

PHX DVT GYR

 CITY OF PHOENIX AVIATION DEPARTMENT

Monthly Noise Report

January 2016

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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:

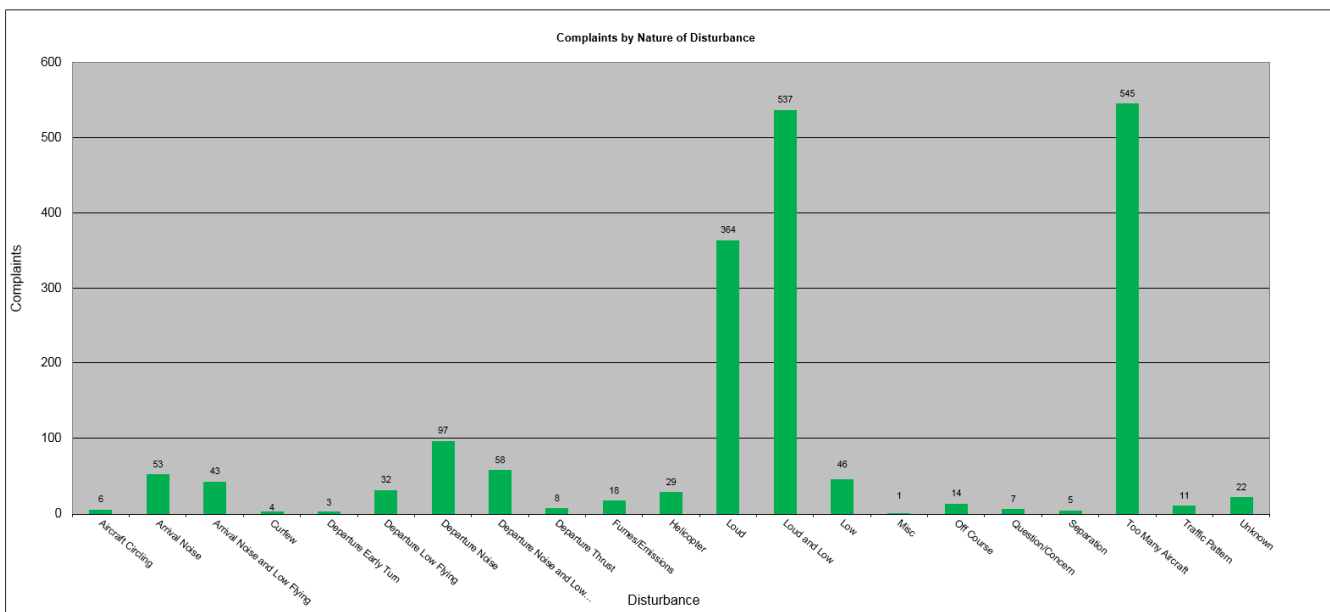
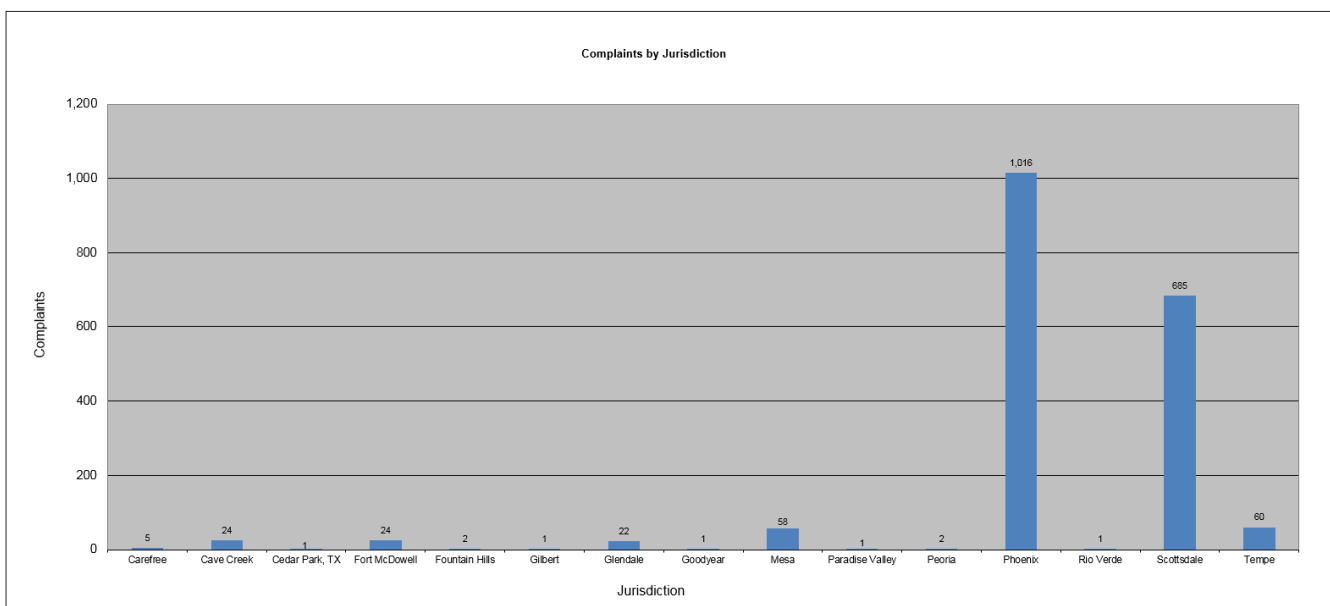
- The Airspace and Noise Section received 1,882 complaints from 189 households in January 2016.
- PHX had 37,424 operations in January 2016. This is a 1.9% decrease from December 2015. Phoenix Deer Valley Airport (DVT) had 31,557 operations in January 2016. This is a 7.0% increase from December 2015. Phoenix Goodyear Airport (GYR) had 10,199 operations in January 2016. This is a 9.1% increase from December 2015.
- The 4 DME Compliance Rate for January 2016 was 99.35%.
- PHX operated 39.24% westerly and 60.76% easterly in the month of January 2016.

January 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.

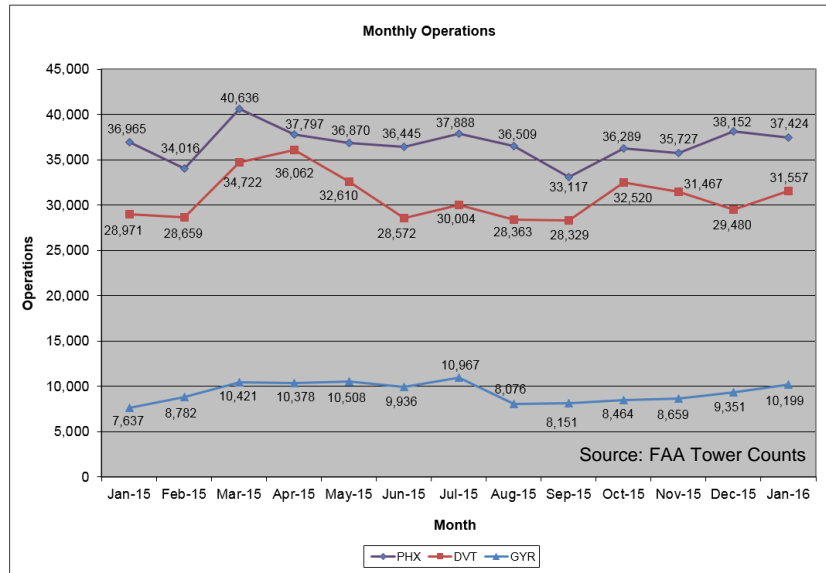
Complaint Statistics

	Jan-15			Jan-16	
	Households	Complaints		Households	Complaints
PHX- Sky Harbor	219	930		155	1,802
DVT- Deer Valley	3	5		33	79
GYR- Goodyear	0	0		1	1
Totals	222	935		189	1,882



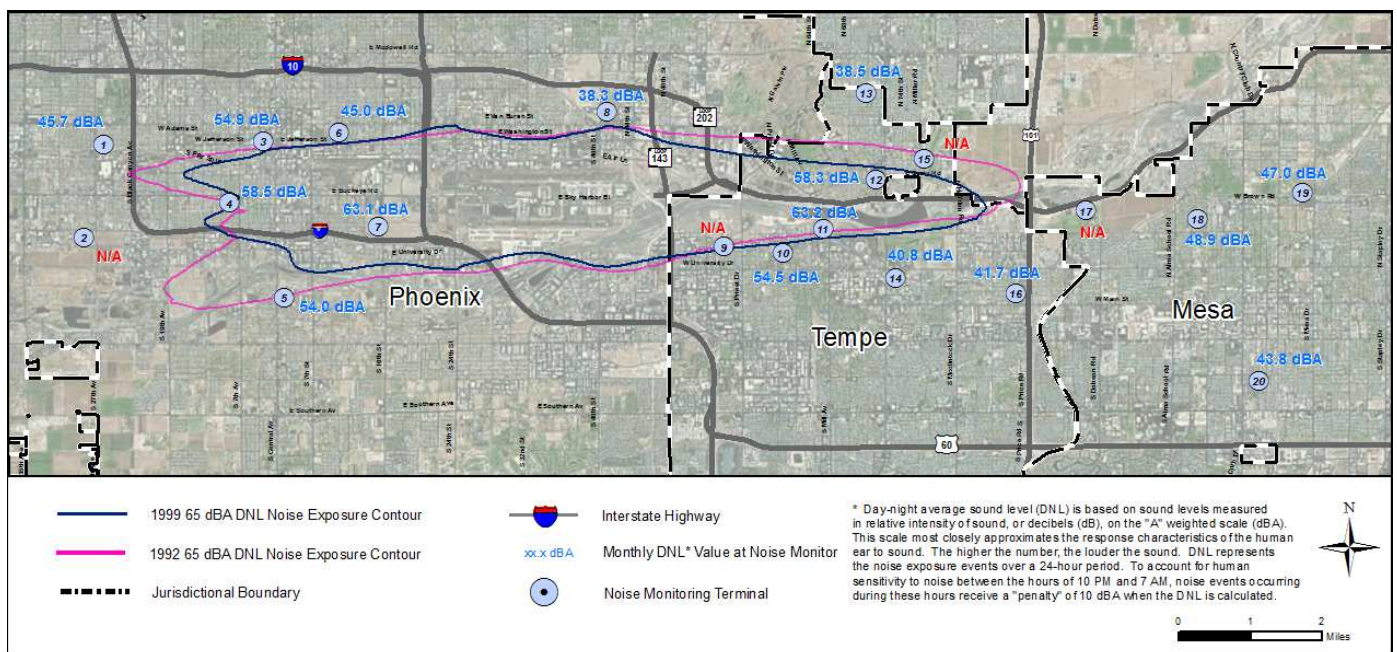
Airport Operations

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

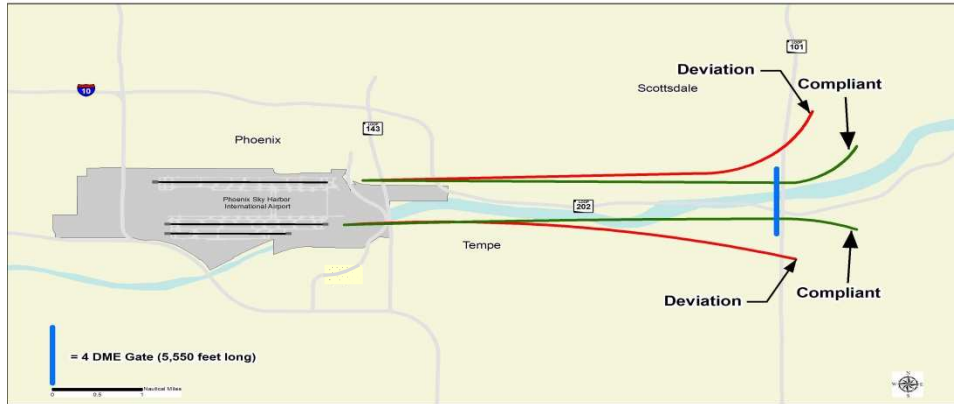
Noise Monitors: PHX has 20 noise monitors in the communities surrounding the Airport. These are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual flight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

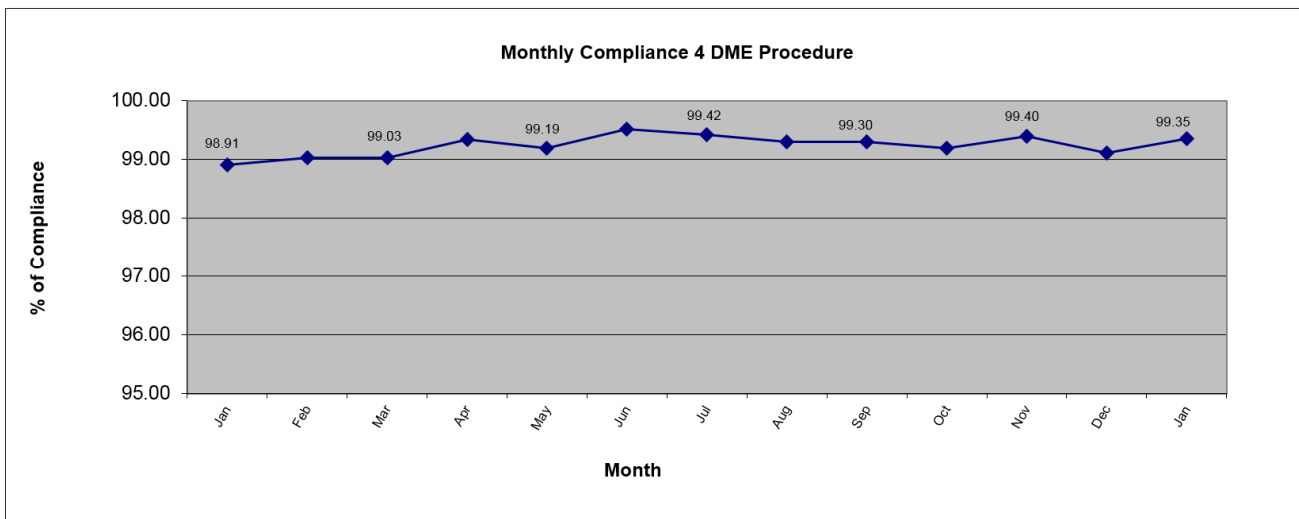
Fly Friendly Procedures

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.



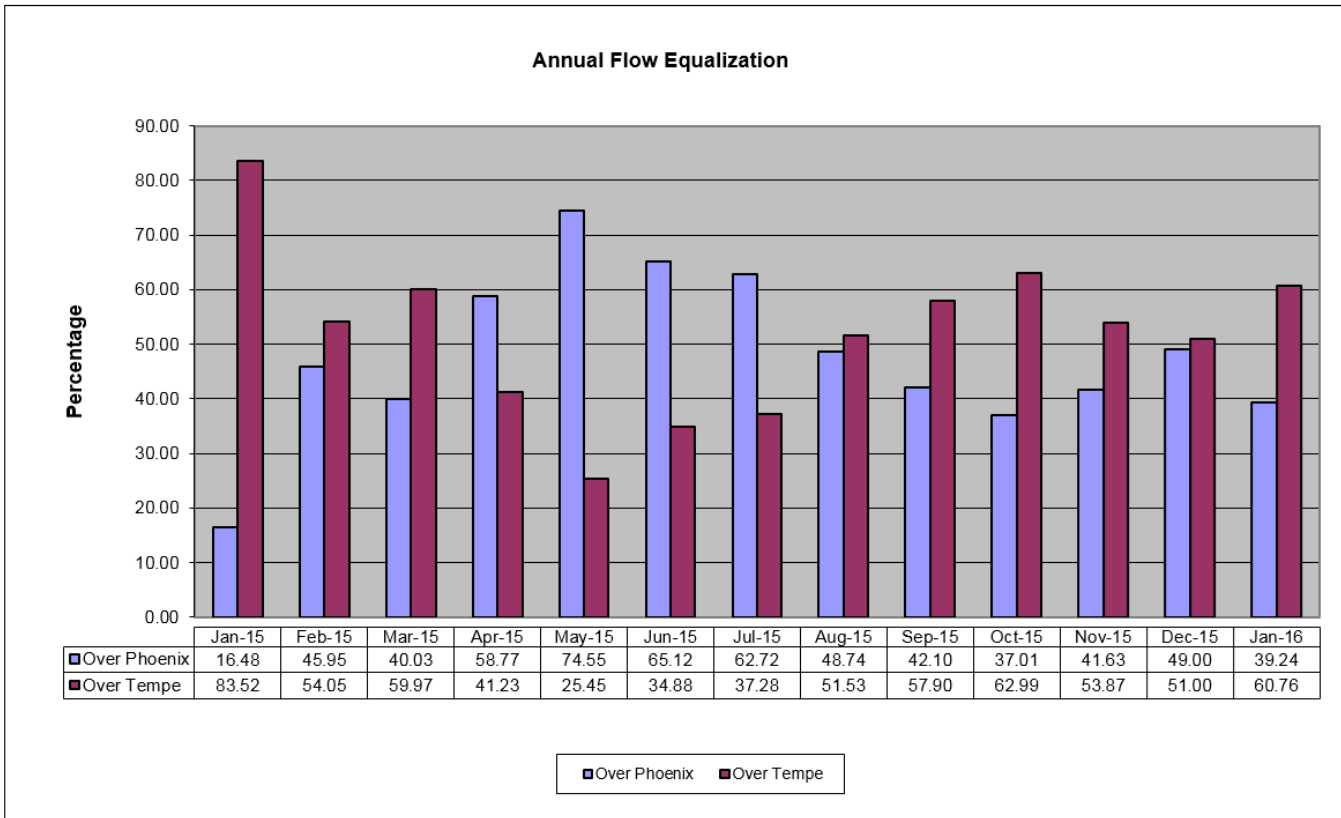
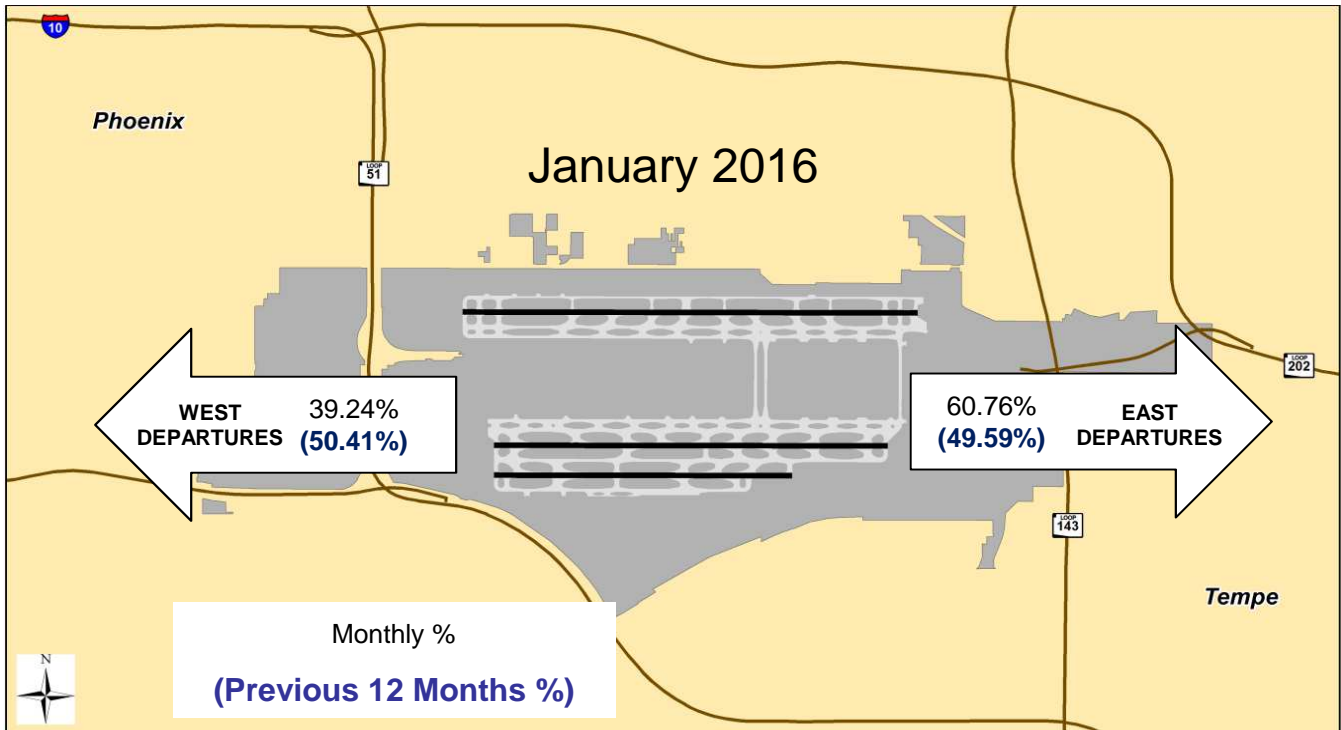
January 2016 4DME compliance rate: 99.35%

January 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	5	3,309	99.85
Southwest Airlines	12	2,857	99.58
Mesa Airlines	3	1,003	99.70
SkyWest Airlines	5	722	99.31
Delta Airlines	1	484	99.79
United Airlines	5	461	98.92
General Aviation	17	278	93.88
Alaska Airlines	3	128	97.66
WestJet Airlines	0	120	100.00
FedEx Airlines	0	107	100.00
Spirit Airlines	0	89	100.00
Frontier Airlines	0	78	100.00



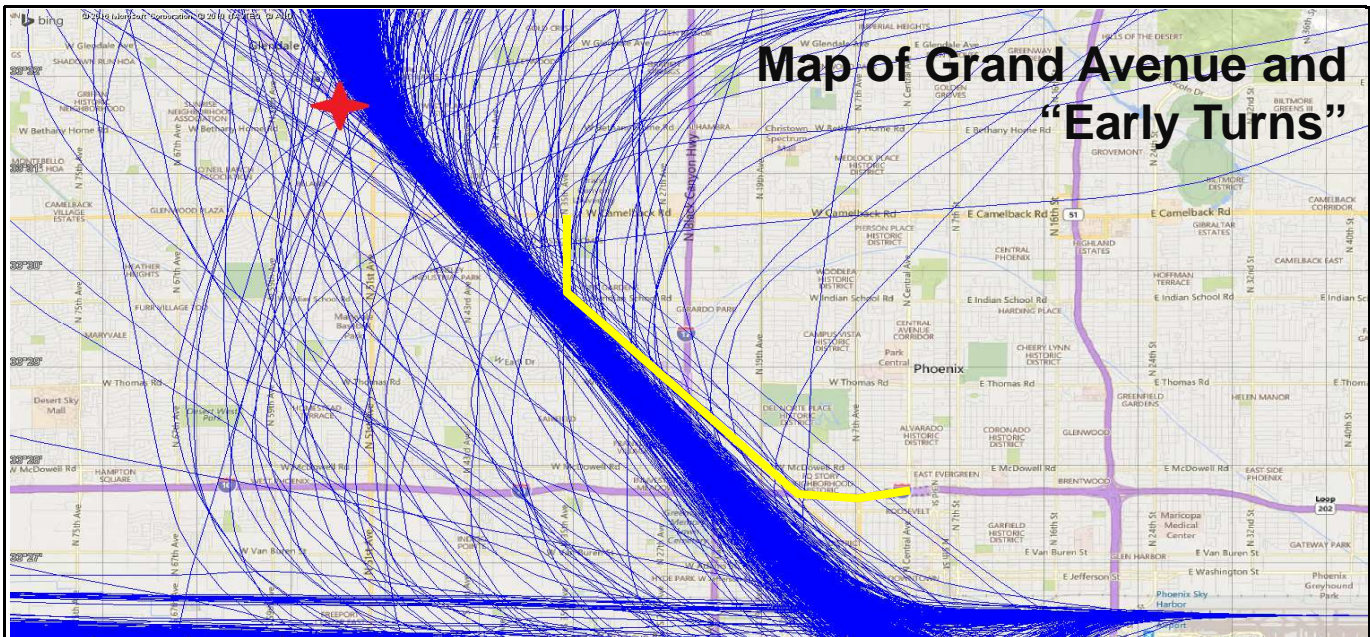
Fly Friendly Procedures Continued

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 January 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.



"Early Turns" - Grand Avenue 2016	
Counts derived from subjective analysis and subject to change	
Month	Counts
January	69
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
Year To Date	69

**“Early Turns” - Grand Avenue
Month of January 2016 Continued
January 1-15 “Early Turns” FAA Info Table**

#	Operation Time	Type	Flight	AC Type	RWY	Destination	FAA Info.
1	2016-01-15 13:50:26	Commercial	AAL1312	B738	25R	JFK	Flying within Legal Tolerance
2	2016-01-01 00:21:16	Commercial	AAL2020	A321	26	CLT	Flying within Legal Tolerance
3	2016-01-01 00:02:32	Commercial	AAL2026	A321	26	PHL	Flying within Legal Tolerance
4	2016-01-10 20:09:53	Commercial	AAL2027	A321	25R	MSP	Flying within Legal Tolerance
5	2016-01-10 20:00:39	Commercial	AAL2390	B738	25R	ORD	Flying within Legal Tolerance
6	2016-01-09 01:41:21	Commercial	AAL415	A321	25R	ORD	Flying within Legal Tolerance
7	2016-01-01 00:35:32	Commercial	AAL420	A319	26	CLE	Flying within Legal Tolerance
8	2016-01-06 22:30:35	Commercial	AAL422	A319	25R	OMA	Flying within Legal Tolerance
9	2016-01-14 21:18:53	Commercial	AAL422	A319	25R	OMA	Flying within Legal Tolerance
10	2016-01-09 01:25:37	Commercial	AAL476	A320	26	MSP	Flying within Legal Tolerance
11	2016-01-07 19:55:46	Commercial	AAL779	A319	25R	DSM	Flying within Legal Tolerance
12	2016-01-07 15:32:55	Commercial	ASH5597	CRJ9	25R	RNO	Vectored Around Weather
13	2016-01-10 20:14:18	Commercial	ASH5610	CRJ9	25R	ABQ	Flying within Legal Tolerance
14	2016-01-07 15:35:16	Commercial	DAL706	A320	25R	DTW	Vectored Around Weather
15	2016-01-10 19:08:02	Commercial	MWT550	C550	25L	OMA	Non RNAV Flight
16	2016-01-08 09:58:08	Privately Registered	N300AA	LJ45	25L	HDN	Flying within Legal Tolerance
17	2016-01-07 15:47:56	Privately Registered	N508KD	C560	26	SJN	Vectored Around Weather
18	2016-01-10 19:32:43	Commercial	SKW6425	CRJ7	25R	DEN	Flying within Legal Tolerance

“Early Turns” - Grand Avenue
Month of January 2016 Continued
January 1-15 “Early Turns” FAA Info Table Continued

19	2016-01-07 16:12:50	Commercial	SWA1038	B738	25R	MKE	Flying within Legal Tolerance
20	2016-01-07 15:56:39	Commercial	SWA1496	B737	25R	DEN	Vectored Around Weather
21	2016-01-06 11:00:20	Commercial	SWA160	B738	25R	MDW	Flying within Legal Tolerance
22	2016-01-14 19:21:54	Commercial	SWA1910	B738	25R	MDW	Flying within Legal Tolerance
23	2016-01-15 19:14:19	Commercial	SWA1910	B738	25R	MDW	Flying within Legal Tolerance
24	2016-01-10 14:31:21	Commercial	SWA2090	B738	25R	SLC	Flying within Legal Tolerance
25	2016-01-07 12:34:17	Commercial	SWA2141	B738	25R	MDW	Flying within Legal Tolerance
26	2016-01-09 16:26:16	Commercial	SWA2166	B738	25R	SLC	Flying within Legal Tolerance
27	2016-01-10 19:39:04	Commercial	SWA2252	B738	25R	DEN	Flying within Legal Tolerance
28	2016-01-14 19:39:23	Commercial	SWA2252	B738	25R	DEN	Flying within Legal Tolerance
29	2016-01-11 21:45:46	Commercial	SWA2776	B737	25R	ABQ	Flying within Legal Tolerance
30	2016-01-15 16:03:57	Commercial	SWA2831	B738	25R	MDW	Flying within Legal Tolerance
31	2016-01-08 16:03:14	Commercial	SWA2901	B733	25R	ABQ	Flying within Legal Tolerance
32	2016-01-07 15:55:27	Commercial	SWA611	B737	25R	BUR	Vectored Around Weather
33	2016-01-10 01:00:31	Commercial	UAL514	B739	25R	ORD	Flying within Legal Tolerance
34	2016-01-08 18:47:53	Commercial	UAL792	A320	25R	DEN	Flying within Legal Tolerance
35	2016-01-10 14:40:06	Commercial	WJA1403	B738	25R	YYC	Vectored Around Traffic

**“Early Turns” - Grand Avenue
Month of January 2016 Continued
January 16-30 “Early Turns” FAA Info Table**

#	Operation Time	Type	Flight	AC Type	RWY	Destination	FAA Info.
1	2016-01-31 23:32:56	Commercial	AAL1319	B738	25R	JFK	Vectored Around Weather
2	2016-01-19 14:44:00	Commercial	AAL1444	B738	25R	ORD	"Early Turn"
3	2016-01-18 23:45:44	Commercial	AAL2026	A321	26	PHL	"Early Turn"
4	2016-01-25 20:03:04	Commercial	AAL2027	A321	25R	MSP	"Early Turn"
5	2016-01-31 23:36:28	Commercial	AAL442	A320	25R	BOS	Vectored Around Weather
6	2016-01-31 21:38:10	Commercial	AAL454	A321	25R	SLC	Vectored Around Weather
7	2016-01-31 21:32:46	Commercial	AAL504	A320	25R	YVR	"Early Turn"
8	2016-01-28 15:59:09	Commercial	AAL642	A321	25R	DEN	"Early Turn"
9	2016-01-31 21:36:38	Commercial	AAL671	A321	25R	PDX	Vectored Around Weather
10	2016-01-31 23:40:24	Commercial	AAL678	A320	25R	EWR	Vectored Around Weather
11	2016-01-25 16:22:50	Commercial	ASH5592	CRJ9	25R	ABQ	Vectored Around Traffic
12	2016-01-16 20:14:01	Commercial	ASH5610	CRJ9	25R	ABQ	"Early Turn"
13	2016-01-31 21:50:36	Commercial	ASH5610	CRJ9	25R	ABQ	Vectored Around Weather
14	2016-01-24 00:00:02	Commercial	ASH5616	CRJ9	26	ABQ	"Early Turn"
15	2016-01-17 19:48:22	Commercial	FFT756	A319	25R	DEN	Vectored Around Traffic
16	2016-01-27 21:46:22	Privately Registered	N15XM	C550	25R	MAE	"Early Turn"

**“Early Turns” - Grand Avenue
 Month of January 2016 Continued
 January 16-30 “Early Turns” FAA Info Table**

17	2016-01-24 11:44:33	Privately Registered	N2AZ	C750	25L	CLT	Vectored Around Traffic
18	2016-01-31 22:02:40	Commercial	SWA1234	B737	25R	LAS	Vectored Around Weather
19	2016-01-31 21:43:27	Commercial	SWA1425	B737	25R	SEA	Vectored Around Weather
20	2016-01-24 16:38:16	Commercial	SWA143	B737	25R	SEA	Vectored Around Traffic
21	2016-01-25 19:28:05	Commercial	SWA1910	B738	25R	MDW	"Early Turn"
22	2016-01-16 18:08:15	Commercial	SWA2020	B737	25R	MDW	"Early Turn"
23	2016-01-26 17:24:59	Commercial	SWA2045	B737	25R	CMH	"Early Turn"
24	2016-01-30 18:45:18	Commercial	SWA2173	B733	25R	MKE	"Early Turn"
25	2016-01-20 19:42:36	Commercial	SWA2252	B738	25R	DEN	"Early Turn"
26	2016-01-26 17:15:24	Commercial	SWA2673	B738	25R	DEN	"Early Turn"
27	2016-01-28 17:53:45	Commercial	SWA2673	B738	25R	DEN	"Early Turn"
28	2016-01-20 21:44:51	Commercial	SWA2776	B737	25R	ABQ	"Early Turn"
29	2016-01-24 21:53:58	Commercial	SWA2776	B737	25R	ABQ	"Early Turn"
30	2016-01-25 18:08:32	Commercial	SWA2974	B733	25R	ABQ	"Early Turn"
31	2016-01-19 15:16:42	Commercial	SWA462	B738	25R	MCI	"Early Turn"
32	2016-01-25 16:21:42	Commercial	SWA620	B738	25R	PDX	Vectored Around Traffic
33	2016-01-24 12:47:04	Commercial	UAL248	B739	25R	ORD	"Early Turn"
34	2016-01-31 22:04:39	Commercial	WJA1495	B738	25R	YYC	Vectored Around Weather