

City of Phoenix Aviation Department 2021 Annual Noise Report



PHX



DVT



GYR

The Annual Noise Report summarizes aircraft noise data for the preceding calendar year. City of Phoenix operates three airports; Phoenix Sky Harbor International (PHX), Phoenix Deer Valley (DVT), and Phoenix Goodyear (GYR).

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/>

Subscribe to updates

<https://www.skyharbor.com/FlightPaths>

Comparison of Annual Data

PHX	2021	2020	2019	2018	2017	2016	2015
Operations	408,285	310,324	438,891	434,252	430,968	440,643	440,411
Complaints	36,464 *	61,251	60,922	52,164	100,808	81,340	24,247
Households	190	307	408	610	666	755	1,338

*One Household submitted 536,871 complaints for PHX in 2021

DVT	2021	2020	2019	2018	2017	2016	2015
Operations	271,979	402,444	456,790	415,16	378,777	370,034	369,759
Complaints	2,477	3,465	466	710	1,261	619	717
Households	57	92	87	96	108	112	94

GYR	2021	2020	2019	2018	2017	2016	2015
Operations	75,880	79,599	117,300	83,223	111,163	123,334	111,330
Complaints	171	230	461	412	41	15	40
Households	2	1	9	7	41	15	22

2021 Year in Review

Performance Indicators

In 2021, operations levels at PHX increased considerably from 2020, while DVT operations declined and GYR operations remained the similar. Household complaints decreased among all three airports in 2021. PHX departure gate compliance remained at 99% in 2021 and departure direction equalization splits also tracked with previous years.

Tempe Entertainment District

Staff took an active role by engaging in discussions with the potential developer and City of Tempe over a large site just 10,000' east of PHX where a redevelopment project including housing was proposed; the site is within the current 65 DNL contour.

Scottsdale Lawsuit

Scottsdale's litigation against FAA continued in 2021 with the City's opening brief being filed in April. In July, the Phoenix City Manager warned FAA against reopening the settlement agreement as a means of addressing Scottsdale's litigation. In September, mediation came to an end as litigation parties prepare for FAA's response brief.

Comparison of 2021 Monthly Data

PHX	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	27,768	25,298	34,363	32,884	34,892	34,408	37,142	36,331	34,851	36,902	37,010	36,436
Complaints	3,753	3,413	3,987	3,801	2,225	2,712	2,598	3,676	4,694	2,052	1,689	1,865
Households	44	41	52	42	45	32	55	42	55	46	40	36

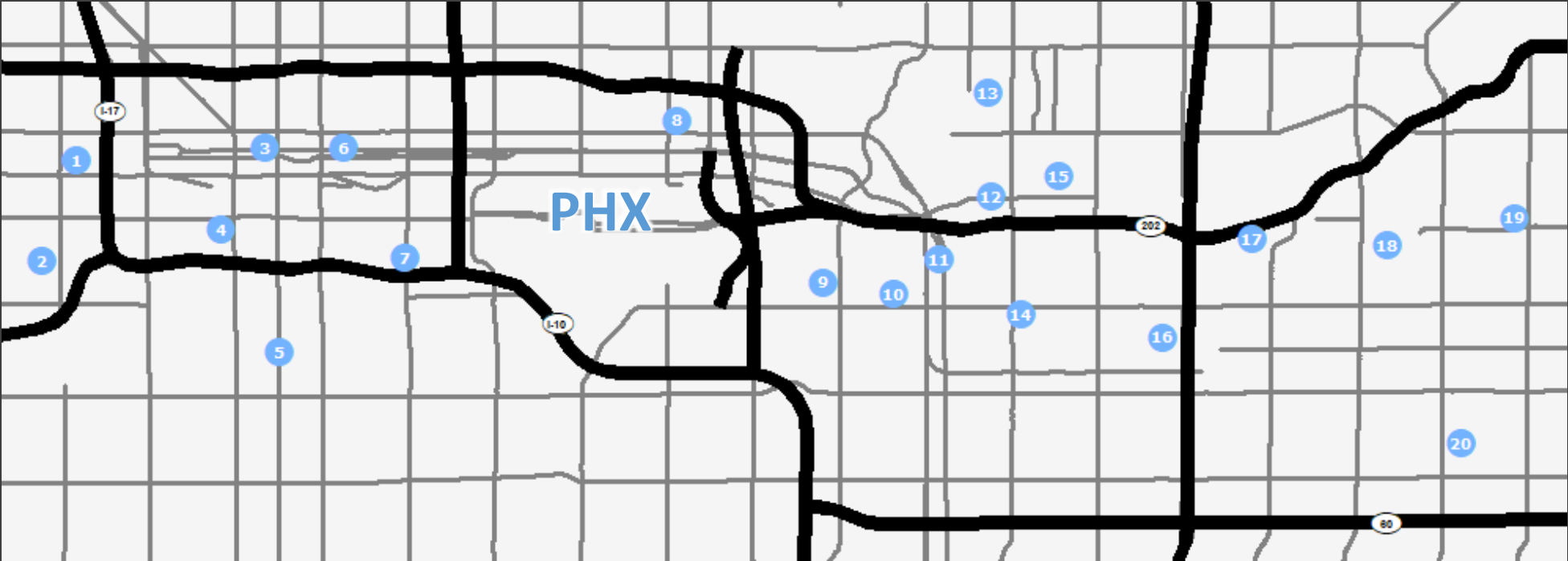
DVT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	28,709	27,768	29,205	27,724	25,304	19,268	19,134	21,086	17,931	19,410	19,063	17,917
Complaints	415	456	484	333	233	133	71	34	88	128	99	49
Households	9	15	16	14	19	6	7	8	7	6	4	2

GYR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	5,217	6,904	8,457	6,977	6,889	5,003	5,243	5,158	4,917	7,456	5,949	7,710
Complaints	17	18	14	21	18	15	9	6	8	14	9	24
Households	1	2	1	1	1	1	1	1	1	1	1	2

A map of the Phoenix metropolitan area and surrounding regions. Major highways are shown as thick black lines, labeled with their respective numbers in white circles: I-10, I-17, I-19, SR-51, SR-52, SR-60, SR-202, and SR-303. Cities and towns are labeled in black text, including Surprise, Sun City, Peoria, Glendale, Phoenix, Tempe, Mesa, Gilbert, Chandler, Apache Junction, Gold Canyon, Queen Creek, Tortilla Flat, Fountain Hills, Scottsdale, Paradise Valley, Buckeye, Wittmann, Morristown, Coldree, and Avondale. Three specific areas are highlighted with large, bold letters: 'DVT' in yellow at the top center, 'PHX' in blue in the middle right, and 'GYR' in green at the bottom left. Numerous small dots are scattered across the map, color-coded by region: yellow dots are concentrated in the DVT area; blue dots are spread throughout the PHX area and also appear in the GYR area; and two green dots are located in the southern part of the GYR area. The background shows a light gray grid representing city streets and darker gray areas representing water bodies or undeveloped land.

- PHX
- DVT
- GYR

Comparison of Annual Noise Monitor Readings



Avg. Sound Level (dB)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2021	47	55	51	58	48	47	68	41	64	52	64	62	38	40	56	37	53	48	44	42
2020	47	54	50	56	46	45	66	41	63	57	62	60	36	40	54	38	51	47	43	43
2019	51	55	53	60	N/A	N/A	N/A	39	64	55	64	62	N/A	40	56	40	51	50	47	46
2018	50	55	54	60	55	47	68	40	64	54	64	62	37	41	55	40	50	49	46	46
2017	48	54	56	59	57	46	68	40	63	54	64	62	38	N/A	56	41	49	49	47	45
2016	48	54	55	59	57	46	68	38	62	54	64	61	39	41	54	43	N/A	49	46	44
2015	48	46	54	59	56	48	67	44	62	56	64	60	38	43	55	42	N/A	48	46	45

Sky Harbor Noise Abatement Performance

Departure Corridor Equalization

To minimize community impacts from overflight, Phoenix works with FAA to ensure departures from Sky Harbor are balanced in terms of east and west flows over the calendar year.

Direction Equalization	2021	2020	2019	2018	2017	2016	2015
East	47%	49%	45%	47%	46%	50%	51%
West	53%	51%	55%	53%	54%	50%	49%

Departure Gate Compliance

To minimize community impacts from overflight, Phoenix works with FAA to ensure departures from Sky Harbor do not turn out of the Salt River compatibility corridor earlier than necessary. In east flow operations, the turn “gate” aligns with the Loop 101 freeway. In west flow operations, the turn “gate” aligns with 43rd Avenue. The compliance percentage measures the relative number of jet aircraft departures that did not turn before the gate (ie, remained inside the compatibility corridor).

Departures	2021	2020	2019	2018	2017	2016	2015
Loop 101	99%	99%	99%	99%	99%	99%	99%

Departures	2021	2020	2019	2018	2017	2016	2015
43 rd Ave	99%	99%	99%	99%	n/a	n/a	n/a