

# Noise Abatement Subcommittee Review of Noise Complaint Activity

October 24, 2016

Madison, Wisconsin



# AIRCRAFT MOVEMENTS

APR 16 – SEP 16

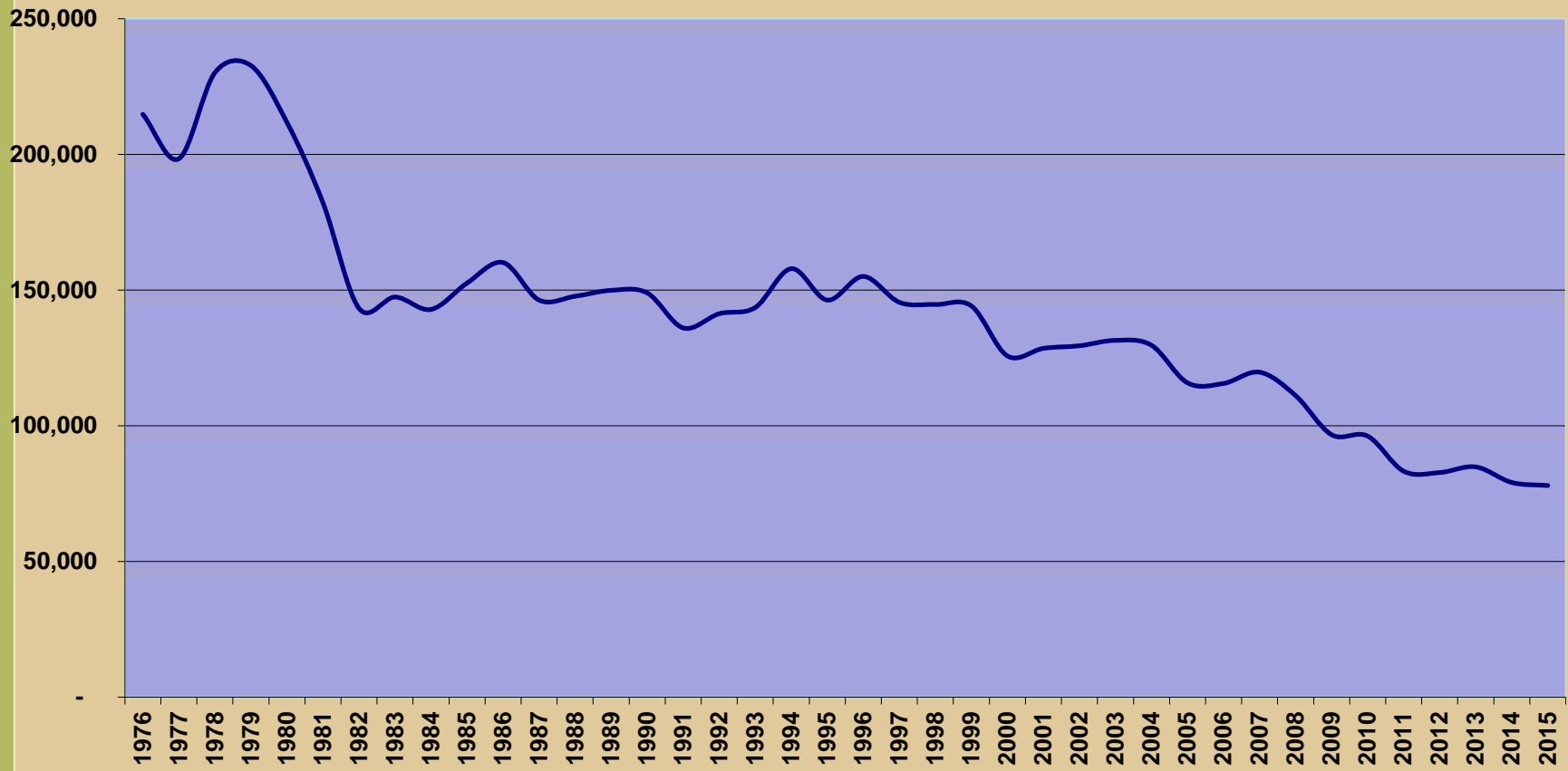
2

<b>Aircraft Movements</b>	<b>APR 16 – SEP 16</b>	<b>APR 15 – SEP15</b>	<b>% Change</b>
<i><b>Air Carrier</b></i>	<b>15,440</b>	<b>14,960</b>	<b>3%</b>
<i><b>Military</b></i>	<b>2,829</b>	<b>2,355</b>	<b>20%</b>
<i><b>General Aviation</b></i>	<b>24,143</b>	<b>23,940</b>	<b>.01%</b>
<i><b>Total Movements</b></i>	<b>42,412</b>	<b>41,255</b>	<b>2%</b>

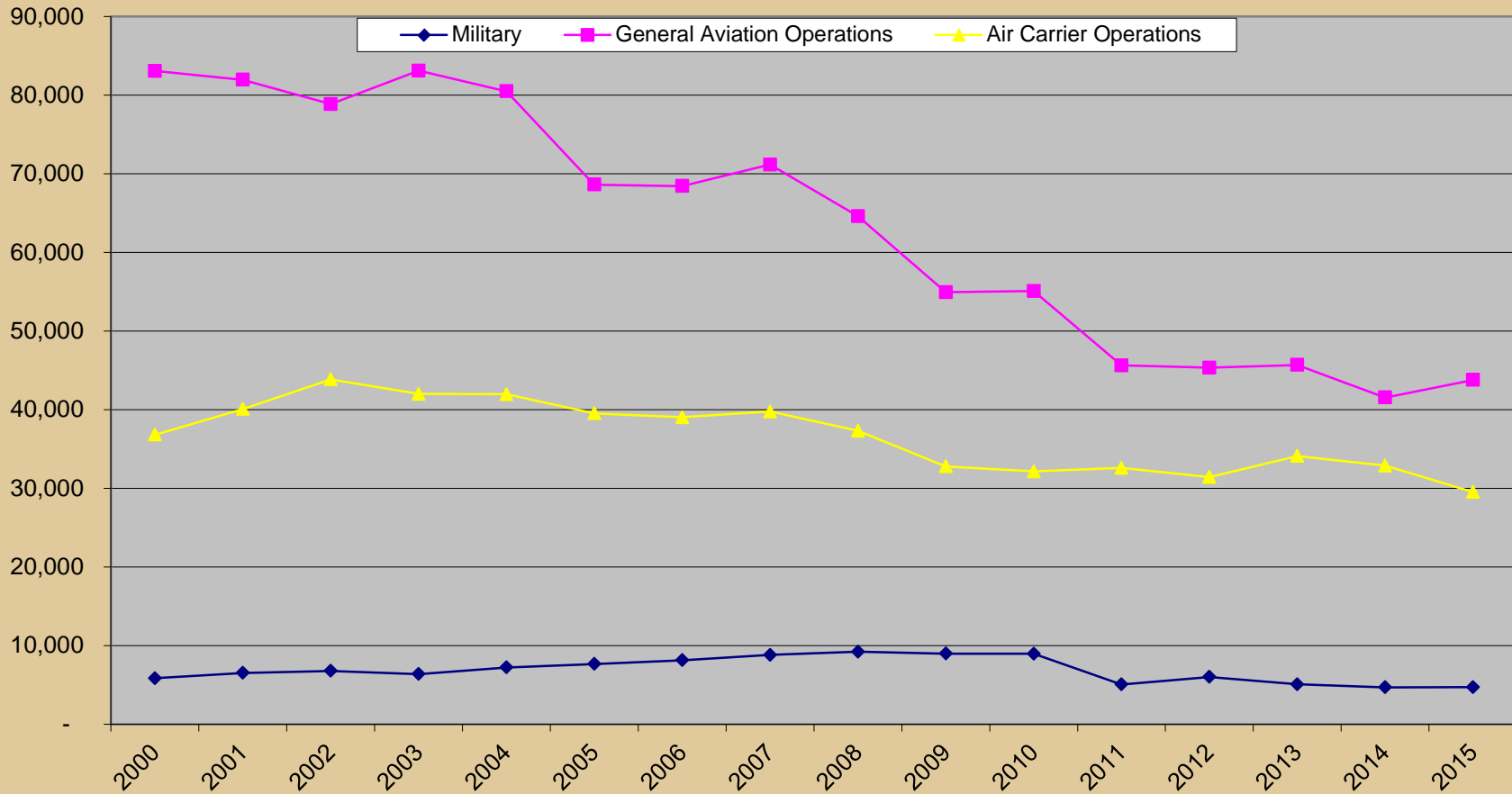


# DCRA HISTORICAL AIRCRAFT OPERATIONS

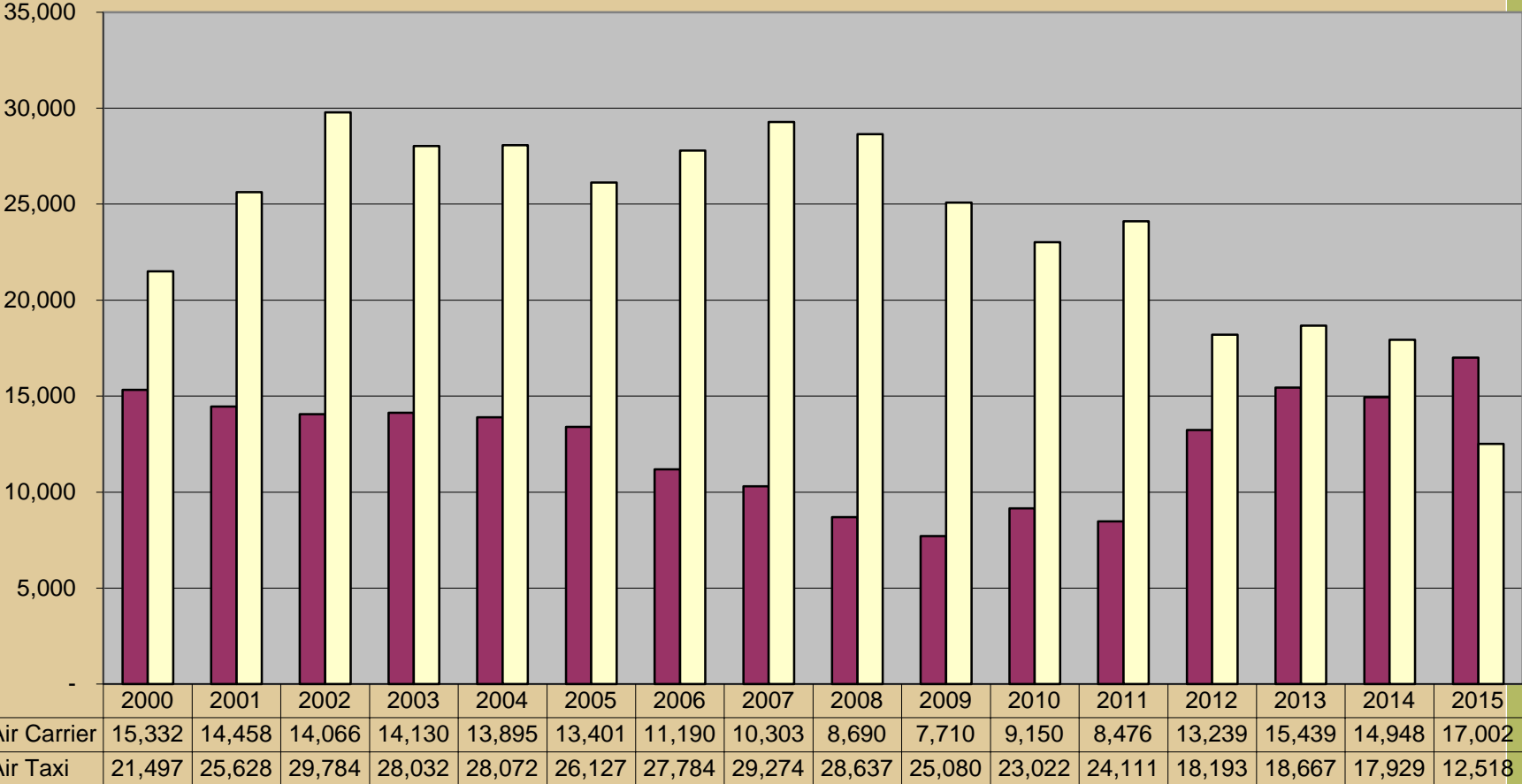
### Historical Total Aircraft Operations, DCRA



# DCRA HISTORICAL OPERATIONS BY AIRCRAFT TYPE

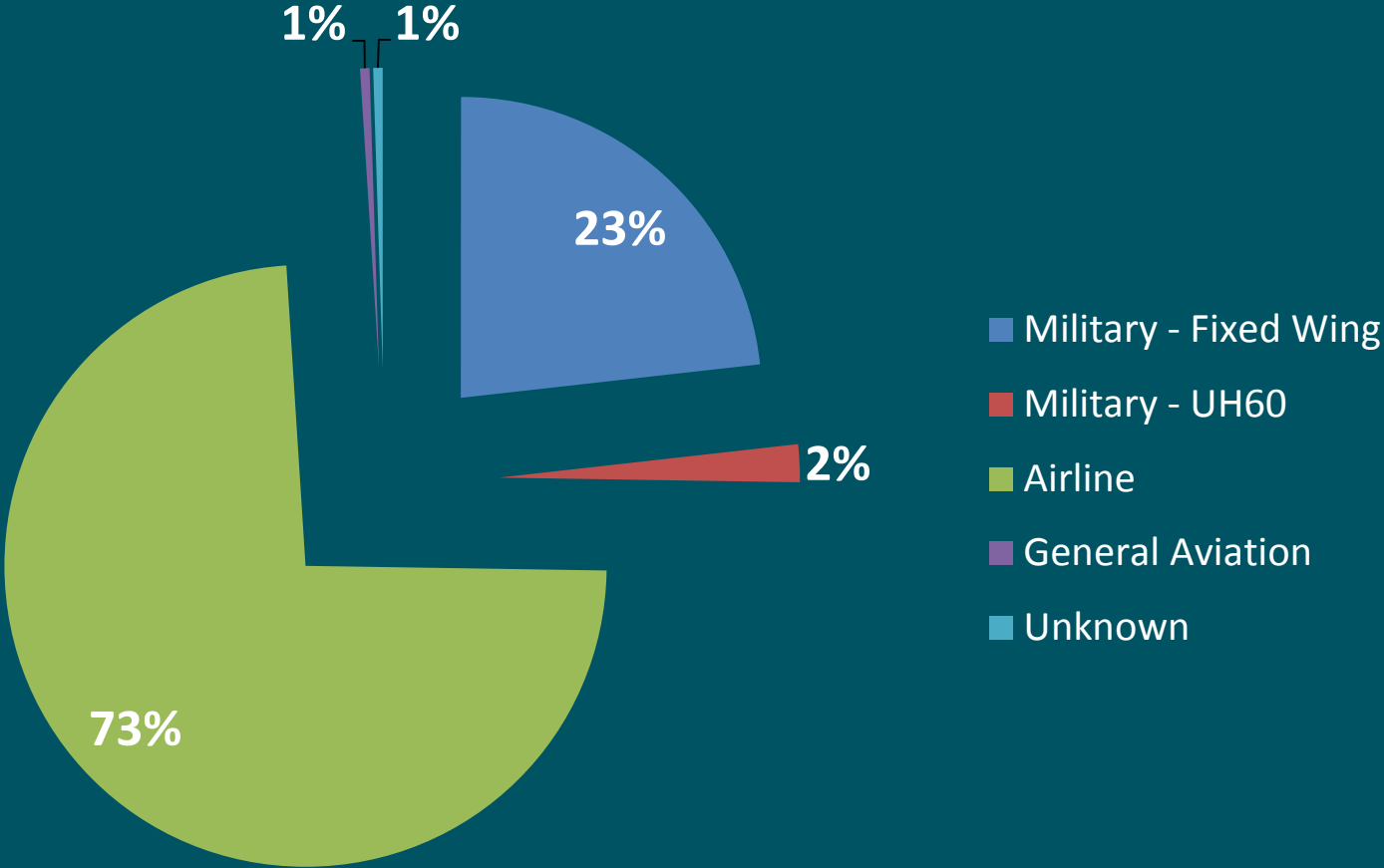


# AIR CARRIER (60+) vs AIR TAXI (59)



# COMPLAINTS BY AIRCRAFT TYPE

APR 16- SEP 16



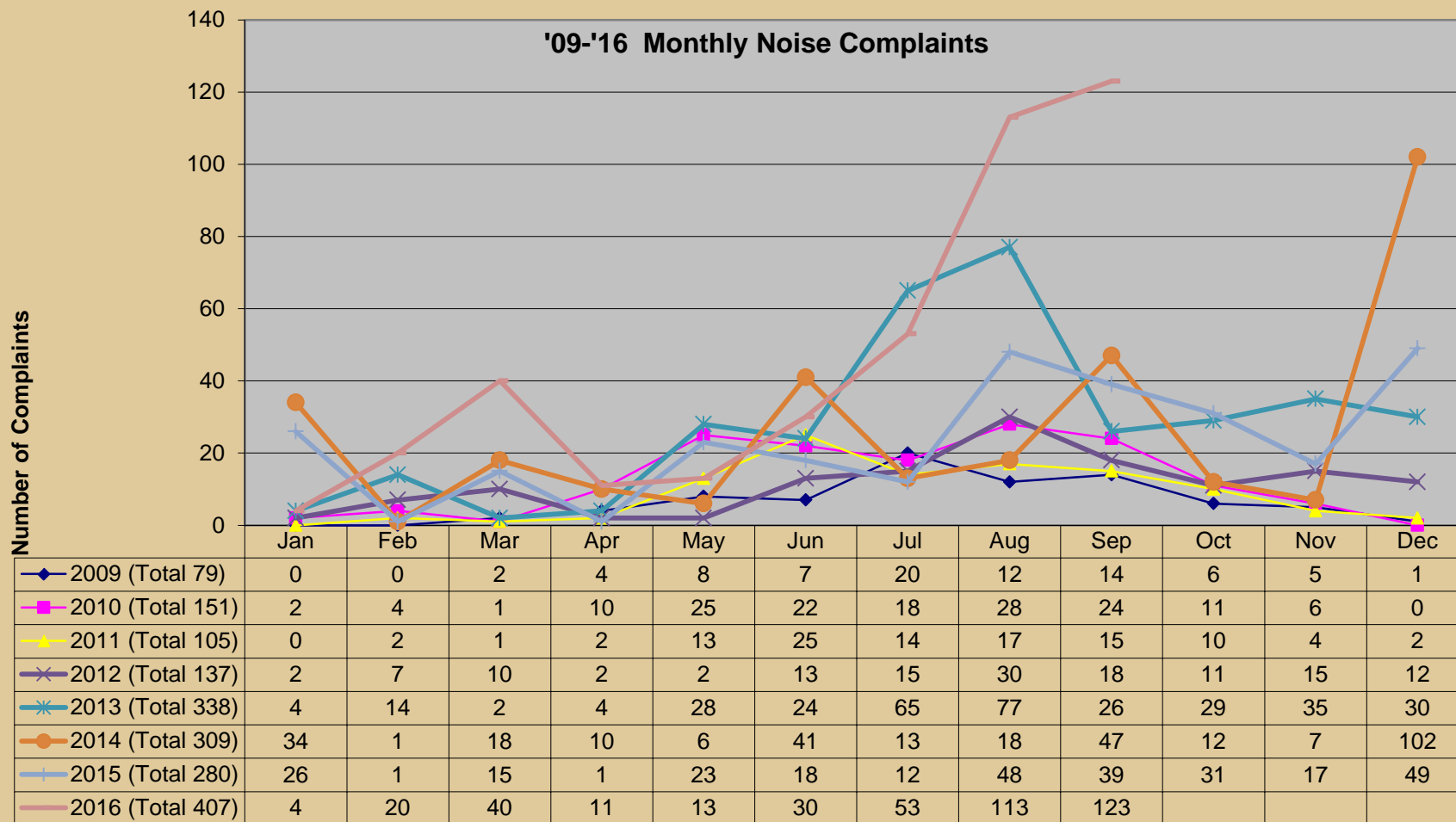
# COMPLAINTS BY AREA

Area	APR 16 – SEP 16		APR 15 - SEP 15	
	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>	213	1	23	1
<i>Fitchburg</i>	0	0	0	0
<i>Madison</i>	124	36	107	57
<i>McFarland</i>	0	0	0	0
<i>Middleton</i>	0	0	0	0
<i>Monona</i>	6	2	1	1
<i>Stoughton</i>	0	0	0	0
<i>Windsor</i>	0	0	0	0
<i>Verona</i>	0	0	0	0
<i>Waunakee</i>			1	1
<b>Total</b>	<b>343</b>	<b>40</b>	<b>123</b>	<b>30</b>



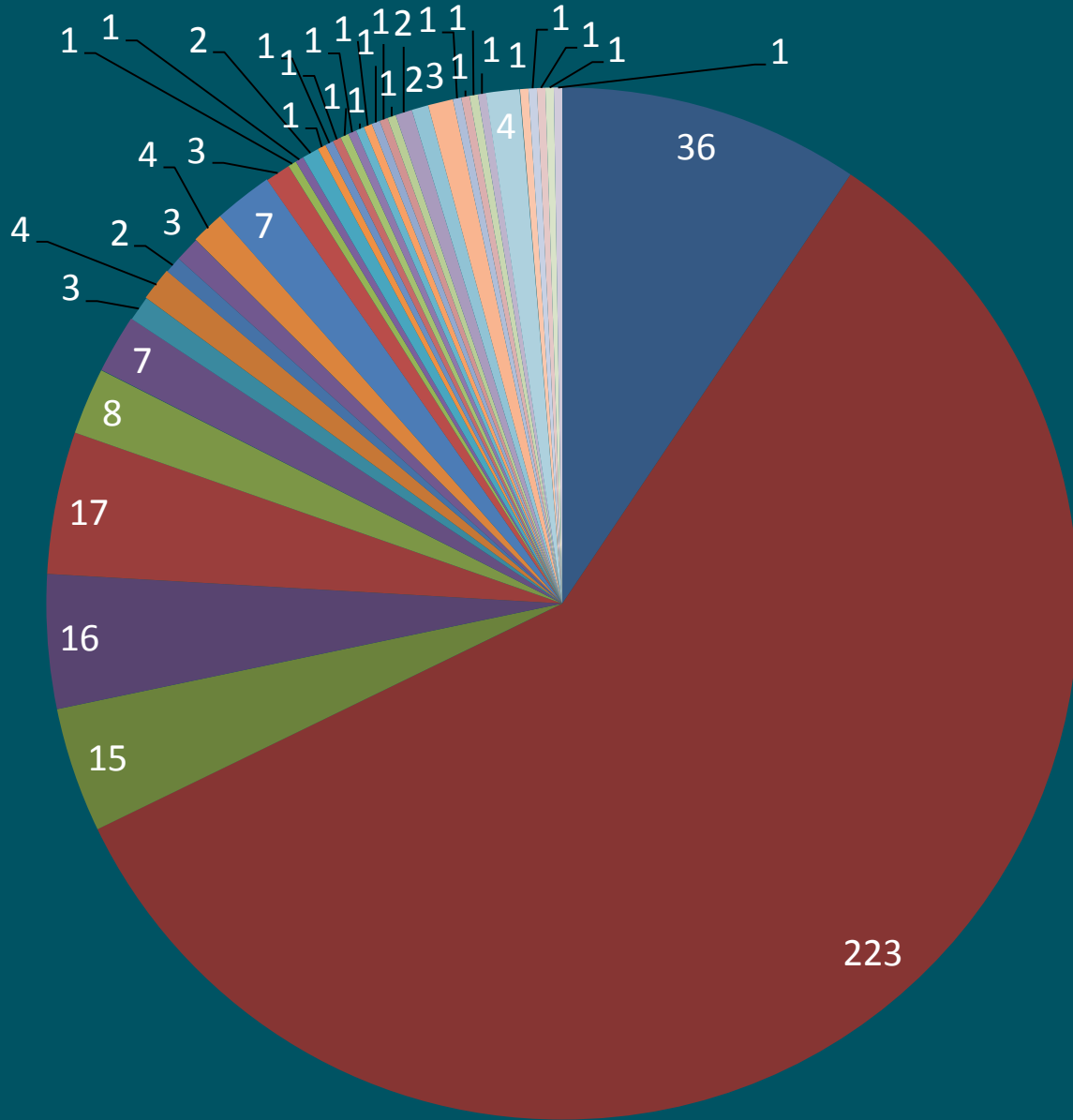
# HISTORICAL COMPLAINTS

APR 16– SEP 16





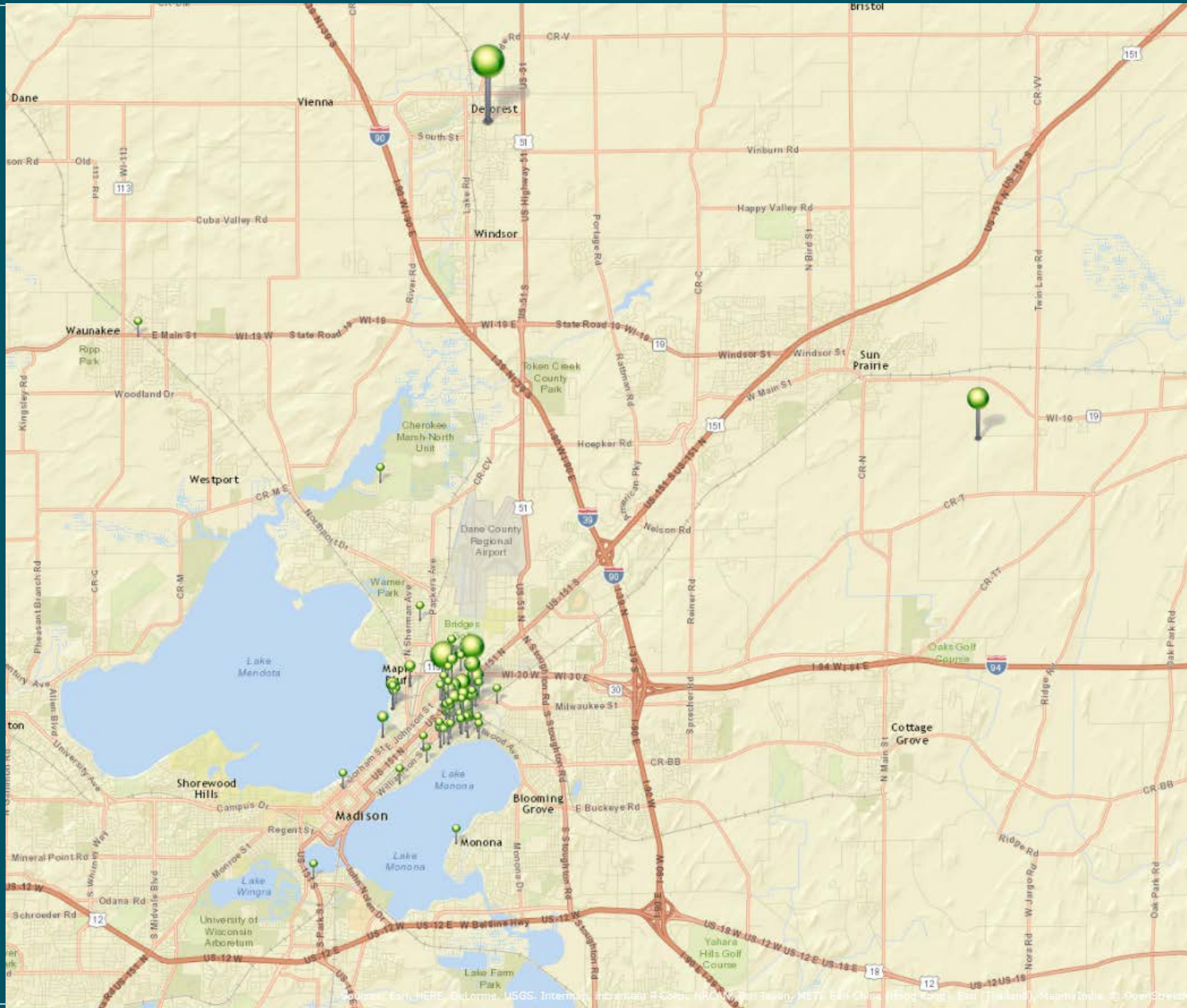
# Calls per Household, 2016 YTD



# COMPLAINT LOCATIONS

APR 16 – SEP 16

10



# NOISE COMPLAINT CALLS

APR 16 – SEP 16

11

	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
DAY	11	13	22	27	32	24	129
NIGHT	0	0	8	26	81	99	86
TOTAL	11	13	30	53	113	123	343



# COMPLAINT HISTORY

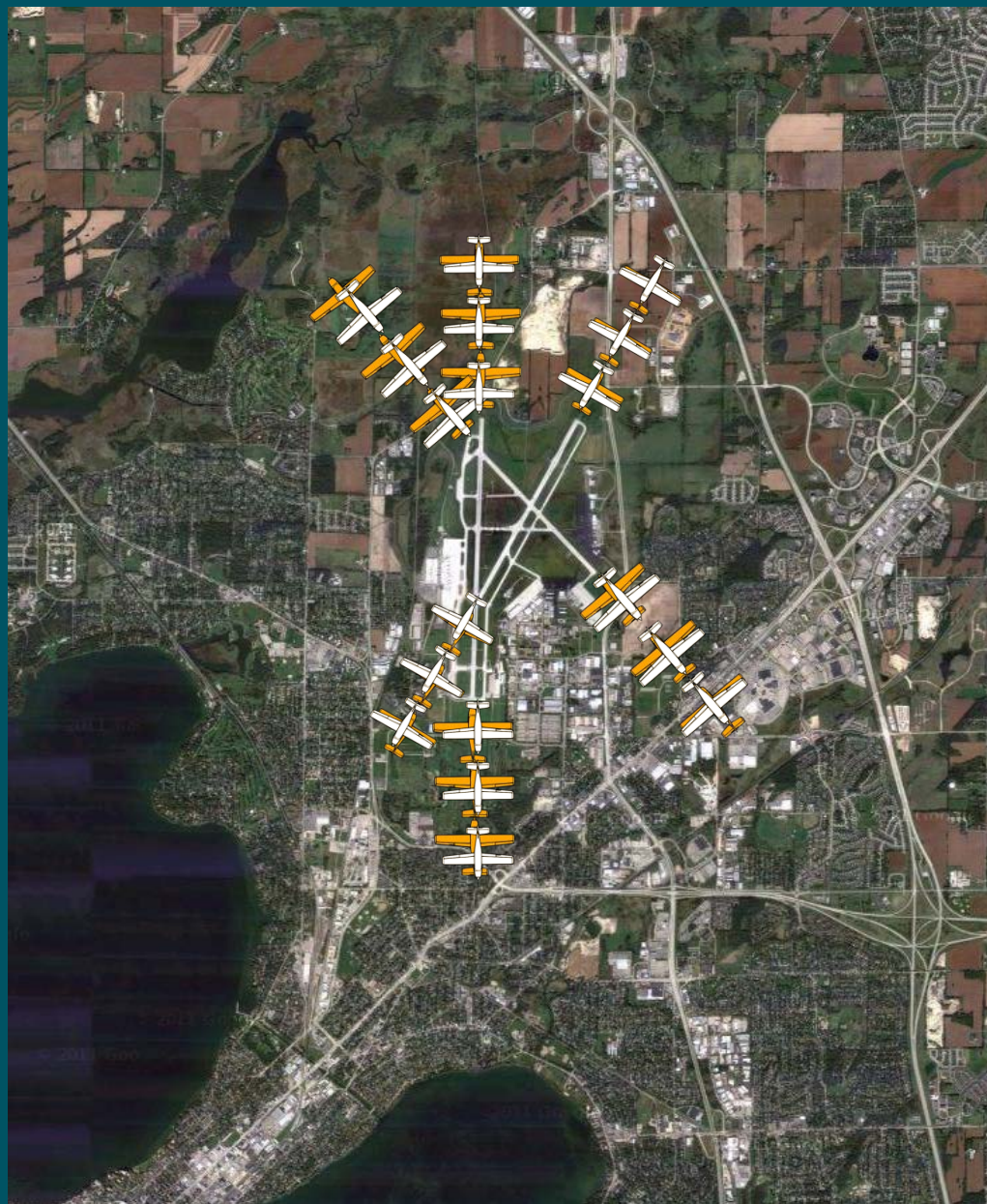
APR 16 – SEP 16

	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	
APR									A		A								A			A A	A						M	G	M M M	
MAY	A A																A		A		M				M M M A		A				M M M	
JUN			M A A	M		M M M M	M	A	A A	A			U	H A A	M M M	M			M M	A			M M	A A								
JUL						M	M			A	M H H A	M M M M M	M A A A	A A	M M M G	M A A		M				M M										A
										2	4	5		2	1	1	4				6											
AUG	M							M M M M	A		M M M M M M			M M M M M	M		M	M M		A					M						M M G	
	5		8	2				4	3	3		9		2	1	3	2					4	7	6					12	6	1	
SEP	M						A U			M			M	M			A M			A		A U			M M		M			M M	M U U	
		1	1	4			2				13	9		1	3			25	8	2	3			10	16	3		3				

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



# WIND CONDITIONS SUMMARY



• WINDS FROM  
THE SOUTH  
THAT ARE  
LESS 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>	82%
VISIBILITY AT 5 STATUTE MILES OR LESS	5%
RUNWAYS CLOSED <sup>2</sup>	18/36 = 389 3/21 = 79 14/32 = 52
<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	39.82%
Aircraft observed arriving from the North	56.92%
Aircraft observed departing to the South	59.22%
Aircraft observed arriving from the South	42.37%

## PASSUR FLIGHT TRACKING

**9,344** operations recorded by Passur flight monitoring system

**1,325** Passur observations of departures to the north and arrivals from the north when conditions allow for implementation of Noise Abatement Procedures





# NOISE ABATEMENT COMPLIANCE AUDIT

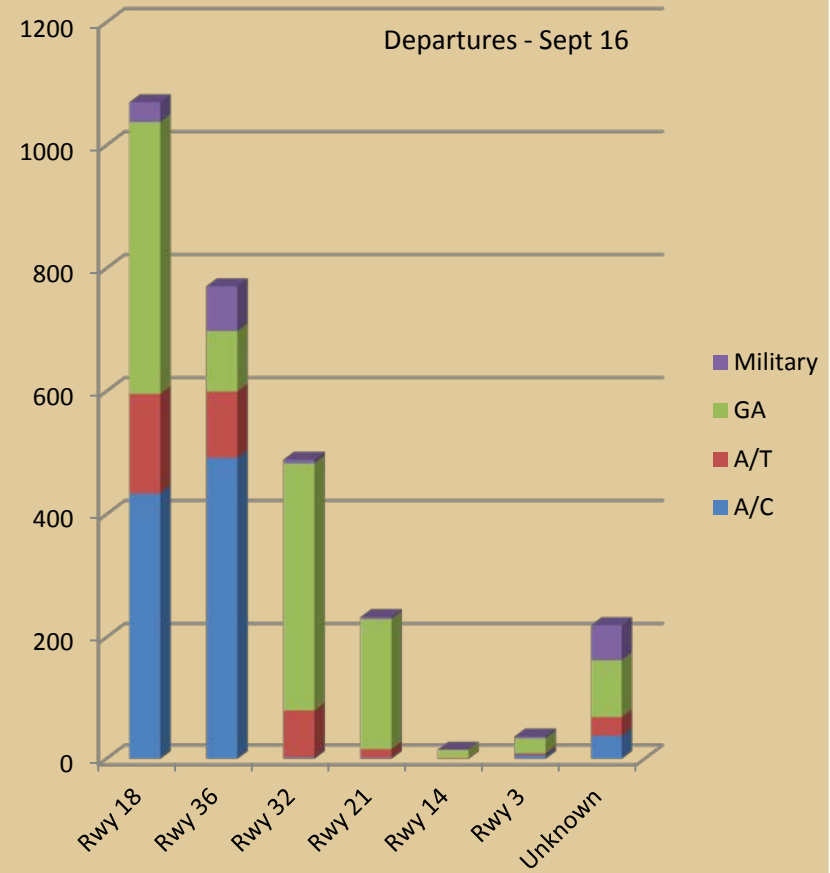
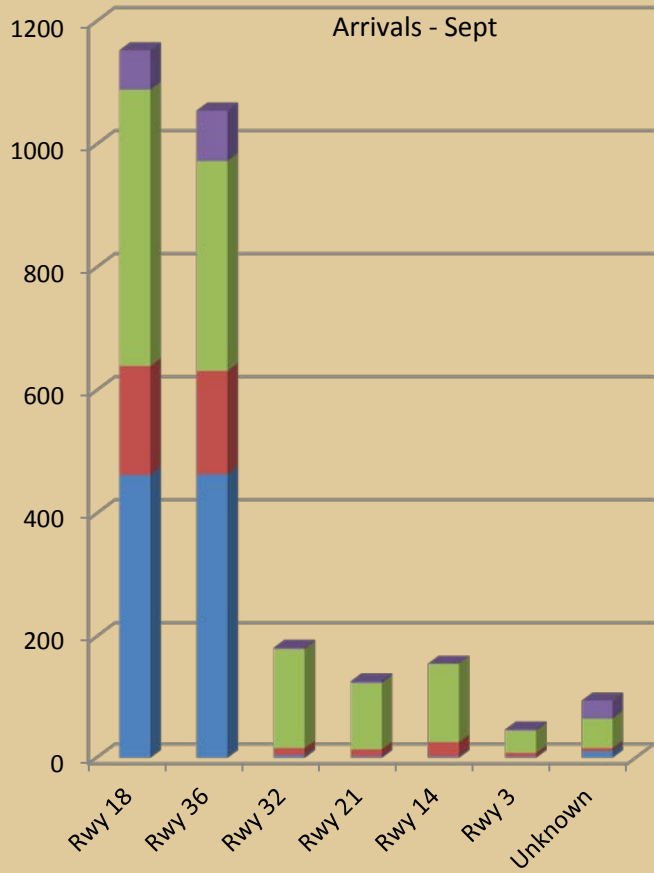
**\*\* With 100% compliance of Noise Abatement Procedures, there are times aircraft are required depart to the south and arrive from the south. \*\***

RUNWAY USE FACTORS			
	Wind	Visibility	Ceiling
South Departure	67.86%	4.31%	0.00%
South Arrival	69.50%	4.19%	16.22%

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

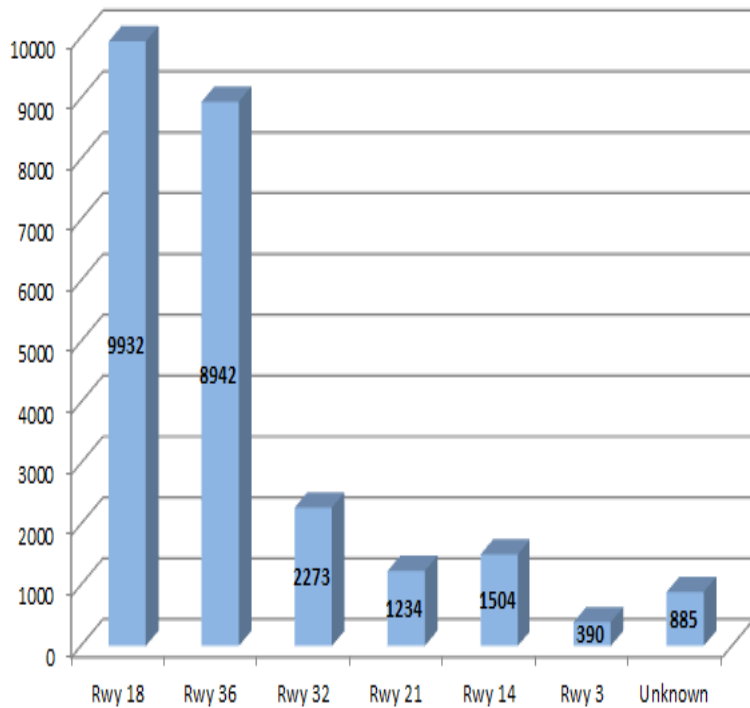


# Runway Usage – Sept 2016

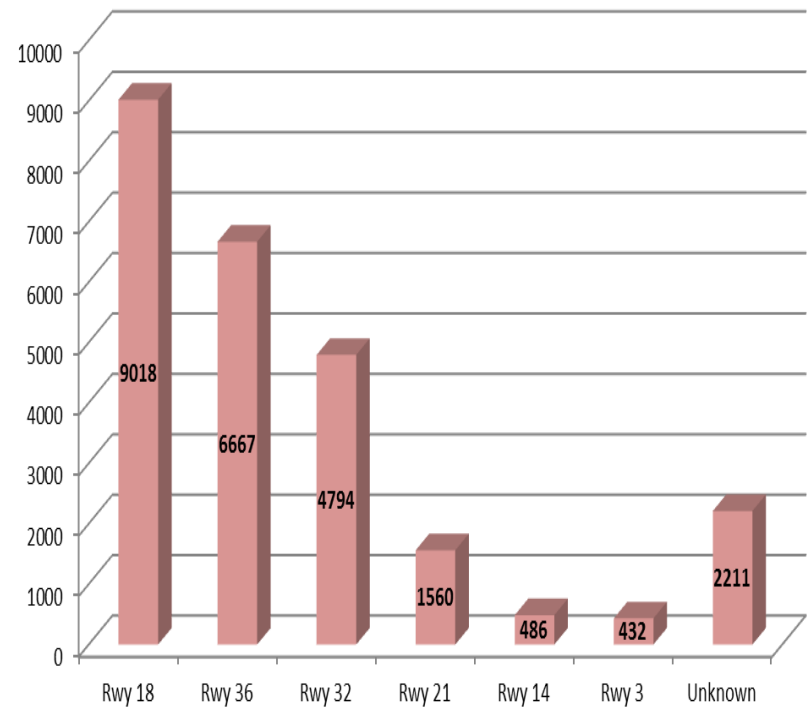


# Runway Usage – 2016 YTD

### Arrivals (2016 YTD)

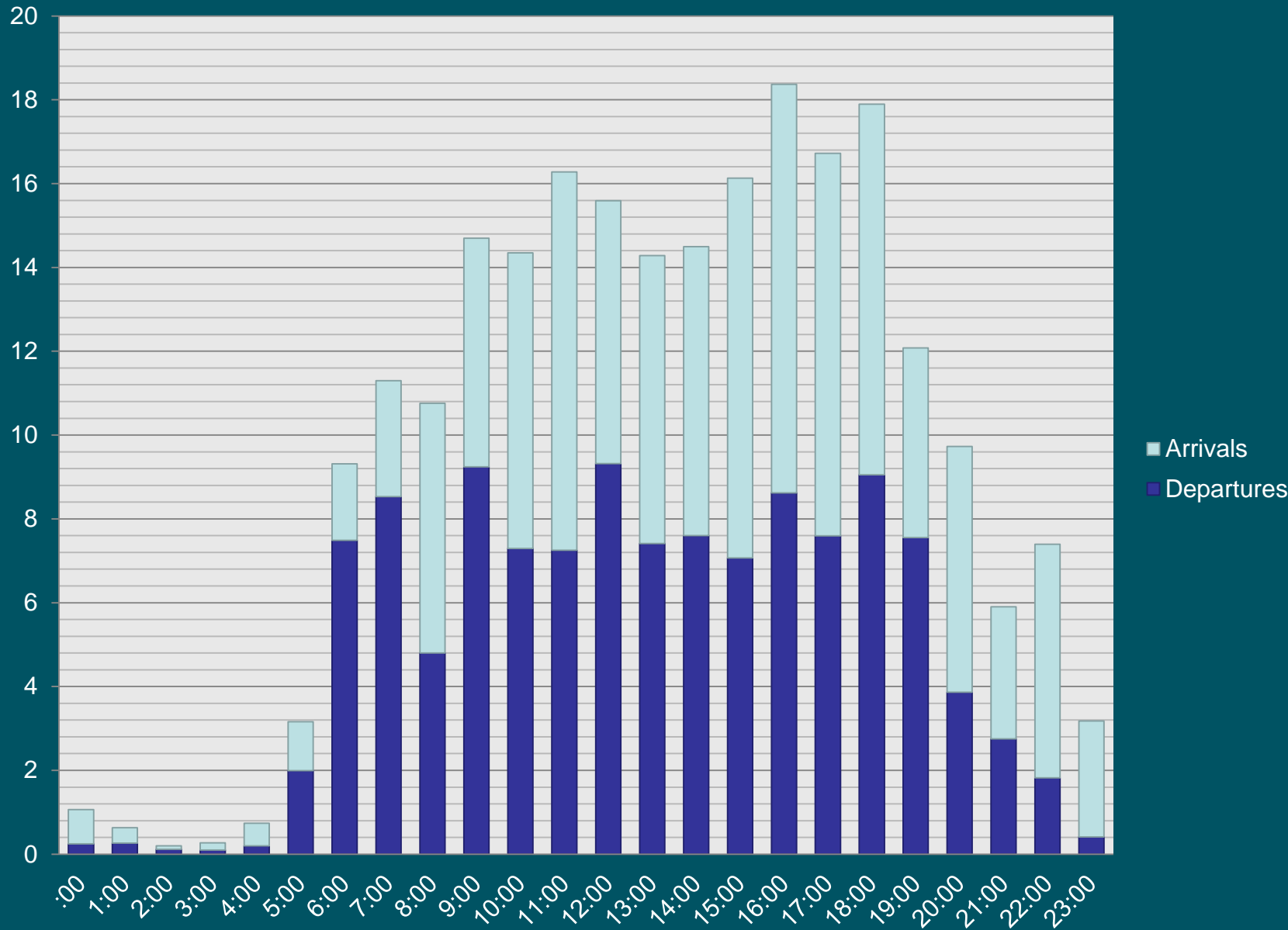


### Departures (2016 YTD)



# AVERAGE HOURLY OPERATIONS

APR 16 – SEP 16



# 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?

