

City of Phoenix Aviation Department 2023 Annual Noise Report



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: (602) 773-1093

Complaint Webform

<https://flighttracker.casper.aero/phx/>

Subscribe to updates

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

Comparison of Annual Data

PHX	2023	2022	2021	2020	2019	2018	2017
Operations	455,205	418,856	408,285	310,324	438,891	434,252	430,968
Complaints	28,515	25,475	36,464	61,251	60,922	52,164	100,808
Households	165	158	190	307	408	610	666

DVT	2023	2022	2021	2020	2019	2018	2017
Operations	344,393	275,153	271,979	402,444	456,790	415,16	378,777
Complaints	1,313	732	2,477	3,465	466	710	1,261
Households	60	20	57	92	87	96	108

GYR	2023	2022	2021	2020	2019	2018	2017
Operations	218,520	164,484	75,880	79,599	117,300	83,223	111,163
Complaints	12,454	506	171	230	461	412	41
Households	17	14	2	1	9	7	9

2023 Year in Review

Performance Indicators

In 2023, operations levels at PHX increased from 2022 by 9%, DVT operations increased by 25% and GYR operations increased by 33%. Total households submitting complaints increased at PHX, DVT, and GYR. PHX departure gate compliance remained at 99% and departure direction equalization splits were also in line with previous years.

Tempe Entertainment District

The ballot measures for the proposed residential mixed-use project just 10,000' east of PHX were rejected by Tempe voters. In addition, the Aviation Department filed a formal complaint in the Superior Court to block future incompatible development within the high-noise exposure area.

FAA PBN Working Group

In Spring 2022, the FAA kicked off a Performance Based Navigation Working Group to address efficiency and safety improvements in our region's terminal and en route airspace. Identification of conceptual changes and public outreach are expected to occur in 2024.

Comparison of 2023 Monthly Data

PHX	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	38,469	37,399	41,235	38,064	37,209	34,216	34,946	35,694	35,954	39,644	40,686	41,149
Complaints	2,659	2,473	2,388	2,376	4,913	2,908	1,981	1,814	1,656	1,761	2,640	946
Households	35	43	38	28	34	21	22	14	20	24	18	12

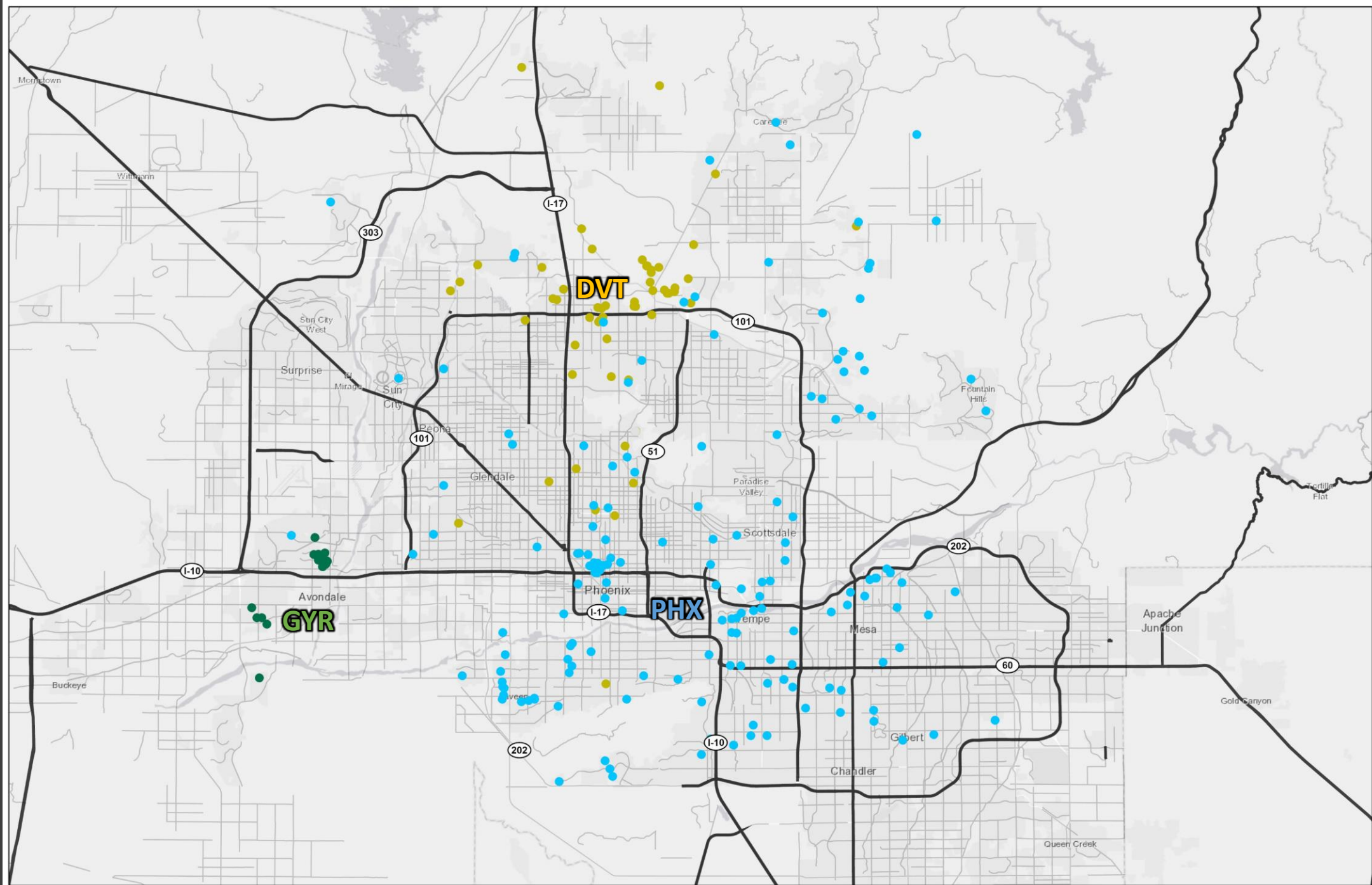
DVT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	28,102	23,492	29,261	30,371	29,727	30,071	26,751	28,842	31,918	24,831	32,051	28,976
Complaints	87	133	127	117	120	87	84	83	105	198	129	43
Households	8	6	18	9	15	7	4	10	4	10	4	9

GYR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	18,155	15,250	19,319	19,161	19,772	18,227	19,135	19,796	10,461	21,175	20,058	18,011
Complaints	107	171	328	473	881	706	850	1,799	815	2,467	1,677	2,180
Households	3	3	6	3	2	2	5	4	3	4	6	7

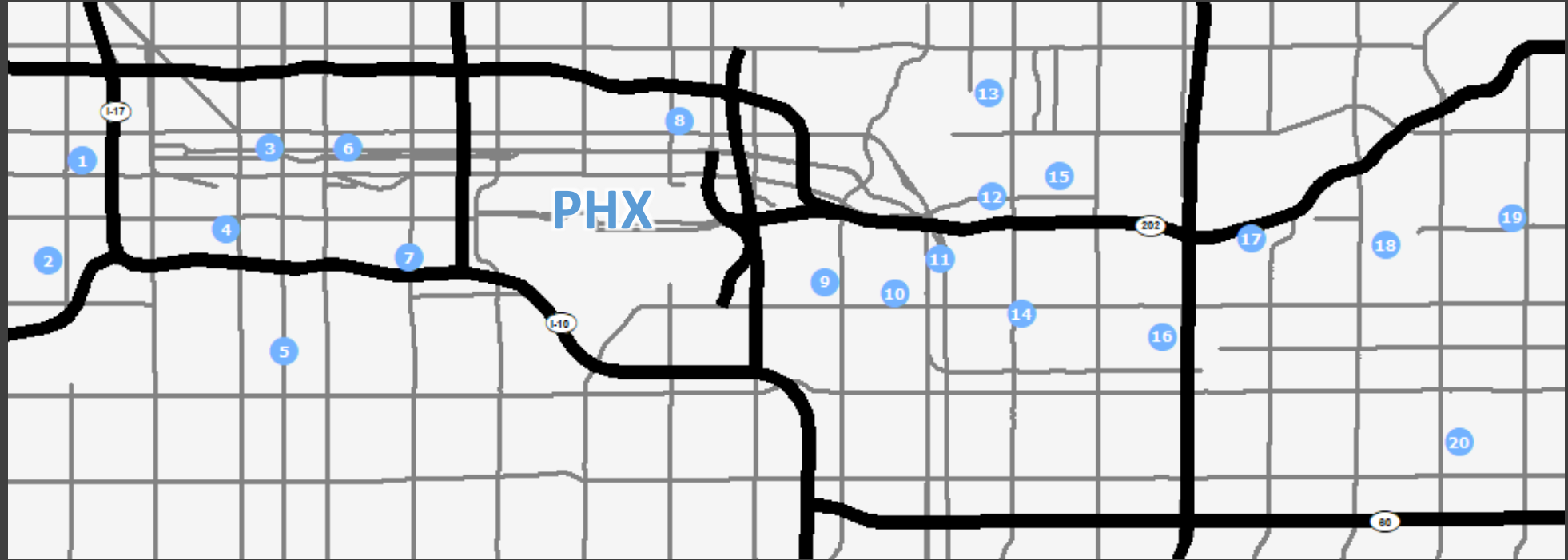
Map of 2023 Complainant Households

Complainant Airport

- 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
2023	55	58	53	N/A	53	51	68	48	65	60	64	64	41	50	N/A	42	56	56	54	50
2022	50	56	56	59	48	47	69	42	65	53	65	63	37	40	56	39	53	48	45	42
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

Sky Harbor Noise Abatement Performance

Departure Corridor Equalization

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

Direction Equalization	2023	2022	2021	2020	2019	2018	2017
East	49%	48%	47%	49%	45%	47%	46%
West	51%	52%	53%	51%	55%	53%	54%

Departure Gate Compliance

To minimize community impacts from overflight, Phoenix works with the 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 (i.e., remained inside the compatibility corridor).

Departures	2023	2022	2021	2020	2019	2018	2017
Loop 101	99%	99%	99%	99%	99%	99%	99%

Departures	2023	2022	2021	2020	2019	2018	2017
43 rd Ave	99%	99%	99%	99%	99%	99%	n/a