The Impact of NextGen on Airports and Communities

NextGen is the Federal Aviation Administration’s extensive air traffic management modernization program that utilizes satellite-based navigation and digital communication systems. These improvements, when implemented responsibly, can increase operational efficiencies, remove human risk factors from airspace management and reduce environmental impacts such as emissions and noise.

In 2004 the FAA estimated NextGen implementation costs will exceed $40 billion and take approximately 20 years to complete [1]. The FAA has also estimated that society will enjoy $80 billion in benefits from NextGen (such as travel time savings and reduced emissions) [2].

Today, the FAA NextGen program has not met expectations. Many communities (New York, Boston, Washington DC, San Francisco and Phoenix) have experienced NextGen flightpath changes that have negatively impacted the environment. In each of these cities, the FAA made significant airspace changes (and resulting quality of life changes) without properly notifying the public or allowing the public to provide input.

The Reality of NextGen

Lack of Compliance
• NextGen purports that aircraft will follow the published routes at a compliance rate of 95% [3]. In practice at Phoenix (and many other airports) the overall compliance rate is approximately 50% and in some cases as low as 5% [4]. This lack of compliance results from the FAA approving airlines to deviate from the published route to gain better fuel savings through a more direct path.

False Benefits
• Because aircraft are requesting deviations most of the time, there isn’t a reduction in human risk factor. As the routes being flown don’t match up with the published routes, there is no way to predict where noise or other impacts may occur in the community. In Phoenix, historic districts, parks and other noise sensitive land uses are now routinely overflown by aircraft using NextGen to maximize efficiency without any of the safety or environmental benefits NextGen is supposed to provide communities.

No Public Transparency
• The FAA has systematically excluded the public from providing meaningful input in the airspace redesign process and has prevented the public from influencing changes once new routes are implemented. The FAA is inconsistent in communicating how the public can influence changes. The FAA does not provide the public with usable tools for understanding airspace changes.

[4] City of Phoenix estimate using common flight-tracking software
Phoenix Sky Harbor International Airport – NextGen Case Study

PHX is one of the nation’s busiest airports. For several decades the community worked with the FAA to ensure land use compatibility around the airport. Over that time, nearly $400 million were invested to acquire noise-sensitive land, sound insulate buildings, develop extensive noise abatement procedures and guide new development to compatible areas within the community [5].

In 2013, the FAA decided that NextGen should be fast-tracked in Phoenix and chose to design new procedures without seeking public input. To meet the minimum requirements under the National Environmental Policy Act, the FAA self-evaluated their airspace changes to determine impacts on neighborhoods, historic properties, public parks and open space. The FAA informed local and state agencies that these issues had been studied and there would be no significant impacts. They also estimated that the airspace changes in Phoenix would deliver $3 million annually in fuel savings through more direct aircraft routing [6]. In September 2014, the FAA implemented NextGen airspace changes without formal notification to the community. The new routes condensed and lowered flight corridors over thousands of homes, historic districts, natural preserves and parks.

$400M
Amount invested in land use compatibility at PHX in 30 years prior to NextGen

$90M
Airline fuel savings from NextGen at PHX projected over the next 30 years

In the ten years preceding NextGen changes at Phoenix, the City received less than 200 noise complaints a year. Since NextGen implementation two years ago, the City has received over 65,000 noise complaints.

[5] City of Phoenix estimate: combination of FAA Grants (20%), bonds backed by Passenger Facility Charges (70%), State Grants and local monies (10%)

NextGen could be a powerful tool, but without balanced criteria and objectives for its utilization, communities and their economies will continue to suffer.

The FAA and airlines are using NextGen technologies irresponsibly and permanently damaging the public’s faith and support of the aviation industry. The NextGen implementation process must be improved.

Congress is considering procedural changes to how the FAA engages communities when NextGen airspace redesign is proposed. These changes must be ratified.

Visit www.skyharbor.com/flightpaths

- LEGAL ISSUES
- LEGISLATIVE UPDATES
- COMMUNITY TOOLS
- NEWS STORIES
- TECHNICAL INFORMATION
- CASE STUDY CITIES

Contact

Jordan Feld, Deputy Aviation Director
jordan.feld@phoenix.gov
602.273.4072

One of many neighborhood signs posted by suffering residents throughout Phoenix

PHX BTS BYR City of Phoenix Aviation Department