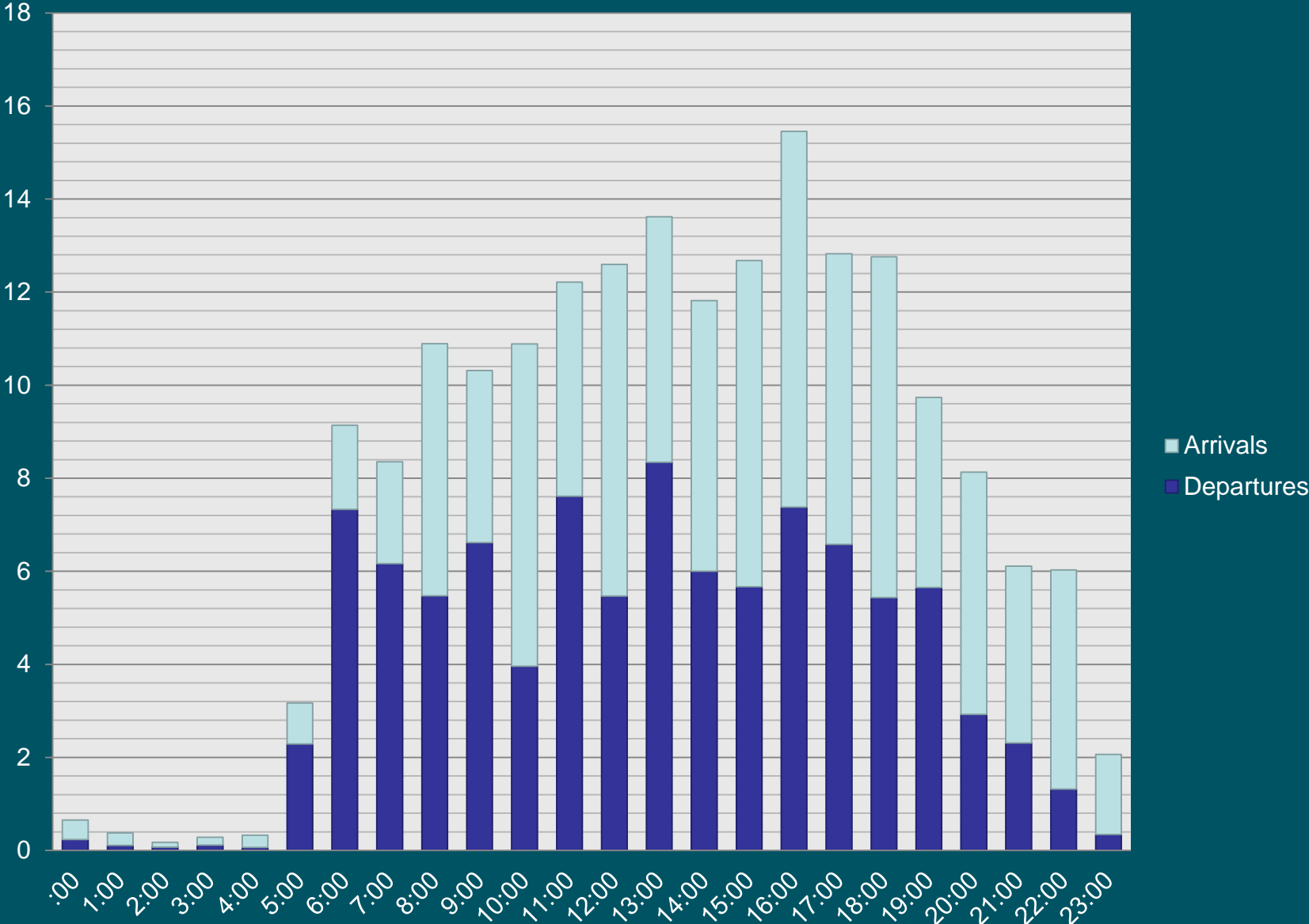
**\*\* With 100% compliance of Noise Abatement Procedures, there are times aircraft are required depart to the south and arrive from the south. \*\***

RUNWAY USE FACTORS			
	Wind	Visibility	Ceiling
South Departure	73.46%	15.91%	0.47%
South Arrival	71.61%	7.73%	31.80%

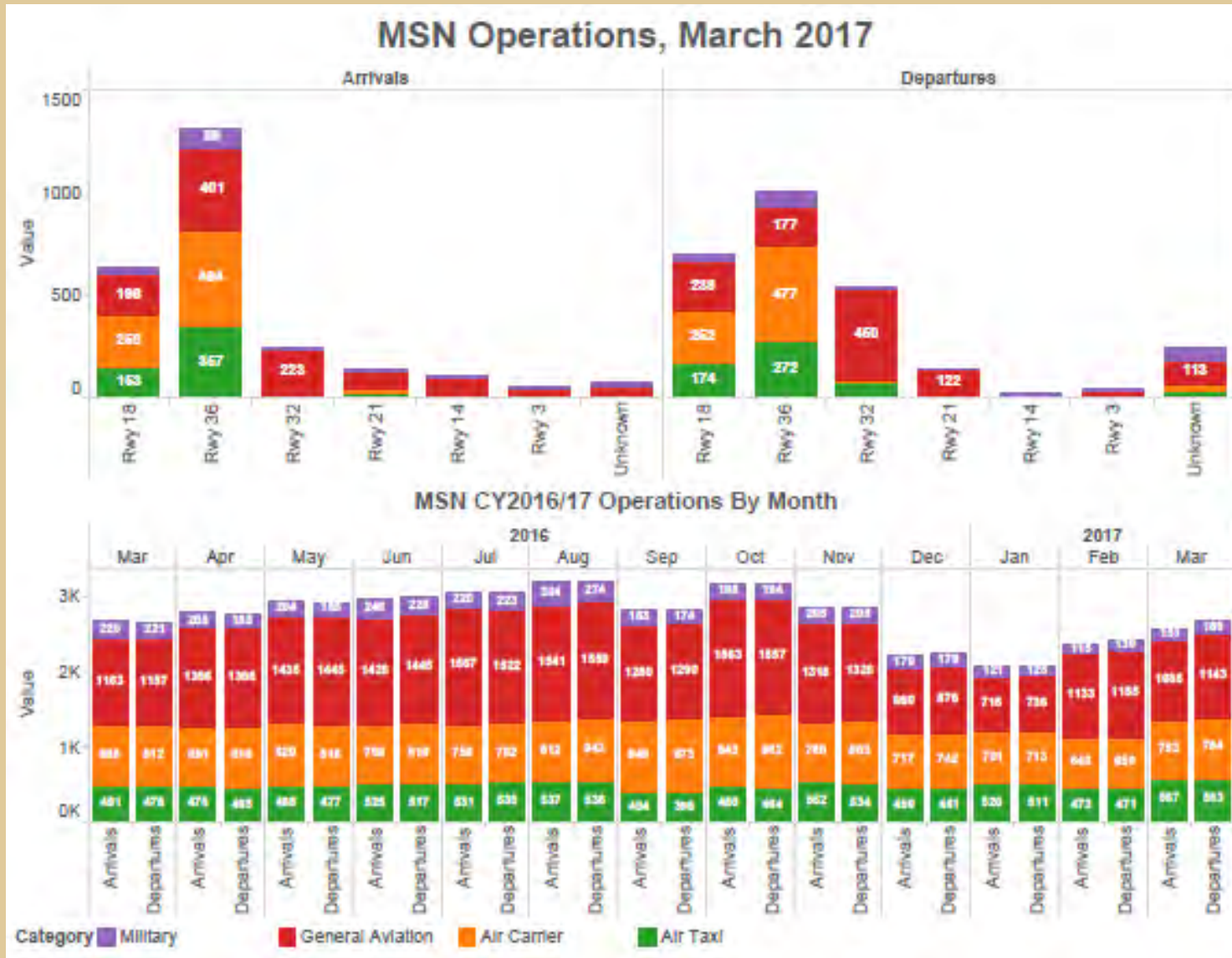
**\*\* Safety, traffic, airline requirements, and weather are all components which are factored into a pilot's decision when landing and taking off. \*\***

# AVERAGE A/C HOURLY OPERATIONS

OCT 16 – MAR 17



# Runway Usage



# 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**

