Request for Comments on the Federal Aviation Administration's Review of the Civil Aviation Noise Policy

LAX/Community Noise Roundtable Discussion – July 2023

FAA extends comment period to end September 29, 2023



FAA Review of Noise Policy

- 1. Research on the effects of exposure to aviation noise, including:
 - a) The correlation of exposure to aviation noise with adverse health impacts,
 - b) Economic impacts, and
 - c) Annoyance.
- 2. Its standard noise metric (*DNL/CNEL*) that describes exposure to aircraft noise, and potential revisions to the choice of standard metric(s).
- 3. Its definition of the threshold of significant noise exposure for actions analyzed under the National Environmental Policy Act of 1969 to determine if that threshold remains appropriate or requires revision. *Significant impact is currently defined as a 1.5 dB increase at noise sensitive receptors within the 65 DNL/CNEL.*
- 4. The level of aircraft noise exposure below which land uses are considered "normally compatible" with airport operations. *The current level is 65 DNL/CNEL*.

https://www.regulations.gov/document/FAA-2023-0855-0001



Potentially Applicable Roundtable Work Program Elements

- Address Low Aircraft Altitudes and Concentrated Flight Paths on the North Downwind Arrival Flight Path
- Reduce the Use of the Extended Downwind Leg of the North Downwind Arrival Flight Path
- Modify LADYJ Departure Route
- Address High-Pitched Noise from A320 Family of Aircraft
- Evaluate the 60 dB CNEL Noise Contour
- Encourage Use of Single-Event Noise Metrics



FAA Categories of Questions in Federal Register Notice

- 1. Vehicle Type (e.g., fixed wing, rotor wing, supersonic, drones)
- 2. Operations (e.g., takeoff, landing, overflight/enroute)

3. DNL

- 4. Averaging (annual-average day)
- 5. Decision-making Noise Metrics
- 6. Communication
- 7. NEPA/Land Use Noise Thresholds
- 8. Noise Thresholds Using Single-Event or Operational Metrics
- 9. Noise Thresholds for Low-Frequency Noise Events
- **10**. Miscellaneous (other issues FAA should consider)
- 11. Literature Review



1. Vehicle Type

What types or elements of current or future air vehicle activity (e.g., unmanned aircraft systems (also known as UAS or drones), advanced air mobility, rotorcraft, subsonic fixed wing, supersonic, or commercial space) should the policy describe and disclose? How should this information be described using noise metrics? Should the FAA use this information to make decisions or for public disclosure only?



2. Operations of Air Vehicles

- a. What elements of aircraft operations (e.g., en-route, takeoff, landing) should the noise metric evaluate and disclose? Should the FAA use this information to make decisions or disclose to the public noise impacts?
- b. What interests or concerns do communities in the vicinity of airports have? How can these concerns be addressed using noise metrics? What noise metrics would address these concerns?
- c. What interests or concerns do overflight communities (28) have? How can these concerns be addressed using noise metrics? What noise metrics would address these concerns?
- d. What interests or concerns do communities in the vicinity of commercial space transportation operations have? How can these concerns be addressed using noise metrics? What noise metrics would address these concerns?
- e. What interests or concerns do communities in the vicinity of UAS (drone) package delivery or other newly emerging technology operations have? How can these concerns be addressed using noise metrics? What noise metrics would address these concerns?



3. DNL

4. Averaging

What views or comments do you have about the FAA's core decision-making metric, DNL? How would these views regarding DNL be resolved if the FAA employed another noise metric (either in addition to, or to replace DNL) or if the FAA calculated DNL differently?

DNL provides a cumulative description of the noise events expected to occur over the course of an entire year averaged into a representative day, described as an Average Annual Day (AAD)

- a. Do you believe an AAD is an appropriate way to describe noise impacts? Please explain why or why not.
- b. If not, what alternative averaging schemes to AAD should be considered and why? What information would the use of an alternative averaging scheme capture that AAD does not.



5. Decisionmaking Noise Metrics The FAA currently uses DNL as its primary decision-making metric for actions subject to NEPA and airport noise compatibility planning studies prepared pursuant to 14 CFR part 150.

- a. Should different noise metrics be used in different circumstances for decision making?
- b. If the answer to Question 5.a. is "yes," please identify: the metric, the information it provides that DNL does not, and explain when and how it should be employed by the FAA in its system. Should this metric be used when the FAA is making decisions that affect noise in these settings? Should this metric be used alone or in combination with another metric?
- c. If the metric should be used in combination with another metric, please describe how they should be used together for decision making?
- d. If the answer to Question 5.a is "no," should DNL remain the core decisionmaking metric or should another metric be substituted in all circumstances?
- e. How would the use of the metrics that you recommend support better agency decision making? Please explain and illustrate with specific examples how the use of the recommended metric(s) would benefit agency decision making?



6. Communication

- a. Please identify whether and how the FAA can improve communication regarding changes in noise exposure.
- b. Should the FAA consider revisions to its policy on the use of supplemental noise metrics in the FAA's NEPA procedures? Please explain how this policy should be modified to improve FAA communication of noise changes when the FAA is making decisions that affect noise.
- c. What information about the change in noise resulting from civil aviation operations should the noise metric communicate to the public?
- d. Please explain how the public will benefit if the FAA implements your proposal in response to Questions 6.a and 6.b.



7. NEPA and Land Use Noise Thresholds

- a. How should the FAA consider information, such as the Schultz Curve and Neighborhood Environmental Survey findings, when deciding whether to retain or modify the FAA noise thresholds established using the DNL metric or to establish new FAA noise thresholds using other cumulative noise metrics?
- b. Should the FAA consider other or additional information when deciding whether to retain or modify the FAA noise thresholds that were established using the DNL metric or to establish new FAA noise thresholds using other cumulative noise metrics?
- c. How should research findings on auditory or non-auditory effects (e.g., speech interference, sleep disturbance, cardiovascular health effects) of noise exposure caused by civil aircraft and vehicles be considered by the FAA when it decides whether to retain or modify the FAA noise thresholds that were established using the DNL metric? How should the FAA consider this same research when deciding whether to establish new FAA noise thresholds using other cumulative noise metrics?
- d. What amount of epidemiological evidence is sufficient to provide the FAA with a sound basis for establishing or modifying the FAA noise thresholds either using the DNL metric or another cumulative noise metric?
- e. Should the FAA consider using factors other than annoyance to establish FAA noise thresholds using the DNL metric or other cumulative noise metrics? What revisions to existing FAA noise thresholds or new noise thresholds do you recommend be established and why?



8. Noise Thresholds Using Single-Event or Operational Metrics

9. Noise Thresholds for Low-Frequency Noise Events As the FAA learned from the results of the NES, people are bothered by individual aircraft noise events, but their sense of annoyance increases with the number of those noise events. Should the FAA consider employing new FAA noise thresholds using single-event or operational metrics? If the answer is "yes," which metrics should be used to establish the FAA noise thresholds? What should be the relevant noise exposure level for the new noise thresholds you propose?

Should FAA establish noise thresholds for low-frequency noise events? If the answer is "yes," which metrics should be used to establish the noise thresholds? What should be the relevant noise exposure level for the new noise thresholds you propose?



10. Miscellaneous

11. Literature Review

What other issues or topics should the FAA consider in this review regarding noise metrics, the method of calculating them, the establishment of noise thresholds, or FAA's method of communicating the change in noise exposure?

Please identify any studies or data regarding civil aviation noise that you believe the FAA should evaluate. Please explain the relevance and significance of the study or evidence and how it should inform FAA decisions regarding the policy.





- Facilitator to incorporate the recommendations provided today into those provided by the Chair
- Chair and Facilitator to complete the draft Roundtable letter
- Roundtable to approve letter at the next meeting
- Roundtable Secretary to submit the approved letter on or before September 29, 2023 to the Federal eRulemaking Portal at <u>https://www.regulations.gov</u>

