

PHX DVT BYR

 CITY OF PHOENIX AVIATION DEPARTMENT

**Annual Noise Report
2010**

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Executive Summary

This report summarizes annual trends on issues regarding noise exposure from the City of Phoenix's three airports: Phoenix Sky Harbor International (PHX), Phoenix Deer Valley (DVT), and Phoenix Goodyear (GYR). The report includes information on operational counts, aircraft fleet mix, noise complaints, runway usage, noise abatement procedures, noise monitoring, and General Aviation activity.

The City of Phoenix is dedicated to minimizing noise exposure to surrounding communities from aircraft operations through a variety of outreach efforts. During the past year, airport staff has met with community groups, elected officials, appointed advisory boards, airline officials, Community Noise Reduction Program consultants, aviation working groups, the Federal Aviation Administration (FAA), and other aviation users in a continued effort to increase awareness of the importance for all aircraft operators to fly in a neighborly fashion.

One of the goals of this report and our outreach is to share information with the public and to encourage further communication between all parties involved with the issue of noise exposure.

Calendar Year 2010 Highlights:

Aircraft operations continued to decline at all three City of Phoenix Airports in 2010. Operations at PHX decreased by 1.17% compared to 2009.

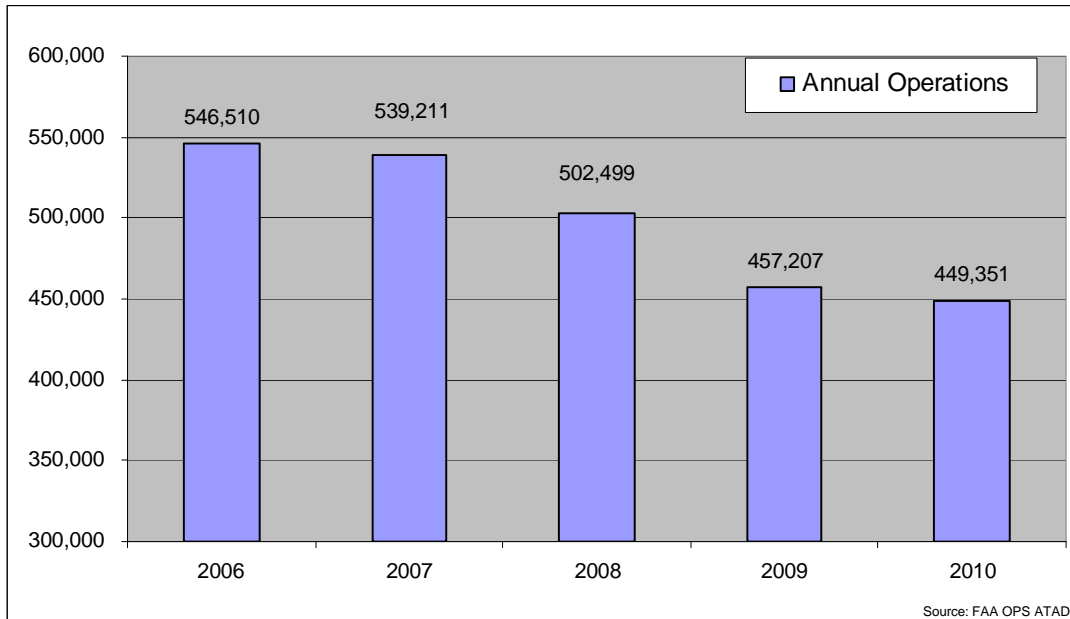
In the last year, the Aviation Department performed extensive airfield improvements at PHX. Taxiway connectors H5 and G5 were built and a connection between two segments of Taxiway Charlie was completed. These taxiways will increase the efficiency of the airfield and reduce ground delays, and go-arounds. There was also the installation of Runway Status Lights, a lighting system which will increase safety for aircraft operating at PHX. These construction projects led to extensive closures of runways and taxiways at PHX.

2010 saw the highest 4 DME departure compliance in history. The annual compliance rate of 98.38% can be attributed to the long history of communications between the Aviation Department, the FAA, aircraft operators, and the community.

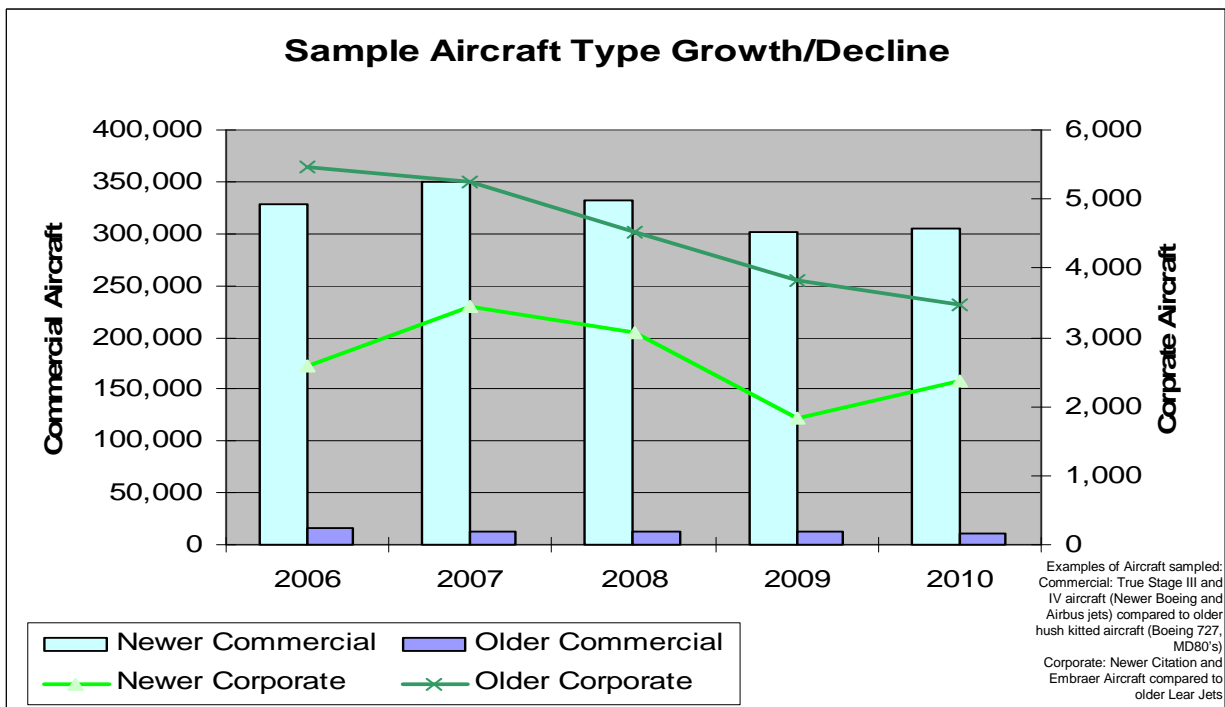
Noise complaint totals decreased in 2010 to 192 which is down from 1,548 in 2009. There was also a decrease in the number of households registering complaints with the Aviation Department, 82 in 2009 and 62 in 2010.



Historical Annual Operations and Fleet Mix Comparisons



Operations at Phoenix Sky Harbor International Airport decreased 1.17% in 2010. This was due to the continued global economic downturn. As operations decrease at PHX, the noise generated by those operations also decreases.



The aircraft fleet mix continues to change as older aircraft are replaced with newer, quieter and more efficient ones. During the past five years, many older aircraft have been retired due to continuing noise concerns, high maintenance and fuel costs. In 2010, newer corporate aircraft made a dramatic increase.



Annual Noise Complaints by Jurisdiction

City	2006		2007		2008		2009		2010	
	Households	Complaints	Households	Complaints	Households	Complaints	Households	Complaints	Households	Complaints
Apache Junction	-	-	-	-	1	1	-	-	-	-
Carefree	1	11	-	-	-	-	-	-	-	-
Cave Creek	1	1	1	1	-	-	-	-	1	1
Chandler	2	2	-	-	-	-	1	1	1	1
Fountain Hills	2	5	1	12	1	1	-	-	-	-
Gilbert	-	-	-	-	2	3	4	4	1	1
Glendale	1	1	1	1	-	-	-	-	-	-
Gold Canyon	1	1	1	1	-	-	-	-	-	-
Laveen	-	-	1	1	-	-	-	-	-	-
Mesa	5	6	7	7	10	165	43	217	19	122
New River	1	1	-	-	-	-	-	-	-	-
Paradise Valley	2	2	1	1	-	-	-	-	-	-
Peoria	-	-	1	1	-	-	1	1	-	-
Phoenix	21	938	24	649	20	96	14	17	20	35
Queen Creek	-	-	-	-	1	1	-	-	-	-
Scottsdale	10	23	4	20	5	1,041	5	1,287	6	9
Tempe	12	23	16	71	19	31	14	21	14	23
Unknown	-	-	1	1	-	-	-	-	-	-
Totals:	59	1,014	59	766	59	1,339	82	1,548	62	192

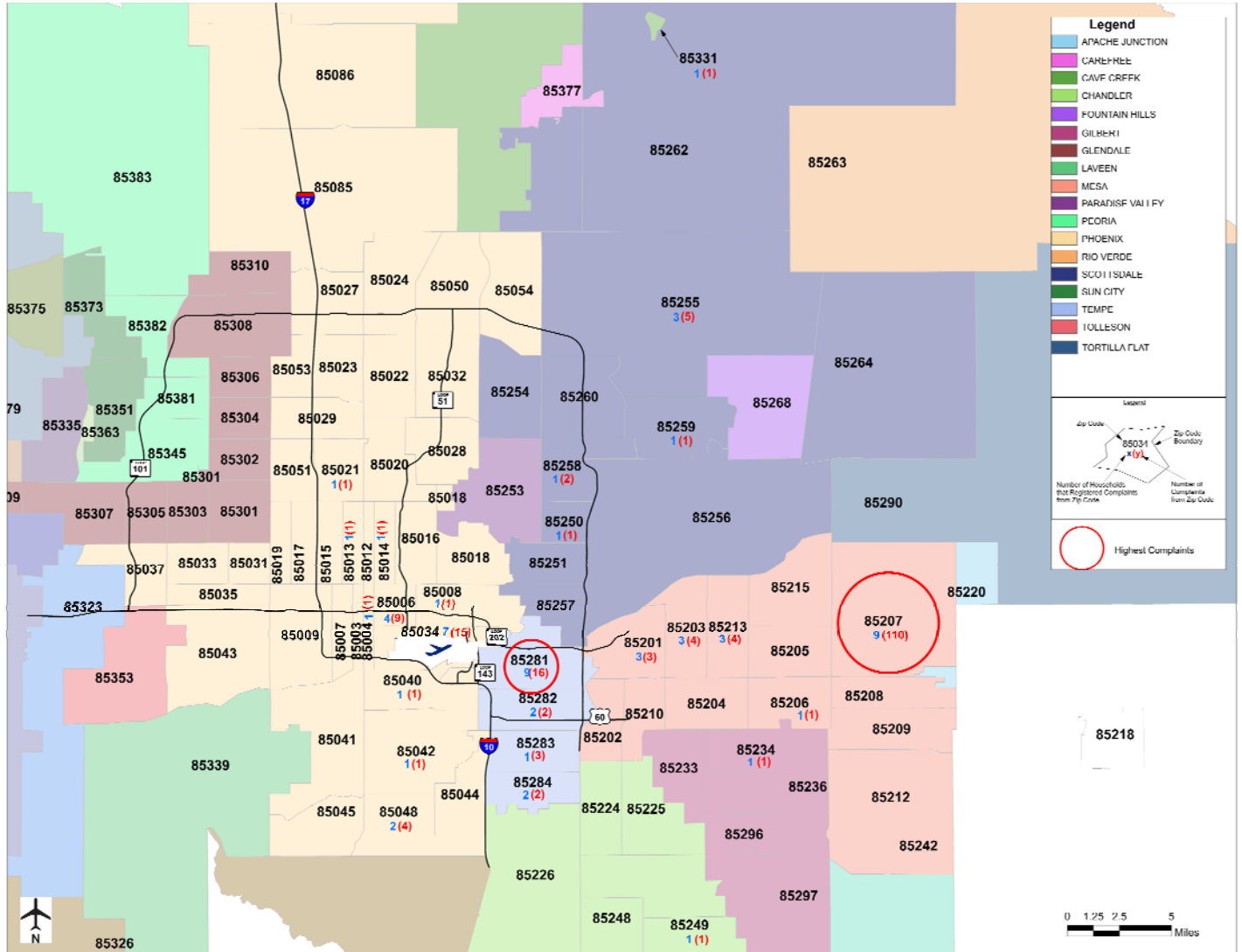
In 2010 noise complaints and households registering complaints decreased. The number of households registering complaints decreased by 25% from 2009. The number of complaints decreased by 88%. In 2009, there was one complainant who registered 1,259 complaints. This complainant did not register a complaint in 2010.

While the Aviation Department received 192 noise complaints in 2010, one household from East Mesa registered 86 complaints. This caller represented 45% of the total complaints regarding PHX operations.

Complaints from jurisdictions closest to PHX continue to decline. This can be attributed to the Aviation Department's Community Noise Reduction Program and increased performance in fly-friendly procedures at PHX.



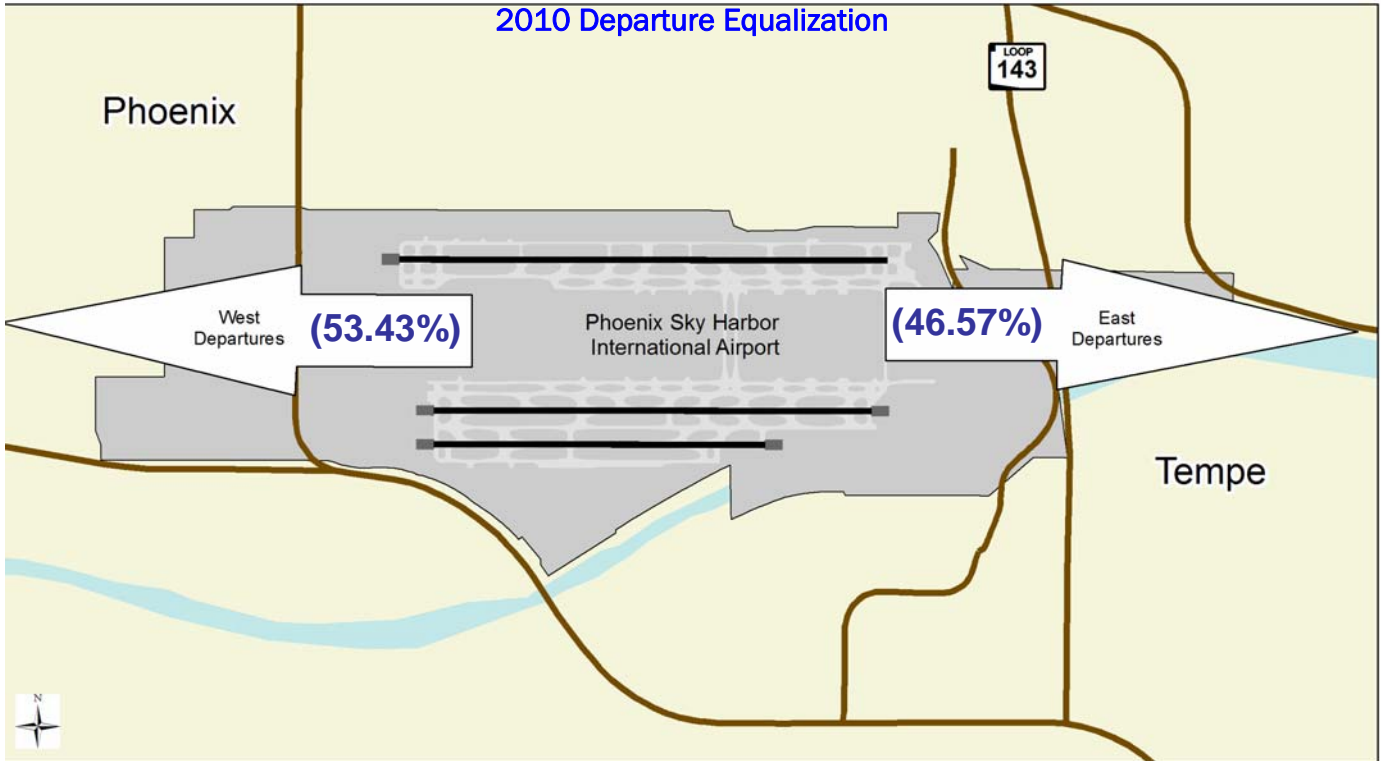
2010 Noise Complaints by Zip Code



* One household from 85207 registered 86 complaints.

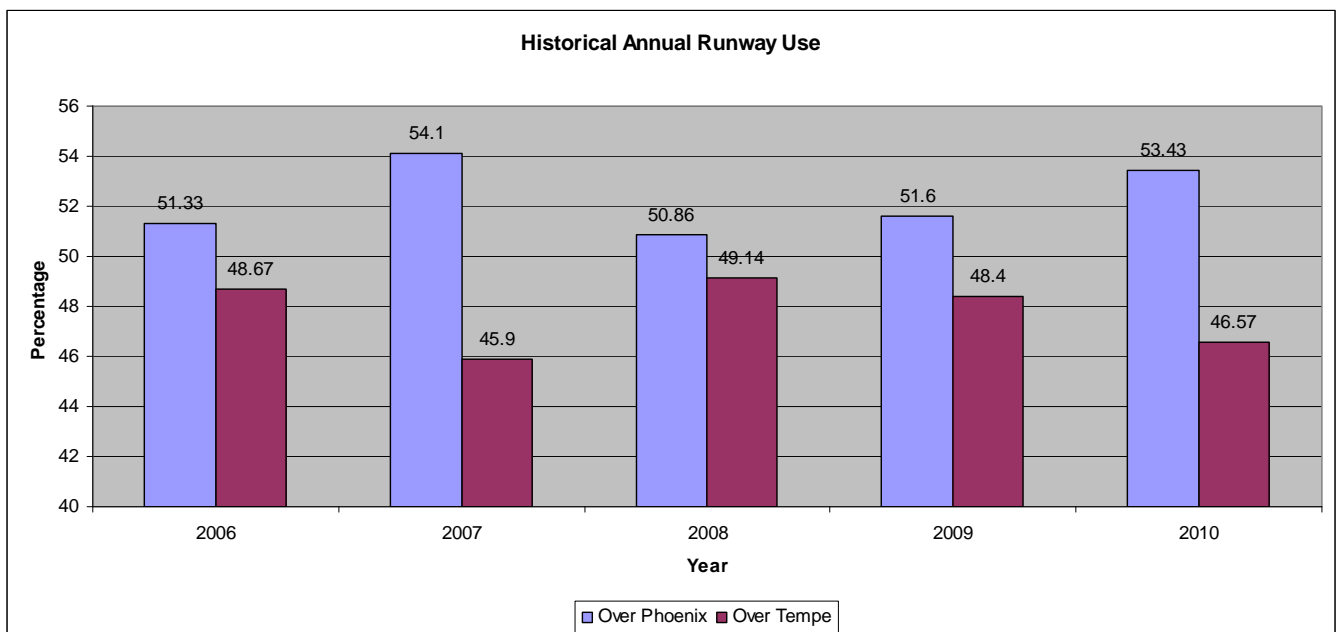


2010 PHX Runway Utilization

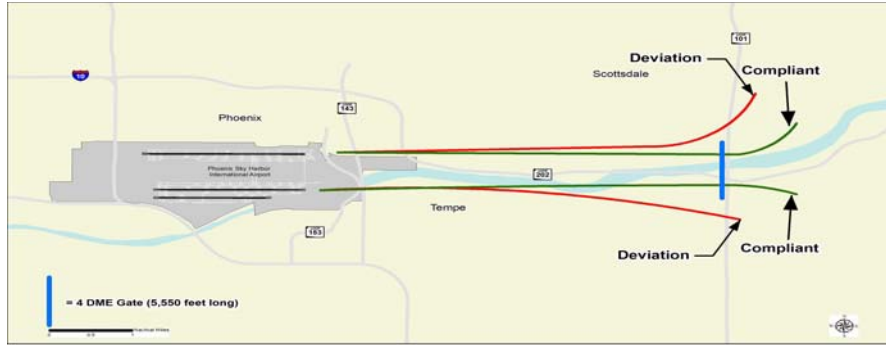


Due to aircraft having to depart into the wind, runway use at PHX is generally predictable with consistent winds. At PHX, winds generally flow east to west at night and, by mid-morning, flow west to east, caused predominantly by solar radiation.

In addition to the favorable wind conditions for equalization of runway use, Aviation Department staff also communicates its importance with local FAA officials. Runway equalization helps provide an even distribution of noise exposure in the surrounding communities.



2010 4 DME Departure Procedure Compliance



2010 4 DME Compliance: 98.38%

2006	2007	2008	2009	2010
96.93%	96.78%	96.44%	98.03%	98.38%

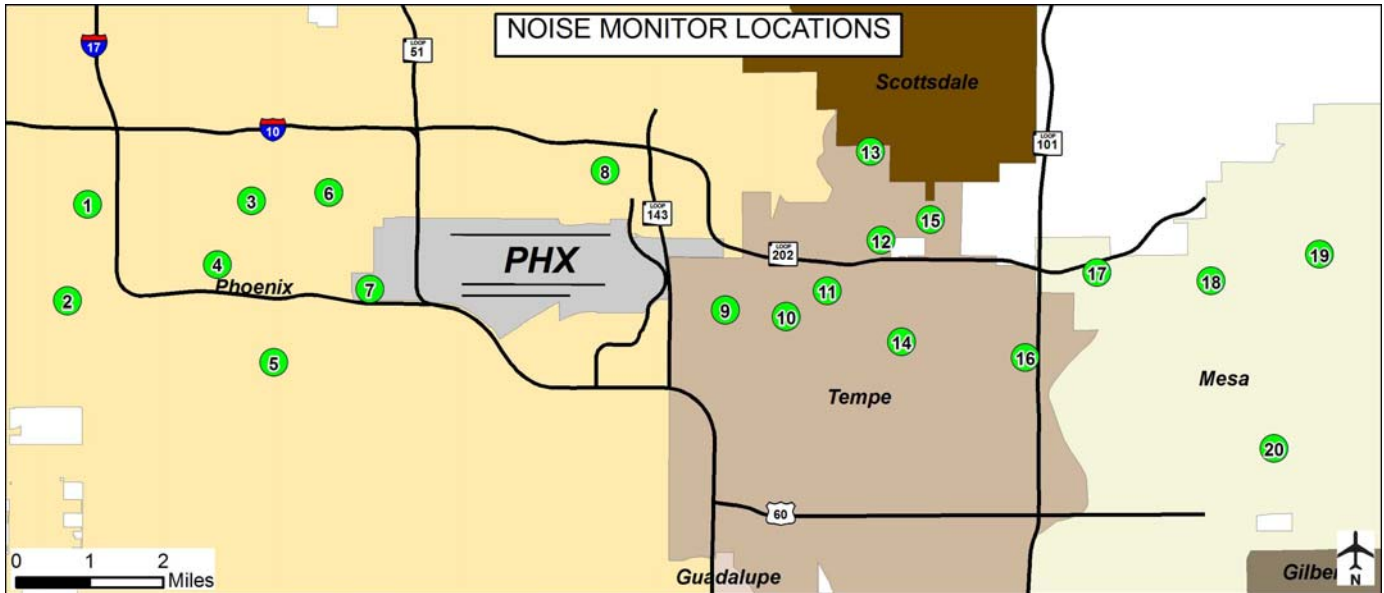
All jet aircraft departing PHX to the east are directed to fly straight out until reaching approximately 5 Nautical Miles (4 DME) before conducting their turns. This procedure is designed to keep aircraft over the Salt River area and minimize noise exposure to residential areas. The Aviation Department monitors compliance with this procedure and communicates regularly with FAA and aircraft operators to ensure that the procedure is adhered to when airspace demands and safety allow. Since 2009, the annual 4DME compliance percentage has remained consistent at around 98%.

The 4 DME Procedure continues to be one of the most vital components to the Aviation Department's commitment to reducing noise exposure.

Airline Code	Airline Name	Deviations	Total Departures to the East	% Compliance
BAW	British Airways	0	63	100.00
TRS	Airtran Airways	0	274	100.00
JBU	Jet Blue Airways	0	292	100.00
AMX	Aeromexico	0	43	100.00
SCX	Sun Country Airlines	0	86	100.00
COA	Continental Airlines	5	2,007	99.75
WJA	West Jet	1	219	99.54
DAL	Delta Airlines	25	4,314	99.42
ASA	Alaska Airlines	11	1,134	99.03
HAL	Hawaiian Airlines	3	290	98.97
FDX	Federal Express	7	674	98.96
USA	US Airways	430	39,138	98.90
UAL	United Airlines	26	2,314	98.88
SWA	Southwest Airlines	324	26,221	98.76
FFT	Frontier Airlines	15	1,154	98.70
ACA	Air Canada	3	230	98.70
ABX	Airborne Express	6	260	97.69
AAL	American Airlines	80	2,911	97.25
Total			81,624	
Operators under 96% Compliance				
BSK	Miami Air International	1	21	95.24
SKW	Skywest Airlines	73	1,519	95.19
SWQ	Swift Air	7	142	95.07
UPS	United Parcel Service	35	535	93.46
CCI	Capital Cargo International	15	199	92.46
OPT	Flight Options	5	62	91.94
EJA	Express Jet Airlines	27	277	90.25
FIV	Citation Shares	9	59	84.75
USC	US Check	44	228	80.70
Total			3,042	



2010 Noise Monitoring Site Measurements



The Aviation Department has 20 Noise Monitoring Terminals (NMT) in the vicinity of PHX. The NMTs are able to determine exactly how loud aircraft operations were at a particular location. In 2009, all monitors were replaced. The new state-of-the-art monitors utilize DSL and Wireless communications which are less susceptible to communication failures than the analog phone lines used in the older monitors.

The new monitors are able to differentiate with greater accuracy between aircraft noise events and community events. This has led to more noise events at the site locations being correlated to aircraft operations. However noise levels have continued to decrease since 2006.

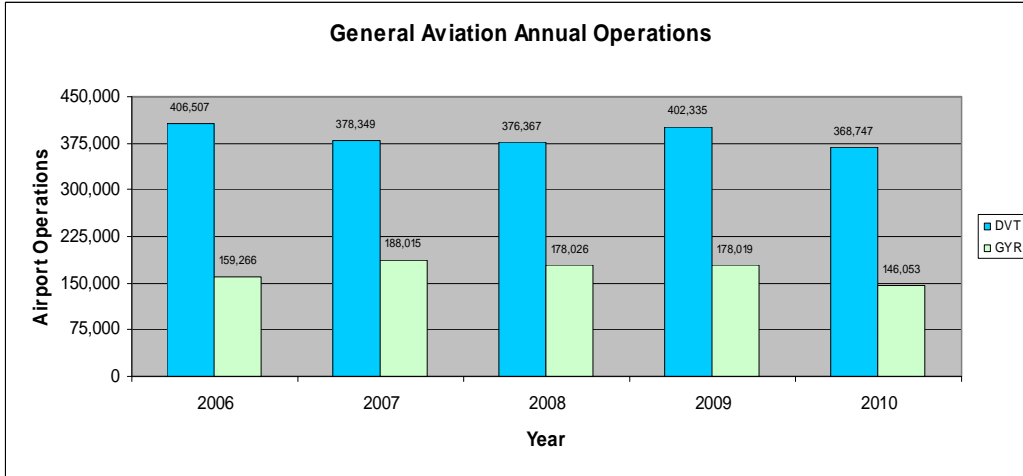
It is important to note that a change in 3 decibels is commonly recognized as the smallest increase in noise exposure that is audible to the human ear.

Noise Monitoring Site	2006	2007	2008	2009	2010	5 Year% Change
NMS01	53.1	52.5	46.6	48.2	50.6	-4.70%
NMS02	57.3	57.5	51.8	52.7	54.7	-4.53%
NMS03	55.3	55.5	52.2	52.9	54.4	-1.63%
NMS04	63.7	64.2	57.6	55.9	58.6	-8.01%
NMS05	58.4	57.8	52.2	53.3	55.3	-5.31%
NMS06	51.1	49.4	44.2	45.4	48.5	-5.09%
NMS07	69.5	69.4	64.4	66.2	67.4	-3.02%
NMS08	48.8	50.3	46.1	44.6	44.2	-9.43%
NMS09	64.3	64.8	60.1	61.3	63.2	-1.71%
NMS10	57.6	58.4	53.5	55.5	57.4	-0.35%
NMS11	65.5	65.8	60.3	62.5	63.8	-2.60%
NMS12	63.0	61.1	55.2	59.1	61.4	-2.54%
NMS13	45.8	46.1	40.8	41.7	43.5	-5.02%
NMS14	50.1	49.5	44.9	44.2	44.5	-11.18%
NMS15	57.4	57.4	51.9	53.2	55.8	-2.79%
NMS16	48.9	46.6	41.9	41.3	42.1	-13.91%
NMS17	54.9	55.4	49.4	51.4	54.1	-1.46%
NMS18	52.6	52.1	45.5	47.4	51.5	-2.09%
NMS19	48.2	48.6	43.7	45.6	48.7	1.02%
NMS20	49.0	47.9	46.3	42.8	44.6	-8.98%

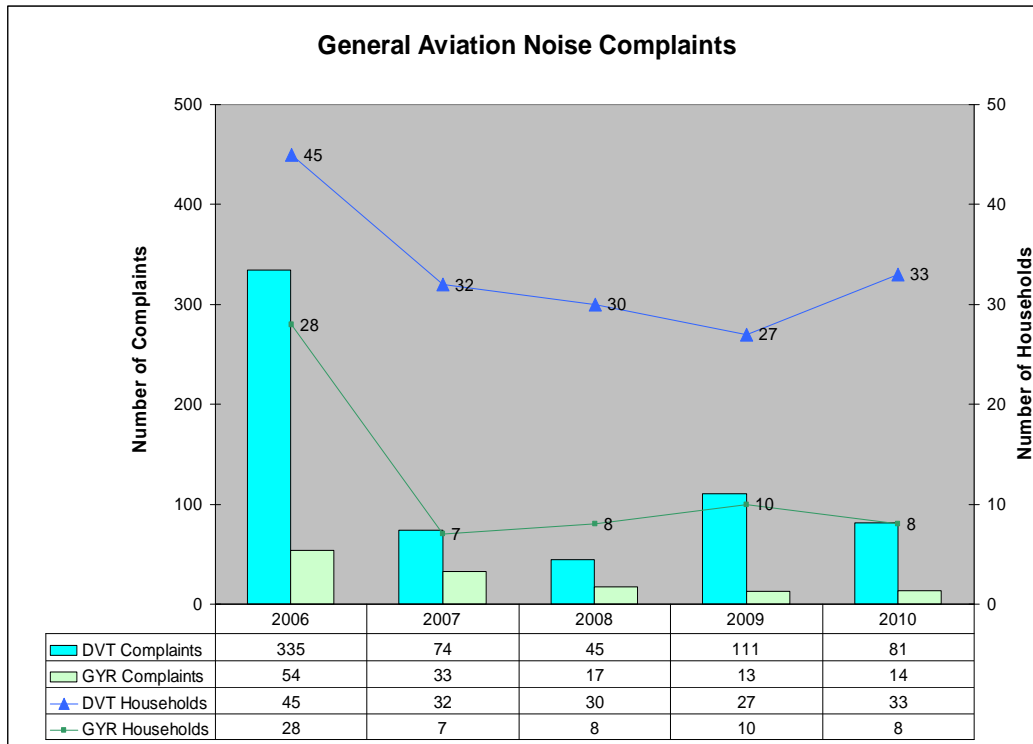


General Aviation Operations and Noise Complaints

General Aviation 2010 Monthly Operations													
Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
DVT	29,704	26,348	32,657	31,711	30,597	31,022	29,571	31,326	31,841	31,559	33,053	29,358	368,747
GYR	12,897	12,262	12,380	11,200	9,354	12,995	12,495	12,614	13,595	13,121	11,680	11,460	146,053



Source: FAA OPS ATADs



Operations at the General Aviation Airports owned and operated by the City of Phoenix (Phoenix Goodyear and Phoenix Deer Valley Airports) and other General Aviation Airports in the Greater Phoenix Area experienced a decline in 2010. However, noise complaints remained consistent at Deer Valley Airport and Goodyear Airport.

