

# ***PHX DVT GYR***

 CITY OF PHOENIX AVIATION DEPARTMENT

## **Monthly Noise Report**

**April 2016**

### Contents

- Page 2 – Introduction/Summary
- Page 3 – Noise Complaints
- Page 4 – Airport Operation Totals & Noise Monitoring Sites
- Page 5 – Fly Friendly Procedures
- Page 7 – “Early Turns” Grand Avenue

# Introduction/Summary

The City of Phoenix Aviation Department Airspace and Noise Section collects aircraft noise monitoring and flight operations data to provide the community with up-to-date information concerning aircraft noise exposure. Additionally, staff receive and address noise concerns from residents through either the noise hotline (844-244-7430) or the electronic complaint form available on the Phoenix Sky Harbor International Airport (PHX) webpage:

<https://www.skyharbor.com/FlightPaths/FileAConcernContactUs>

The following report provides a summary of the data collected for the preceding month. Each component of the report is intended to show observable trends in operation counts, flight direction, complaints, and adherence to noise abatement procedures.

## Summary:

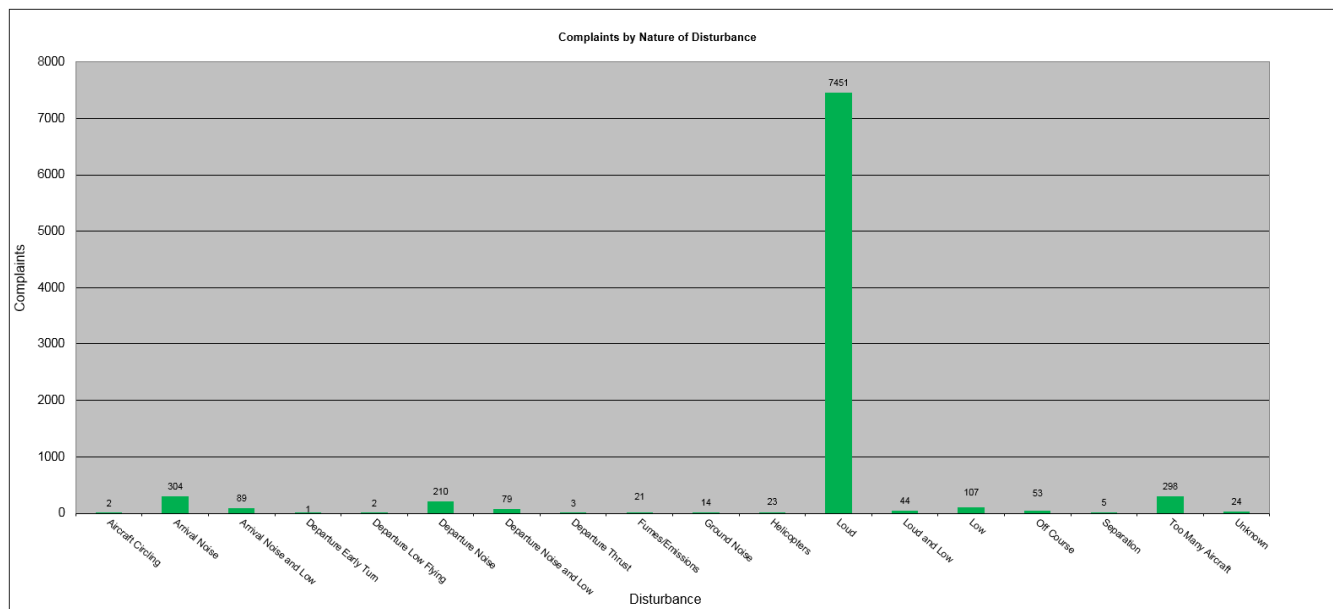
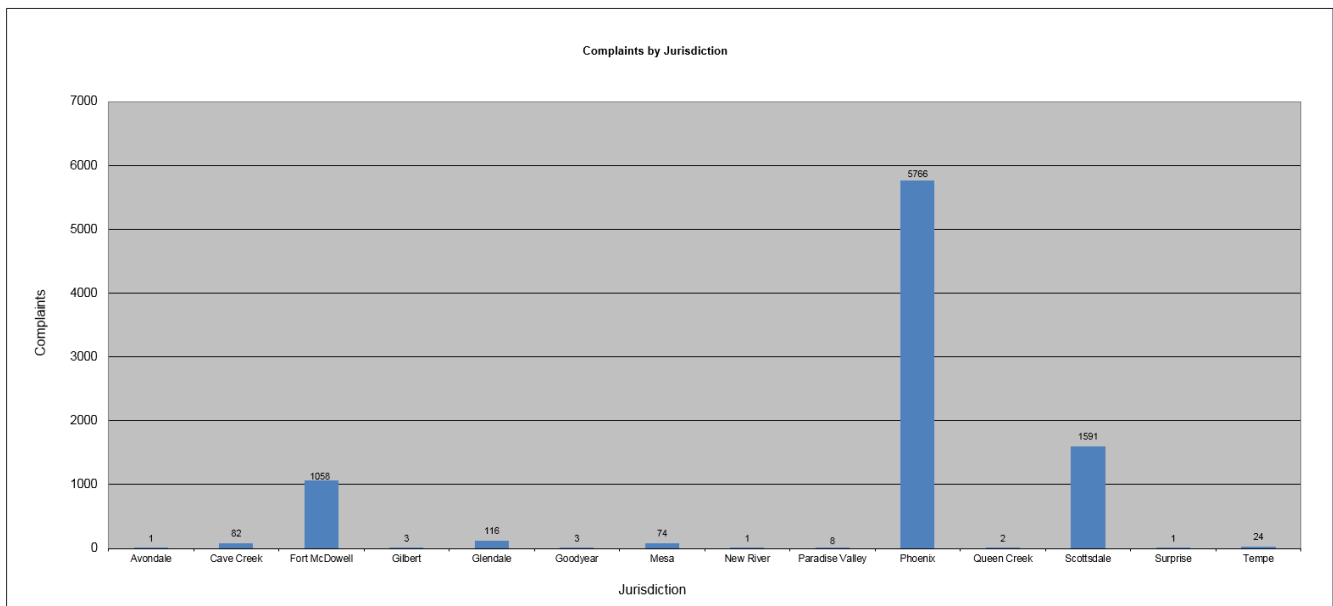
- The Airspace and Noise Section received 8,646 complaints from 276 households in the month of April 2016.
- PHX had 37,854 operations in April 2016. This is a 7.4% decrease from March 2016. Phoenix Deer Valley Airport (DVT) had 33,514 operations in April 2016. This is a 0.8% decrease from March 2016. Phoenix Goodyear Airport (GYR) had 9,748 operations in April 2016. This is a 16.0% decrease from March 2016.
- The 4 DME Compliance Rate for April 2016 was 99.51%.
- PHX operated 59.39% westerly and 40.61% easterly in the month of April 2016.

# April 2016 Noise Complaints

**Complaints:** Many factors contribute to the amount of complaints received each month and by how many people. Complaint totals are rarely consistent due to factors ranging from one unusual flight event that generates multiple complaints from a large group of people, a bad weather day or change in the weather, or a new homeowner that did not notice the flight paths before they purchased their home.

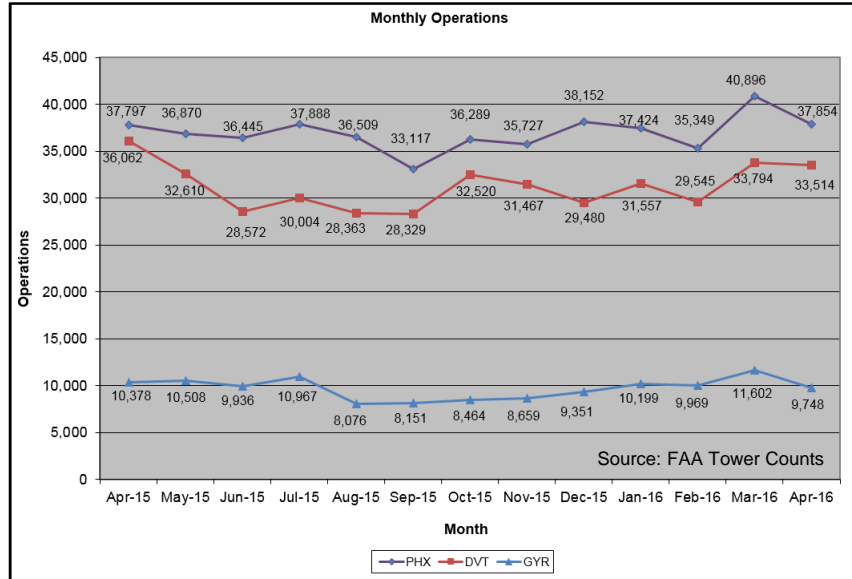
## Complaint Statistics

|                  | Apr-15     |              |  | Apr-16     |              |
|------------------|------------|--------------|--|------------|--------------|
|                  | Households | Complaints   |  | Households | Complaints   |
| PHX- Sky Harbor  | 264        | 1,648        |  | 255        | 8,576        |
| DVT- Deer Valley | 6          | 11           |  | 18         | 67           |
| GYR- Goodyear    | 1          | 1            |  | 3          | 3            |
| <b>Totals</b>    | <b>271</b> | <b>1,660</b> |  | <b>276</b> | <b>8,646</b> |



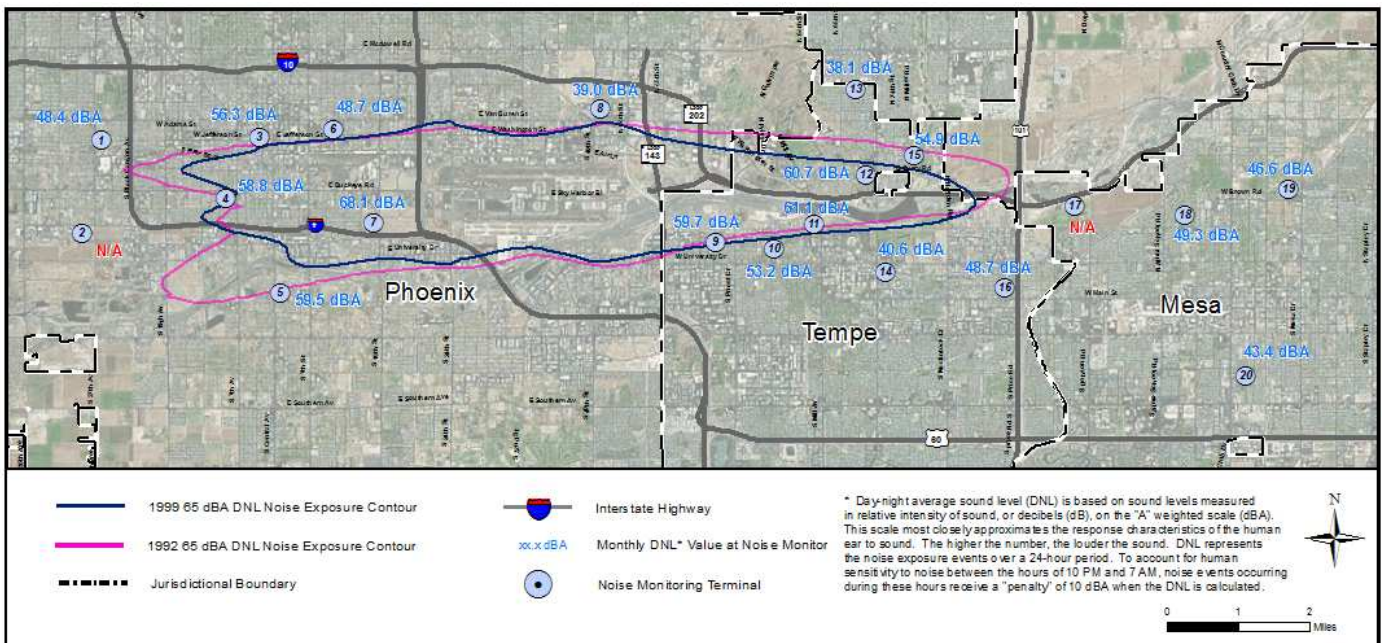
# Airport Operations

Aircraft operations generally fluctuate due to seasonal and passenger demand. The graphic below depicts operation totals at Phoenix Sky Harbor International Airport (PHX), Phoenix Deer Valley Airport (DVT) and Phoenix Goodyear Airport (GYR). Examples of peak travel times are spring break, major sporting events, the end of the school year and winter holidays.



# Noise Monitoring Sites

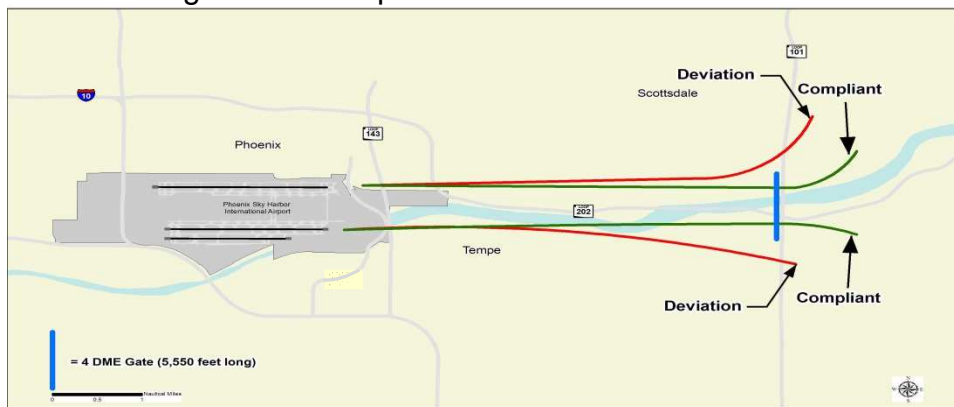
**Noise Monitors:** PHX has 20 noise monitors in the communities surrounding the Airport. These are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual flight data from the FAA. Staff can then tie noise complaints to aircraft operations and any noise events correlated with those flights. Staff also monitors changes in monthly and annual noise readings at each location.



Note: Noise Monitoring Sites with an "N/A" did not provide usable data for the preceding month due to maintenance or operational testing, or non-aircraft noise events around the site.

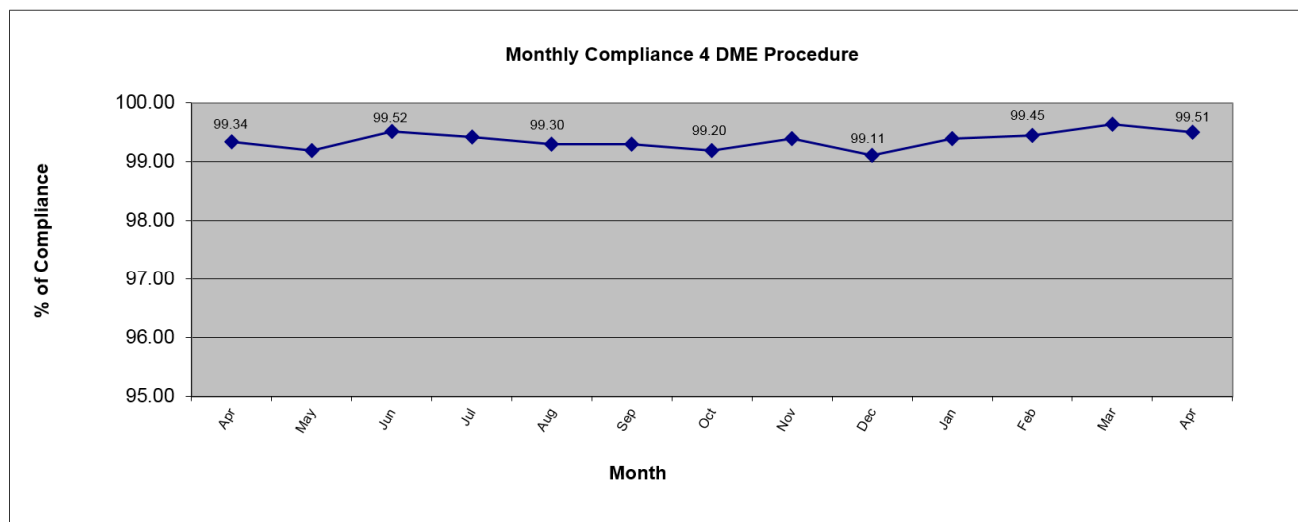
# Fly Friendly Procedures

**4 DME:** The 4 DME (Distance Measuring Equipment) departure procedure directs jet aircraft departing to the east to travel generally along the Salt River for approximately 5 miles from the airport before turning. In the event that an aircraft deviates from the 4 DME departure procedure, Airspace and Noise Section staff will contact the carrier to determine the reason for the deviation and encourage future compliance.



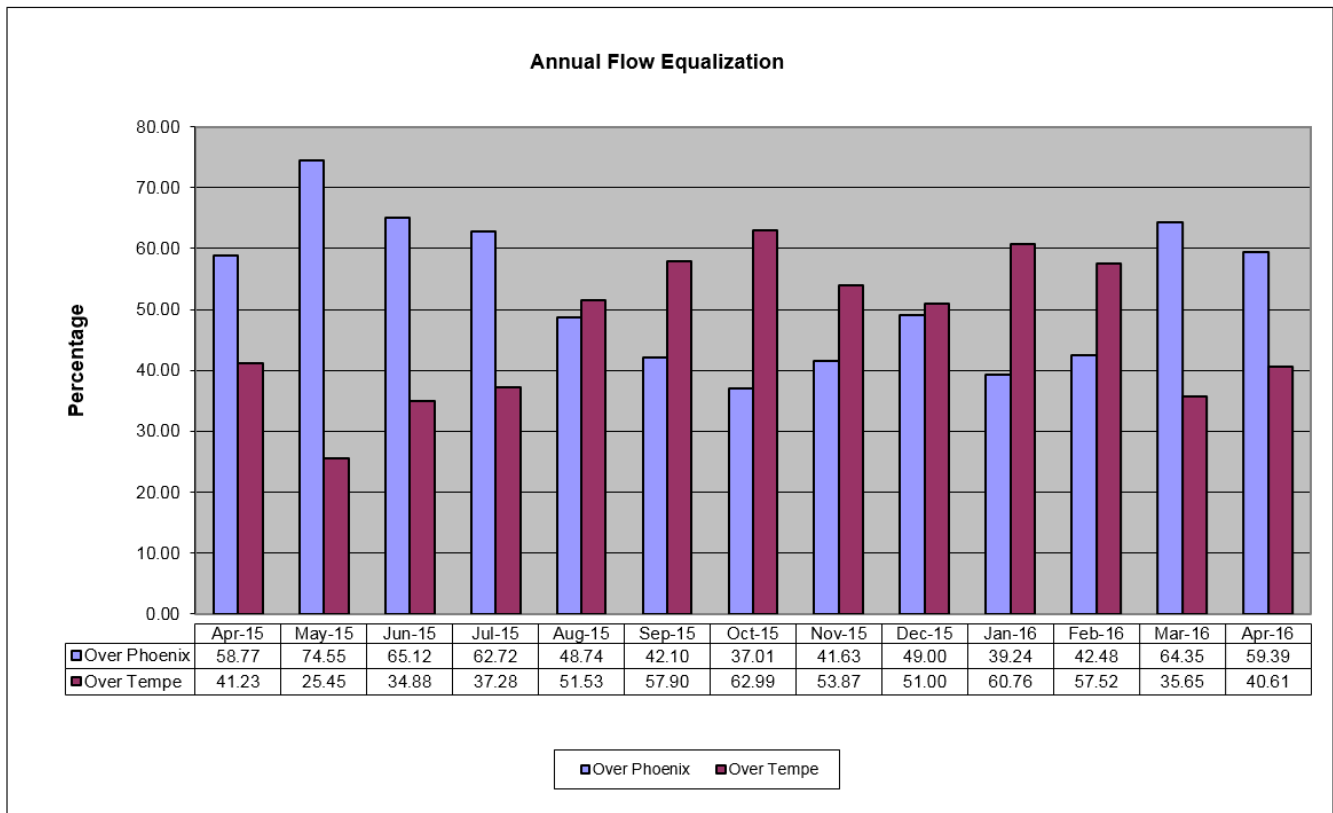
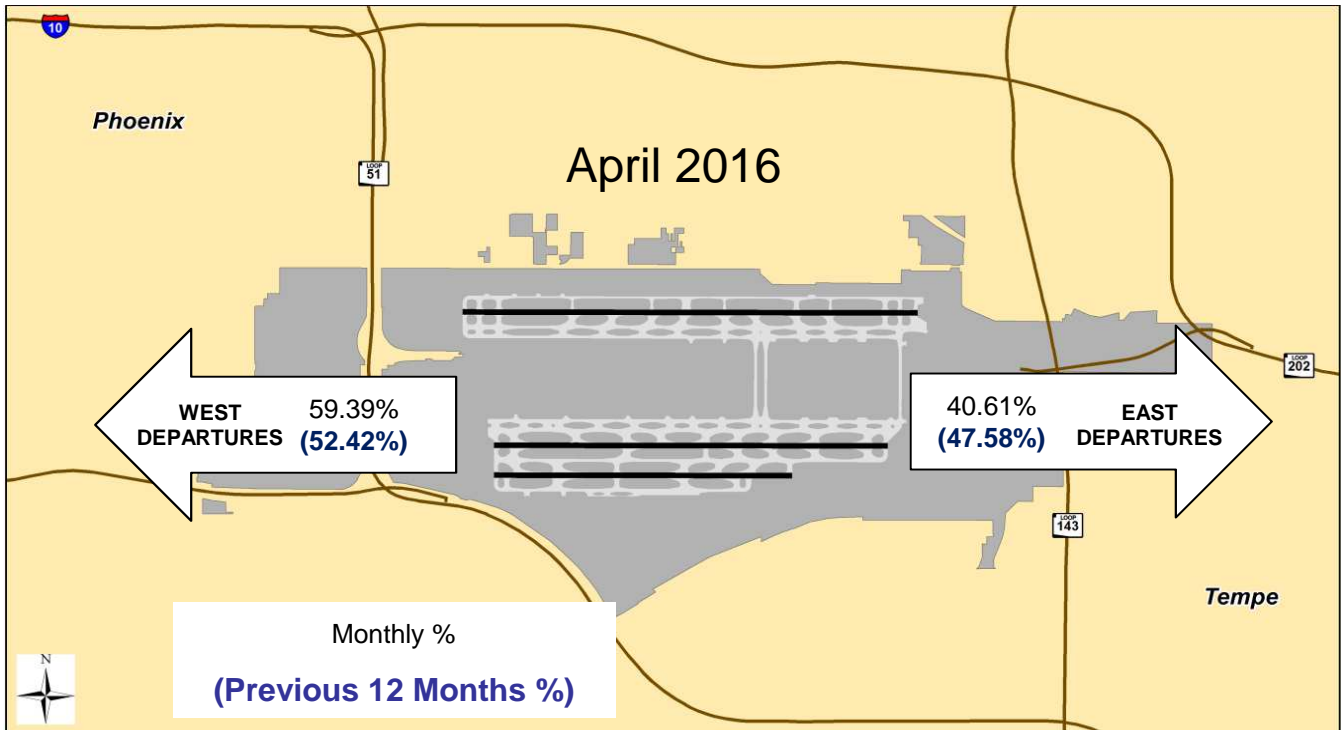
April 2016 4DME compliance rate: 99.51%

| April 2016 4 DME Deviations                             |            |                              |              |
|---|------------|------------------------------|--------------|
| Operators with 75 or more jet flights to the east shown |            |                              |              |
| Airline Name  | Deviations | Total Departures to the East | % Compliance |
| American Airlines                                       | 7          | 2,195                        | 99.68        |
| Southwest Airlines                                      | 11         | 1,970                        | 99.44        |
| Mesa Airlines   | 4          | 648                          | 99.38        |
| SkyWest Airlines  | 0          | 548                          | 100.00       |
| United Airlines   | 0          | 312                          | 100.00       |
| Delta Airlines  | 0          | 311                          | 100.00       |
| General Aviation  | 7          | 150                          | 95.33        |
| Alaska Airlines   | 0          | 109                          | 100.00       |



# Fly Friendly Procedures Continued

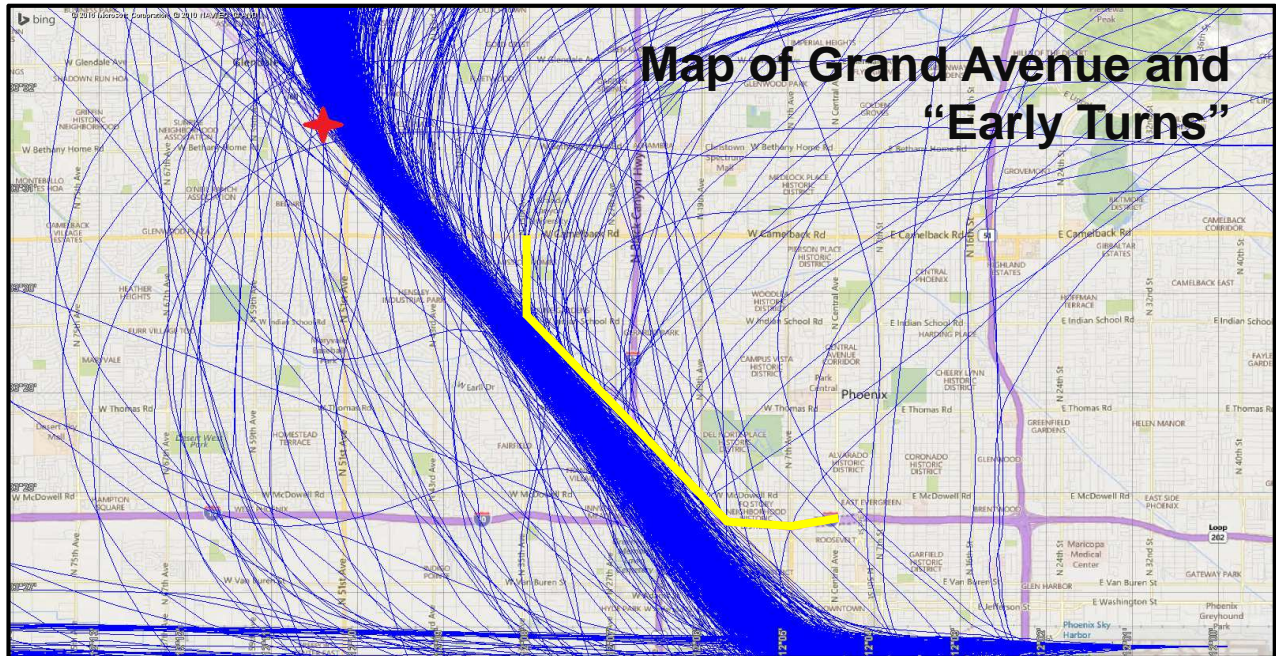
**Equalization:** Phoenix Sky Harbor International Airport has a goal to equalize the amount of aircraft departures between the east and west over an annualized period. Because aircraft need to fly into the wind for added lift, there are times when weather can cause longer periods of flow in one direction versus the other.





# “Early Turns” - Grand Avenue Month of April 2016

While a formal turning “gate” does not exist for RNAV northwest departures, the City has informally established a gate for monitoring purposes; generally depicted by the yellow line on the map below. Staff monitors the amount of jet aircraft that turn back to due north or east before going past the informal gate and publishes that data so that the community has a sense of aircraft flight paths that deviate from the RNAV corridor; which is consistent with the November 14, 2014 FAA instruction to PHX air traffic controllers to not issue early turns to aircraft unless doing so for safety purposes. Staff continues to work with the FAA on defining Northwest route “early turn” criteria so it is representative of FAA and reflective of community issues.



| <b>"Early Turns" - Grand Avenue 2016</b>                      |        |
|---|--------|
| Counts derived from subjective analysis and subject to change |        |
| Month   | Counts |
| January   | 69     |
| February  | 21     |
| March   | 25     |
| April   | 49     |
| May   |        |
| June  |        |
| July  |        |
| August  |        |
| September   |        |
| October   |        |
| November  |        |
| December  |        |
| Year To Date  | 164    |

**“Early Turns” - Grand Avenue  
Month of April 2016 Continued  
April 1-30 “Early Turns” Table**

| #  | Operation Time      | Type                 | Flight  | AC Type | RWY | Destination |
|----|---------------------|----------------------|---------|---------|-----|-------------|
| 1  | 2016-04-07 22:25:16 | Commercial           | AAL1319 | B738    | 25R | JFK         |
| 2  | 2016-04-07 19:17:54 | Commercial           | AAL1617 | B738    | 25R | ORD         |
| 3  | 2016-04-22 22:49:53 | Commercial           | AAL2026 | A321    | 26  | PHL         |
| 4  | 2016-04-10 12:21:24 | Commercial           | AAL354  | B738    | 25R | MSP         |
| 5  | 2016-04-10 00:47:53 | Commercial           | AAL415  | A321    | 26  | ORD         |
| 6  | 2016-04-02 21:59:20 | Commercial           | AAL442  | A320    | 25R | BOS         |
| 7  | 2016-04-28 20:16:59 | Commercial           | AAL500  | A319    | 25R | IND         |
| 8  | 2016-04-22 22:37:31 | Commercial           | AAL600  | A321    | 26  | IND         |
| 9  | 2016-04-30 16:29:39 | Commercial           | AAL618  | A320    | 25R | BWI         |
| 10 | 2016-04-07 19:05:02 | Commercial           | ASH5610 | CRJ9    | 25R | ABQ         |
| 11 | 2016-04-25 12:46:20 | Commercial           | ASH5719 | CRJ9    | 25R | ABQ         |
| 12 | 2016-04-29 06:38:08 | Commercial           | DAL1050 | A320    | 25R | DTW         |
| 13 | 2016-04-30 16:05:01 | Commercial           | DAL2046 | B738    | 25R | ATL         |
| 14 | 2016-04-30 16:26:45 | Commercial           | DAL899  | A320    | 25R | MSP         |
| 15 | 2016-04-22 23:36:02 | Commercial           | DAL979  | B763    | 26  | DTW         |
| 16 | 2016-04-30 16:32:40 | Commercial           | FFT1540 | A319    | 25R | ATL         |
| 17 | 2016-04-29 08:27:05 | Privately Registered | N507SF  | C680    | 25L | SLG         |
| 18 | 2016-04-23 09:59:41 | Privately Registered | N711WG  | C525    | 25L | MKC         |
| 19 | 2016-04-12 05:24:04 | Privately Registered | N75WP   | C560    | 26  | PGA         |
| 20 | 2016-04-23 17:55:16 | Privately Registered | N808CS  | PRM1    | 25L | UNK         |
| 21 | 2016-04-10 00:45:58 | Commercial           | NKS168  | A320    | 25R | ORD         |
| 22 | 2016-04-16 00:00:45 | Commercial           | ROU1834 | A321    | 25R | YYZ         |
| 23 | 2016-04-02 21:50:19 | Commercial           | SKW2969 | CRJ2    | 25R | DRO         |
| 24 | 2016-04-22 20:31:15 | Commercial           | SKW2976 | CRJ2    | 25R | FLG         |
| 25 | 2016-04-14 11:57:51 | Commercial           | SWA1159 | B738    | 25R | MKE         |



**“Early Turns” - Grand Avenue  
Month of April 2016 Continued  
April 1-30 “Early Turns” Table Continued**

| <b>#</b> | <b>Operation Time</b> | <b>Type</b> | <b>Flight</b> | <b>AC Type</b> | <b>RWY</b> | <b>Destination</b> |
|----------|-----------------------|-------------|---------------|----------------|------------|--------------------|
| 26       | 2016-04-20 20:41:21   | Commercial  | SWA1371       | B738           | 25R        | ABQ                |
| 27       | 2016-04-26 21:27:28   | Commercial  | SWA1371       | B738           | 25R        | ABQ                |
| 28       | 2016-04-28 20:31:54   | Commercial  | SWA1371       | B738           | 25R        | ABQ                |
| 29       | 2016-04-20 17:56:42   | Commercial  | SWA1909       | B738           | 25R        | BWI                |
| 30       | 2016-04-25 18:07:26   | Commercial  | SWA1909       | B738           | 25R        | BWI                |
| 31       | 2016-04-30 17:41:37   | Commercial  | SWA1919       | B737           | 25R        | ABQ                |
| 32       | 2016-04-03 15:30:54   | Commercial  | SWA2035       | B737           | 25R        | MDW                |
| 33       | 2016-04-02 21:43:02   | Commercial  | SWA2166       | B737           | 25R        | ABQ                |
| 34       | 2016-04-23 09:38:01   | Commercial  | SWA2320       | B737           | 25R        | MDW                |
| 35       | 2016-04-28 18:53:02   | Commercial  | SWA2463       | B733           | 25R        | LAS                |
| 36       | 2016-04-30 16:35:54   | Commercial  | SWA2532       | B733           | 25R        | MCI                |
| 37       | 2016-04-30 15:51:35   | Commercial  | SWA2588       | B738           | 25R        | LAS                |
| 38       | 2016-04-06 19:42:07   | Commercial  | SWA2643       | B738           | 25R        | MKE                |
| 39       | 2016-04-07 22:40:52   | Commercial  | SWA3036       | B737           | 25R        | OKC                |
| 40       | 2016-04-20 17:07:11   | Commercial  | SWA3113       | B733           | 25R        | ABQ                |
| 41       | 2016-04-21 17:26:41   | Commercial  | SWA3113       | B733           | 25R        | ABQ                |
| 42       | 2016-04-30 17:27:23   | Commercial  | SWA3222       | B737           | 25R        | MDW                |
| 43       | 2016-04-06 22:39:24   | Commercial  | SWA3232       | B737           | 25R        | ABQ                |
| 44       | 2016-04-30 16:07:19   | Commercial  | SWA3634       | B738           | 25R        | DEN                |
| 45       | 2016-04-30 17:46:34   | Commercial  | SWA3789       | B738           | 25R        | DEN                |
| 46       | 2016-04-20 20:03:35   | Commercial  | SWA3935       | B737           | 25R        | PIT                |
| 47       | 2016-04-08 00:00:01   | Commercial  | UAL209        | B739           | 26         | ORD                |
| 48       | 2016-04-10 00:00:03   | Commercial  | UAL209        | B739           | 25R        | ORD                |
| 49       | 2016-04-07 20:11:55   | Commercial  | UPS857        | MD11           | 25R        | SDF                |