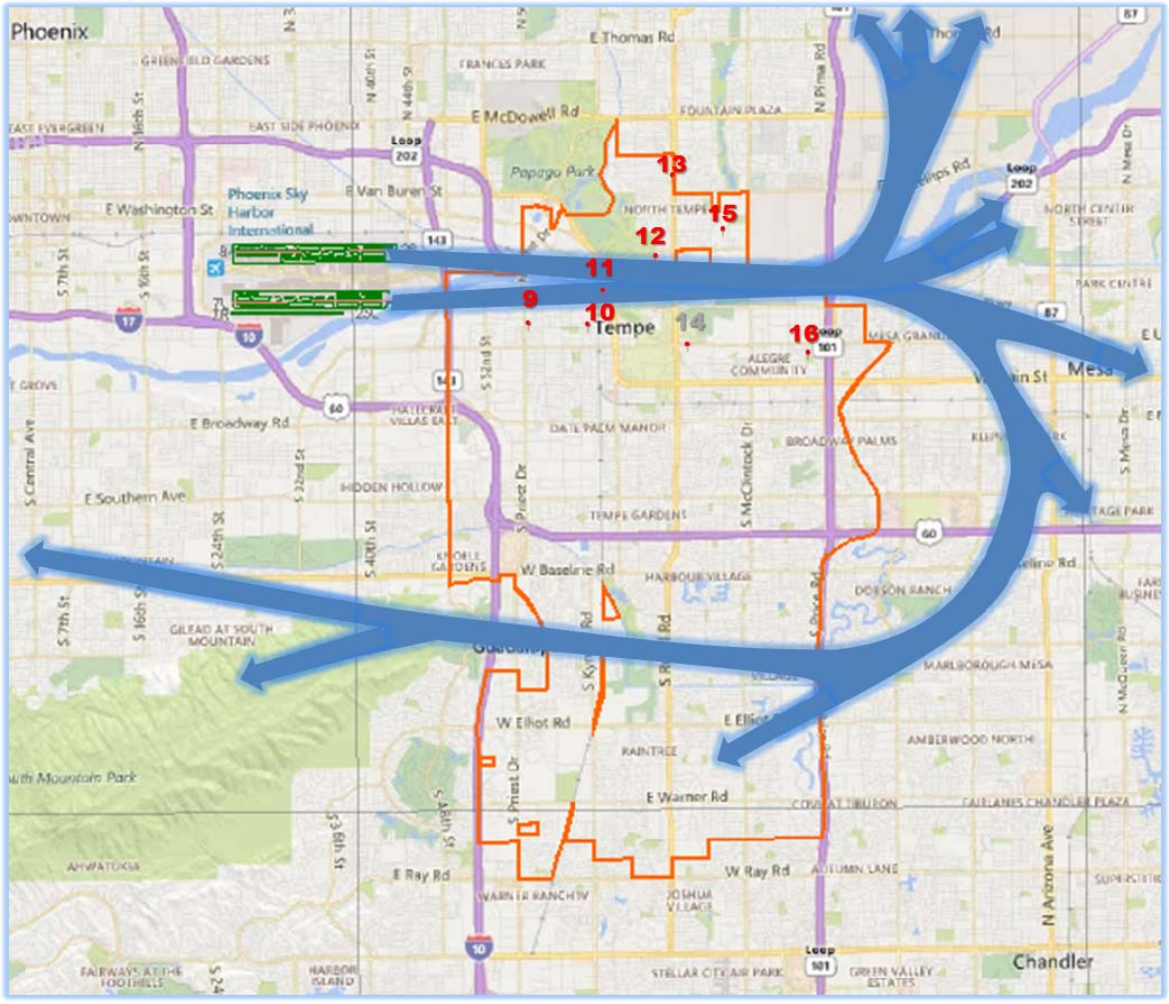
2017 1st Quarter Noise Monitoring Report



PHX Noise Monitoring Sites in Tempe

Site 14 is under construction and the monitoring equipment has been removed until a site redevelopment project is completed.

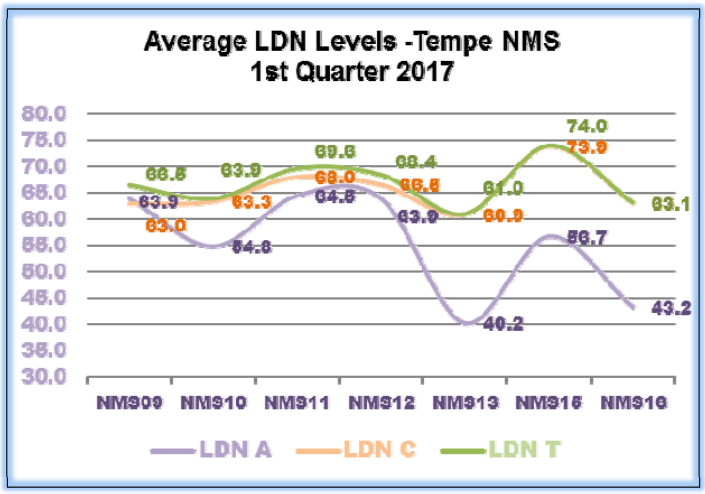
Contents

Aviation Noise Monitoring

The Phoenix Sky Harbor International Airport (PHX) Noise and Flight Track Monitoring System (NFTMS) has eight fixed Noise Monitoring Sites (NMS) in Tempe located in neighborhoods around the Town Lake/ Rio Salado area. Through an agreement made with the City of Phoenix, the City of Tempe can access noise monitoring data collected by the system and use supporting software that filters the data to indentify the noise energy contributions attributed to aircraft operations over areas where the monitors are located.

A. Weighted Sound Exposure Levels

Average monthly sound exposure levels of aircraft events, are calculated from the Ldn or day-night average sound level also called Day Night Level (DNL) that includes a penalty of 10 dB (A) added for nighttime sound events occurring between 22.00-07.00 hours. This summary also includes a description of noise based on long-term equivalent level (Leq) Average sound levels created by aircraft, DNL or Ldn are a product of detection tools built in to the PHX NFTMS, which separate sound events registered at the monitoring site. The ambient sound events from all sources picked up at a monitoring site other than from aviation is the Ldn C. The sound events the NFTMS attributes to aircraft sound is the Ldn A. Ldn T is an expression of the total sound from all sources including aircraft noise.



The average noise levels registered at NMS 15 at Weber Drive in north Tempe were at a higher average level during the first quarter of 2017 compared to the last quarter of 2016. Most of the noise increase identified by the monitor was attributed to increase in community noise (Ldn C) levels.

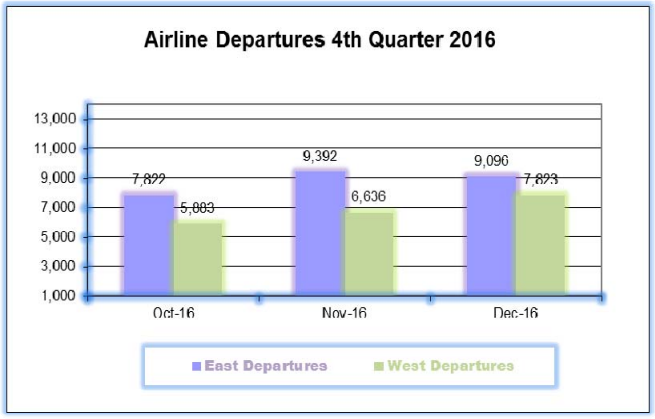
B. East – West Equalization of Noise Burden

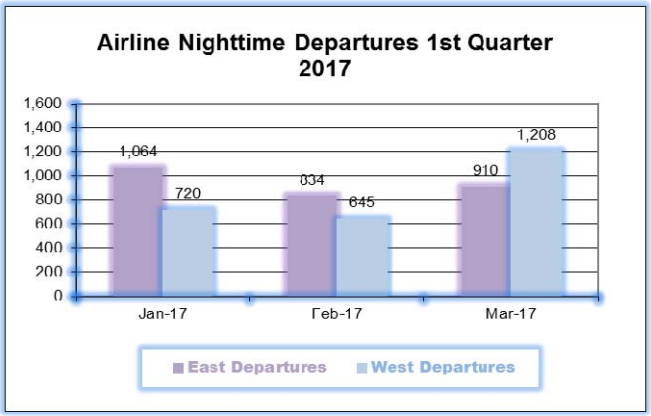
The airport Air Traffic Control Tower is directing large carrier departure traffic with the goal of accomplishing a 50/50 annualized east west split. A procedure for noise mitigation over Tempe delay jet aircraft turns away from the Salt River to the airspace over the Highway 202/ 101 intersection.

Departure flow east and west are determined over the year by daily and seasonal changes in wind directions, and the cities of Tempe and Phoenix have agreed that airport should attempt to distribute the noise burden from departing jets and large turboprop aircraft equally east and west on an annual basis including both day-and nighttime operations.

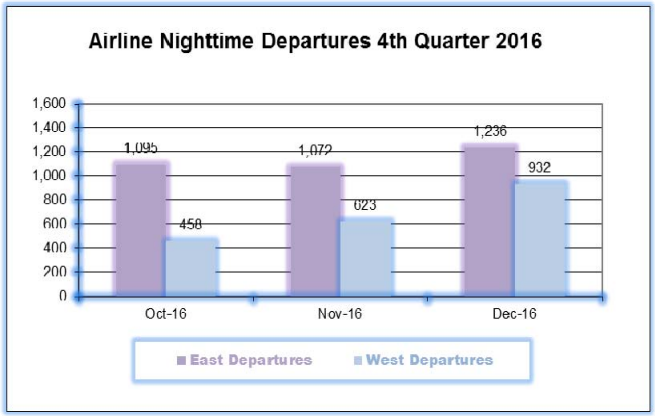
The flow of air carrier and corporate jet departures went predominantly east the first two months of the first quarter of 2017, which is typical the first couple of months of the year. This changed during March 2017 when most departures went west of the airport.

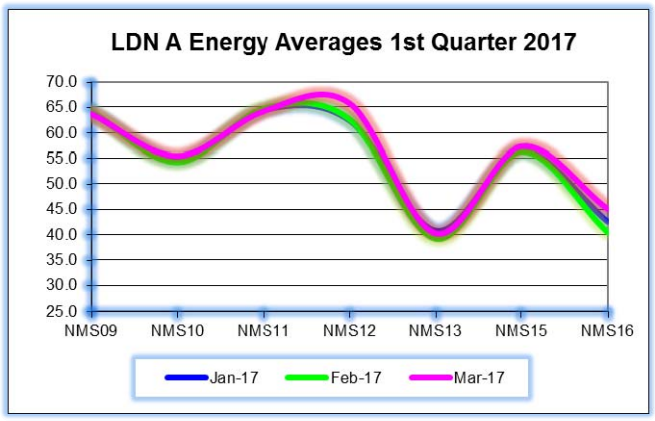
There was a total decrease in departures to the east by 1.7% and departures to the west increased by 11.4 % compared to the last quarter of 2016.



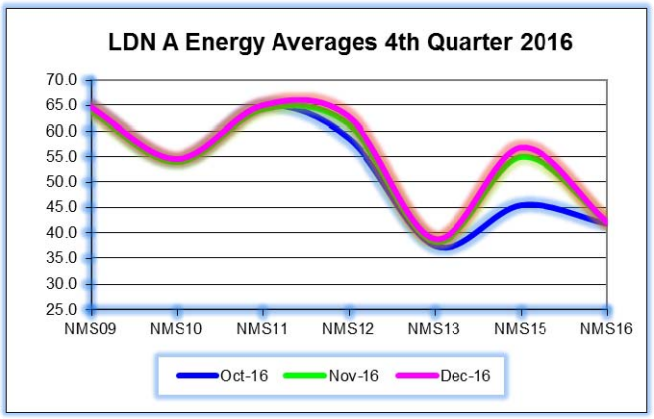


Night time departures occurring between 10:00 p.m. to 7:00 a.m. towards the east decreased by 8.7% compared to the last quarter of 2016.



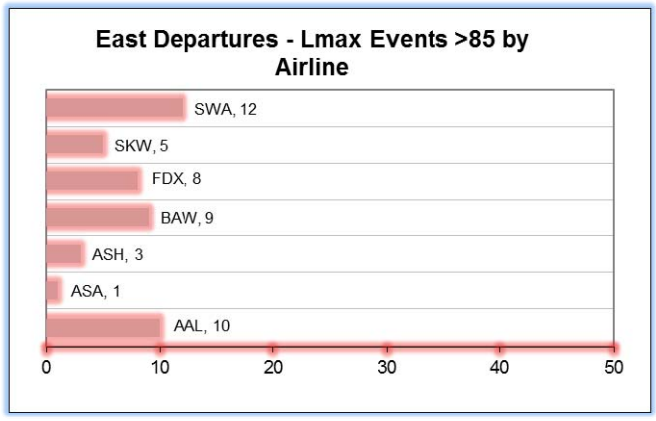


The day-night average noise levels registered at the noise monitoring sites in Tempe were on average equal or higher than the the last quarter of 2016. Particularely appearant was the lower levels registered for the month of October 2016, when airport runway use changed because airport construction and maintenance work kept the north runway closed a whole month.



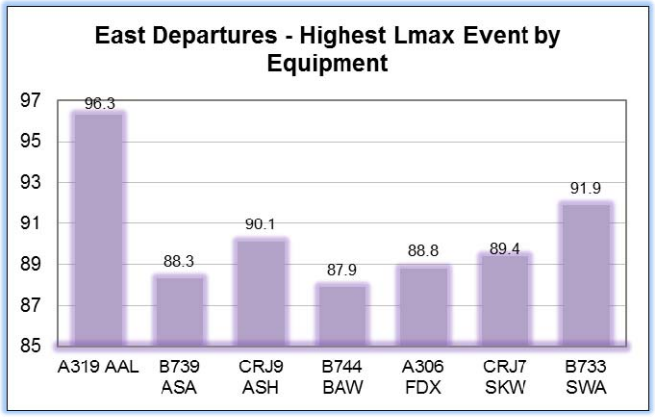
C. Registered Maximum Sound Energy Levels

The number of higher sound energy level events attributed to airline operations varies each month, which influences monthly Ldn average levels. Lmax is the maximum A- weighted sound level, dB (A) registered during a particular sound event. A-weighted means the sound is measured at frequencies that reflect the sensitivity ranges of the human ear.

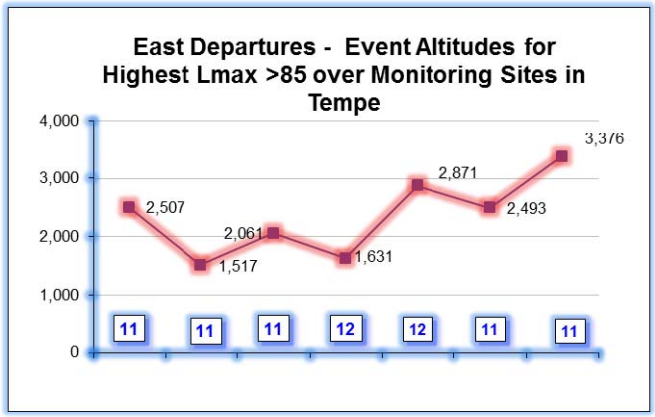


Fewer registered events where aircraft noise reached or exceeded Lmax 85dB occurred the first quarter of 2017 compared to the last quarter of 2016.

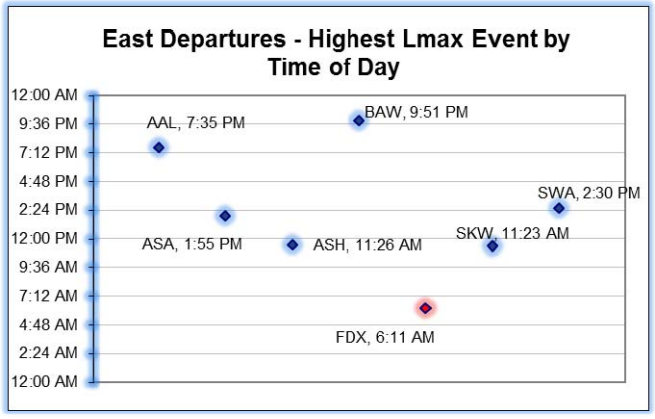
SWA: Southwest Airlines
SKW: Sky West Airlines
FDX: FedEx
BAW: British Airways
ASH: Mesa Airlines
ASA: Alaska Airlines
AAL: American Airlines



The highest event registered during the first quarter reached Lmax 96.3 dB, and was created by an Airbus A319.



An Alska Airlines flight was at a lower altitude than the British Airways B747, when creating a noise events above 85 dB (Lmax). The event was registered at the Tempe Beach Park monitoring site.



Events above 85 dB (Lmax) registered during night-time hours are depicted in red.

Information about the NFTMS and the City of Tempe agreement with the City of Tempe are available at www.tempe.gov/aircraftnoise.