## Federal Aircraft Noise Regulations: Part 150 Overview

Presentation to Sea-Tac Stakeholder Advisory Round Table

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# 14 CFR Part 150, Airport Noise Compatibility Planning

- FAA created in response to Aviation Safety and Noise Abatement Act of 1979 ("ASNA")
- Prescribes standards and systems for:
  - single system for measuring noise
  - estimating cumulative noise exposure using computer modeling
  - describing noise exposure
  - coordinating with local land use agencies
  - documenting the analytical process
  - submitting the documentation to FAA
  - FAA and public review processes
  - FAA approval or disapproval process

#### Generalized Part 150 Study Process





#### Part 150 Process – Roles and Responsibilities

Entity	Responsibilities
The Airport	<ul> <li>✓ Directs study</li> <li>✓ Submits NEM and NCP documentation to FAA</li> </ul>
FAA	<ul> <li>✓ Approves project scope</li> <li>✓ Provides input to, reviews and assists with analysis of noise mitigation measures</li> <li>✓ "Accepts" documentation and "approves" NCP measures pursuant to Part 150 regulations</li> <li>✓ Responsible for evaluation, approval, and implementation of noise abatement flight procedures</li> <li>✓ Assists in funding eligible measures</li> </ul>
Local governments	<ul> <li>Provide input to recommended land use measures</li> <li>Implement and enforce land use measures to maintain and improve noise compatibility</li> </ul>
Other stakeholders	<ul> <li>Monitor study process, provide input</li> </ul>

#### Part 150 Noise Exposure Map Overview

- FAA "accepts" NEM as compliant with Part 150 regulation
- NEM must include detailed description of
  - Airport layout, aircraft operations, and other inputs to noise model
  - Aircraft noise exposure in terms of Day-Night Average Sound Level (DNL)
  - Land uses within DNL 65+ decibel (dB) contours
  - Noise / land use compatibility statistics within DNL 65+ dB contours
- NEM must address two calendar years
  - Year of submission
  - Forecast at least five years from year of submission
  - FAA reviews and approves forecasts for consistency with Terminal Area Forecast (TAF)
- Guidance in FAA Advisory Circular AC 150/5020-1 Noise Control and Compatibility Planning for Airports







#### Part 150 Noise Compatibility Program Overview

- NCP must address three major categories of proposed actions:
  - 1. Noise abatement measures
    - Must demonstrate a noise reduction benefit within DNL 65 dB
    - Examples include: aircraft operational, airport layout, flight track and runway use, etc.
    - FAA will review for safety and efficiency
  - 2. Land use (noise mitigation) measures
    - To address existing noncompatible uses
    - To prevent introduction of new noncompatible uses
  - 3. Programmatic measures
    - NCP implementation
    - Noise abatement procedures compliance program
    - NEM and NCP review and update processes
- FAA "accepts" NCP as compliant with Part 150 standards
- FAA reviews and approves (or disapproves) each recommended measure individually
  - Record of Approval (ROA);
  - FAA approval of Part 150 measures in an NCP does not constitute final approval for implementation; still subject to NEPA, SMS, available funding, etc.

#### Part 150 Public Outreach

- FAA requirements:
  - ✓ Coordinate with jurisdictions responsible for land use (zoning) within the NEM's DNL 65 dB contour
  - ✓ Make the NEM available for public review and comment prior to submitting to the FAA
  - ✓ Provide an opportunity for a public hearing on the NCP prior to submitting to the FAA





#### Provisions for Update

- Generally, NEMs should be updated when there are substantial new noncompatible uses or a reduction in noise over non-compatible uses.
- Generally, NCPs are updated when there are changes in the nature of aircraft noise surrounding the Airport that might affect NCP measures (e.g., new runways, substantial changes in operations or aircraft fleet mix)
- NEMs can be updated independently of NCPs and used to determine if NCP update is warranted.

### Discussion

