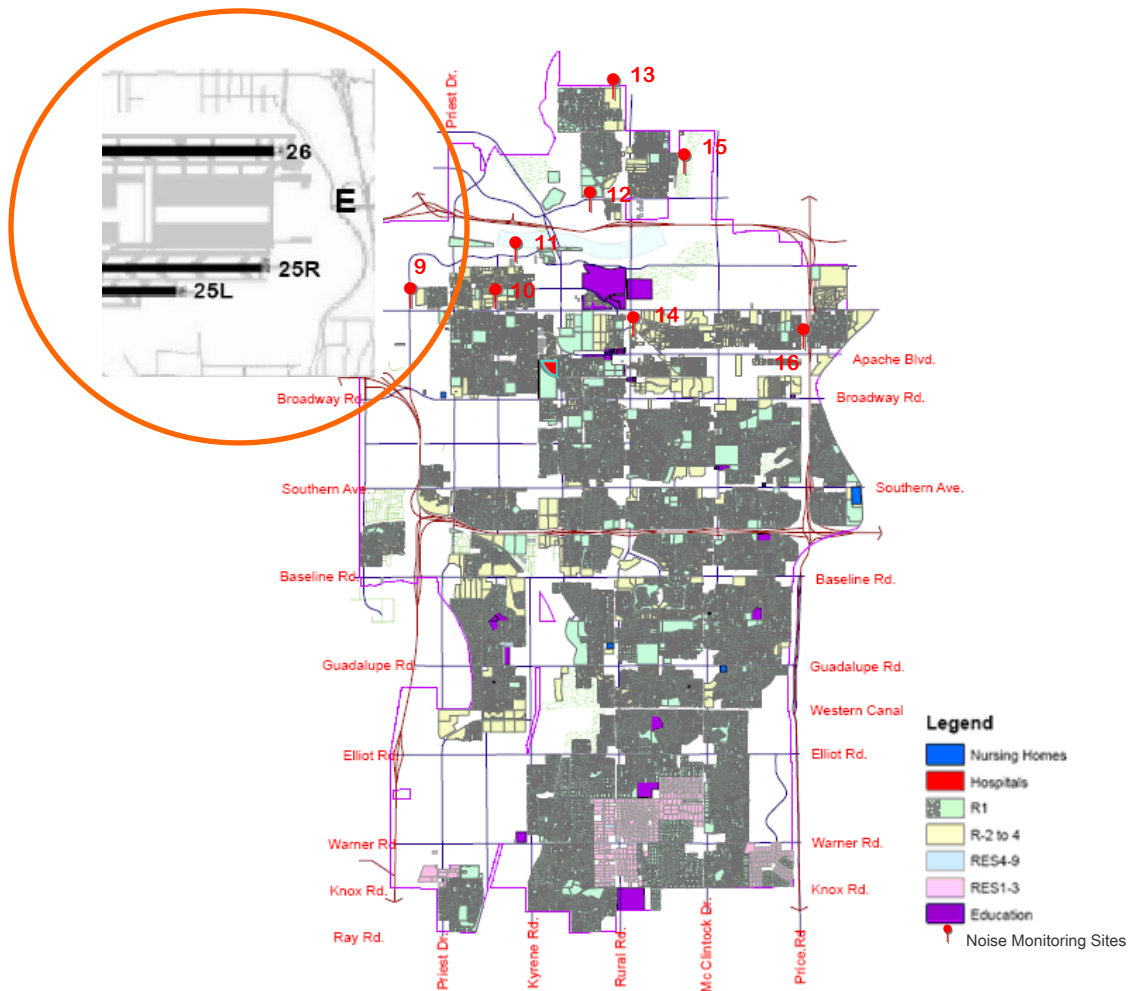

2013 2nd Quarter Noise Monitoring Report

PHX East



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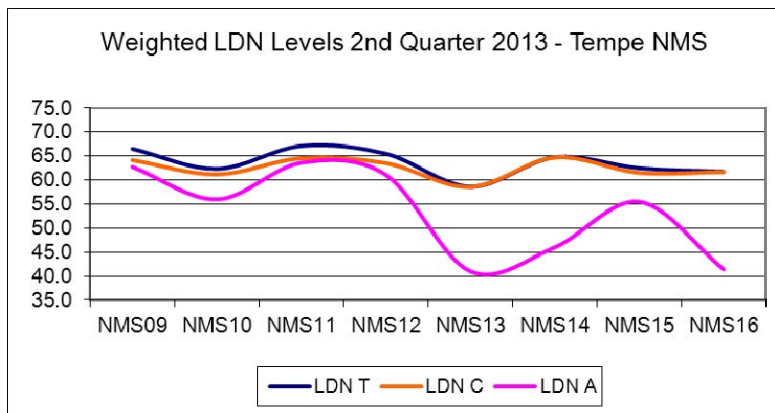
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Aviation Noise Monitoring

The Phoenix Sky Harbor International Airport Noise and Flight Track Monitoring System (NFTMS) has 8 fixed Noise Monitoring Sites (NMS) in Tempe located in neighborhoods around the Town Lake/ Rio Salado area in proximity of the 65 DNL noise exposure contour line for the airport. 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 identify the noise energy contributions attributed to aircraft operations over areas 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 DNL. This is a summary description of noise based on long-term equivalent level (Leq) with a penalty of 10 dB (A) added for nighttime sound occurring between 22.00-07.00 hours. Average sound levels created by aircraft, Ldn A, are a product of detection tools built in to the NFTMS, which separate 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.



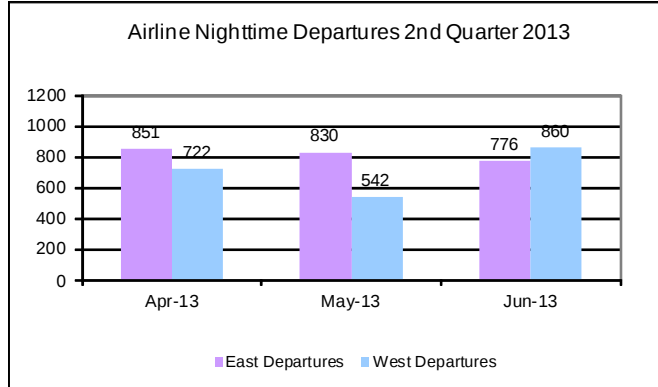
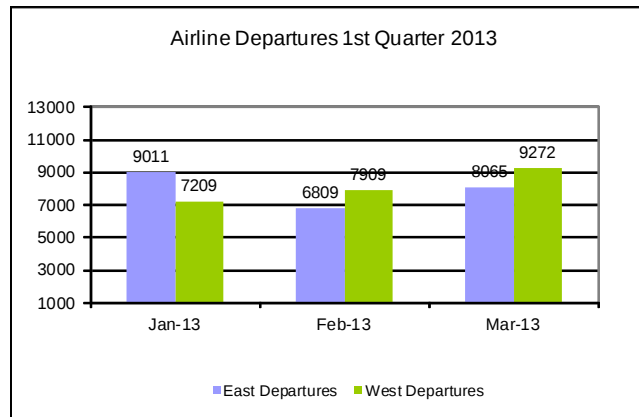
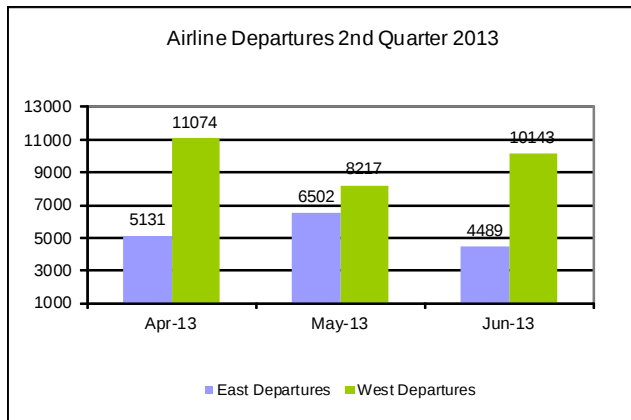
Ldn A decreases with the distance to the airport's runways. The monitored standard deviations are naturally higher for the monitors located at sites in Tempe located outside the downtown area south of the riverbed, where the distances to the aircraft as one of the sources of noise in the local environment are greater.

B. East – West Equalization of Noise Burden

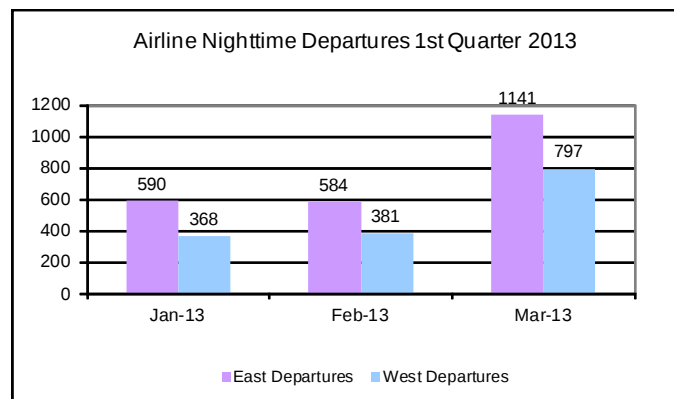
The airport Air Traffic Control Tower is directing large carrier departure traffic with the goal of accomplishing a 50/50 annualized east west split. A procedure for noise mitigation over Tempe delay air carrier turns away from the Salt River to the airspace over the Highway 202/ 101 intersection. There is no similar constraint for departure headings towards the west.

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 has agreed that airport should attempt to distribute the noise burden from departing large commercial aircraft equally east and west on an annual basis.

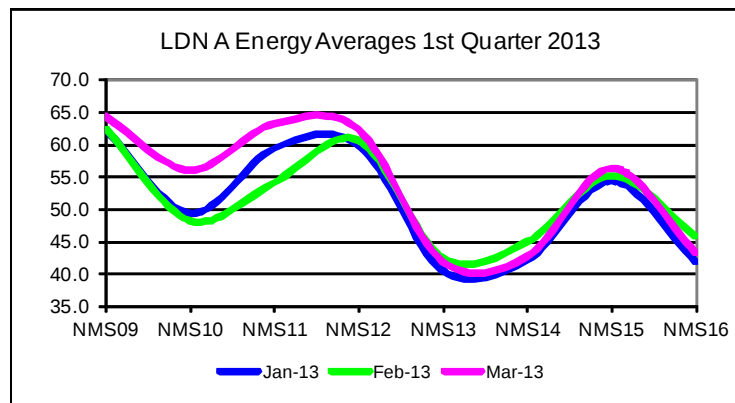
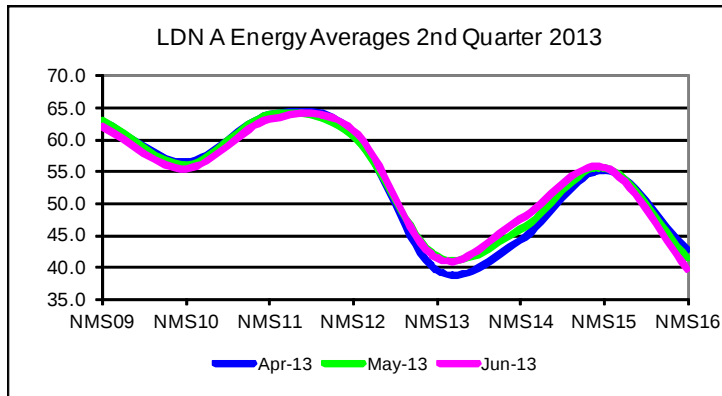
The flow of commercial air carrier and corporate jet departures continued to go in westerly directions the second quarter of 2013. East departures decreased by 19.4% and west departures increased by 9.4% compared to the first quarter of 2013.



Over the quarter as a whole, nighttime departures occurring between 10:00 p.m. to 7:00 a.m. increased towards the east with 3.0% and towards the west by 15.7% compared to the first quarter of 2013.

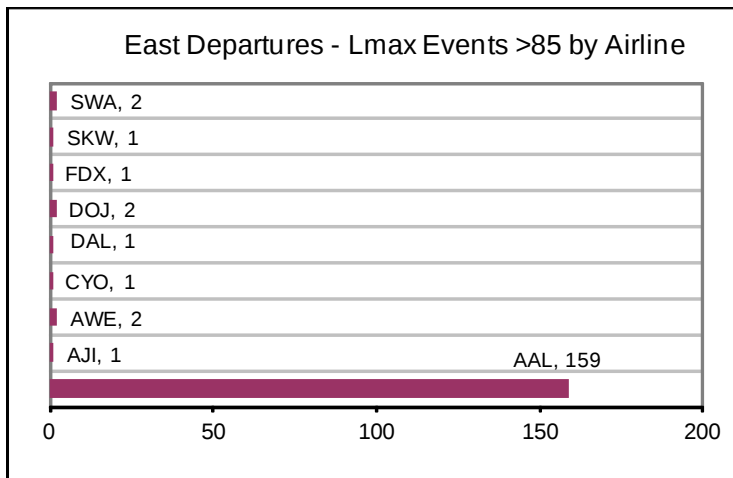


With more departure activity the monitors along the south side of the Tempe Town Lake area showed higher average Ldn A sound energy level during the second quarter.



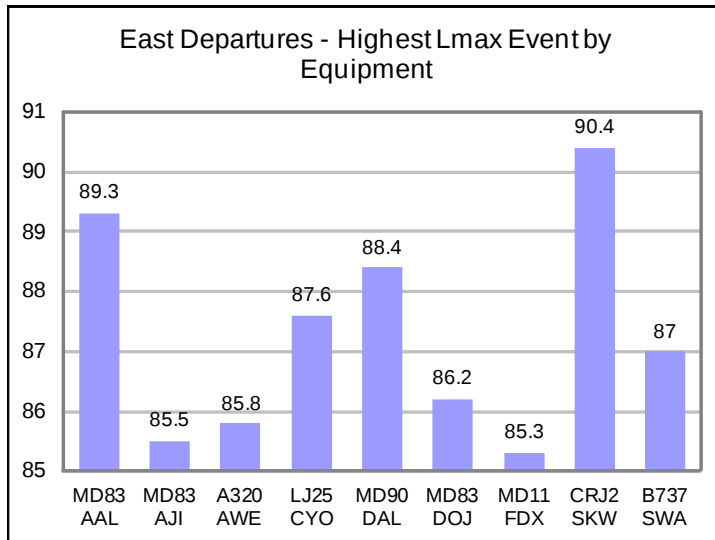
C. Registered Maximum Sound Energy Levels

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.

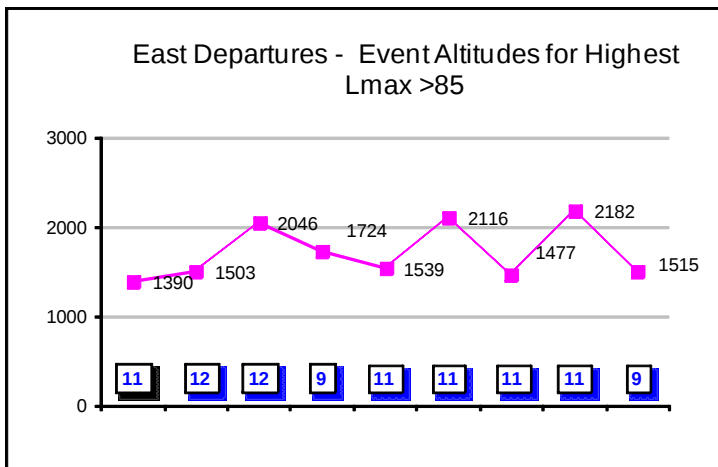


American Airlines has the most registrations of high Lmax levels over Tempe.

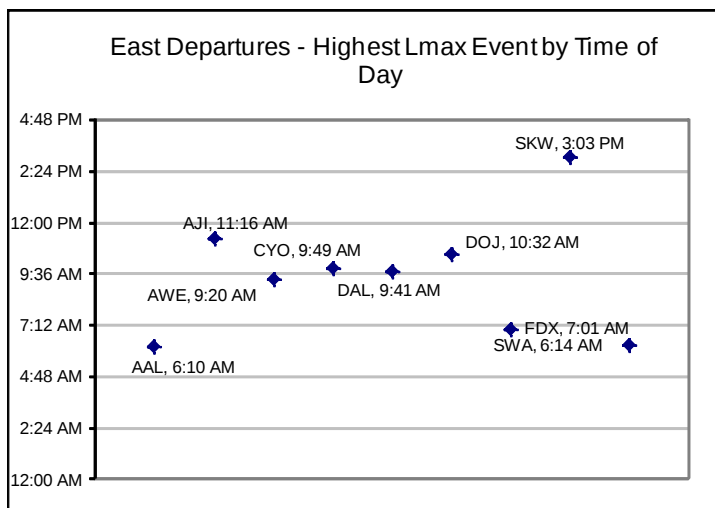
SWA: Southwest
SKW: Sky West
FDX: FedEx
DOJ: Department of Justice
DAL: Delta
CYO: Air Transport
AWE: US Airways
AJI: Ameristar Jet Charter
AAL: American



The highest event registered by a non-military aircraft reached, 90.4 dB A, (Lmax). This was a Sky West Canadair regional jet over Tempe Beach Park in the afternoon of May 11, 2013.



The highest Lmax at the lowest altitude was reached by American Airlines MD83 over the same monitor in downtown Tempe.



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