

City of Phoenix Aviation Department 2022 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: (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 2022 Annual Data

PHX	2022	2021	2020	2019	2018	2017	2016
Operations	418,856	408,285	310,324	438,891	434,252	430,968	440,643
Complaints	25,475	36,464	61,251	60,922	52,164	100,808	81,340
Households	158	190	307	408	610	666	755

DVT	2022	2021	2020	2019	2018	2017	2016
Operations	275,153	271,979	402,444	456,790	415,16	378,777	370,034
Complaints	732	2,477	3,465	466	710	1,261	619
Households	20	57	92	87	96	108	112

GYR	2022	2021	2020	2019	2018	2017	2016
Operations	164,484	75,880	79,599	117,300	83,223	111,163	123,334
Complaints	506	171	230	461	412	41	15
Households	14	2	1	9	7	9	15

2022 Year in Review

Performance Indicators

In 2022, operations levels at PHX increased from 2021 by 2.6%, DVT operations increased by 1% and GYR operations increased by 74%. Total households submitting complaints decreased at PHX and DVT but increased at GYR. PHX departure gate compliance remained at 99% and departure direction equalization splits were also in-line with previous years.

Tempe Entertainment District

Staff took an active role by engaging in discussions with the potential developer and the 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. Through negotiations, a variety of noise mitigation requirements were agreed to by Tempe.

FAA PBN Working Group

In Spring 2022, FAA kicked off a Performance Based Navigation Working Group to address efficiency and safety improvements in our region's terminal and en route airspace. Conceptual changes and public outreach are expected to occur in 2023.

Comparison of 2022 Monthly Data

PHX	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	38,815	32,927	38,265	35,936	34,229	33,252	34,003	33,717	33,040	36,298	36,566	36,808
Complaints	1,582	1,116	1,966	1,790	1,606	2,523	2,707	2,496	2,981	2,583	2,208	1,917
Households	35	26	45	34	22	29	39	23	31	52	33	38

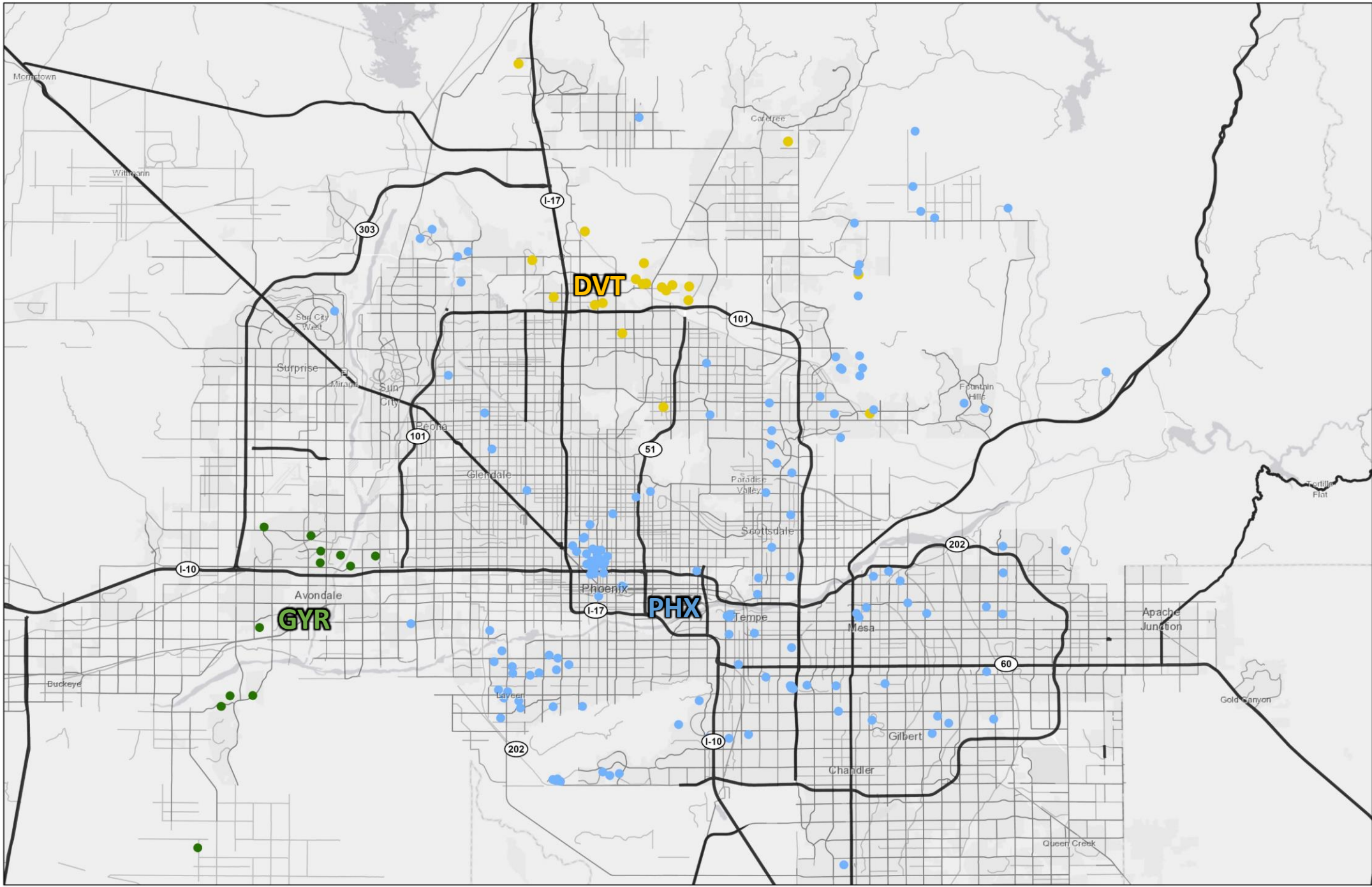
DVT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	20,817	21,423	22,872	22,313	22,707	20,244	20,045	23,435	23,731	25,270	27,390	24,906
Complaints	9	44	105	57	53	37	35	46	43	99	97	107
Households	5	4	2	5	2	3	3	4	3	4	3	7

GYR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations	9,038	12,042	13,054	12,753	12,043	11,161	12,885	15,828	16,378	17,243	16,691	14,701
Complaints	31	52	50	46	41	42	23	41	35	49	53	43
Households	1	2	4	4	3	1	1	3	2	1	2	3

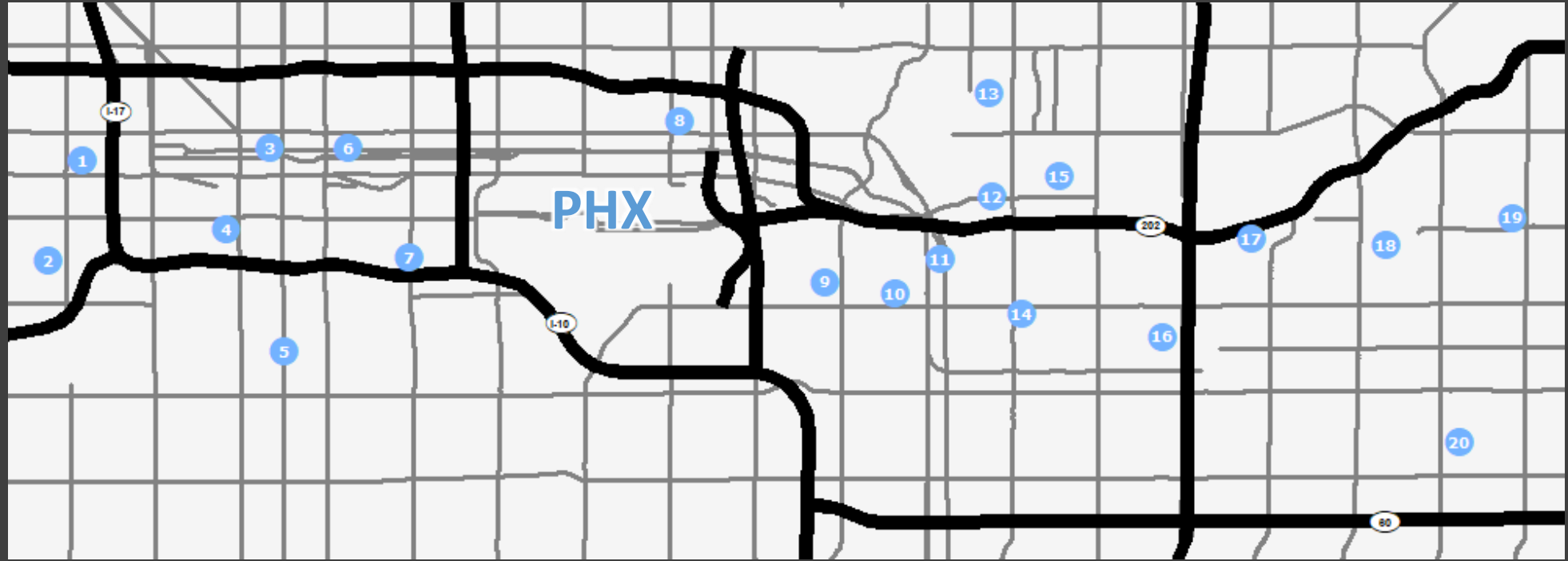
Map of 2022 Complainant Households

Complainant Airport

- PHX
- DVT
- GYR



Comparison of 2022 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
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
2016	48	54	55	59	57	46	68	38	62	54	64	61	39	41	54	43	N/A	49	46	44

Sky Harbor 2022 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	2022	2021	2020	2019	2018	2017	2016
East	48%	47%	49%	45%	47%	46%	50%
West	52%	53%	51%	55%	53%	54%	50%

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	2022	2021	2020	2019	2018	2017	2016
Loop 101	99%	99%	99%	99%	99%	99%	99%

Departures	2022	2021	2020	2019	2018	2017	2016
43 rd Ave	99%	99%	99%	99%	99%	n/a	n/a