

An aerial photograph of a city skyline. In the foreground, there are several tall skyscrapers. To the right, a residential area with many houses is visible, surrounded by trees. In the sky, a helicopter is flying on the left, and a large commercial airplane is flying on the right. A white banner with the text "NOISE POLICY REVIEW" is overlaid in the center.

NOISE POLICY REVIEW



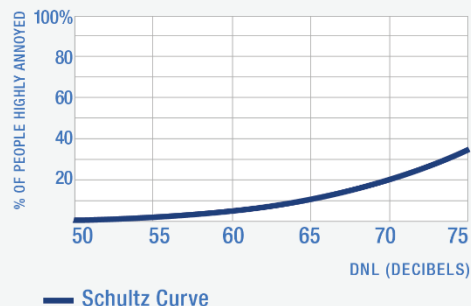
NEIGHBORHOOD ENVIRONMENTAL SURVEY RESULTS



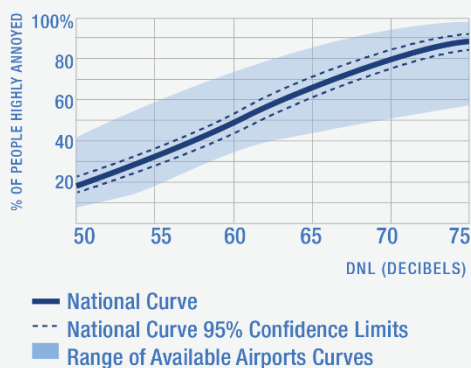
The Neighborhood Environmental Survey results support an observed increase in annoyance from aircraft noise:

- The results show a substantial increase in annoyance for the population living in the vicinity of airports
- The increase in annoyance is generally consistent across various levels of noise exposure

SCHULTZ CURVE



NATIONAL CURVE



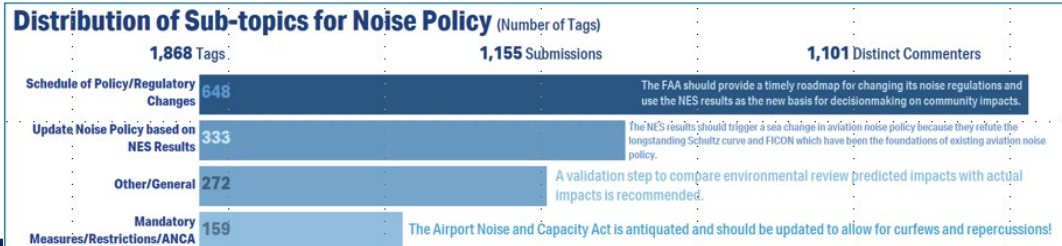
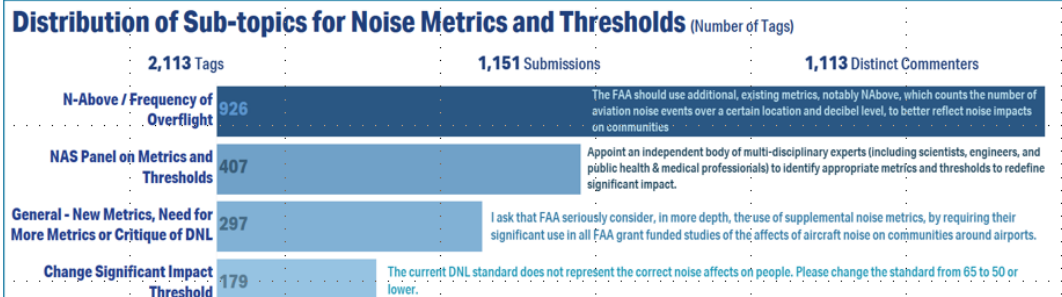
The new Survey was designed to use a consistent approach across each airport community surveyed. This has allowed for an enhanced ability to provide additional statistical information about the new results, such as the 95% Confidence Limits and range of results from each of the 20 airports, as shown on the plot above. This was not possible with the older Schultz Curve.



FAA NOISE RESEARCH PORTFOLIO NOTICE



- Announced results of NES, identified other research efforts, and sought feedback on future direction
- We analyzed 4,000+ comments received on our noise research Federal Register Notice.
- Comments related to:
 - Additional areas of noise research;
 - Feedback on noise metrics and thresholds; and
 - Input on noise policy.
- Additional information regarding public comments on NES notice can be accessed via FAA REDAC site.



NOISE POLICY REVIEW



- In late 2021, the FAA initiated a review of our noise policy as part of our ongoing commitment to address aircraft noise. This effort will build on our work to advance the scientific understanding of noise impacts as well as the development of analytical tools and technologies.
- It will consider new evidence from the agency's noise research program, including from the Neighborhood Environmental Survey, and the distribution of environmental risks, tradeoffs, or externalities across communities.
- Goals
 - Identify and implement well-reasoned, scientifically-grounded noise policy updates that incorporate FAA's updated understanding of aviation noise and human response and the development of analytical tools and technologies to better manage and reduce the environmental impacts of aviation
 - Conduct an inclusive, transparent, and participatory process that prioritizes input from substantially affected stakeholders, including local communities



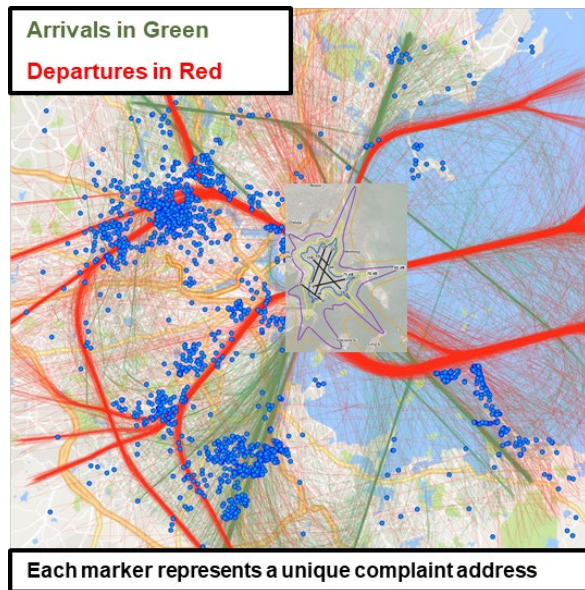
SCOPE OF NOISE POLICY REVIEW



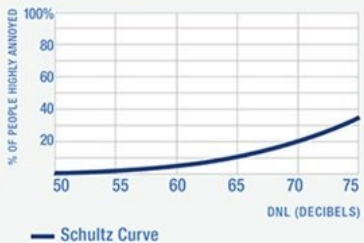
- **Focus on foundational elements of FAA's noise policy, including:**
 - **Metrics:** hard look at DNL, consideration of other metrics (e.g., Number Above), and how they are calculated
 - **Noise Thresholds:** Consider NES findings and other research, investigate lowering below DNL 65 dBA the definition of the level of significant noise exposure for actions subject to environmental review requirements and modifying the definitions of the levels of noise exposure that are deemed to be “normally compatible” with airport operations, as set forth in Table 1 of Appendix A to Part 150.
 - For new metrics, consider whether it is appropriate to establish a noise threshold and its potential value



THE NOISE PROBLEM: THEN AND NOW



SCHULTZ CURVE



NATIONAL CURVE



EQUIVALENT OPERATIONS FOR DNL = 65

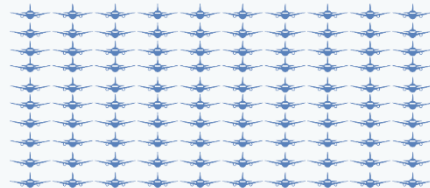
1 EVENT/DAY @ SEL 114.4 dBA/EVENT = DNL 65



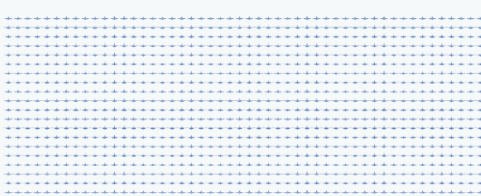
10 EVENTS/DAY @ SEL 104.4 dBA/EVENT = DNL 65



100 EVENTS/DAY @ SEL 94.4 dBA/EVENT = DNL 65



1000 EVENTS/DAY @ SEL 84.4 dBA/EVENT = DNL 65



Federal Aviation
Administration

UNPACKING THE POLICY OPTIONS



Should FAA transition away from a noise policy with a single metric comprising the system in favor of an expanded system of metrics?

An expanded system of metrics may consider:

Vehicle Types	Analysis Purpose	Type of Analysis
Aircraft	Environmental Review	Airfield Changes
Helicopters	Land Use Planning	Airspace Changes
Rockets	Eligibility Requirements	New Entrants

Cumulative	Operational/ Single Event	Other
Day-Night Average Sound Level (DNL)	Number Above an L_{\max} (NA)	FAA seeking feedback None identified at this time
Community Noise Equivalent Level (CNEL)	Time Above an L_{\max} (TA)	
School/Work Hour Equivalent Sound Level (L_{eq})	L_{\max}	



UNPACKING POLICY OPTIONS



- 1) Revisit the elements of the Day-Night Average Sound Level (DNL) by exploring the methods used for calculating it.
- 2) Examine existing noise thresholds and consider whether to:
 - Retain the current thresholds, with no change.
 - Set noise thresholds for any, some, or all the noise metrics in the system.
 - Change the metric and level used to define the threshold of significance and reportable impacts.
 - Revise the metric and level used to define compatible land use and noise sensitive uses.
- 3) Consider reviewing the noise policy at least once every 3-5 years to determine whether updates or revisions are necessary to respond to new information.



KEY TAKEAWAYS REGARDING FAA POLICYMAKING



Potential Outcomes of Policy Changes

- Possible updates to regulations, orders, guidance, etc.
- Change level of review needed for a given action
- Improve FAA's communication about noise impacts to public

Policy Changes Will Not Affect . . .

- Current/existing aviation noise exposure
- Where/when aircraft currently fly
- Completed or ongoing environmental reviews



FEDERAL REGISTER NOTICE (FRN) AND FRAMING PAPER



- Published on May 1, 2023, for a 90-day comment period ending July 31, 2023
 - On July 11, FAA extended the comment period to September 29, 2023
 - Includes a background on FAA Civil Aircraft Noise Policy and outlines next steps
 - Requests input on 11 questions
- Links to a companion framing paper, *“The Foundational Elements of the Federal Aviation Administration Civil Aviation Noise Policy: The Noise Measurement System, its Component Noise Metrics, and Noise Thresholds”*
 - Intended to be read in parallel with FRN
 - Provides additional context and discussion around questions posed in the FRN to help stakeholders better understand the questions and feedback sought
- Submit comments to Docket FAA-2023-0855 at regulations.gov or contact FAA with questions



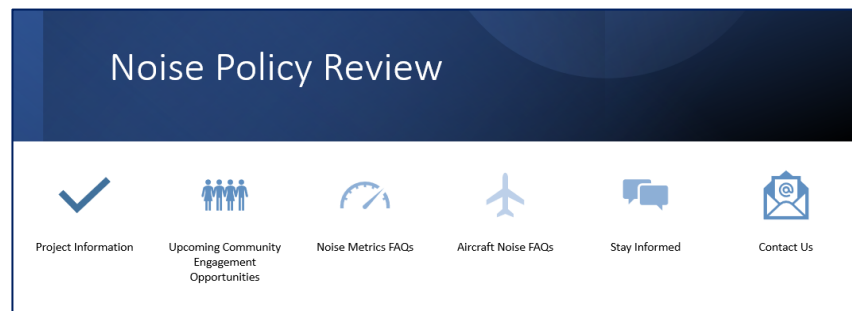
ENGAGEMENT



FAA NOISE POLICY REVIEW LANDING PAGE:



- FAA has published a **project landing page** <https://www.faa.gov/noisepolicyreview>
 - Spanish language webpage and materials are available [here](#). Mandarin Chinese translation coming soon!
- Will be revised as the review progresses.
- Content will include:
 - Noise Policy Review information and status;
 - [Framing Paper](#)
 - Resources (education materials, [videos](#), FAQs, primary sources, etc.);
 - Links to watch virtual webinars (or read transcripts); and
 - Link to [subscribe](#) to FAA project updates.



NOISE POLICY REVIEW WEBINARS



Date	Time	How to Attend
Tuesday, May 16th, 2023	1:00 pm - 3:00 pm ET	<ul style="list-style-type: none">• YouTube Live Stream• PDF transcript of webinar• Presentation Slides
Thursday, May 18th, 2023	6:00 pm - 8:00 pm ET	<ul style="list-style-type: none">• YouTube Live Stream• PDF transcript of webinar• Presentation Slides
Tuesday, May 23rd, 2023	9:00 pm - 11:00 pm ET	<ul style="list-style-type: none">• YouTube Live Stream• PDF transcript of webinar• Presentation Slides
Thursday, May 25th, 2023	3:00 pm - 6:00 pm ET	<ul style="list-style-type: none">• YouTube Live Stream• PDF transcript of webinar• Presentation Slides



FURTHER INFORMATION



Webpage: www.faa.gov/noisepolicyreview

Email: NoisePolicyReview@faa.gov

Phone: 202-269-6999



LIST OF ACRONYMS



- AAD - Average Annual Day
- CNEL – Community Noise Equivalent Level
- dB – Decibel
- dBA – A-weighted decibel
- DNL – Day-Night Average Sound Level
- FRN – Federal Register Notice
- GA – General Aviation
- L_{eq} – Equivalent Sound Level
- L_{max} – Maximum Sound Level
- NA – Number Above
- NAS – National Airspace System
- NEPA – National Environmental Policy Act
- NES – Neighborhood Environmental Survey
- NPR – Noise Policy Review
- SAF – Sustainable Aviation Fuels
- SEL – Sound Exposure Level
- TA – Time Above

