

# Monthly Noise Report September 2021

# CONTENTS

<b>OVERVIEW</b> .....	<b>2</b>
SEPTEMBER 2021 OVERVIEW.....	2
NOISE COMPLAINTS.....	2
NOISE COMPLAINTS – BY COMMUNITY.....	3
NOISE COMPLAINTS – BY TYPE .....	4
<b>OPERATIONS</b> .....	<b>4</b>
<b>NOISE MONITORING TERMINALS</b> .....	<b>5</b>
<b>NOISE MITIGATION PROCEDURES</b> .....	<b>6</b>
TEMPE “4 DME”.....	6
EQUALIZATION.....	7
JOINT PETITION “43 <sup>RD</sup> AVE GATE” .....	7
<b>CONCLUSION</b> .....	<b>8</b>

\*FAA has updated their Phoenix NextGen website to: <https://www.faa.gov/air-traffic/community-involvement/phx/>

For additional information, please visit [skyharbor.com/FlightPaths](https://skyharbor.com/FlightPaths)

# OVERVIEW

The City of Phoenix Aviation Department operates the Phoenix Airport System which consists of Phoenix Sky Harbor International Airport (PHX), Phoenix Deer Valley (DVT) and Phoenix 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.

## September 2021



**PHX: 34,851** operations  
(4% less than last month)

**DVT: 17,931** operations  
(15% less than last month)

**GYR: 4,917** operations  
(5% less than last month)



- **62 households** filed **4,750** complaints for PHX, DVT and GYR Airports

- **1 household** filed **72,295** complaints for PHX

- Staff received and responded to **160 requests** for follow-up information

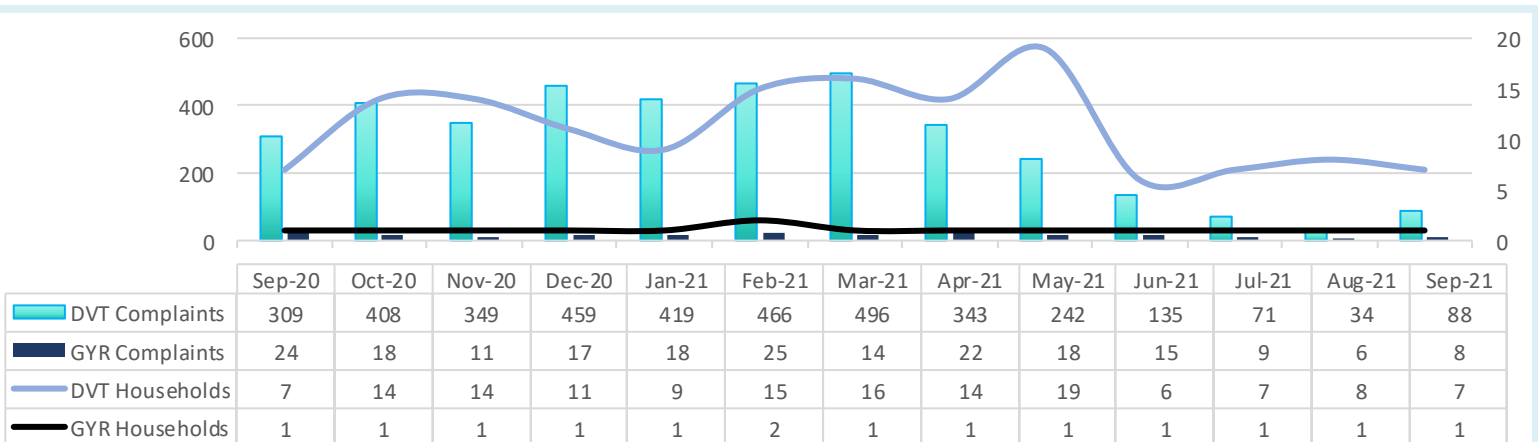
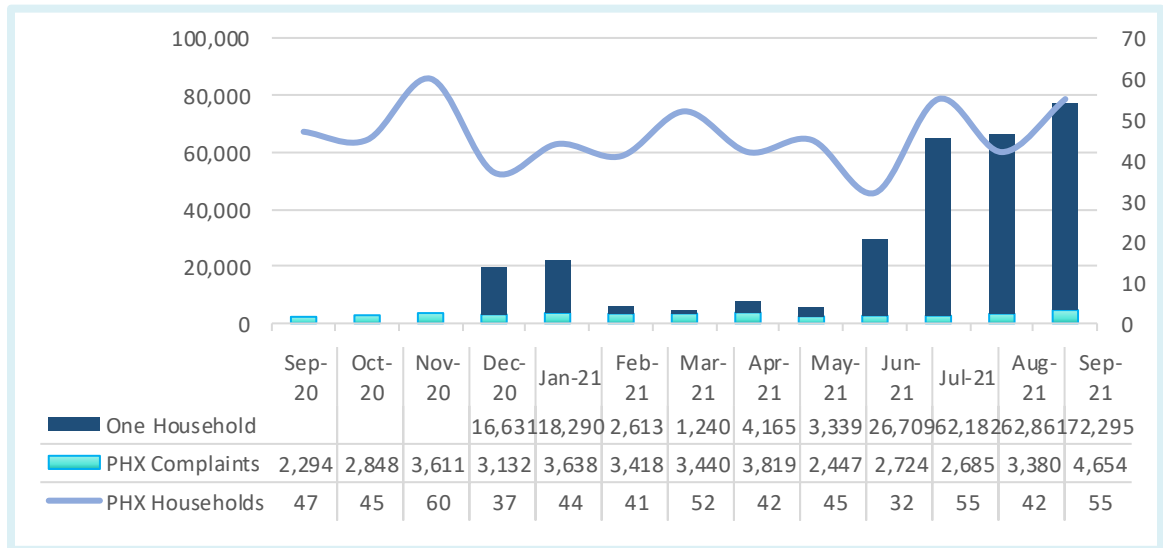


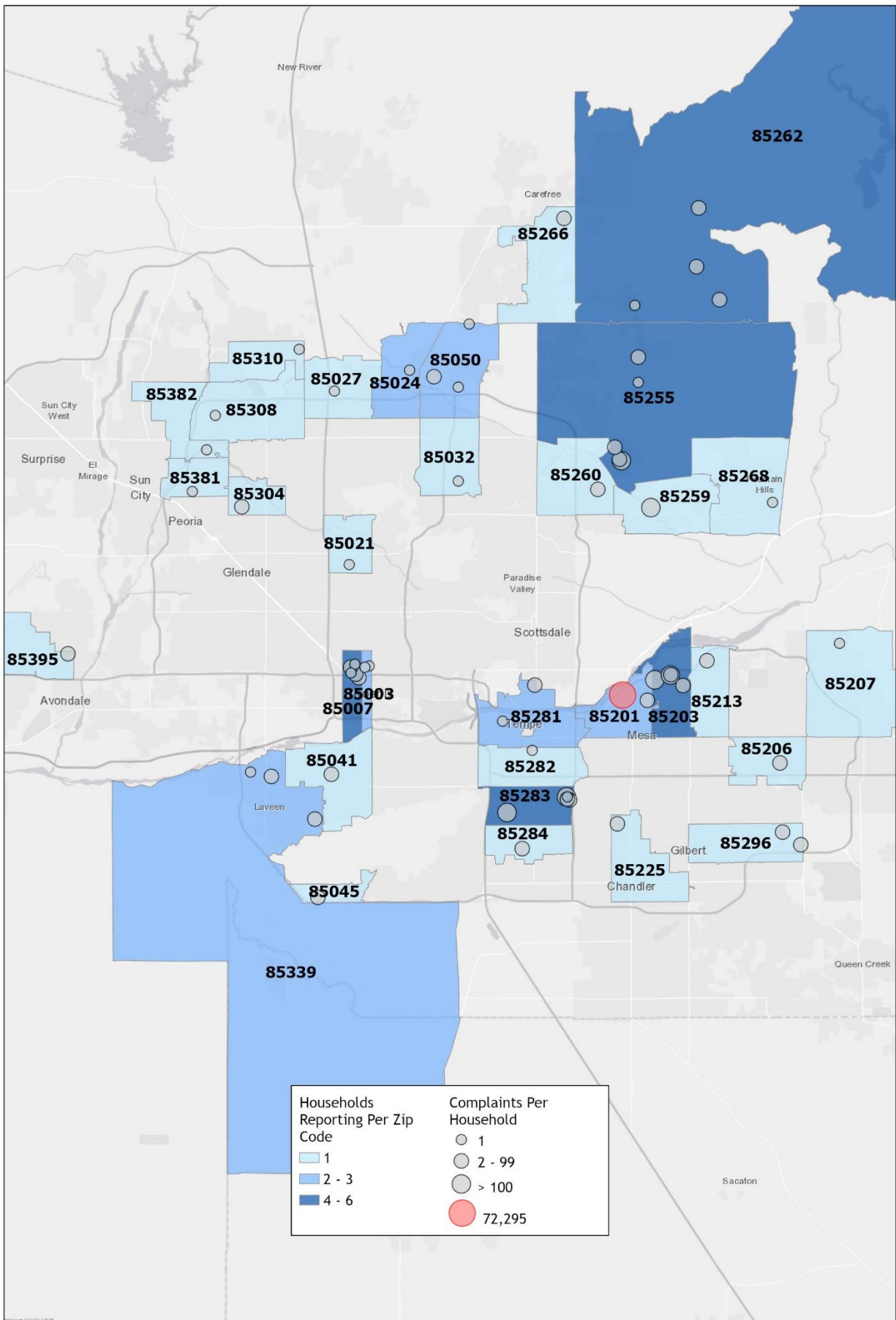
"4-DME" compliance rate was **99.9%**

"Equalization" rate was **49%** westerly and **51%** 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.



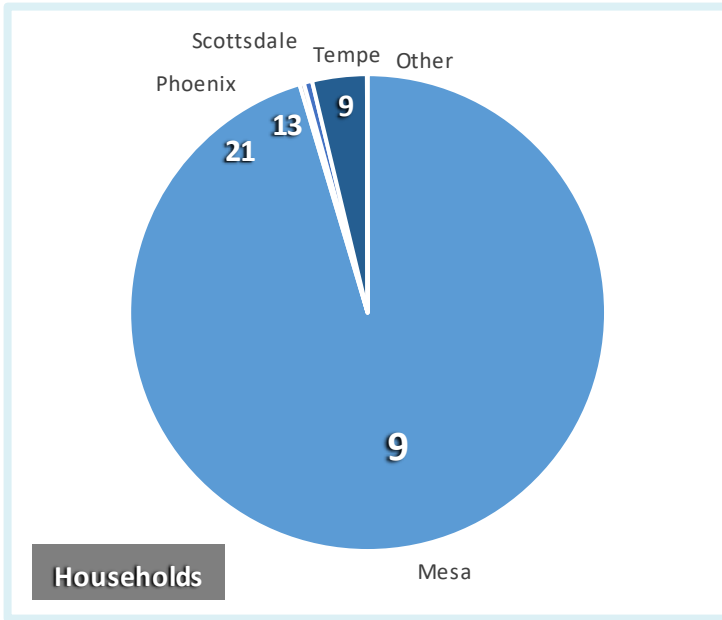


10 Miles

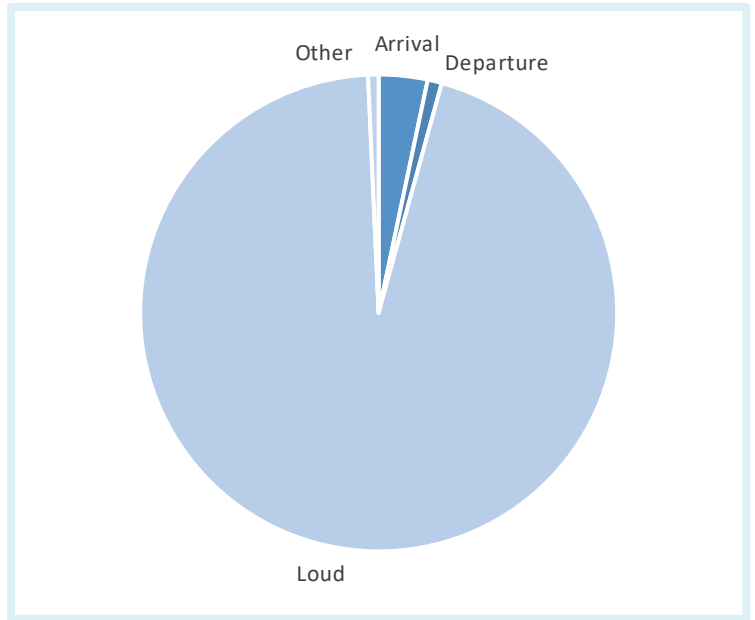
September Complaints by Zip Code



## Noise Complaints – By Community



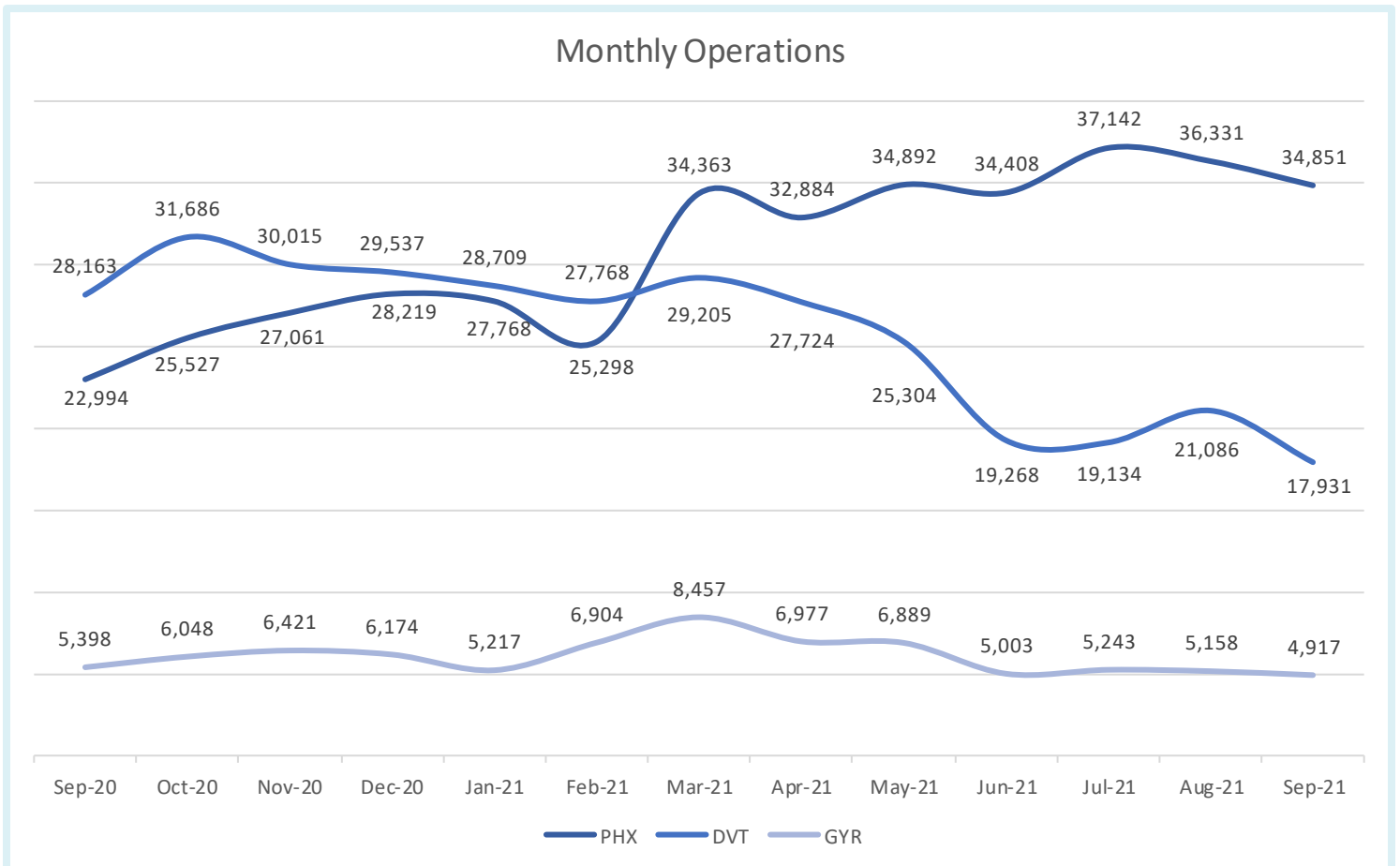
## Noise Complaints – By Type



## OPERATIONS

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

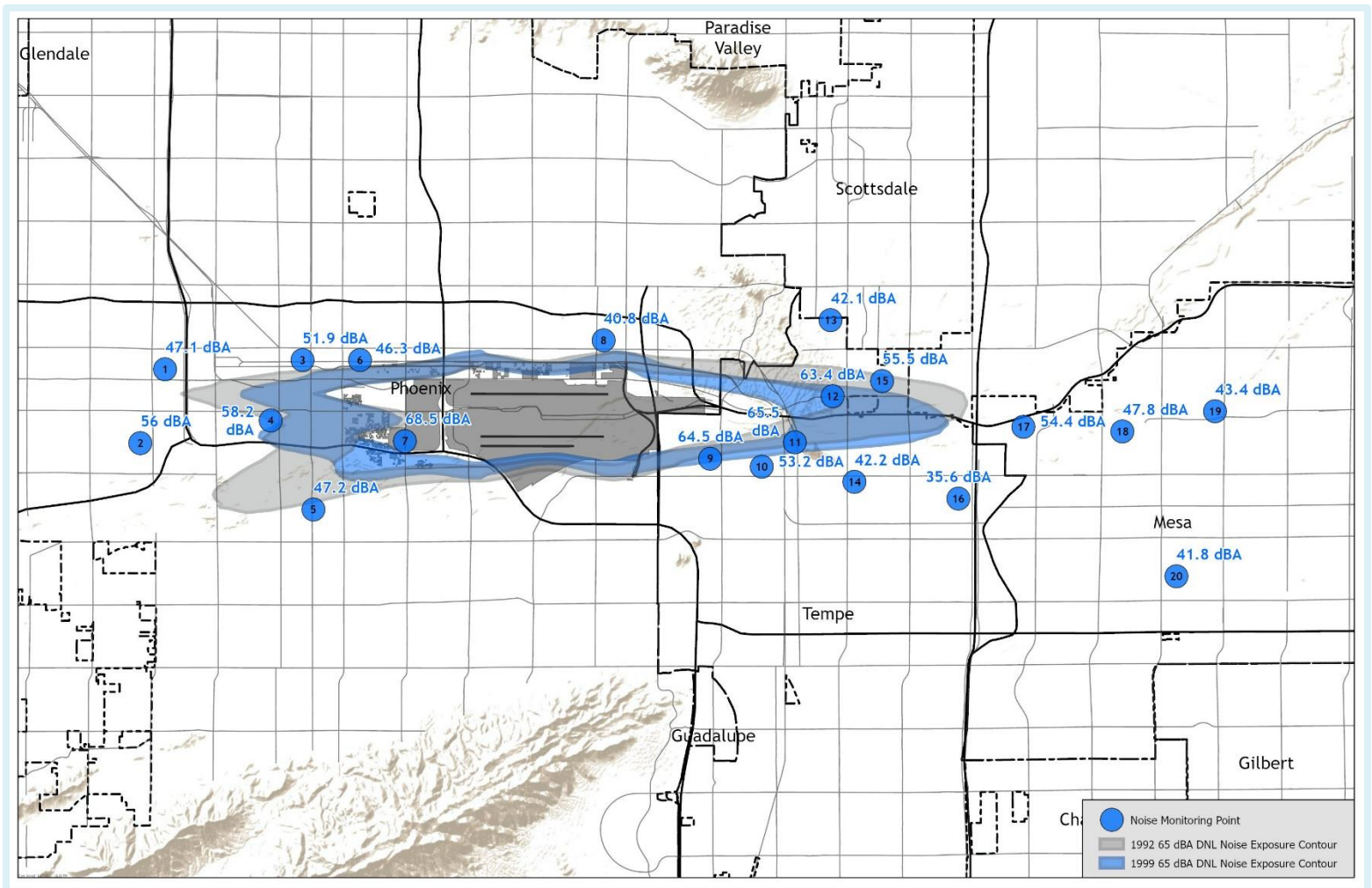
### Monthly Operations



# NOISE MONITORING TERMINALS

<b>NMT</b>	1	2	3	4	5	6	7	8	9	10
<b>LdnA</b>	47.1	56.0	51.9	58.2	47.2	46.3	68.5	40.8	64.5	53.2
<b>%Δ</b>	-1.0	0.1	0.0	0.2	-1.4	-0.2	0.2	-3.8	0.0	-2.9
<b>NMT</b>	11	12	13	14	15	16	17	18	19	20
<b>LdnA</b>	65.5	63.4	42.1	42.2	55.5	35.6	54.4	47.8	43.4	41.8
<b>%Δ</b>	0.2	0.6	6.2	8.4	0.8	-0.7	1.3	0.5	1.5	-1.3

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.

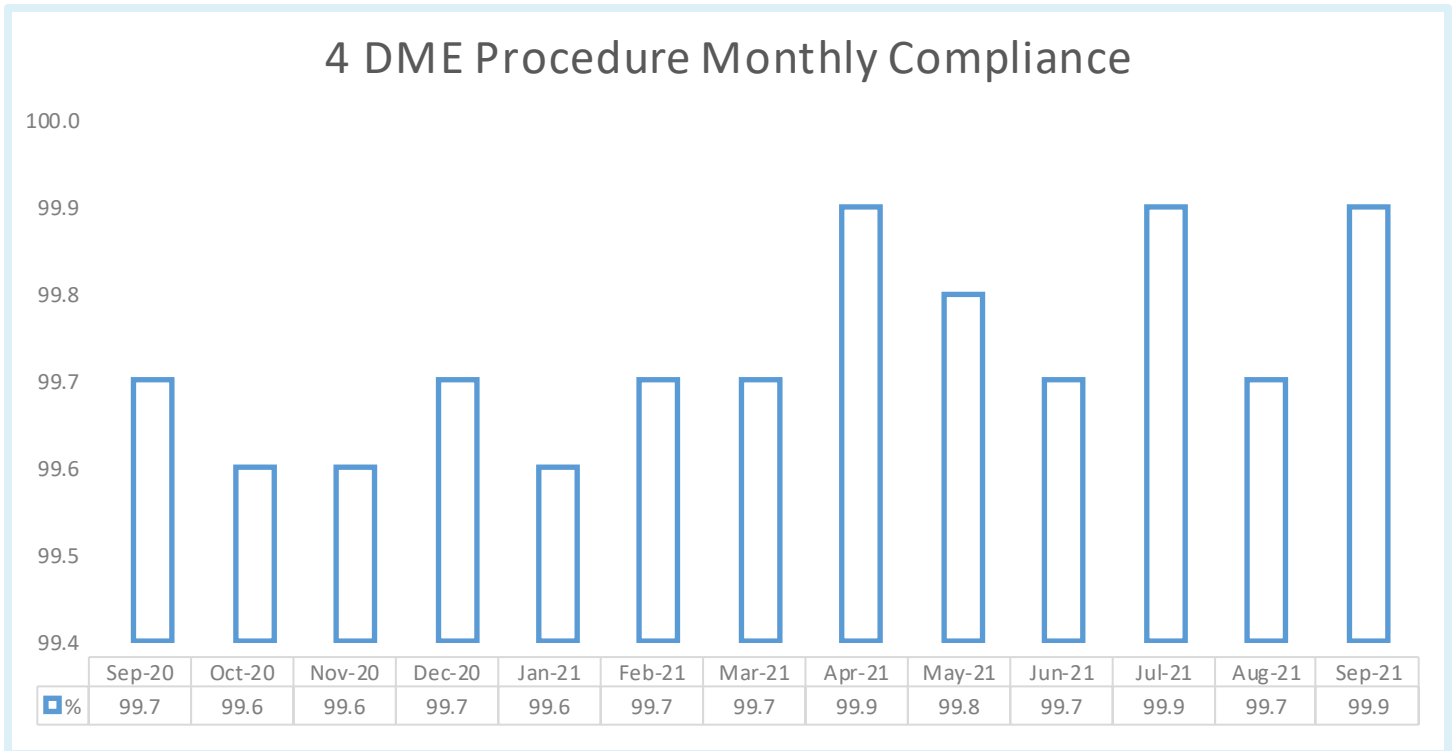


# NOISE MITIGATION PROCEDURES

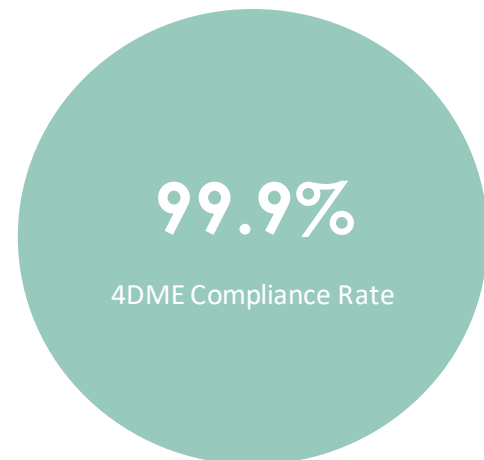
Working with the community, the FAA has implemented a variety of noise reduction measures. While some procedures might not always be used because of wind, weather, and other operational considerations; the Aviation Department encourages maximum use to the extent possible by monitoring and reporting on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

## Tempe “4DME”

The 4DME departure procedure directs all jet aircraft departing PHX heading east to fly generally along the Salt River for approximately 6 miles, before turning. The 4DME procedure is designed to keep jet aircraft over the Salt River, until they pass the 101 freeway, where it intersects the 202 Red Mountain freeway.

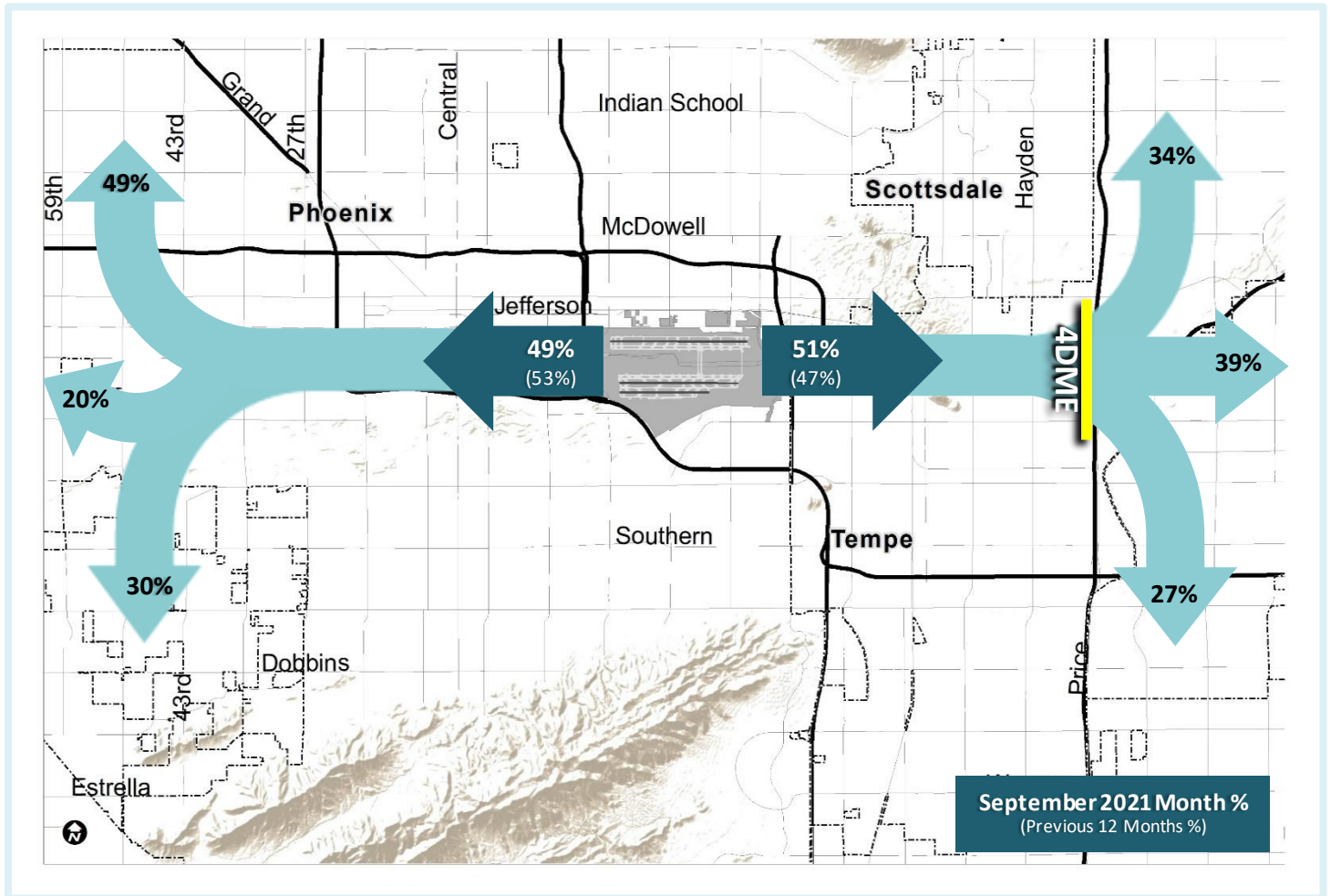


	<b>Operator</b>	<b>Dev.</b>	<b>Dep.</b>	<b>% Compliant</b>
<b>75+ Operations</b>	Southwest Airlines	2	2,328	99.9%
	American Airlines	2	1,855	99.9%
	SkyWest Airlines	0	588	100.0%
	Mesa Airlines	0	503	100.0%
	Delta Airlines	0	357	100.0%
	United Airlines	0	332	100.0%
	Alaska Airlines	0	171	100.0%
	General Aviation	1	125	99.2%
	UPS Airlines	1	125	99.2%
	FedEx Airlines	0	86	100.0%

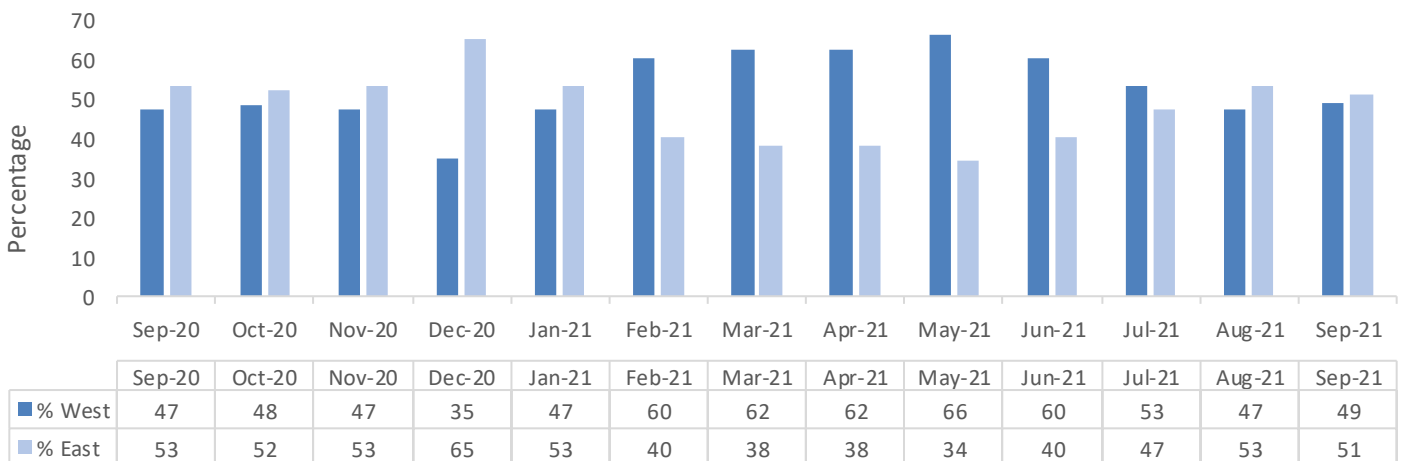


# Equalization

The equalization policy for departures ensures that averaged over a calendar year, the number of departures is 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 spring and summer, and to the east during fall and winter, due to the prevailing winds during those seasons.



### Annual Flow Equalization

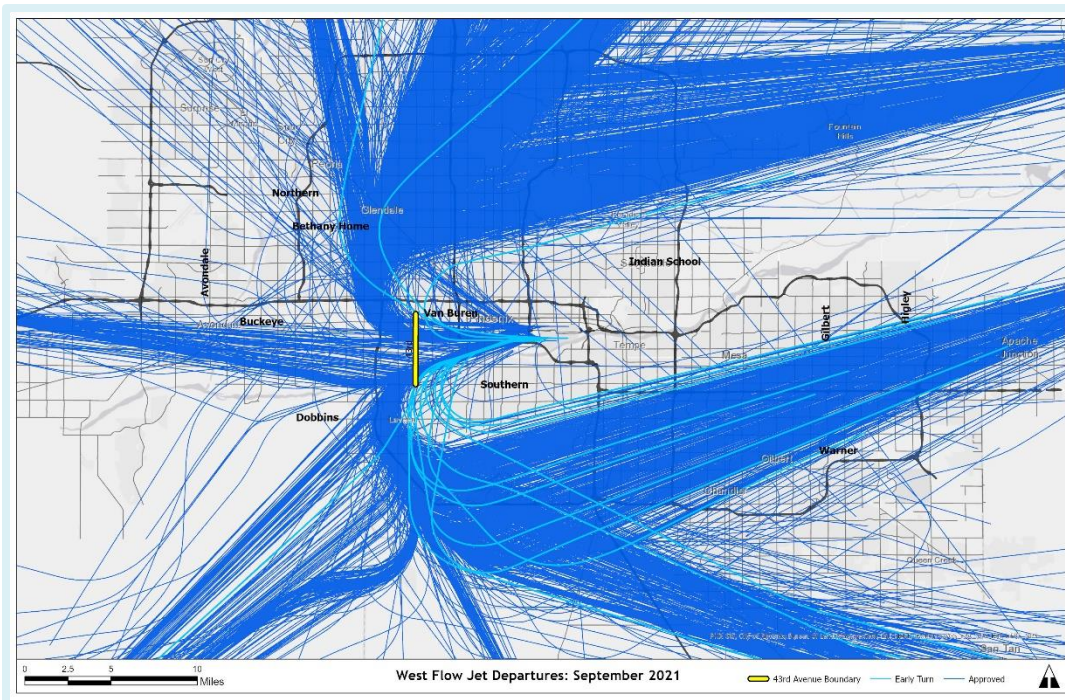


## Joint Petition “43<sup>rd</sup> Ave Gate”

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

## 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 can 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.



### West Flow Jet Departures September 2021



### Complaint Hotline

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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