

# Monthly Noise Report

## July 2019

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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.

## July 2019



**PHX: 35,368** operations  
(0.5% less than last month)

**DVT: 35,578** operations  
(5.7% less than last month)

**GYR: 9,434** operations  
(3.9% more than last month)



**75 households** filed **2,415 complaints** for PHX, DVT and GYR Airports

Staff received and responded to **53 requests** for follow-up

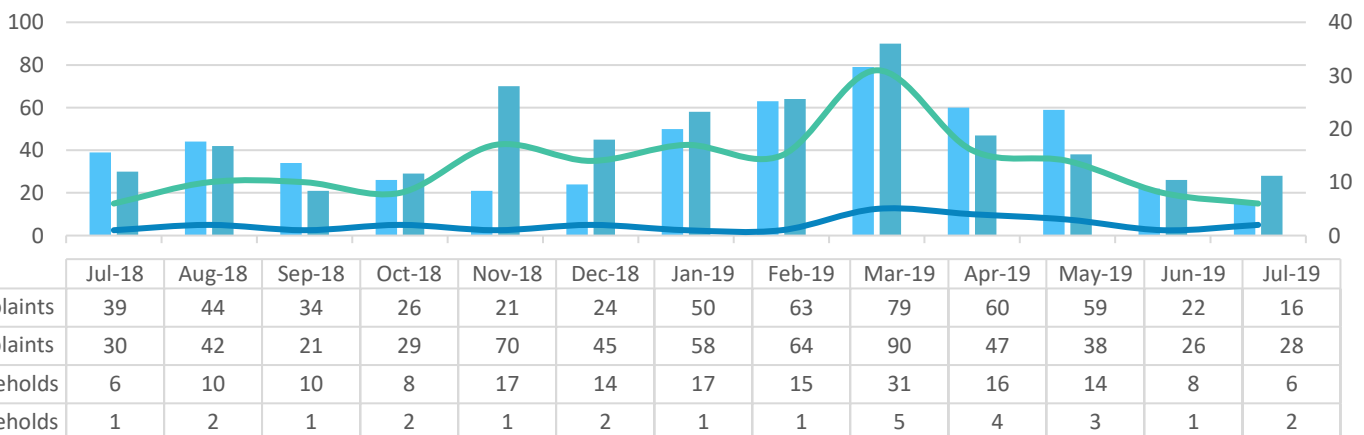
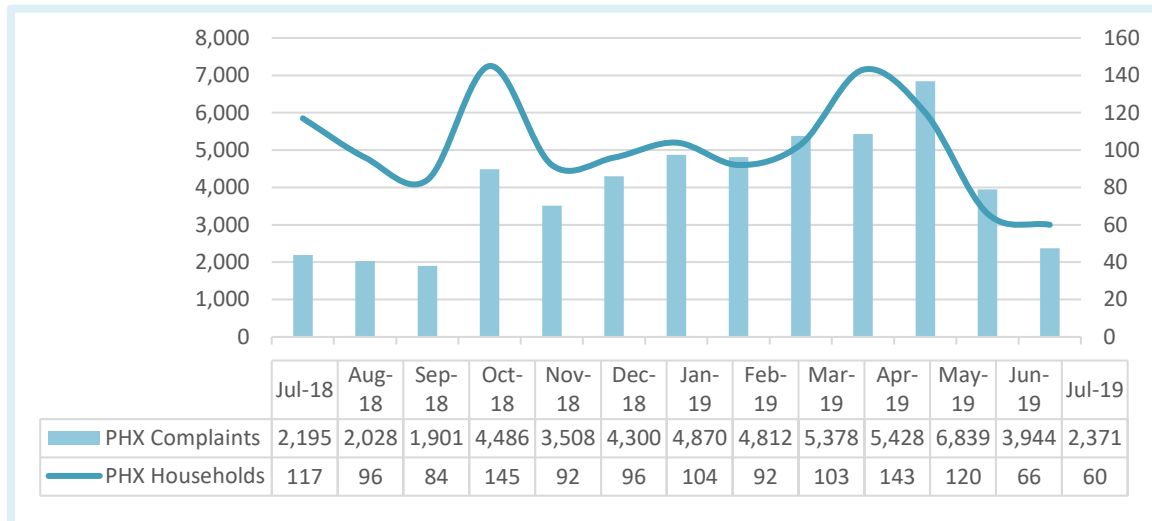


“4-DME” compliance rate was **99.84%**

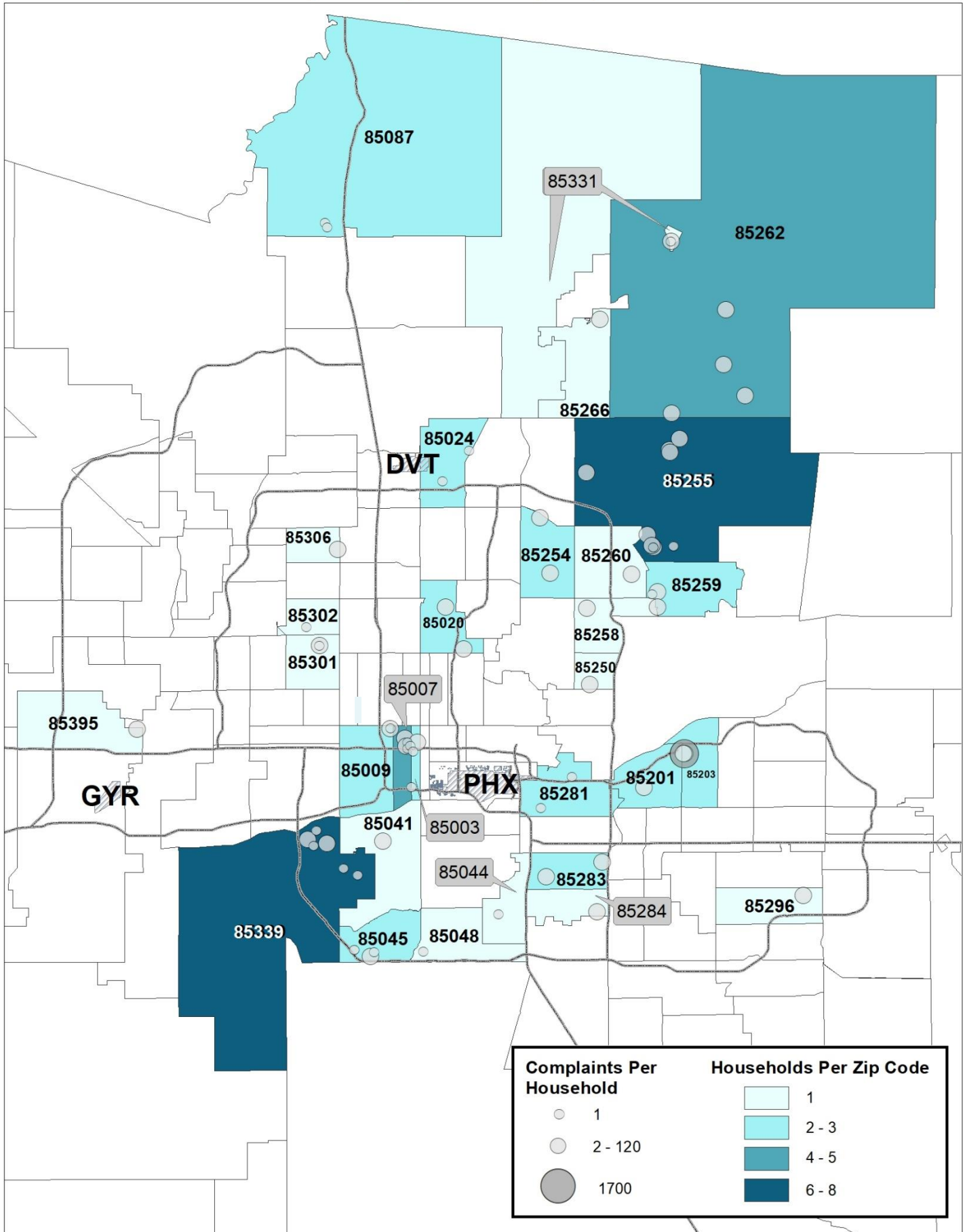
“Equalization” rate was **71.62%** westerly and **28.38%** easterly

### Noise Complaints

Many factors contribute to the number of complaints received each month and by how many households. Factors can include irregular operations, weather events, seasonal demand changes, new residents moving into an area impacted by aircraft operations and more.



# July Complaints by Zip Code



85087

85331

85262

85266

85024

DVT

85255

85306

85254

85260

85259

85302

85020

85258

85301

85250

85395

85007

GYR

85009

PHX

85281

85201

85203

85041

85003

85044

85283

85284

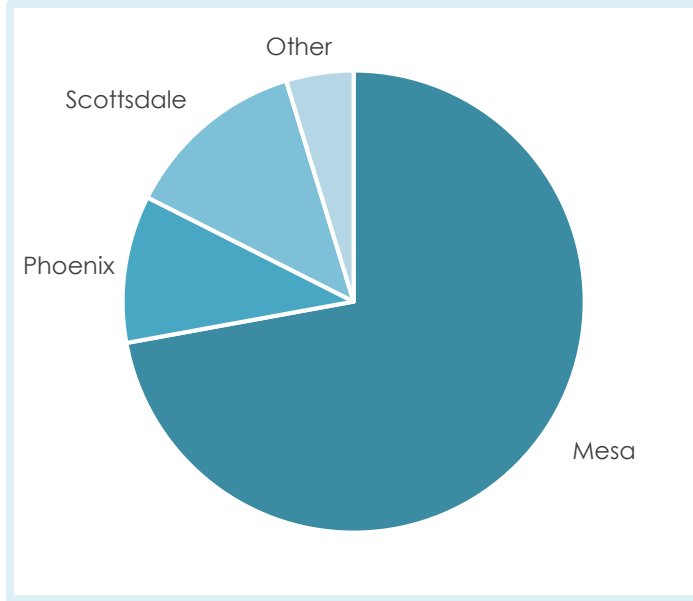
85296

85339

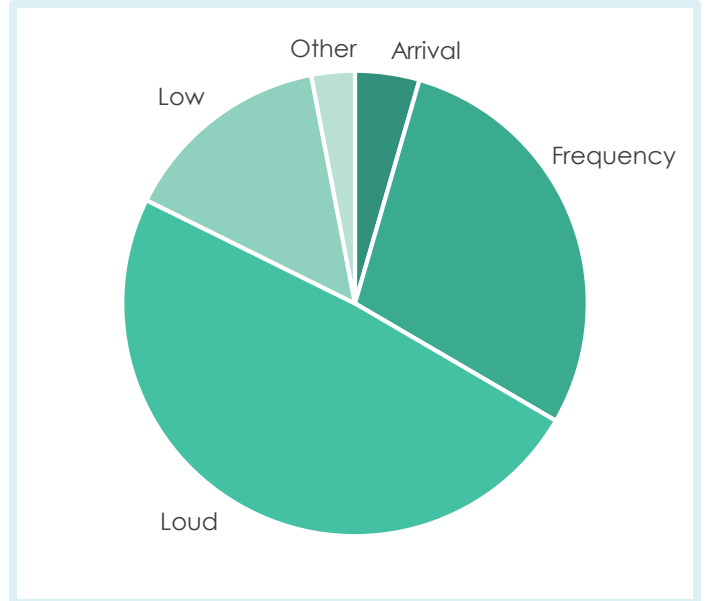
85045

85048

## Noise Complaints – By Community

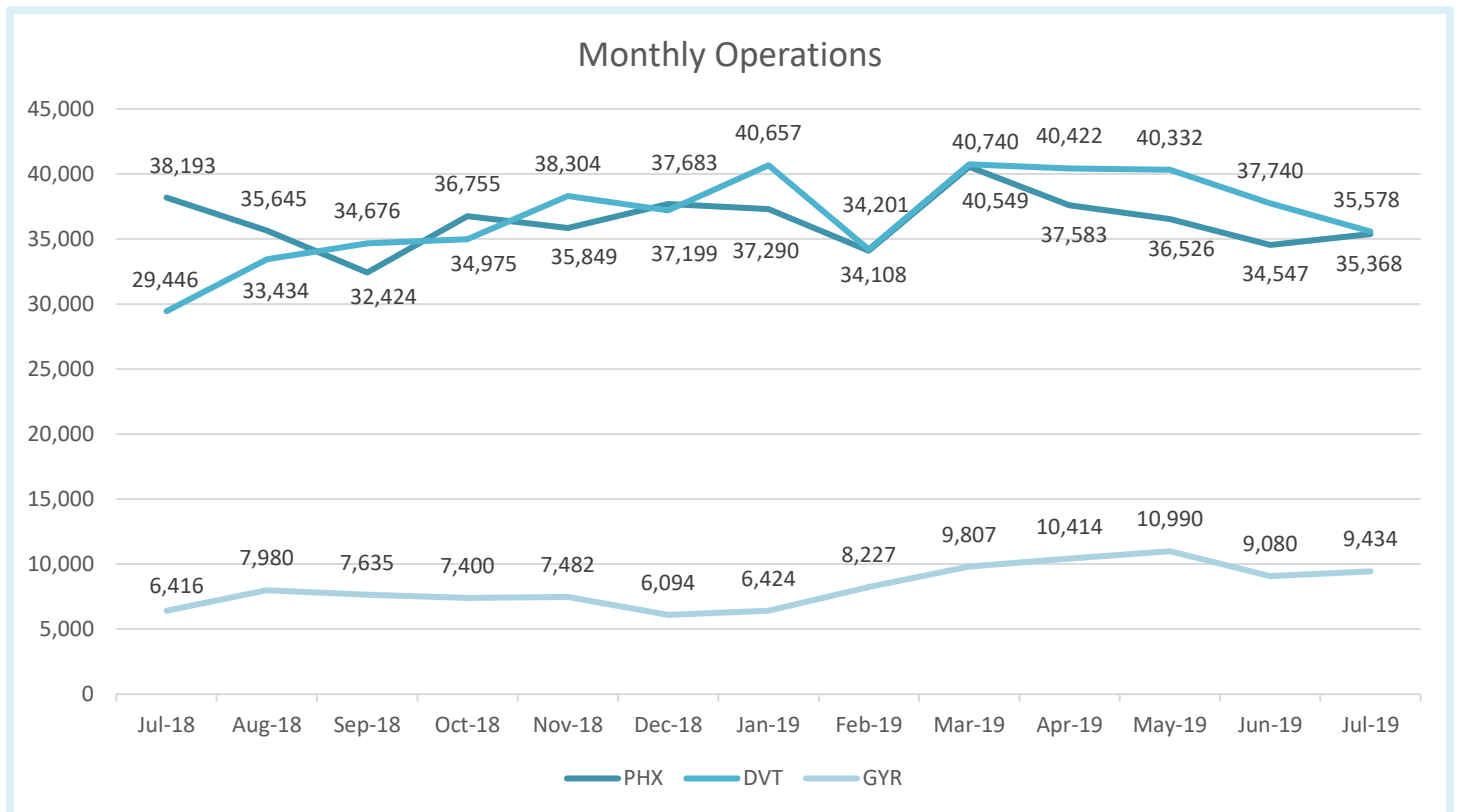


## Noise Complaints – By Type



## OPERATIONS

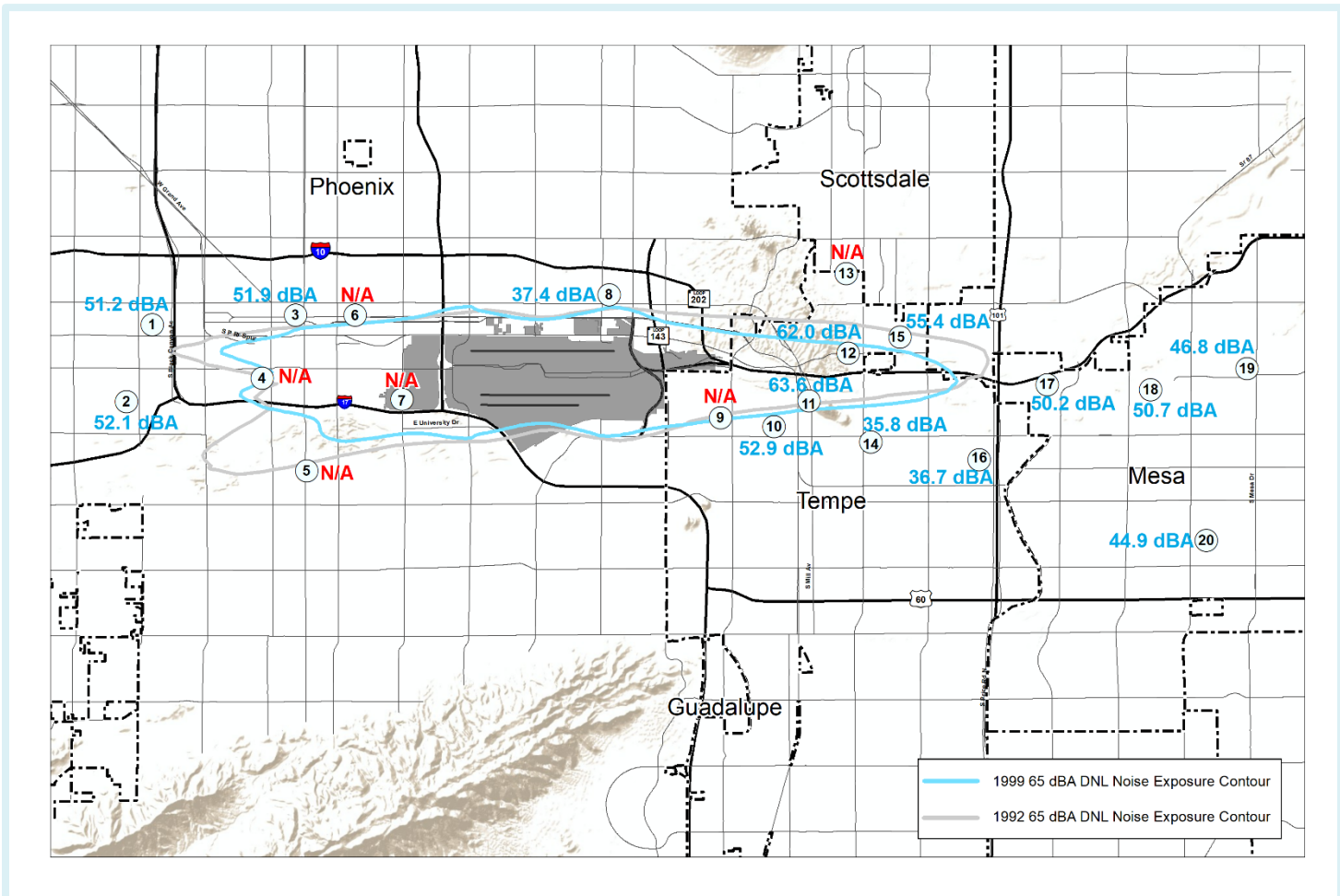
The graph below shows monthly aircraft operations over the last year (March is historically the PHX peak).



# NOISE MONITORING SITES

<b>NMS</b>	1	2	3	4	5	6	7	8	9	10
<b>LdnA</b>	51.2	52.1	51.9	N/A	N/A	N/A	N/A	37.4	N/A	52.9
<b>% Δ</b>	-0.1	-1.8	-1.4	N/A	N/A	N/A	N/A	-1.7	N/A	-1.1
<b>NMS</b>	11	12	13	14	15	16	17	18	19	20
<b>LdnA</b>	63.6	62.0	N/A	35.8	55.4	36.7	50.2	50.7	46.8	44.9
<b>% Δ</b>	0.1	0.0	N/A	-3.4	0.1	28.7	-1.1	1.9	0.0	0.0

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.

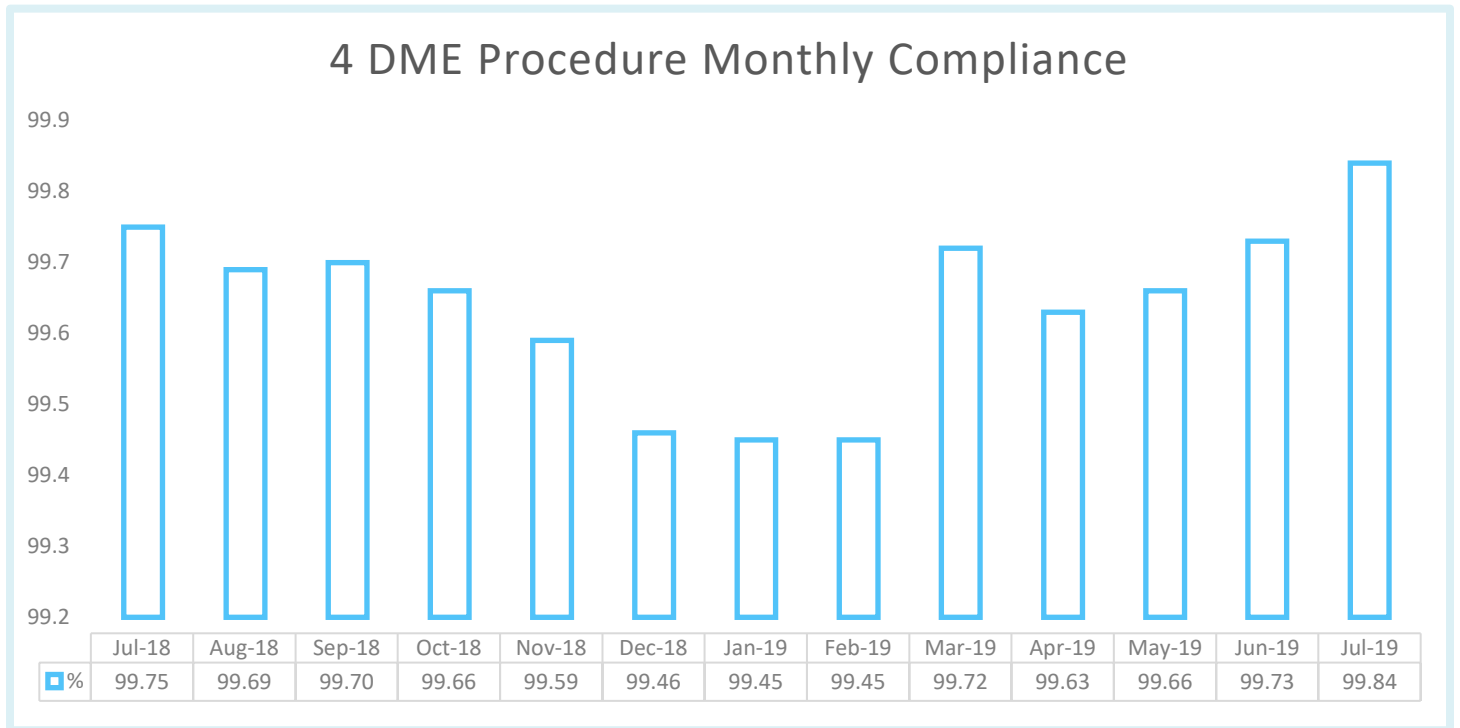


# NOISE MITIGATION PROCEDURES

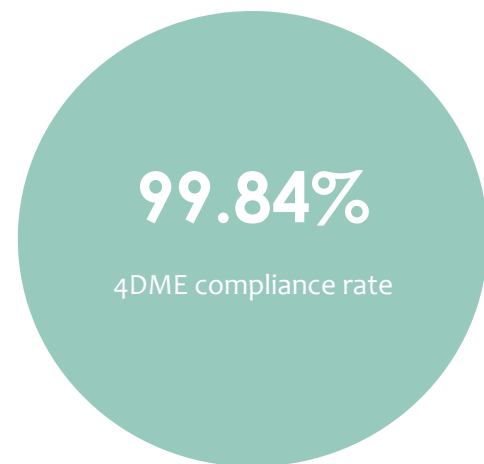
Working with the community, the FAA has implemented a variety of noise reduction measures. While some procedures may not be used at all times because of wind, weather, and other operational considerations; the Aviation Department encourages maximum use to the extent possible by monitoring and reporting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

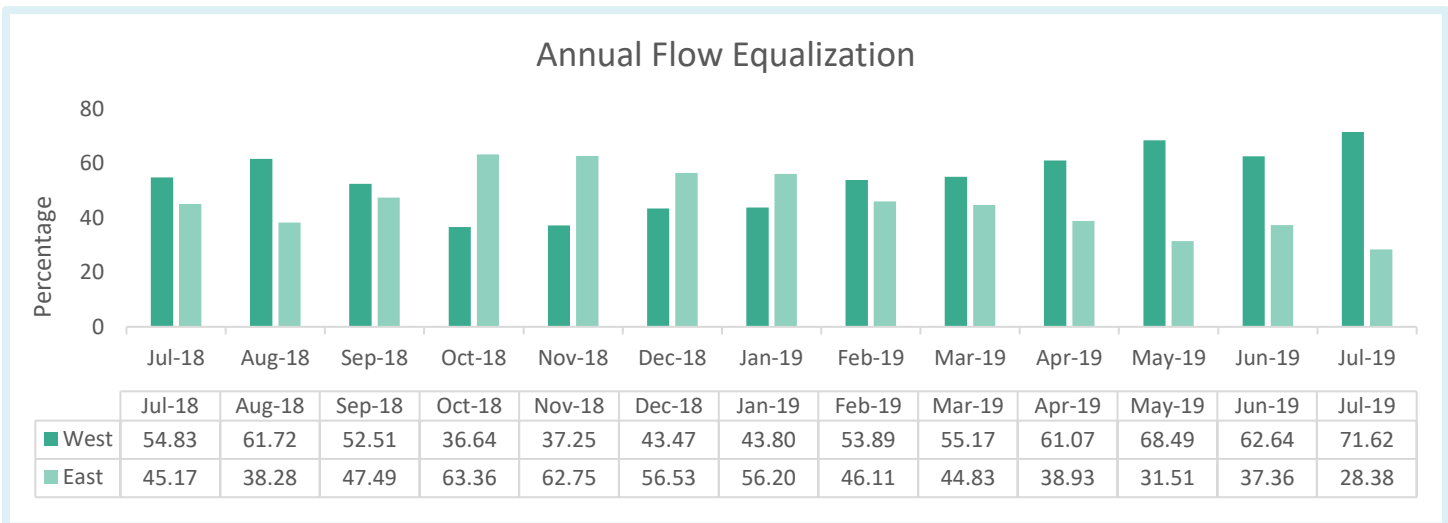
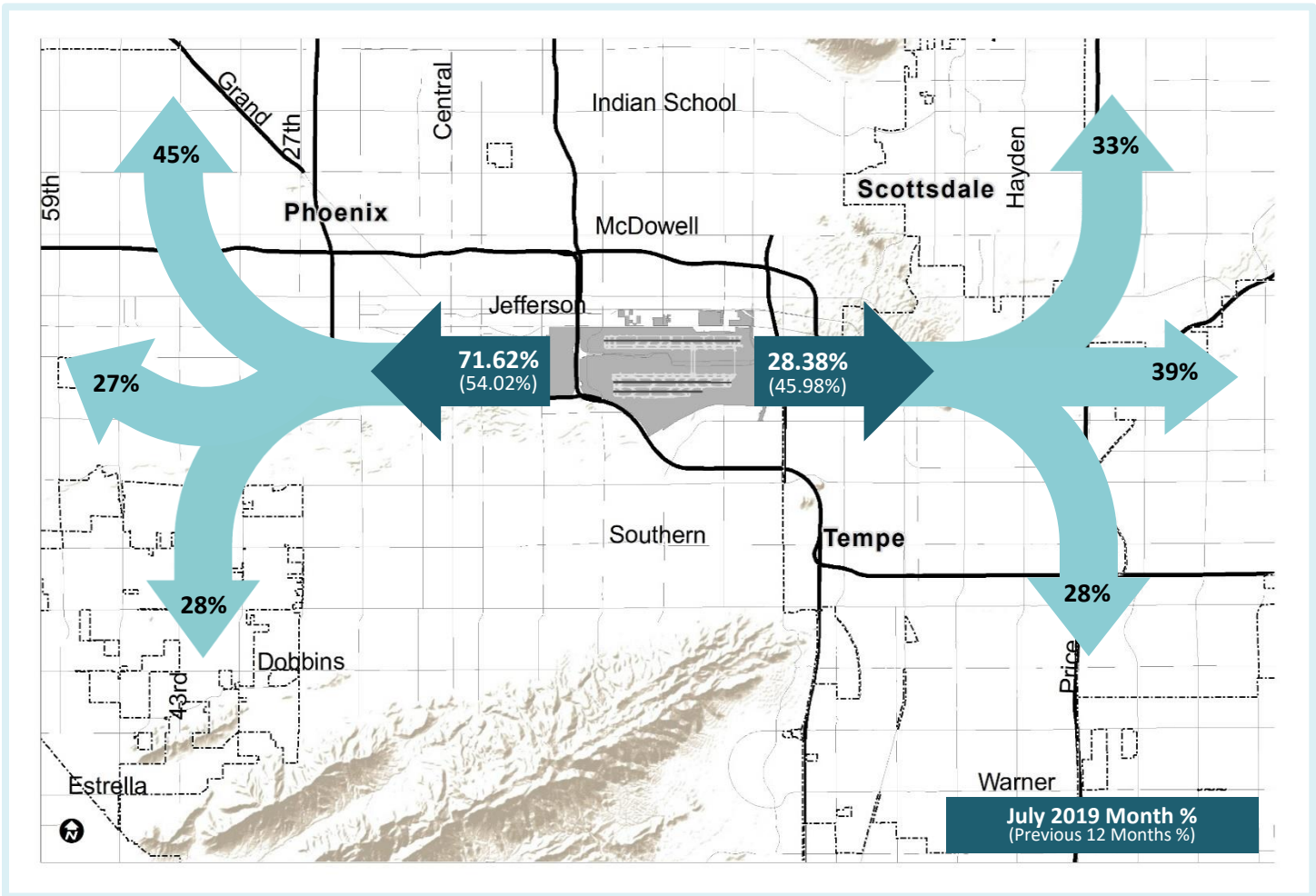


<b>Operator</b>	<b>Dev.</b>	<b>Dep.</b>	<b>% Compliant</b>
Southwest Airlines	0	1,488	100.00%
American Airlines	0	1,387	100.00%
Mesa Airlines	0	369	100.00%
SkyWest Airlines	0	304	100.00%
Delta Air Lines	0	226	100.00%
United Airlines	0	201	100.00%
Non-airline	7	79	91.14%



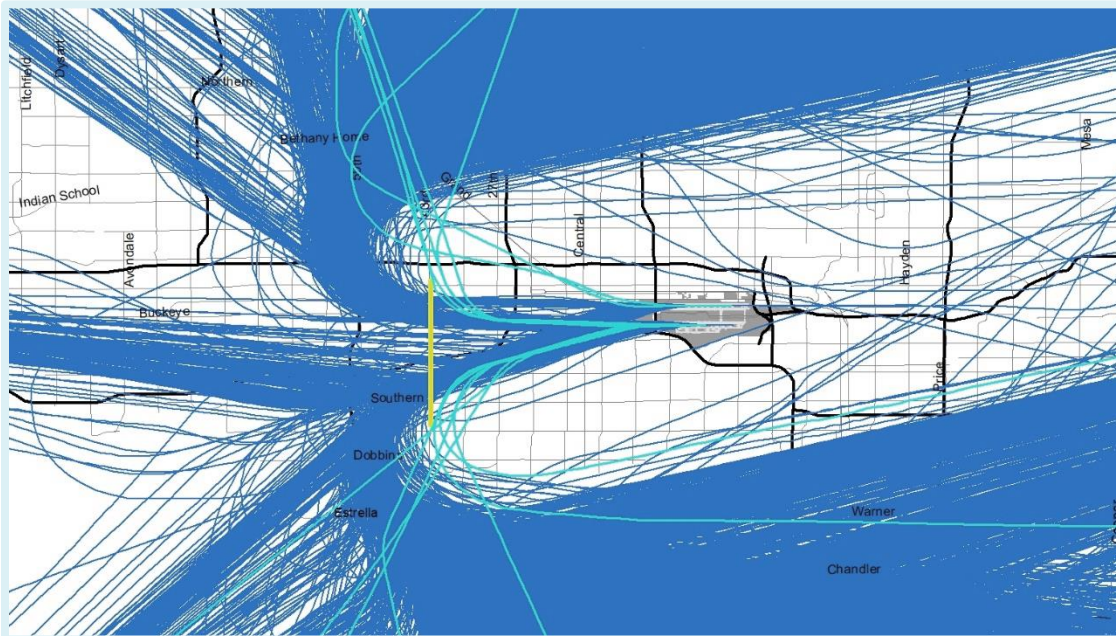
# Equalization

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.

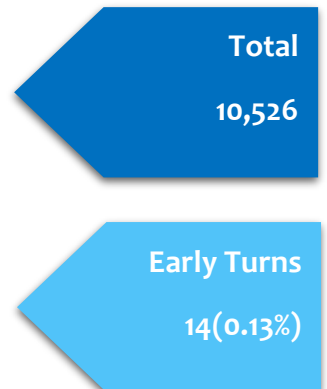


## Joint Petition “43<sup>rd</sup> Ave Gate”

Per the Joint Petition between FAA, City, and Historic Neighborhoods accepted by the US Court of Appeals; FAA must approximate the location of historical west-flow departures in using performance-based navigation or RNAV. The Joint Petition provides that in approximating the historical departures, the FAA will not turn aircraft before 43<sup>rd</sup> Avenue unless there is a unique safety or weather issue. Similar to the 4DME compliance monitoring the Aviation Department conducts for east-flow departures; the following graphic shows the amount of “early turns” relative to 43<sup>rd</sup> Avenue for the preceding month



### West Flow Jet Departures July 2019



## CONCLUSION

Monitoring community noise impacts and advocating for continuous improvement through noise mitigation and abatement is a team effort. The Aviation Department relies on valued feedback from our community members in sharing ongoing concerns and new issues. The Aviation Department strives to facilitate compliance with current noise abatement procedures, awareness and positive change with regulators (FAA) and operators (Airlines) so our community may enjoy all the benefits of a world-class Airport System with the absolute minimum impact. 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.

### Complaint Hotline

(602) 683-2669 or toll-free (844) 244-7430



### Complaint Webform

<http://www.planenoise.com/copad/q3qH4u/>



### Download the Plane Noise app

<http://www.planenoise.com/mobile/phoenix/jr3wcQ2/>



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