

What's All The Noise About Airport Noise

FAA Noise Overview and Research

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Federal Aviation
Administration



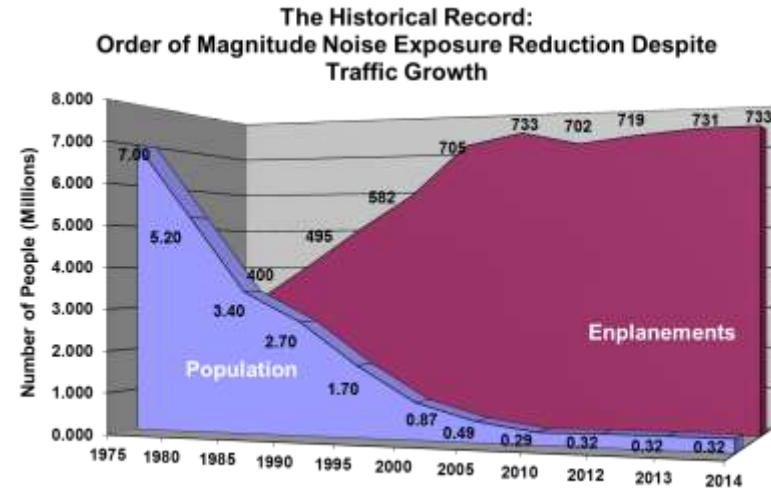
Important Drivers

Even though the number of people in the U.S. exposed to significant aircraft noise since 1975 has dropped by 95 percent, complaints, opposition and challenges regarding aviation noise have not

- **Noise Goals**

- Reduce U.S. population exposure to significant aircraft noise around airports*
 - By 2018, U.S. population exposure to airport noise will be less than 300,000 persons
- Community noise concerns are not a significant constraint on growth

* Significant noise is defined as being exposed to day-night average sound level (DNL) 65 decibels or greater

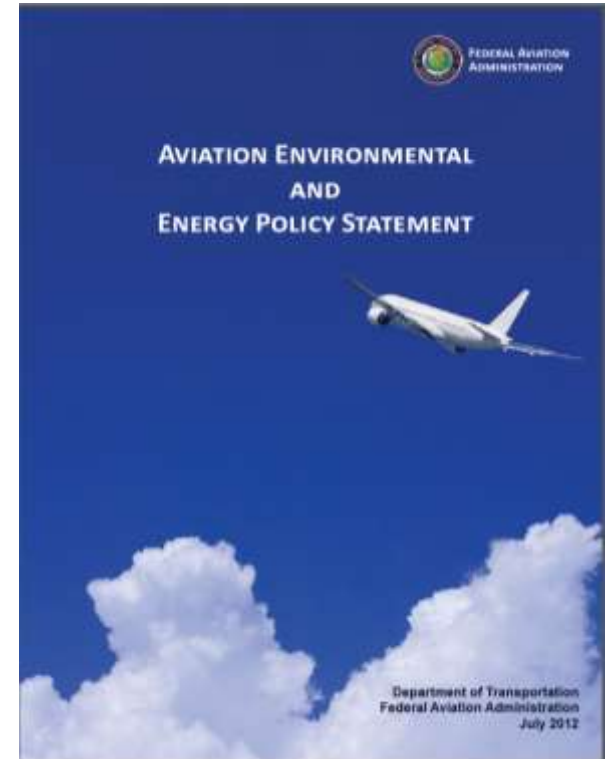


FAA Environment & Energy Strategy

Environmental protection that allows aviation growth

NextGen Five-Pillar Environmental Approach

- P1: Improved Scientific Knowledge and Integrated Modeling
- P2: New Aircraft Technologies (Continuous Lower Energy, Emissions and Noise (CLEEN))
- P3: Sustainable Alternative Aviation Fuels
- P4: Air Traffic Management Modernization and Operational Improvements
- P5: Policies, Environmental Standards, and Market Based Measures



Issue of Significance Noise Levels

- Nation-wide survey to update the scientific evidence of the relationship between aircraft noise exposure and its effects on communities around airports
- National survey will be completed at 20 airports, which represent all airports in the nation based on statistical approach
- The research will create a dose-response curve (DNL vs Annoyance)
 - FAA will then review the dose-response curve and determine any need for policy or guidance
- Survey will begin in 2016 and results should be completed towards the end of 2017



Noise Challenges of New Procedures

- With the introduction of new technologies such as PBN and RNAV, there has been many airports experiencing new procedures.
- These procedures may be a challenge with respect to aviation noise because new areas around airports may be experiencing noise and these technologies tend to lessen the dispersion of the flight tracks.
- Successful implementation needs to include involvement from the airport proprietor, the FAA, industry, and the community.
- FAA is exploring multiple options regarding stakeholder involvement. In addition, FAA is also exploring metrics used to disclose aviation noise with respect to PBN and RNAV.



Helicopter Noise Concerns

- Multiple areas within the U.S. have voiced concerns about noise from helicopters
- In July 2014, FAA adopted a Stage 3 noise standard for helicopters, bringing FAA in-line with international standards
- The LA Helicopter Initiative was formed as a voluntary response to legislation regarding helicopters in the LA Basin Area
- FAA has initiated or is taking part in multiple research projects to better understand helicopter annoyance
 - AEE and ACRP* research examining:
 - Modeling aspects of helicopter noise
 - Annoyance factors of helicopter noise

Summary

- Aviation Noise is getting a lot of attention
- FAA has an integrated program of science research, fostering technology improvements, and developing appropriate policy to seek to manage aviation noise in the NAS.
- Stakeholder involvement is key to FAA successfully balancing NextGen needs with community response

