



## ABCx2, LLC Comments Concerning Shifting Noise

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### Overview

To our knowledge, there are no Federal regulations, guidelines, or policies that categorically prohibit changes to the flight procedures near airports if they result in a shift in the aircraft noise exposure (as measured in terms of the associated noise contours) from one location to another. In fact, the National Environmental Policy Act (NEPA) does not preclude increasing noise exposure. It simply states that noise exposure must be rigorously considered when determining the course of action.

While the decision regarding the best option to implement will incorporate a wide range of considerations, our analysis indicates that changes in flight procedures should be deemed acceptable if they result in a decrease in the total number of people within the DNL 65 dBA and DNL 75 DBA contours; no increase greater than 1.5 dBA for any individual; and no disproportionate impact on low-income populations, minority populations, or Indian tribes. These standards are consistent with both FAR Part 150 and NEPA.

### Required Considerations

There are two critical issues that must be considered before changes to the flight procedures near airports may be deemed acceptable. Note that these are necessary but not sufficient considerations when exploring changes to flight procedures, i.e., they merely represent factors and thresholds for determining when a factor warrants additional scrutiny or should be a basis for rejecting an option under consideration.

#### Threshold of significance for noise impacts under the National Environmental Policy Act

In 1976, the Secretary of Transportation and the Administrator of the FAA issued the Aviation Noise Abatement Policy (ANAP), the first comprehensive aviation noise abatement policy in the U.S. In defining the "aircraft noise problem," this policy characterized aircraft noise exposure of DNL 65 to 75 dBA in residential areas as "significant" and DNL 75 dBA or more as "severe," and related these noise exposure levels to previously used interpretations of expected community actions based on case studies.

The ANAP also identified DNL 65 dBA as the noise exposure level above which aircraft noise "create[s] a significant annoyance for most residents," but it did not provide any additional information supporting this characterization. Since the issuance of the ANAP, the FAA has used the DNL 65 dBA threshold as the basis for its "noise goal" of reducing the number of people exposed to "significant aircraft noise" around U.S. airports.

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The National Environmental Policy Act (NEPA) requires federal agencies to consider the impacts of their proposed actions on the environment. If a proposed federal action would significantly affect the environment, then NEPA requires the agency to prepare an Environmental Impact Statement (EIS) [1]. In its policies and procedures implementing NEPA [2,3], the FAA has exercised its discretion to specify DNL 65 dBA as the "significance threshold" for the noise effects of its actions. FAA further defines a "significant impact" due to noise as any location exposed to noise greater than DNL 65 dBA and experiencing a 1.5 dBA or greater increase in noise due to an action [4].

The FAA's adoption of DNL 65 dBA in the NEPA significance threshold was based on the "significance" of aviation noise exposure at or above that level, as described in "general guidelines for noise compatibility" and reflected in the Part 150 land use compatibility guidelines. Accordingly, the NEPA significance threshold applies only in noise sensitive areas (e.g., residential, schools, health care facilities) where the Part 150 guidelines are relevant to the land use.

### Environmental Justice

The Council on Environmental Quality (CEQ) guidance [5] for consideration of environment justice states that a reasonable range of alternatives be identified and developed, and that all reasonable alternatives, including a "no action" alternative, must be analyzed rigorously and objectively to determine whether impacts on low-income populations, minority populations, or Indian tribes may lead to the identification of disproportionately high and adverse human health or environmental effects that are significant and that otherwise would be overlooked [6]

The guidance does not change the prevailing legal thresholds and statutory interpretations under NEPA and existing case law. For example, for an EIS to be required, there must be a sufficient impact on the physical or natural environment to be "significant" within the meaning of NEPA. That said, the identification of such an effect should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population.

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## Analysis and Conclusions

Given the considerations described above, and consistent with federal policy and practice, we conclude that changes in flight procedures should not raise undue concern if:

1. No individual experiences an increase in noise exposure greater than 1.5 dBA;
2. There is no increase in the number of persons exposed to “significant” levels of aircraft noise exposure (as defined by FAA and NEPA), i.e., there is no increase in the number of people within the DNL 65 dBA contour;
3. There is no increase in the number of persons severely impacted by aircraft noise (as defined by both FAA and NEPA), i.e., there is no increase in the number of people within the DNL 75 dBA contour;
4. There are no impacts on low-income populations, minority populations, or Indian tribes that are disproportionately high.

Thus, changes in flight procedures should be deemed acceptable if they result in no increase in the total number of people within the DNL 65 dBA and DNL 75 DBA contours; does not increase the noise impact for any individual by more than 1.5 dBA; does not disproportionately impact on low-income populations, minority populations, or Indian tribes. It stands to reason that changes in flight procedures would be even more acceptable if they provide a net decrease in the total number of people within the DNL 65 dBA and DNL 75 DBA contours.

## References

- [1] 40 C.F.R. § 1502 – Environmental Impact Statement.  
<https://www.law.cornell.edu/cfr/text/40/part-1502>
- [2] FAA Policies and Procedures for Considering Environmental Impacts  
[https://www.faa.gov/documentLibrary/media/Order/FAA\\_Order\\_1050\\_1F.pdf](https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf)
- [3] FAA Airport Noise and Compatibility Planning <https://www.law.cornell.edu/cfr/text/14/part-150>
- [4] FAA History of Noise.  
[https://www.faa.gov/regulations\\_policies/policy\\_guidance/noise/history/](https://www.faa.gov/regulations_policies/policy_guidance/noise/history/)
- [5] Final Guidance for Consideration of Environmental Justice in Clean Air Act 309 Reviews US Environmental Protection Agency/Office of Federal Activities (2252A) July 1999
- [6] Title VI of the Civil Rights Act of 1964, U.S.C. 2000d et seq., and agency implementing regulations, prohibit recipients of federal financial assistance from taking actions that discriminate on the basis of race, color, or national origin... If an agency is aware that a recipient of federal funds may be taking action that is causing a racially discriminatory impact, the agency should consider using Title VI as a means to prevent or eliminate that discrimination.

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