

Monthly Noise Report

March 2018

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Overview

The City of Phoenix Aviation Department operates the Phoenix Airport System which consists of Phoenix Sky Harbor International Airport (PHX), Deer Valley (DVT) and Goodyear (GYR) Airports. The Department serves as the primary liaison between the community, airlines and the Federal Aviation Administration (FAA) regarding aircraft overflight activity and noise concerns. While the authority to control aircraft in flight and on the ground, lies exclusively with the FAA, the airlines control the number of flights and flight schedules. The Department collects aircraft noise and flight operations data to analyze, advise and assist the community with up-to-date information. Additionally, the Department manages noise concerns received from residents through a variety of services including the noise hotline, PlaneNoise smartphone app, PublicVue flight tracker and the Department's website complaint form. This report provides a summary of the data collected for the preceding month and in context with historical data for operation counts, flight direction, complaints, and adherence to noise abatement procedures.

MARCH 2018



- PHX had 40,349 operations (16.9% more than last month)
- DVT had 38,534 operations (13.8% more than last month)
- GYR had 7,246 operations (16.5% more than last month)



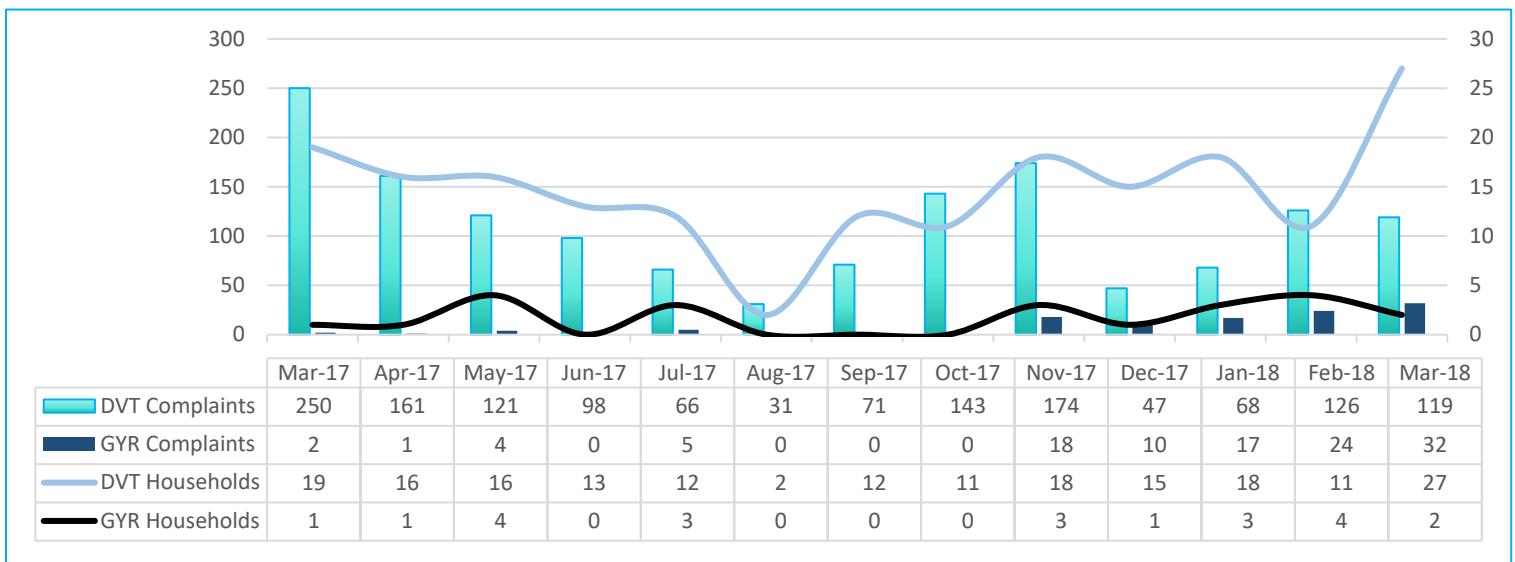
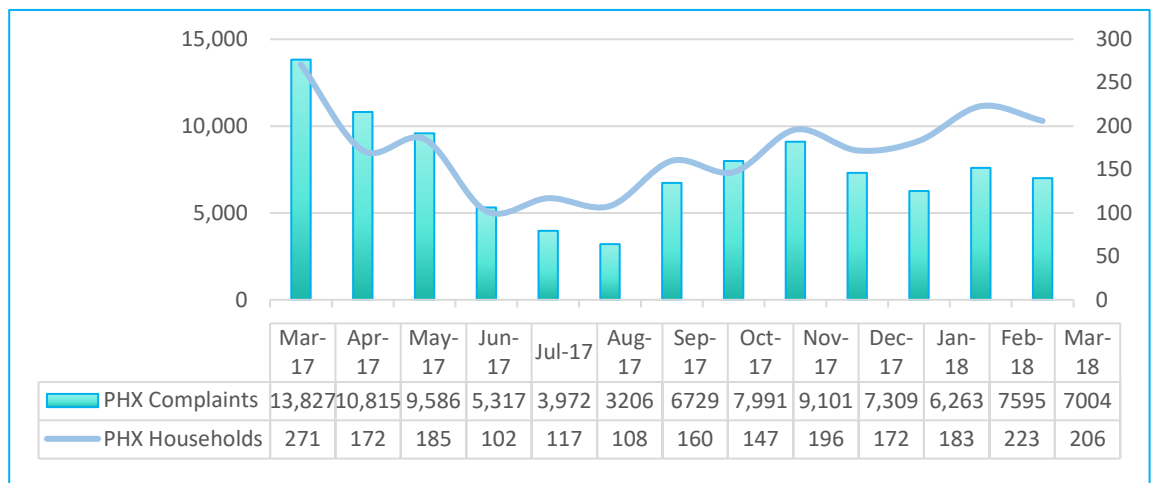
- 235 households filed 7,155 complaints for PHX, DVT and GYR Airports
- Staff received and responded to 212 requests for follow-up



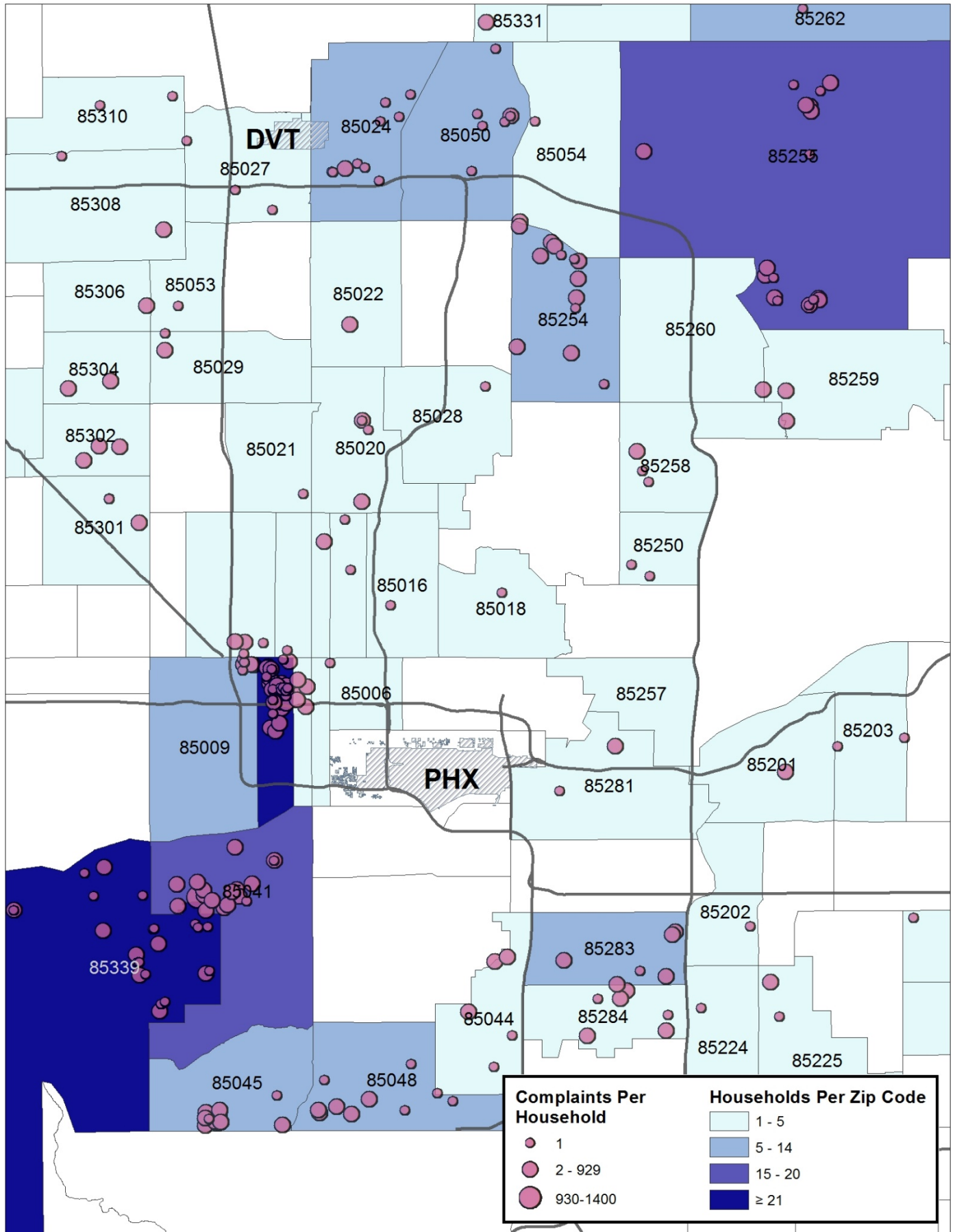
- "4-DME" compliance rate was 99.59% (PHX)
- "Equalization" rate was 63.71% westerly and 36.29% easterly (PHX)
- "Early Turn" ops were 25 (PHX northwest departures)

Noise Complaints

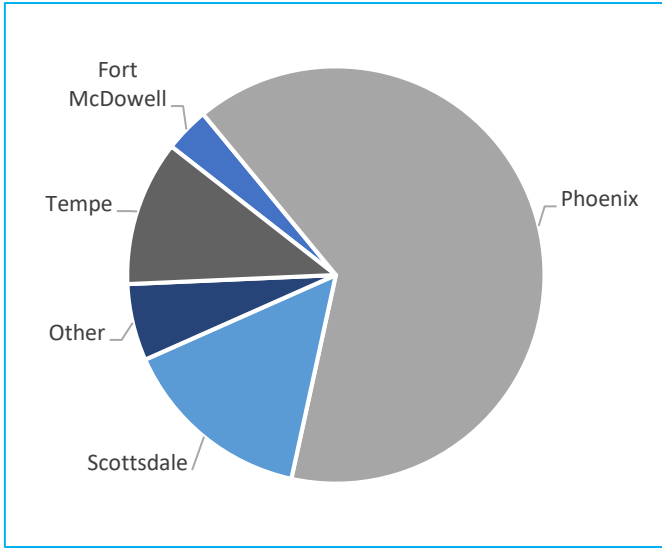
Many factors contribute to the number of complaints received each month and by how many people (households) including irregular operations, weather, seasonal demand changes, or new residents moving into an area impacted by aircraft operations.



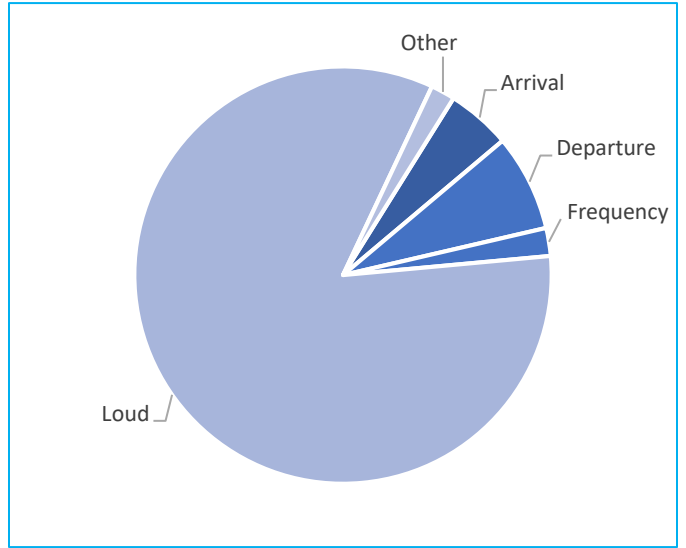
March Complaints by Zip Code



Noise Complaints – By Community

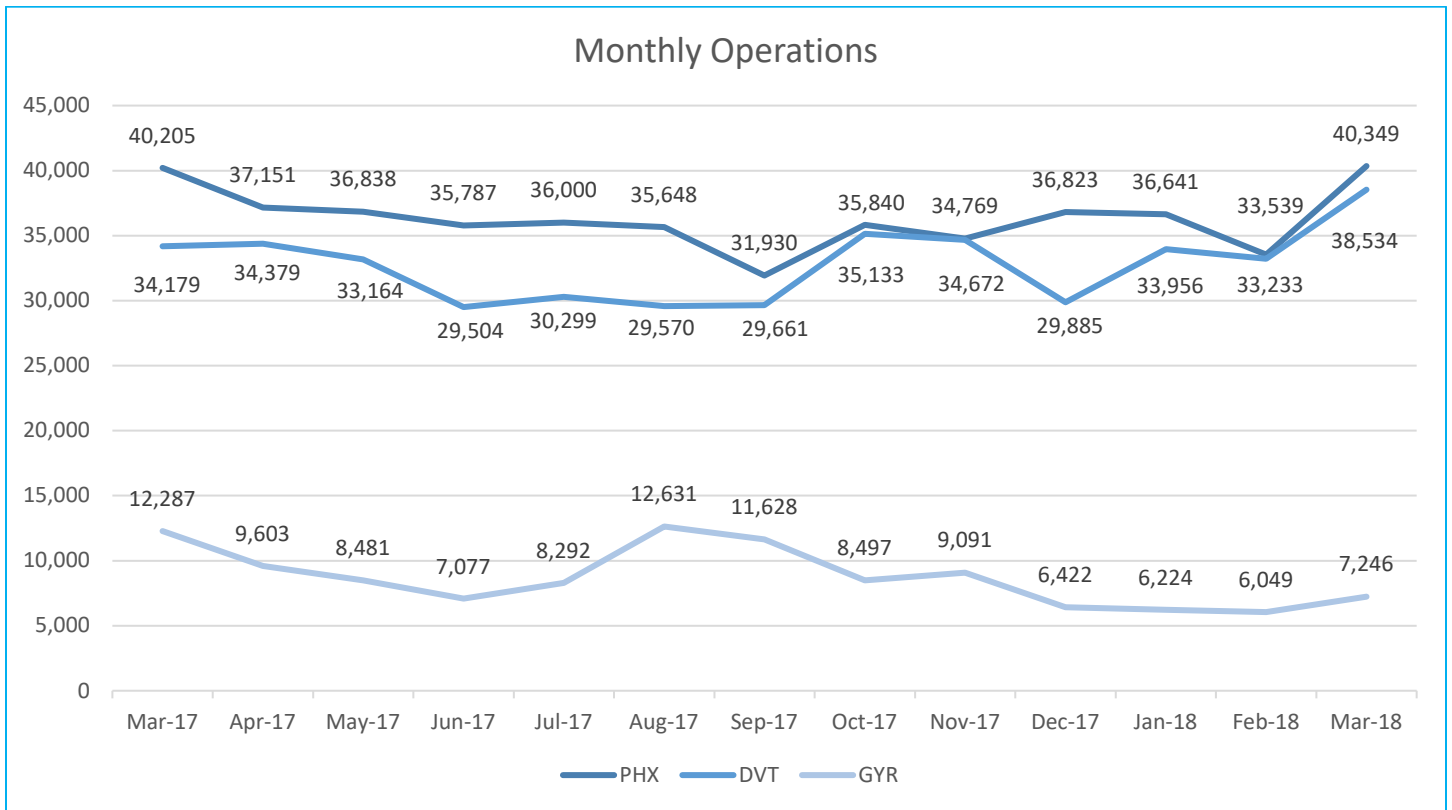


Noise Complaints – By Type



Operations

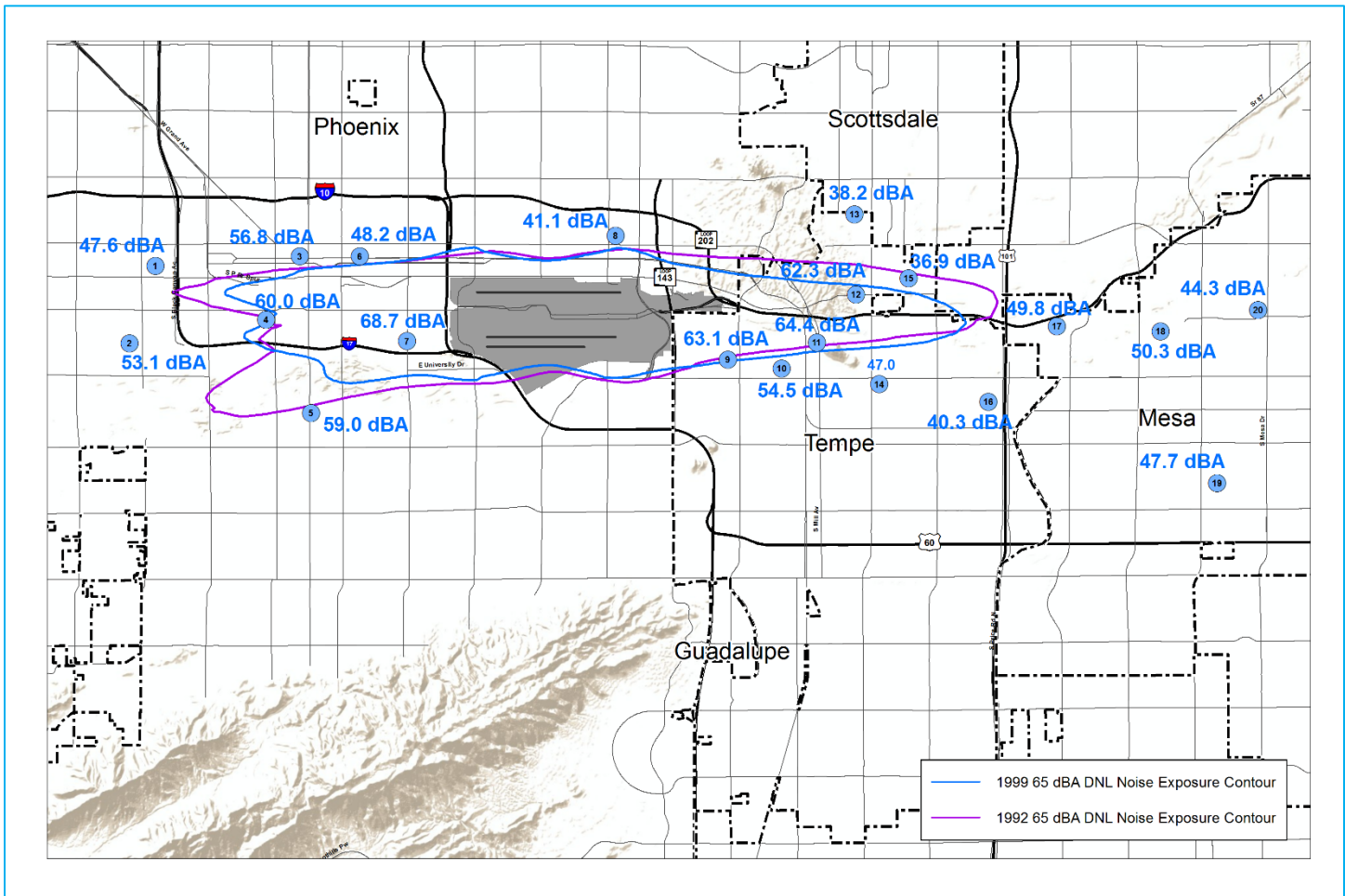
The graph below shows monthly aircraft operations over the last year (March is historically the PHX peak)



Noise Monitoring Sites

Twenty noise monitors surround PHX in the communities of Phoenix (8), Tempe (8), and Mesa (4). The noise readings are computed as A-weighted day/night sound level (LdnA) averaged over a 24-hour period with penalty weighting for noise events between 10pm and 7am. Use of the LdnA (measured in dBA) and penalty weighting for nighttime events help ensure noise readings reflect community annoyance factors and issues specific to human hearing and noise energy frequencies.

NMS	1	2	3	4	5	6	7	8	9	10
LdnA	47.6	53.1	56.8	60.0	59.0	48.2	68.7	41.1	63.1	54.5
% Δ	5	0	1.8	0	0.7	7.9	-0.4	-0.3	-1.7	-2.3
NMS	11	12	13	14	15	16	17	18	19	20
LdnA	64.4	62.3	38.2	47.0	56.9	40.3	49.8	50.3	47.7	44.3
% Δ	-1.7	2.7	1.4	N/A	3.7	0.7	-1.9	-2.4	0.7	-2.5

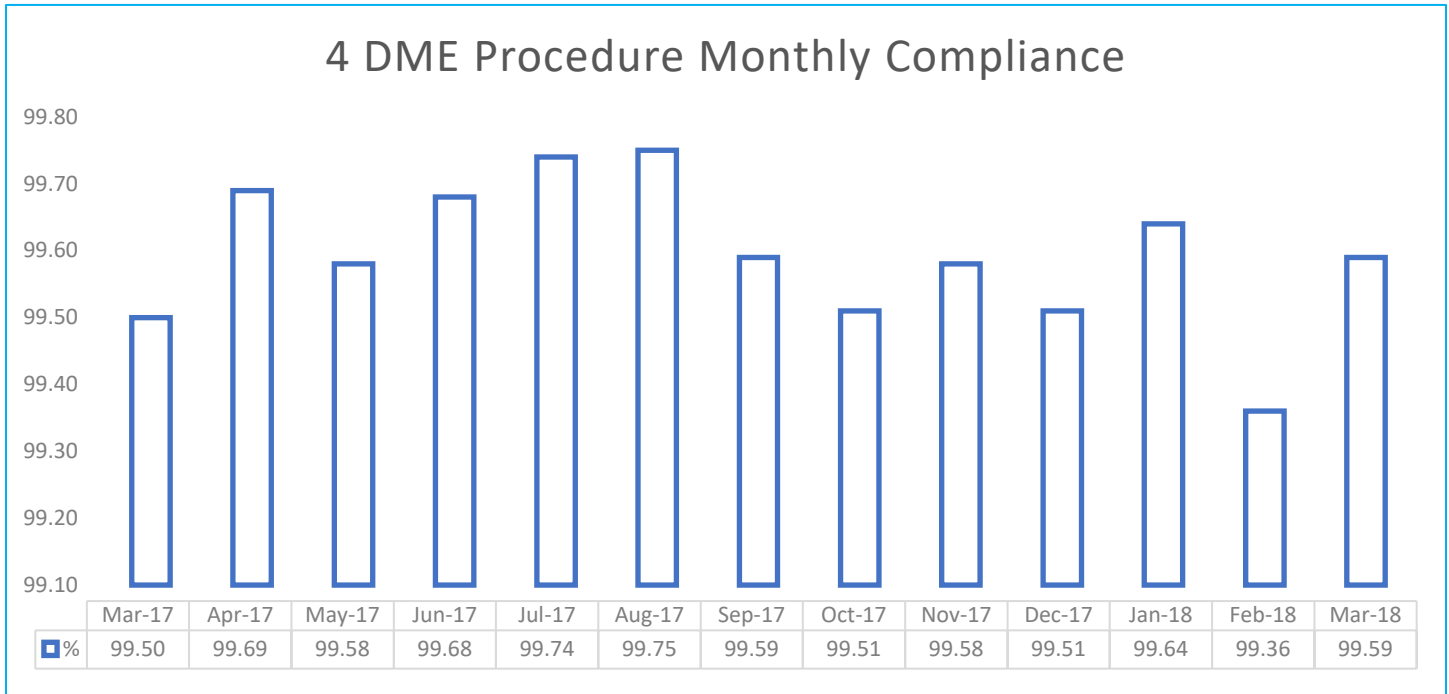


Noise Mitigation Procedures

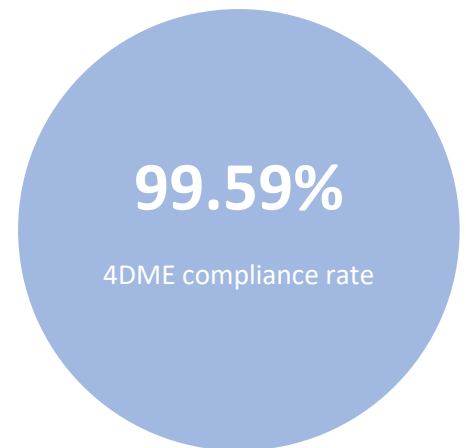
Working with the community, the FAA has implemented a variety of noise reduction measures. While some procedures may not be used at all times because of wind, weather, and other operational considerations; the Aviation Department encourages maximum use to the extent possible by monitoring and reporting on procedure compliance.

Tempe “4 DME”

The 4 DME departure procedure directs jet aircraft departing PHX to the east to fly generally along the Salt River for approximately 6 miles before turning. The 4 DME procedure is designed to keep aircraft over the Salt River.

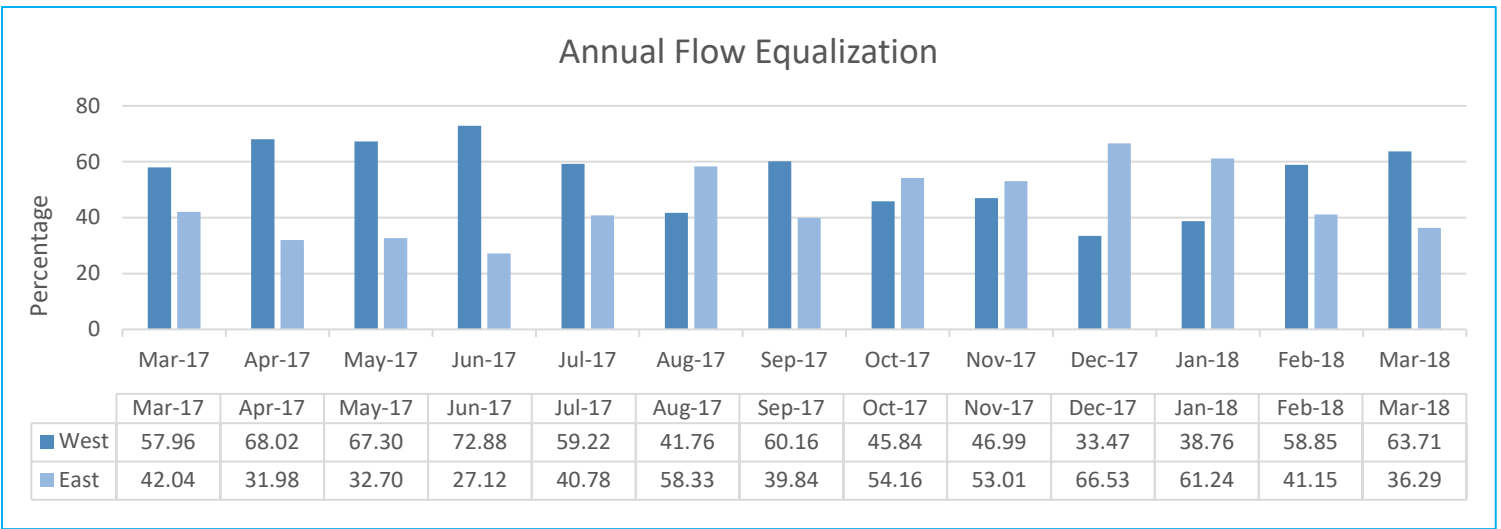
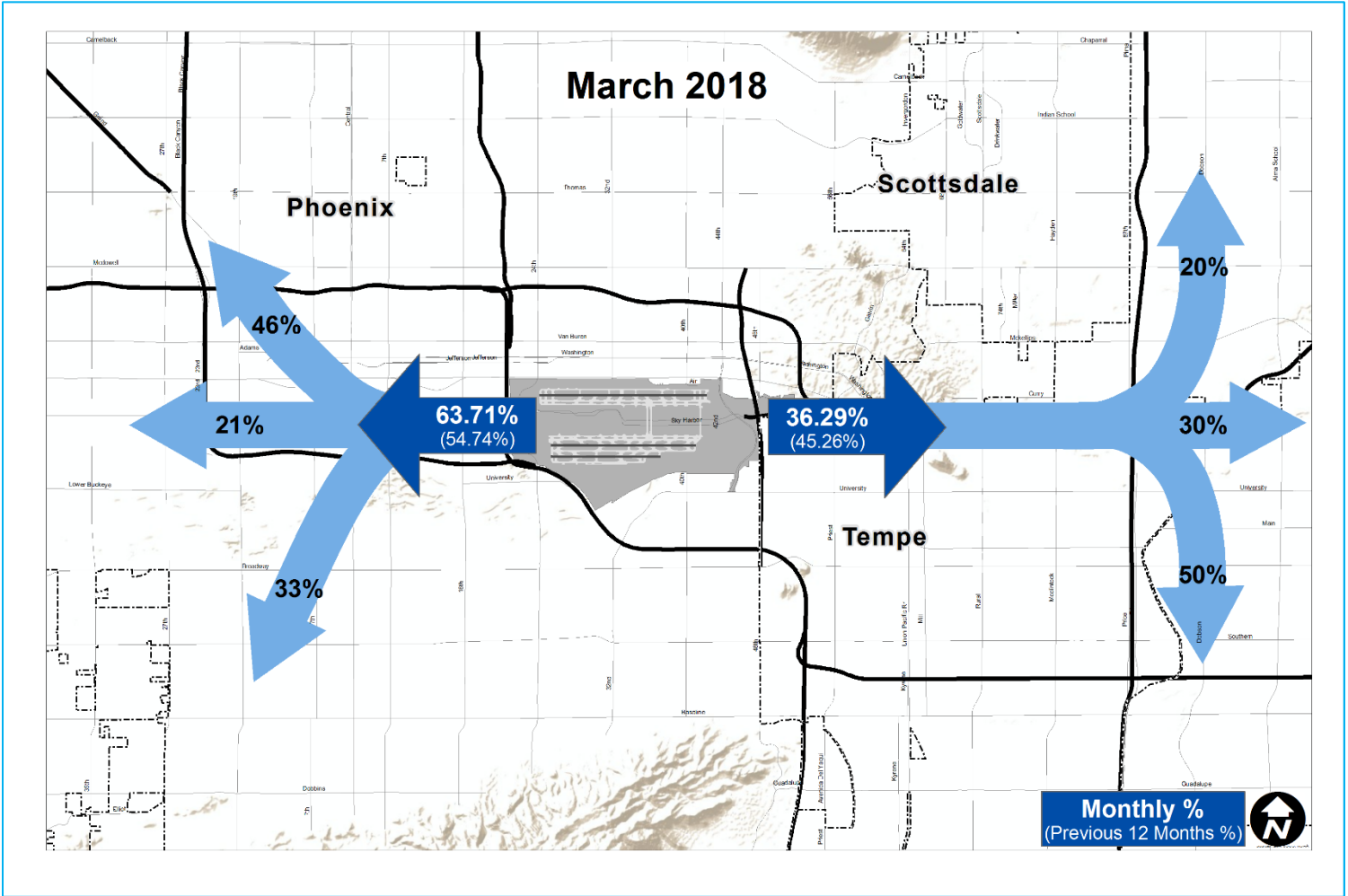


Operator	Dev.	Dep.	% Compliant
American Airlines	3	2,003	99.85%
Southwest Airlines	2	1,866	99.89%
Mesa Airlines	2	661	99.70%
United Airlines	1	304	99.67%
SkyWest Airlines	0	303	100.00%
Delta Air Lines	0	298	100.00%
Non-Airline	15	150	90.00%
Alaska Airlines	0	146	100.00%
Frontier Airlines	0	131	100.00%
WestJet Airlines	0	77	100.00%



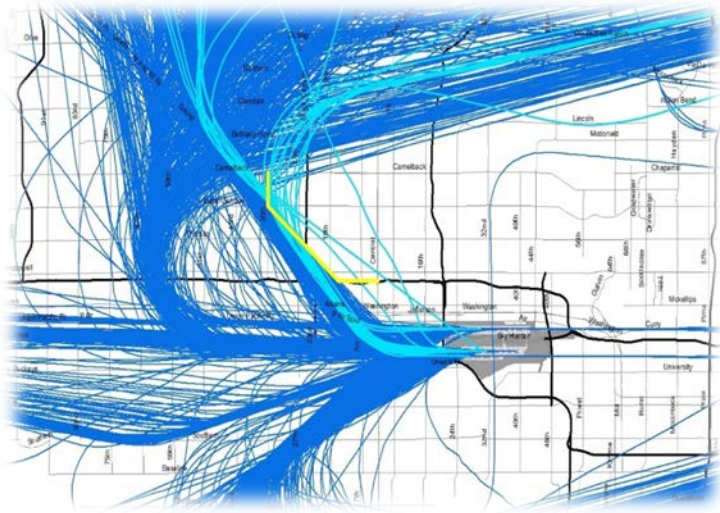
Equalization

The equalization policy for departures ensures that averaged over a calendar year, departures are equally distributed in east and west flow to minimize noise impacts to any one specific area. FAA typically directs more operations to the west during the summer and to the east in the winter due to the prevailing winds during those seasons.



Grand Ave “Gate”

Shortly after the FAA implemented area navigation (RNAV) procedures at PHX in 2014, a “gate” was established for northwest departures to reduce noise impact to Phoenix historic neighborhoods; the gate reduces the number of operations that “early turn” prior to Grand Avenue or “early turn” back over the community before reaching Camelback Road (as illustrated on the map below). ***In March of 2018, the FAA began implementing portions of the lawsuit settlement Joint Petition, including reverting the northwest departures to their previous corridor. Staff will begin looking at new measures of “early turn” activity to include in the monthly report.***



Conclusion

Monitoring community noise impacts and advocating for continuous improvement through noise mitigation and abatement is a team effort; the Aviation Department relies on the valued feedback and time of community members in communicating ongoing concerns and new issues. The Aviation Department strives to facilitate compliance, awareness and positive change with regulators (FAA) and operators (airlines) so that our community may enjoy all the benefits of a world-class Airport System with the absolute minimum of impacts to any household or place where the effect of aircraft operations is not beneficial. Please contact the Aviation Department Noise Office with questions regarding this report or any other matter related to aircraft noise and the City’s Airport System.

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“24/7 Noise Hotline” 844-244-743

