

DANE COUNTY  
REGIONAL AIRPORT  
MADISON



# Noise Abatement Subcommittee

*November 20, 2019*

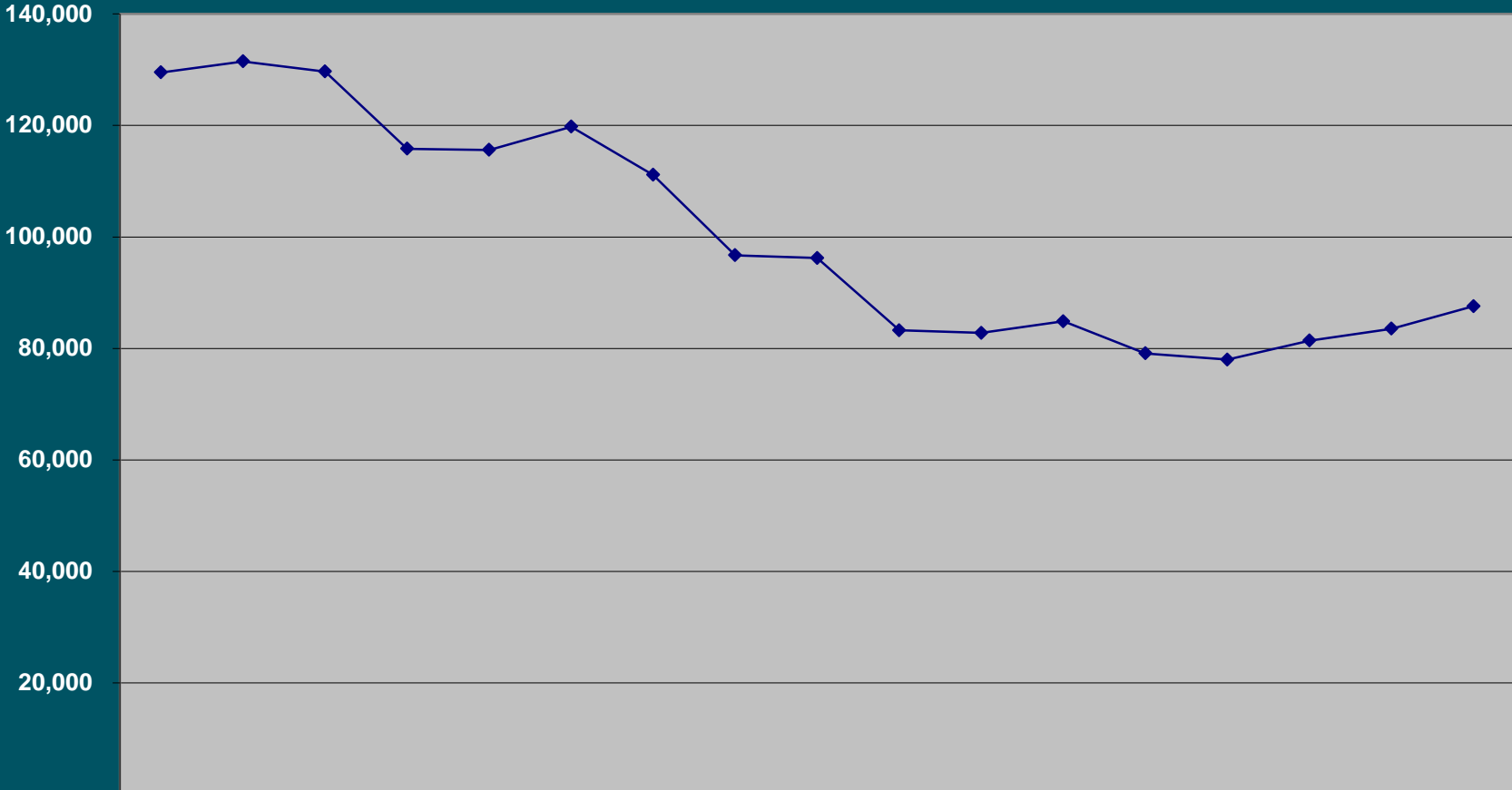
*It's all about the journey.*

# AIRCRAFT MOVEMENTS

APR 19 – SEP 19

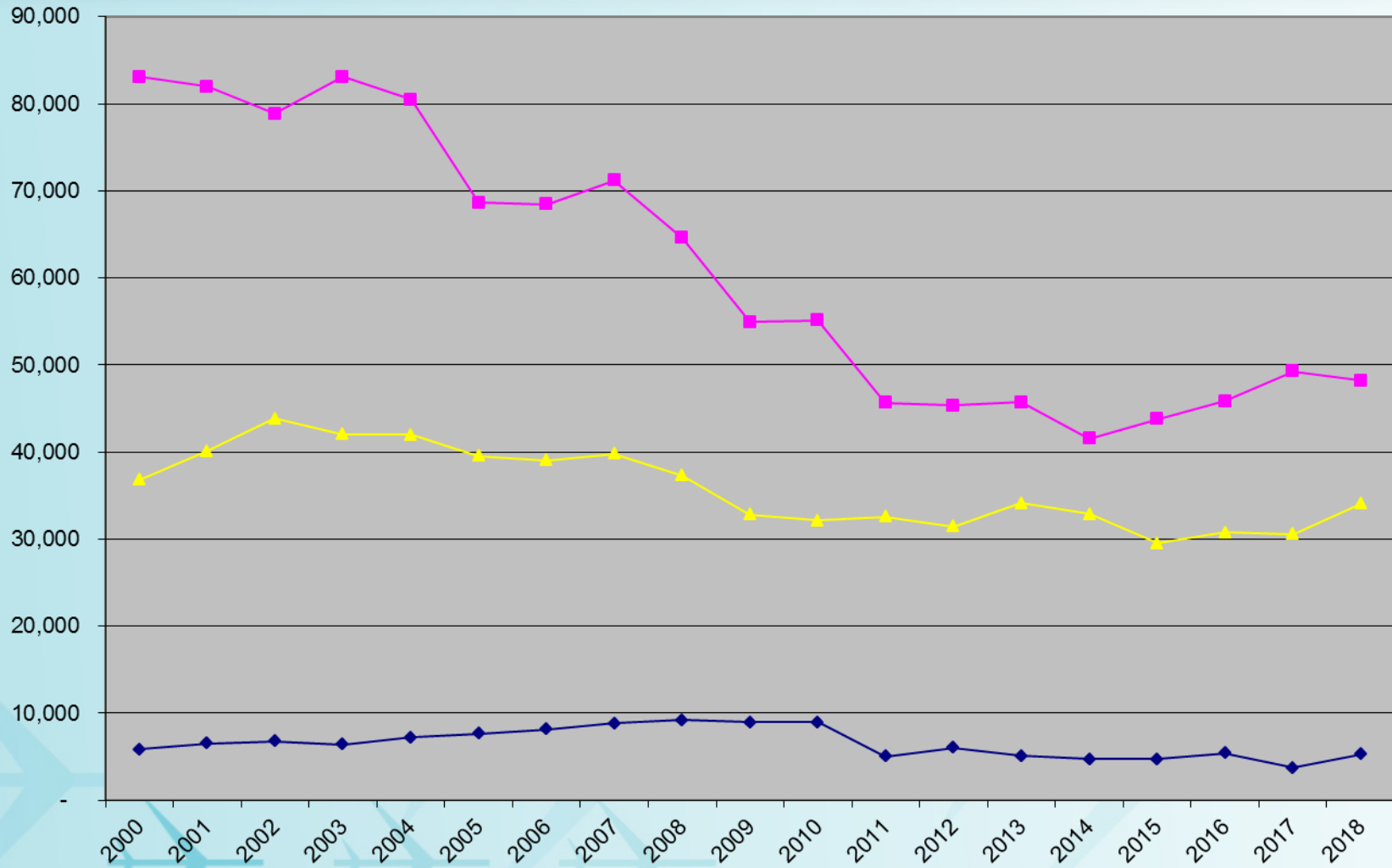
| <b>Aircraft Movements</b>      | <b>APR 18 – SEP 18</b> | <b>APR 19 – SEP 19</b> | <b>% Change</b> |
|--------------------------------|------------------------|------------------------|-----------------|
| <i><b>Air Carrier</b></i>      | <b>17,783</b>          | <b>18,374</b>          | <b>3 %</b>      |
| <i><b>Military</b></i>         | <b>2,928</b>           | <b>2,646</b>           | <b>-3 %</b>     |
| <i><b>General Aviation</b></i> | <b>26,345</b>          | <b>22,198</b>          | <b>-15 %</b>    |
| <i><b>Total Movements</b></i>  | <b>47,056</b>          | <b>43,218</b>          | <b>-8 %</b>     |

# ANNUAL AIRCRAFT OPERATIONS

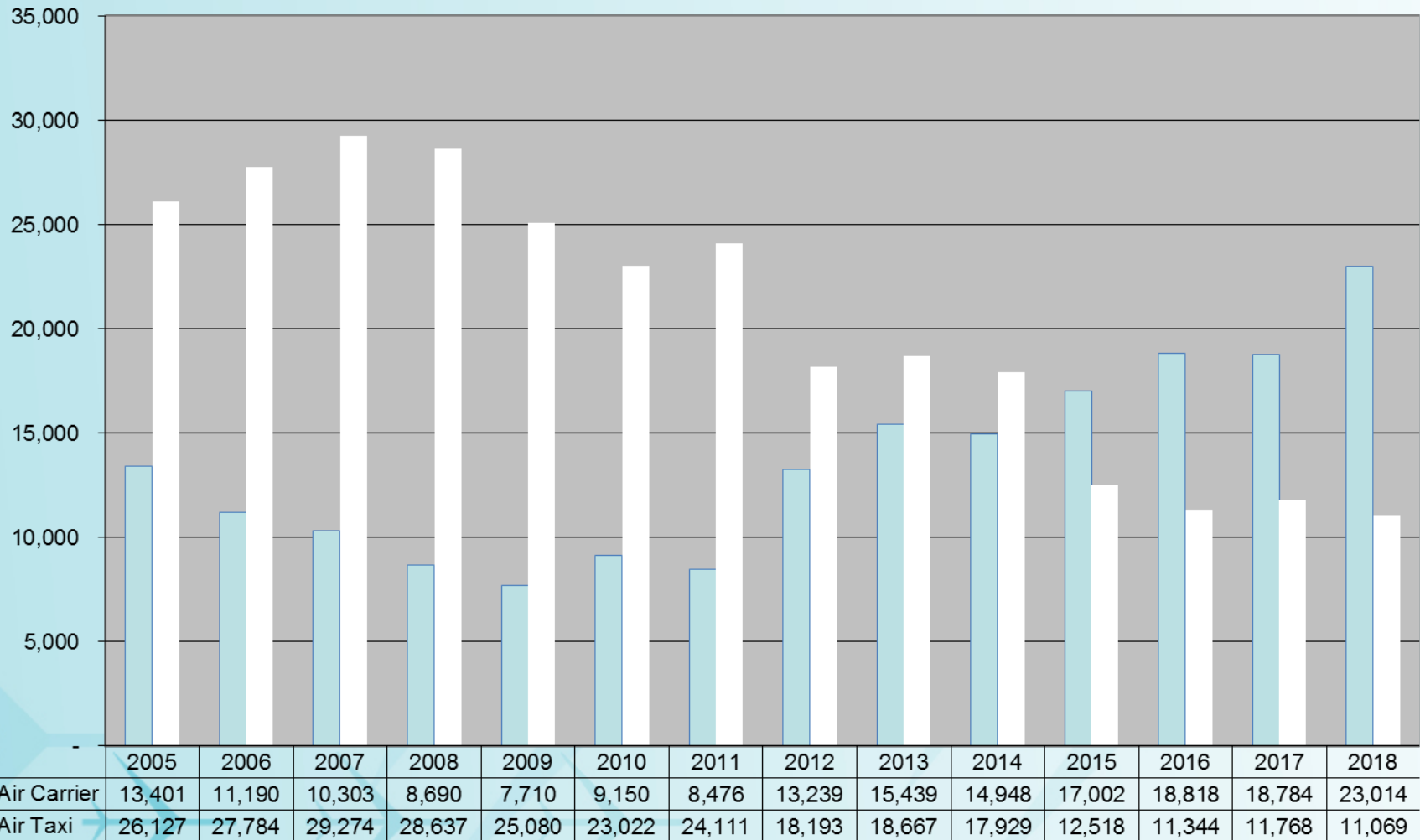


|                       |       |       |       |       |       |       |       |        |       |       |       |        |        |        |        |        |        |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| — Aircraft Operations | 129,4 | 131,4 | 129,6 | 115,8 | 115,6 | 119,7 | 111,1 | 96,700 | 96,20 | 83,26 | 82,77 | 84,860 | 79,116 | 77,996 | 81,403 | 83,539 | 87,578 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|--------|--------|--------|--------|

# HISTORICAL AIRCRAFT OPERATIONS BY TYPE

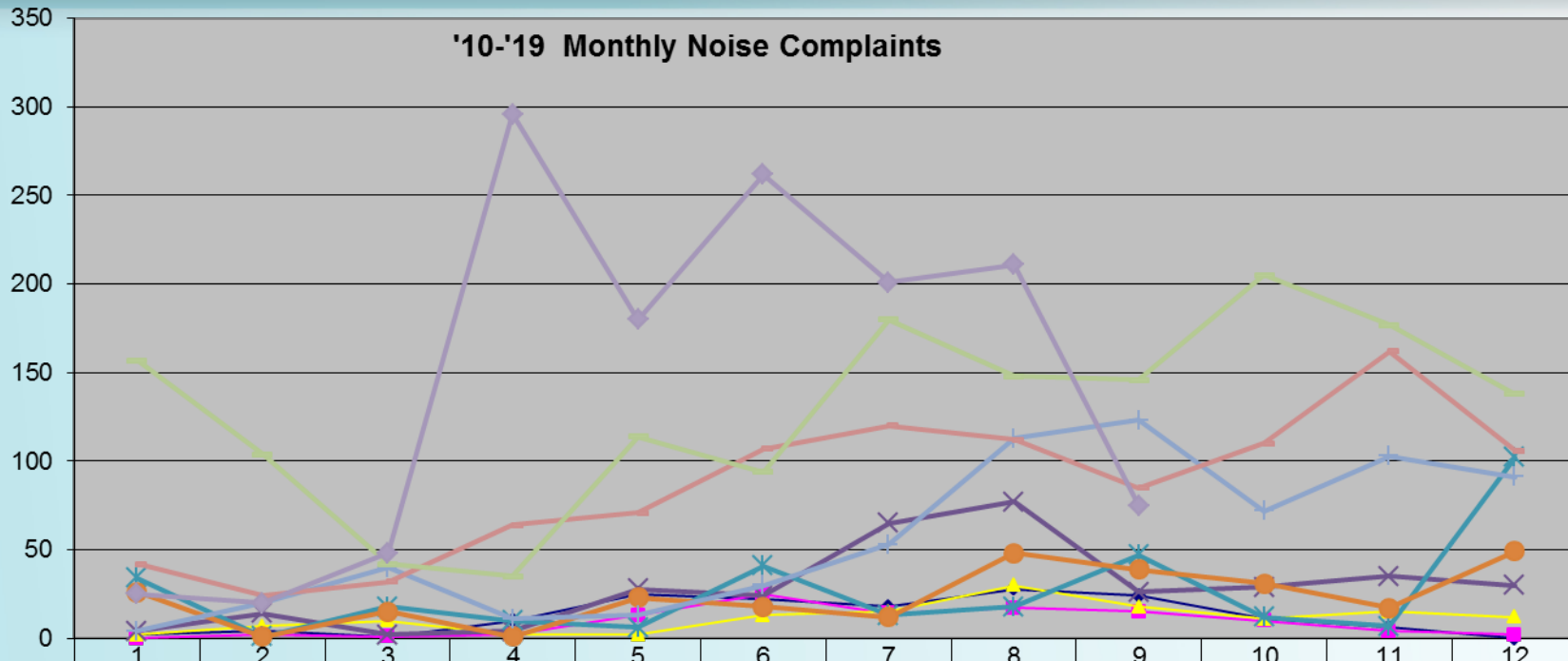


# Air Carrier (A-320, B717) vs Air Taxi (CRJ, ERJ)



# COMPLAINTS MONTHLY HISTORY

APR 19 – SEP 19

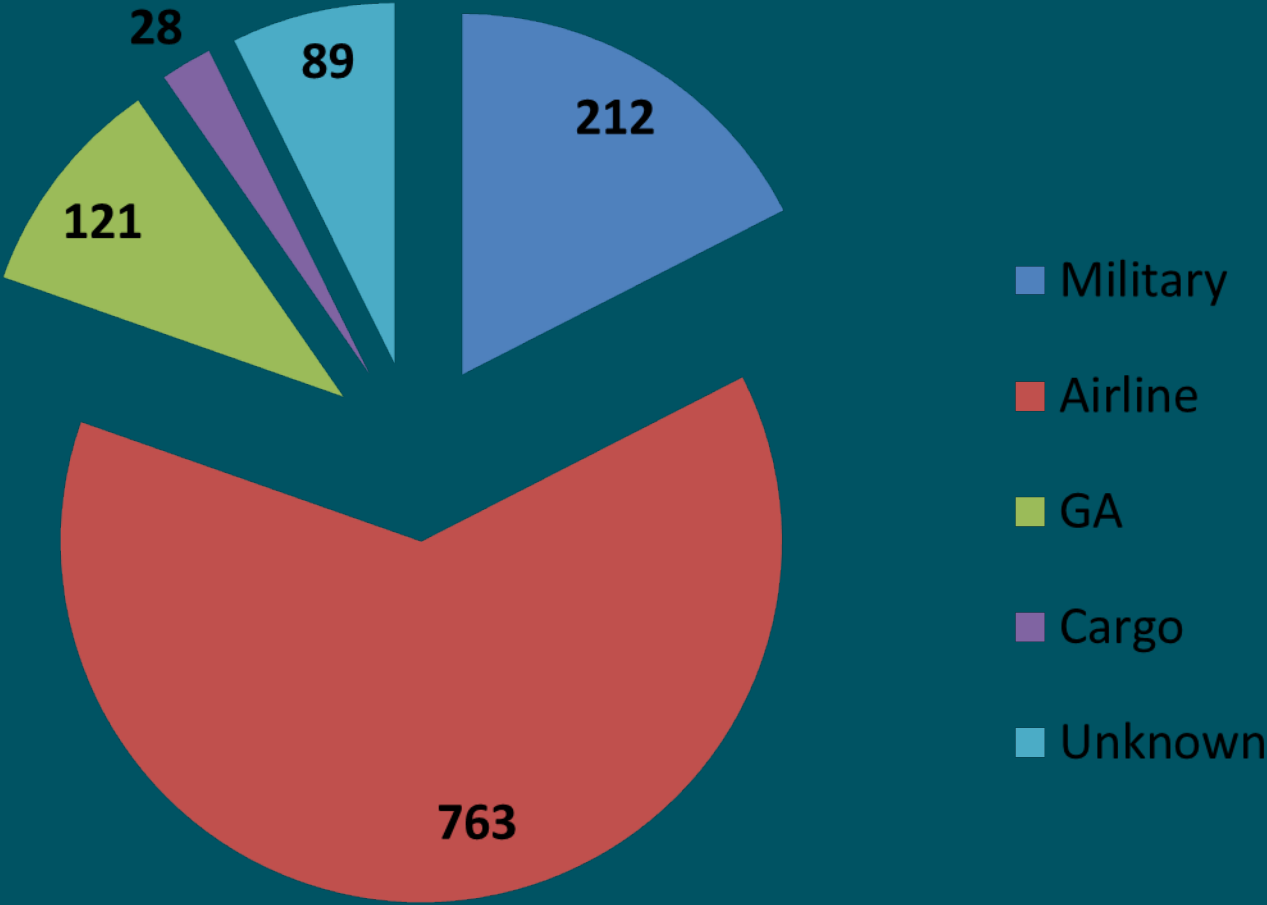


Number of Complaints

|                     | 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 |
| ◆ 2019 (Total 1381) | 25  | 20  | 48 | 296 | 180 | 262 | 201 | 211 | 75  |     |     |     |

# COMPLAINTS BY AIRCRAFT TYPE

APR 19 – SEP 19



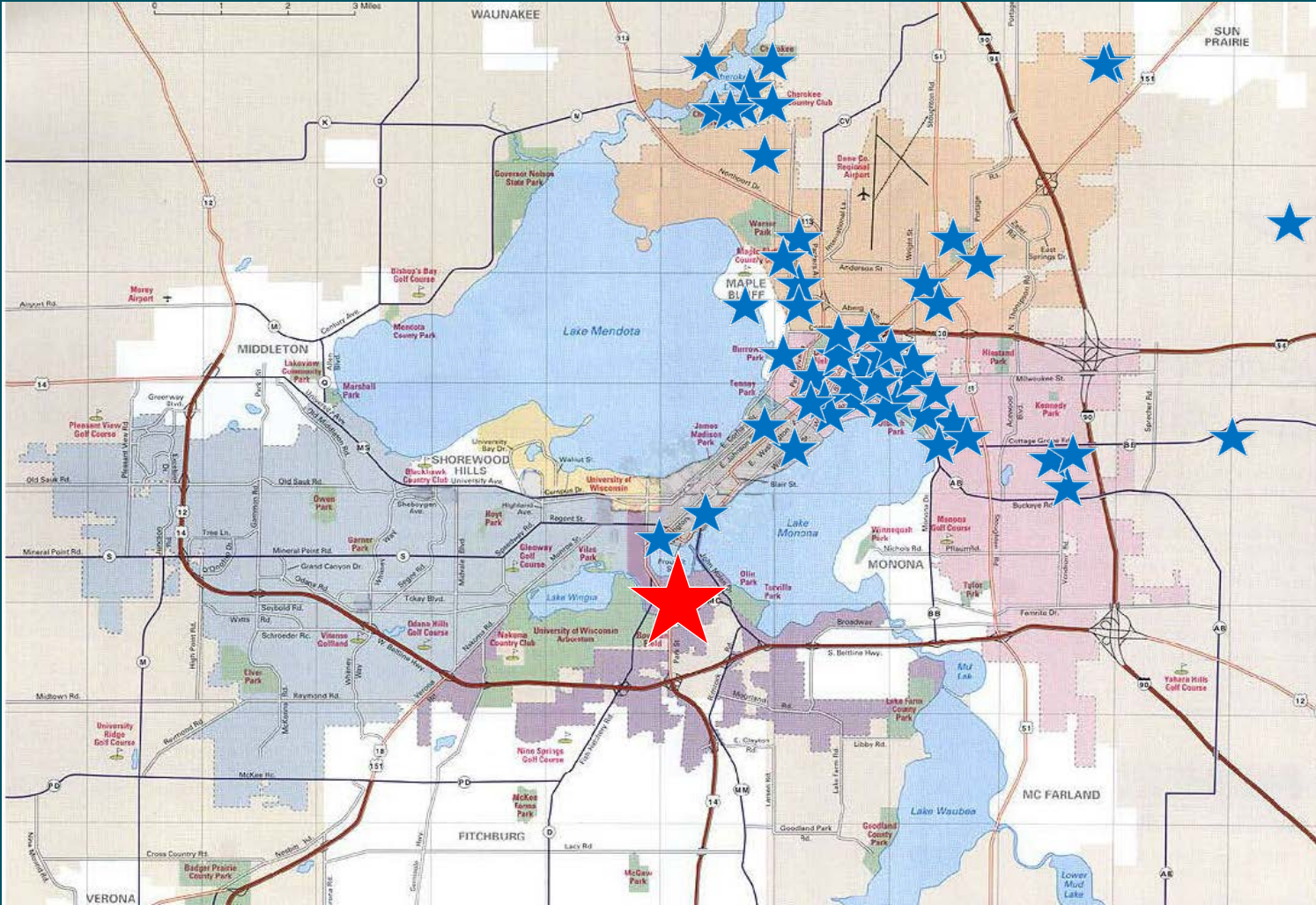
# COMPLAINTS BY AREA

| Area                  | APR 19 - SEP 19 |            | APR 18 - SEP 18 |            |
|-----------------------|-----------------|------------|-----------------|------------|
|                       | Complaints      | Households | Complaints      | Households |
| <i>Blooming Grove</i> | 0               | 0          | 0               | 0          |
| <i>Cottage Grove</i>  | 1               | 1          | 0               | 0          |
| <i>Deerfield</i>      | 0               | 0          | 0               | 0          |
| <i>DeForest</i>       | 359             | 1          | 406             | 1          |
| <i>Fitchburg</i>      | 0               | 0          | 0               | 0          |
| <i>Madison</i>        | 852             | 75         | 299             | 52         |
| <i>Marshall</i>       | 0               | 0          | 0               | 0          |
| <i>Middleton</i>      | 0               | 0          | 0               | 0          |
| <i>Monona</i>         | 1               | 1          | 0               | 0          |
| <i>Sun Prairie</i>    | 11              | 3          | 12              | 1          |
| <i>Windsor</i>        | 0               | 0          | 0               | 0          |
| <i>Verona</i>         | 0               | 0          | 0               | 0          |
| <i>Waunakee</i>       | 1               | 1          | 0               | 0          |
| <b>Total</b>          | <b>1225</b>     | <b>82</b>  | <b>717</b>      | <b>54</b>  |





# COMPLAINT LOCATION

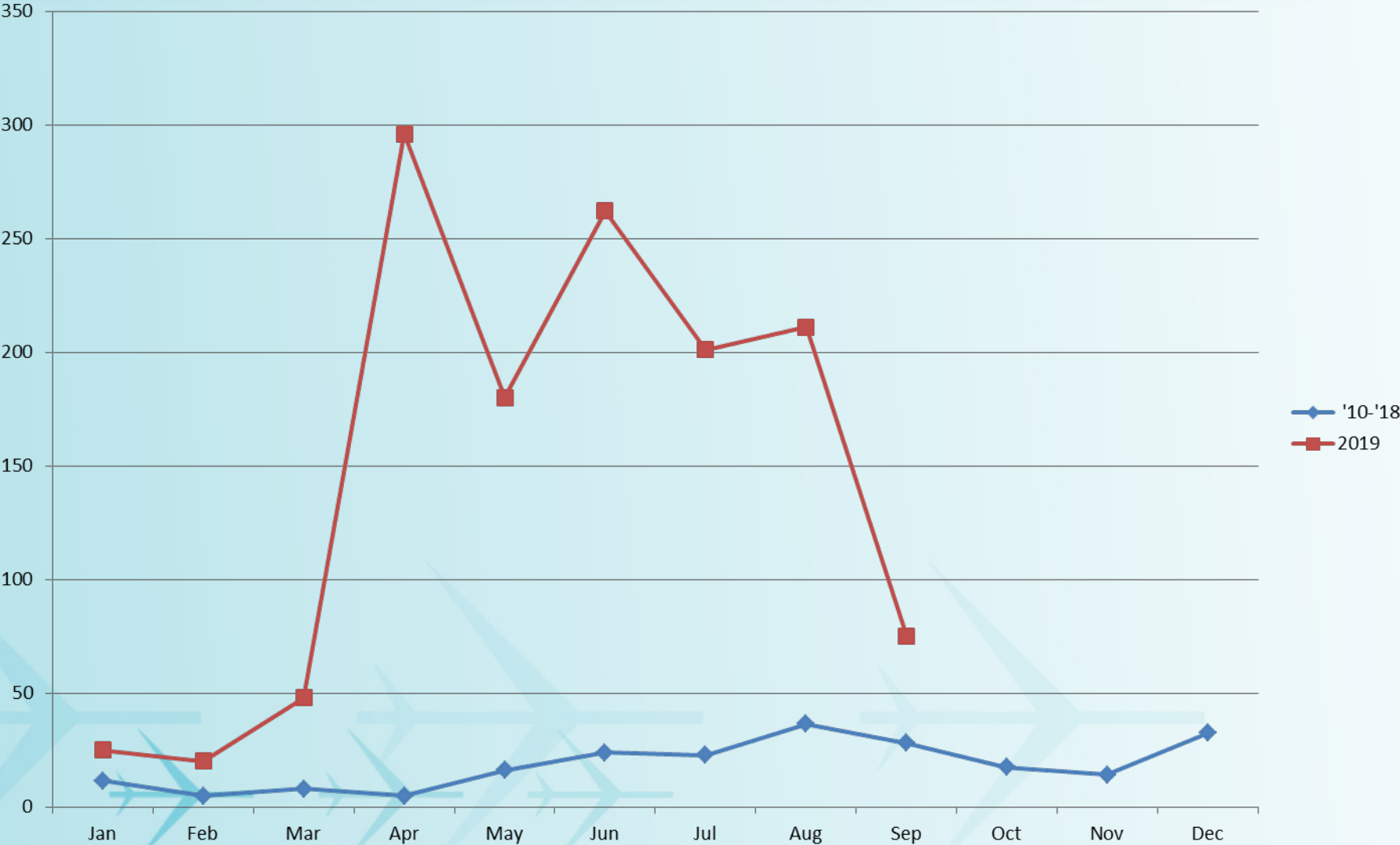


# NOISE COMPLAINT CALLS

APR 19 – SEP 19

|       | APR | MAY | JUN | JUL | AUG | SEP | TOTAL |
|-------|-----|-----|-----|-----|-----|-----|-------|
| DAY   | 155 | 124 | 147 | 114 | 89  | 49  | 678   |
| NIGHT | 141 | 56  | 115 | 87  | 122 | 26  | 547   |
| TOTAL | 296 | 180 | 262 | 201 | 211 | 75  | 1225  |

# Noise Complaint History





# Wisconsin Wind Data\*

\*National Weather Service

| 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>   | 76.22%                                     |
| VISIBILITY AT 5 STATUTE MILES OR LESS   | 2.18%                                      |
| RUNWAYS CLOSED <sup>2</sup>   | 18/36 = 672<br>3/21 = 832<br>14/32 = 3,385 |
| <sup>1</sup> – Based on METAR weather observations at the time of recorded aircraft operations.<br><sup>2</sup> – Runway closures primarily due to runway maintenance |  |



# NOISE ABATEMENT COMPLIANCE AUDIT

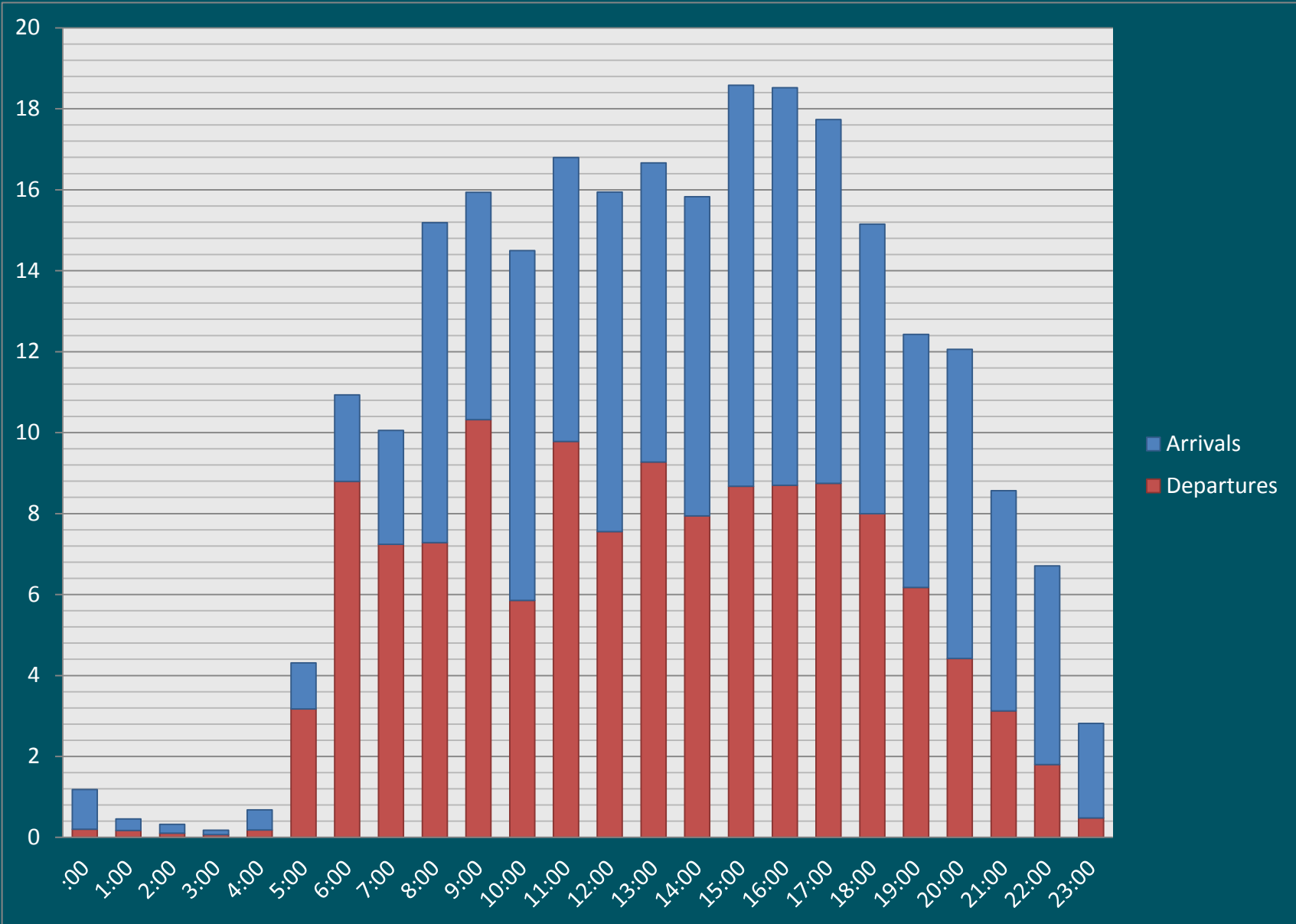
**\*\* With 100% compliance of Noise Abatement Procedures, there are times aircraft are required depart to the south and arrive from the south. \*\***

| RUNWAY USE FACTORS |        |            |         |
|--------------------|--------|------------|---------|
|                    | Wind   | Visibility | Ceiling |
| South Departure    | 69.33% | 2.02%      | 0.05%   |
| South Arrival      | 66.42% | 5.621%     | 10.64%  |

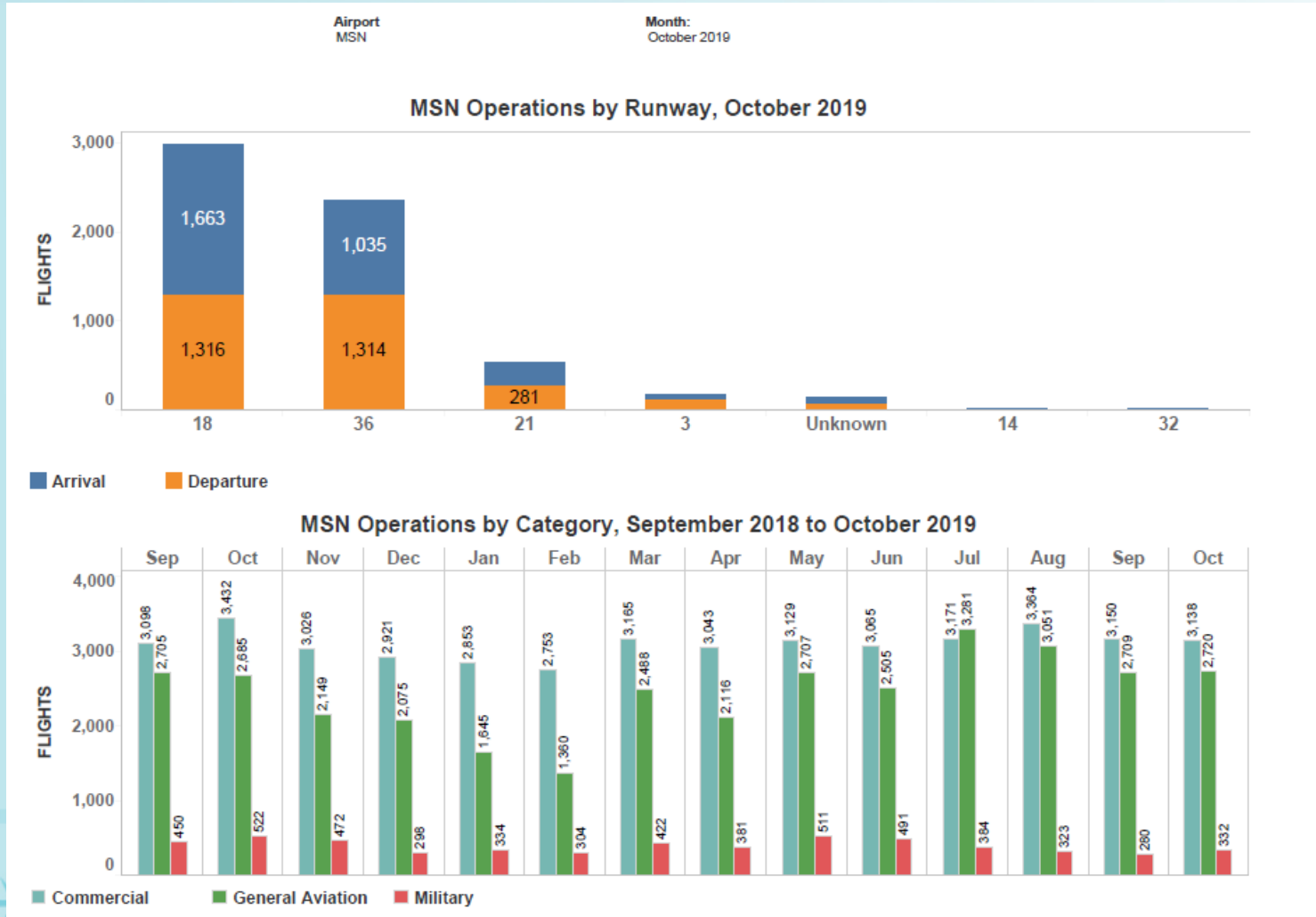
**\*\* Safety, traffic, airline requirements, and weather are all components which are factored into a pilot's decision when landing and taking off. \*\***



# AVERAGE HOURLY OPERATIONS



# MSN ATCT TRAFFIC INFORMATION



# CONTACT INFORMATION

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

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

Madison Automated Weather: **249-0615**

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Questions?

*It's all about the journey.*