



 CITY OF PHOENIX AVIATION DEPARTMENT

## **Monthly Noise Report**

**November 2015**

### 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 2,455 complaints from 213 households in November 2015.
- PHX had 35,727 operations in November 2015. This is a 1.5% decrease from October 2015. Phoenix Deer Valley Airport (DVT) had 31,467 operations in November 2015. This is a 3.2% decrease from October 2015. Phoenix Goodyear Airport (GYR) had 8,659 operations in November 2015. This is a 2.3% increase from October 2015.
- The 4 DME Compliance Rate for November 2015 was 99.40%.
- PHX operated 41.63% westerly and 58.37% easterly in the month of November 2015.

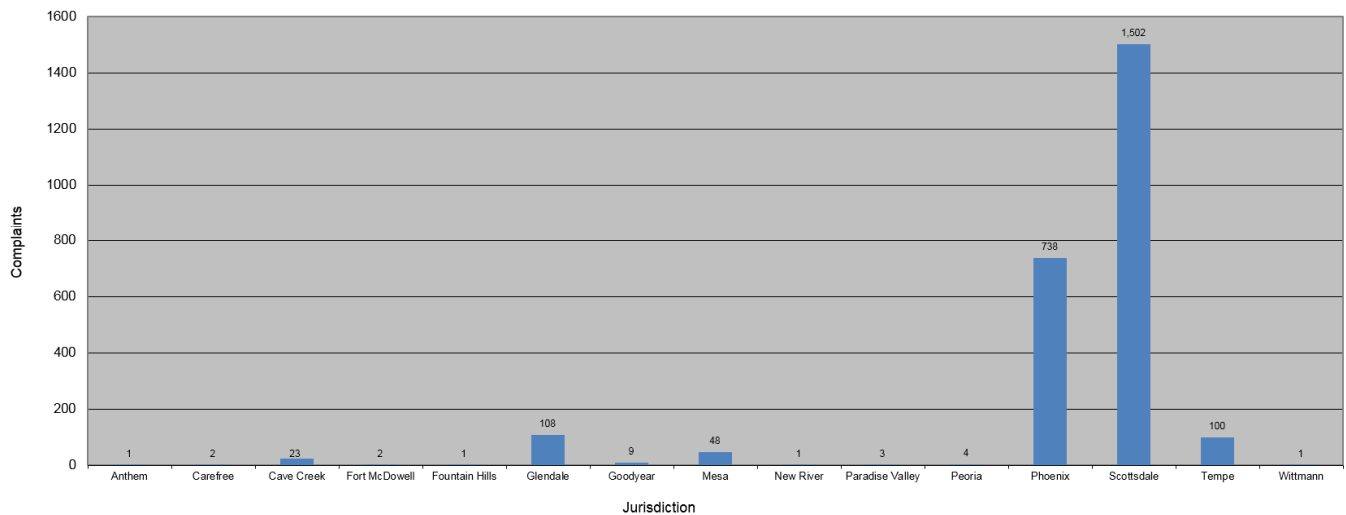
# November 2015 Noise Complaints

**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.

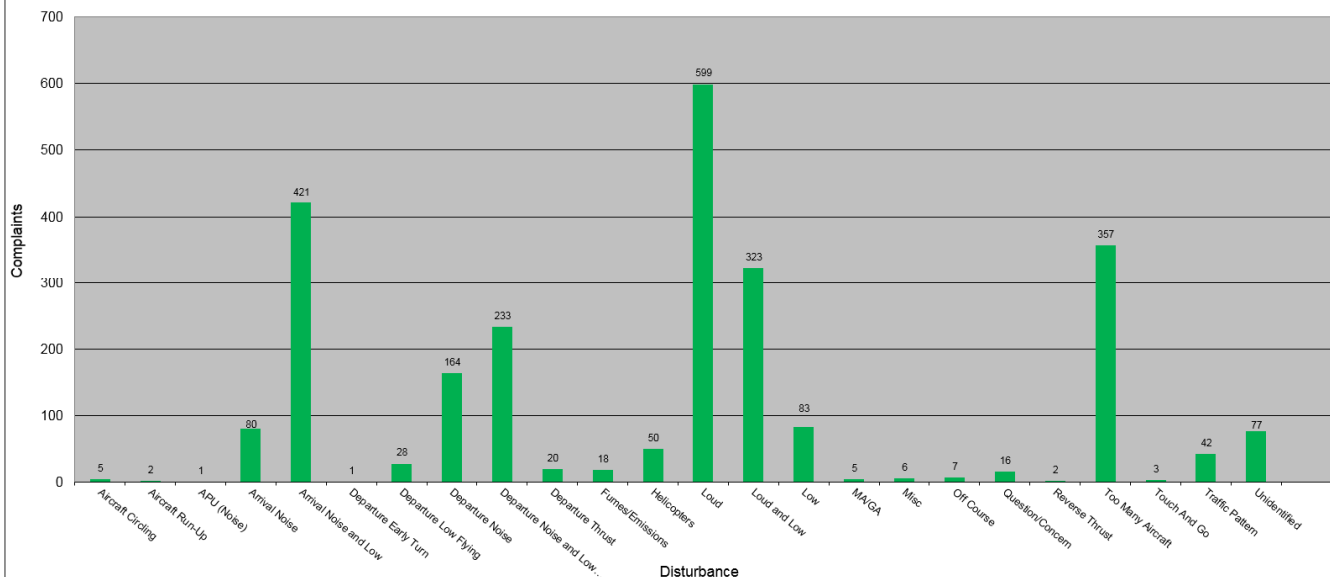
## Complaint Statistics

	Nov-14			Nov-15	
	Households	Complaints		Households	Complaints
PHX- Sky Harbor	227	677		186	2,291
DVT- Deer Valley	4	4		24	151
GYR- Goodyear	0	0		3	13
<b>Totals</b>	<b>231</b>	<b>681</b>		<b>213</b>	<b>2,455</b>

Complaints by Jurisdiction

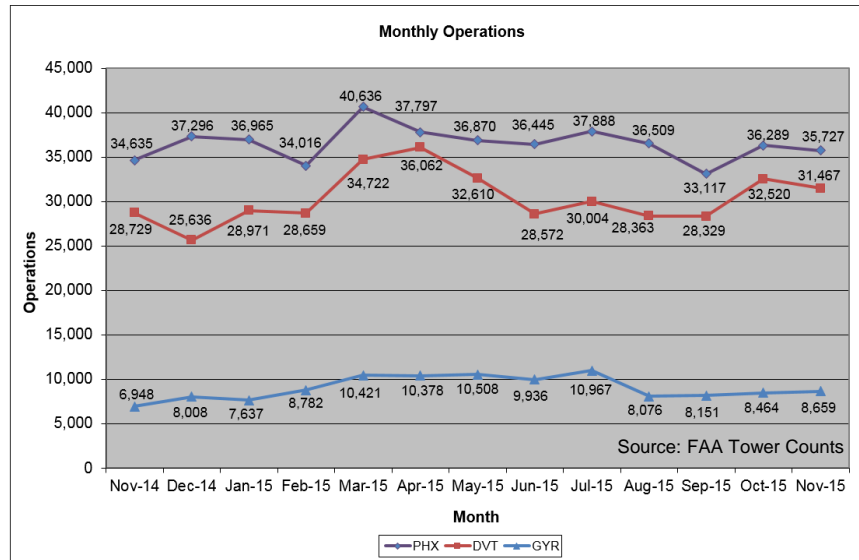


Complaints by Nature of Disturbance



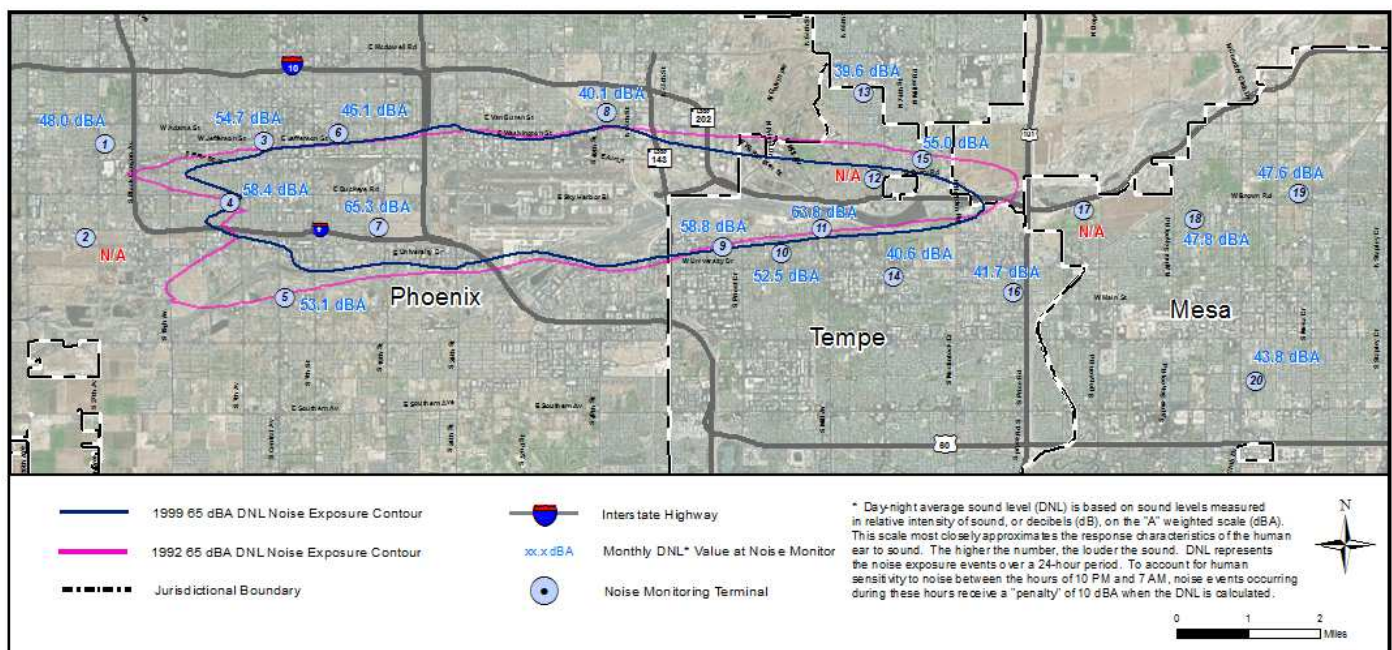
# Airport Operations

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

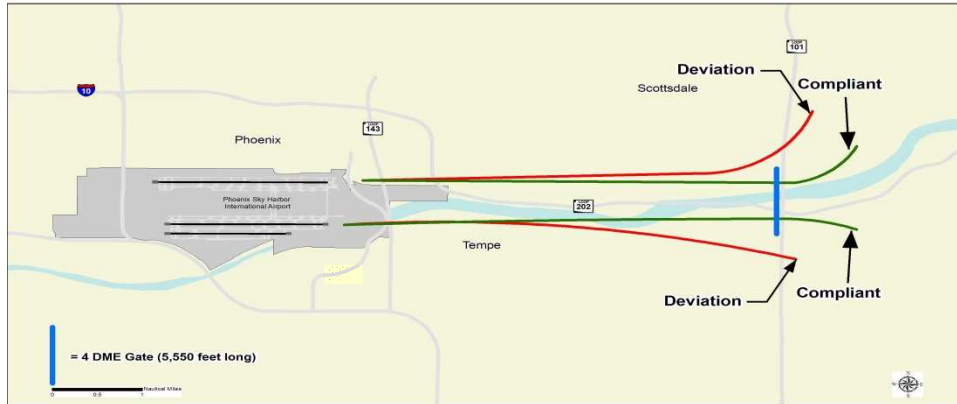
**Noise Monitors:** PHX has 20 noise monitors in the communities surrounding the Airport. These are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual 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.

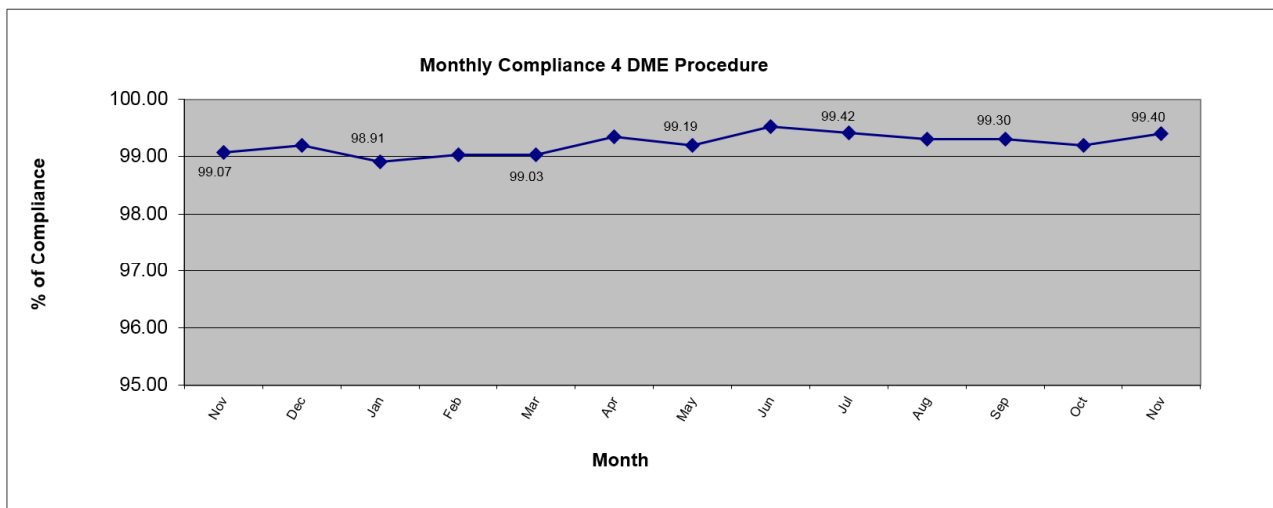
# Fly Friendly Procedures

**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.



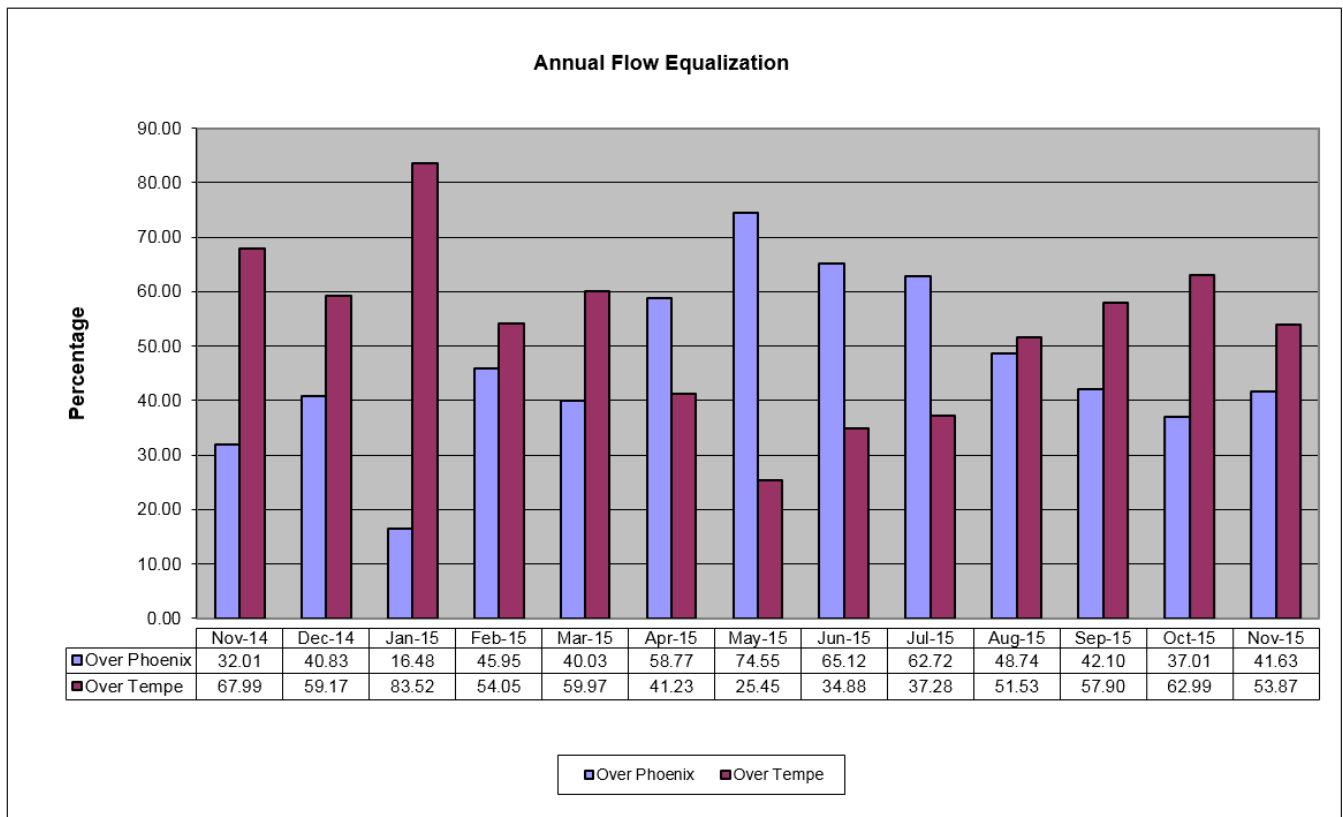
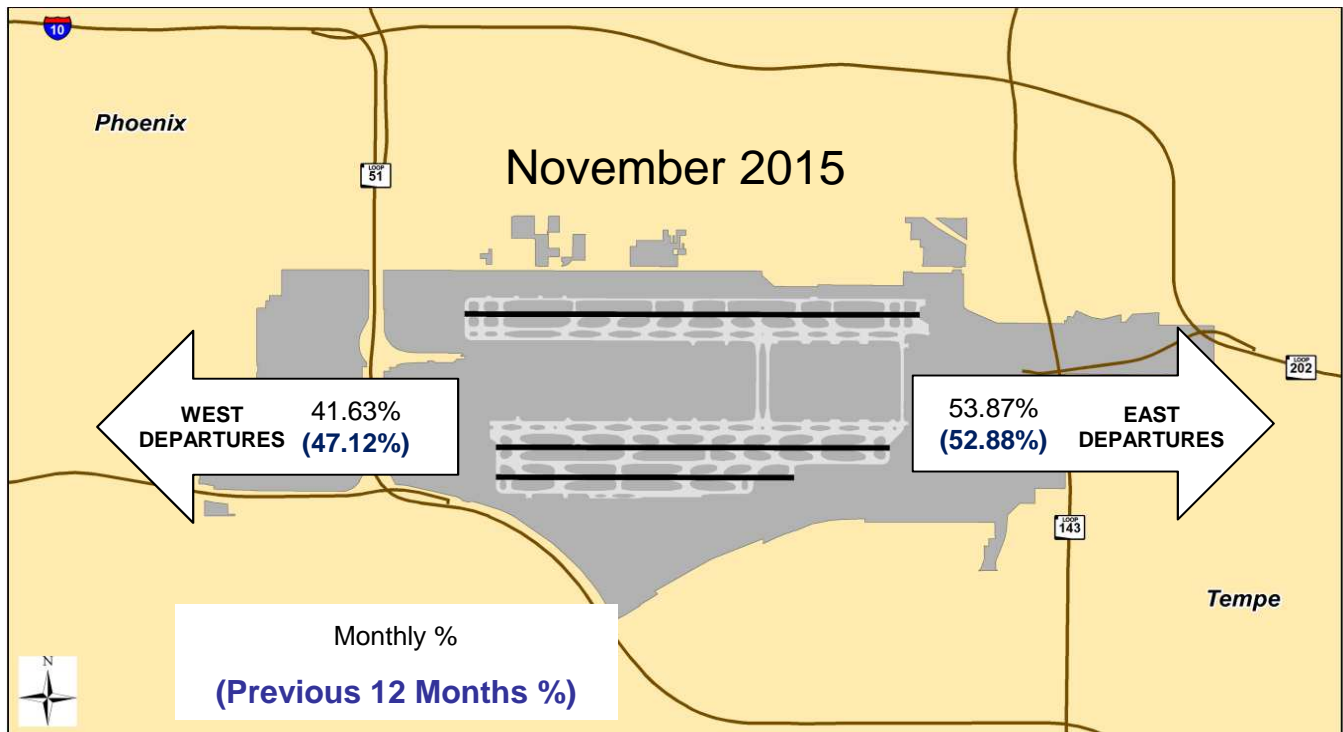
November 2015 4 DME compliance rate: 99.40%

November 2015 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	5	3,069	99.84
Southwest Airlines	16	2,661	99.40
Mesa Airlines	5	923	99.46
SkyWest Airlines	3	662	99.55
Delta Airlines	0	433	100.00
United Airlines	1	384	99.74
General Aviation	15	178	91.57
Alaska Airlines	1	142	99.30
FedEx Airlines	0	103	100.00
WestJet Airlines	0	103	100.00



# Fly Friendly Procedures Continued

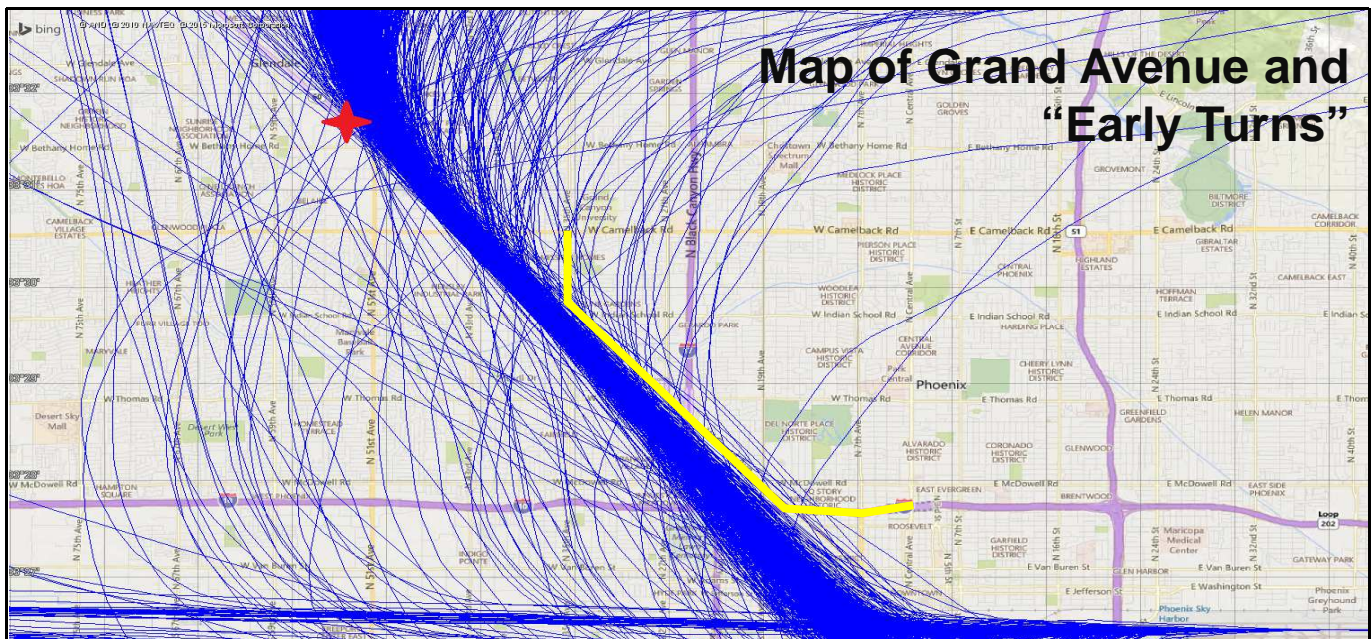
**Equalization:** Phoenix Sky Harbor International Airport has a goal to equalize the amount of aircraft departures between the east and west over an annualized period. Because aircraft need to fly into the wind for added lift, there are times when weather can cause longer periods of flow in one direction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





## “Early Turns” - Grand Avenue Month of November 2015

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 2015</b>	
Counts derived from subjective analysis and subject to change	
Month	Counts
January	71
February	40
March	69
April	71
May	154
June	85
July	115
August	45
September	65
October	84
November	40
December	-
Year To Date	839

# “Early Turns” - Grand Avenue

## Month of November 2015 Continued

### November 1-15 “Early Turns” FAA Info Table

#	Operation Time	Type	Flight	AC Type	RWY	Destination	FAA Info.
1	2015-11-04 13:31:47	Commercial	AAL1951	A321	25R	DEN	Pilot requested turn to avoid heavy weather
2	2015-11-04 16:51:11	Commercial	AAL618	A320	25R	BWI	Pilot requested turn to avoid heavy weather
3	2015-11-04 13:34:36	Commercial	DAL2432	B738	25R	DTW	No turns issued, aircraft on route
4	2015-11-10 09:19:55	Privately Registered	N552SK	LJ60	25L	SLC	Aircraft right over TWSND
5	2015-11-10 17:39:26	Privately Registered	N560DW	C56X	25L	SJC	Not an RNAV Departure
6	2015-11-04 16:28:52	Privately Registered	N800WF	H25B	25L	BOI	No turns issued, aircraft on route
7	2015-11-04 14:08:17	Commercial	SKW2950	CRJ2	25R	FLG	No turns issued, aircraft on route
8	2015-11-04 16:14:06	Commercial	SKW2959	CRJ2	25R	GJT	Pilot requested turn to avoid heavy weather
9	2015-11-01 22:46:12	Commercial	SKW2969	CRJ2	25R	DRO	No turns issued, aircraft on route
10	2015-11-15 20:18:41	Commercial	SKW2982	CRJ2	25R	GJT	No turns issued, aircraft on route
11	2015-11-15 21:21:00	Commercial	SWA287	B737	25R	MSP	Pilot requested turn to avoid heavy weather
12	2015-11-04 22:19:28	Commercial	SWA294	B733	25R	DEN	Aircraft right over TWSND
13	2015-11-04 16:01:26	Commercial	SWA3015	B737	25R	SLC	Pilot requested turn to avoid heavy weather
14	2015-11-11 22:35:53	Commercial	SWA3206	B737	25R	ABQ	No turns issued, aircraft on route
15	2015-11-04 13:18:32	Commercial	SWA406	B737	25R	DEN	Pilot requested turn to avoid heavy weather
16	2015-11-03 19:31:22	Commercial	SWA438	B737	25R	CMH	No turns issued, aircraft on route
17	2015-11-03 14:58:07	Commercial	SWA9005	B733	25R	BOI	No turns issued, aircraft on route
18	2015-11-04 19:04:28	Commercial	UAL792	A320	25R	DEN	Pilot requested turn to avoid heavy weather
19	2015-11-09 19:43:20	Commercial	UPS3855	B752	25L	SDF	No turns issued, aircraft on route



# “Early Turns” - Grand Avenue

## Month of November 2015 Continued

### November 16-30 “Early Turns” FAA Info Table

#	Operation Time	Type	ACID	AC Type	Runway	Destination	FAA Info.
1	2015-11-29 00:23:51	Commercial	AAL2026	A321	26	PHL	2.19 E of TWNSD no turns were given by Air Traffic
2	2015-11-29 01:08:28	Commercial	AAL2084	A319	26	STL	2.78 E of TWNSD no turns were given by Air Traffic
3	2015-11-19 15:02:48	Commercial	AAL413	A321	25R	SEA	1.85 miles E of TWNSD RMS no turns were given prior to TWNSD
4	2015-11-16 17:20:32	Commercial	AAL622	A321	25R	JFK	2.43 miles E of TWNSD RYO Vectored on course for TRAFFIC
5	2015-11-29 21:36:37	Commercial	AAL671	A321	25R	PDX	1.51 E of TWNSD ZEP no turns were given by Air Traffic
6	2015-11-25 13:59:01	Commercial	AAL680	B752	25R	DCA	.86 E of TWNSD no turns were given by Air Traffic
7	2015-11-30 01:11:39	Commercial	AAL738	B752	26	PHL	1.88 E. of TWNSD no turns were given by Air Traffic
8	2015-11-18 16:38:27	Commercial	ASH5592	CRJ9	25R	ABQ	3.82 miles E of TWNSD RLA Was given a turn for traffic
9	2015-11-16 17:10:20	Commercial	DAL899	A320	26	MSP	2.96 miles E of TWNSD RLA no turns were given by Air Traffic
10	2015-11-29 00:19:09	Commercial	JBU136	A320	26	JFK	2.31 E of TWNSD no turns were given by Air Traffic
11	2015-11-25 15:30:31	Privately Registered	N21NV	LJ60	25R	LAS	.43 E of TWNSD no turns were given by Air Traffic
12	2015-11-18 14:06:13	Privately Registered	N250GP	MU30	25L	VNY	Flew directly over TWNSD
13	2015-11-20 17:33:16	Privately Registered	N469DN	C560	25L	PVU	.41 E of TWNSD no turns were given by Air Traffic
14	2015-11-25 22:52:17	Commercial	SKW2969	CRJ2	25R	DRO	.43 E of TWNSD no turns were given by Air Traffic
15	2015-11-28 21:18:14	Commercial	SKW2974	CRJ2	25R	MRY	.38 E of TWNSD no turns were given by Air Traffic
16	2015-11-19 17:46:40	Commercial	SKW4578	CRJ9	25R	SLC	.32 E of TWNSD no turns were given by Air Traffic
17	2015-11-29 01:10:58	Commercial	SWA2190	B738	25R	ABQ	2.95 E of TWNSD no turns were given by Air Traffic
18	2015-11-29 22:11:03	Commercial	SWA2788	B737	25R	SEA	.21 E of TWNSD no turns were given by Air Traffic
19	2015-11-27 17:08:09	Commercial	SWA4197	B737	25R	ABQ	2.89 E of TWNSD no turns were given by Air Traffic
20	2015-11-19 19:22:28	Commercial	SWA485	B733	25R	LAS	.12 E of TWNSD no turns were given by Air Traffic
21	2015-11-17 17:22:50	Commercial	SWA957	B737	25R	ABQ	2.55 miles E of TWNSD RLA no turns were given by Air Traffic