

# Part 150 Noise and Land Use Compatibility Study Update

Highline Forum  
May 22, 2024



# Part 150 Study Update Topics

Basic elements of a Part 150 Noise Study

History of Part 150 at SEA and study outcomes

New Part 150 Study update in 2024



# Part 150 Study Basics

- Code of Federal Regulations 14 (CFR 14) Part 150 – FAA established study guidelines
- Airports must follow those guidelines to obtain FAA Airport Improvement Program (AIP) grant funding for sound insulation and noise abatement projects
- Part 150s focus on airport noise and land use incompatibilities within the 65 dB Day/Night Level (DNL) contour
- Updated 65 DNL noise contours are a required outcome of a Part 150
- FAA-approved mitigation measures become eligible for AIP funding at 80%

# Phases of this multi-year Study

## Two main phases of a Part 150:

- Noise Exposure Maps (NEM) – noise data collection 

Flight path data  
Aircraft fleet mix  
Air traffic forecasts  
Local land-use inventory
- Noise Compatibility Plan (NCP) – what programs within federal regulation can the airport initiate to address impacts?  
FAA Record of Approval

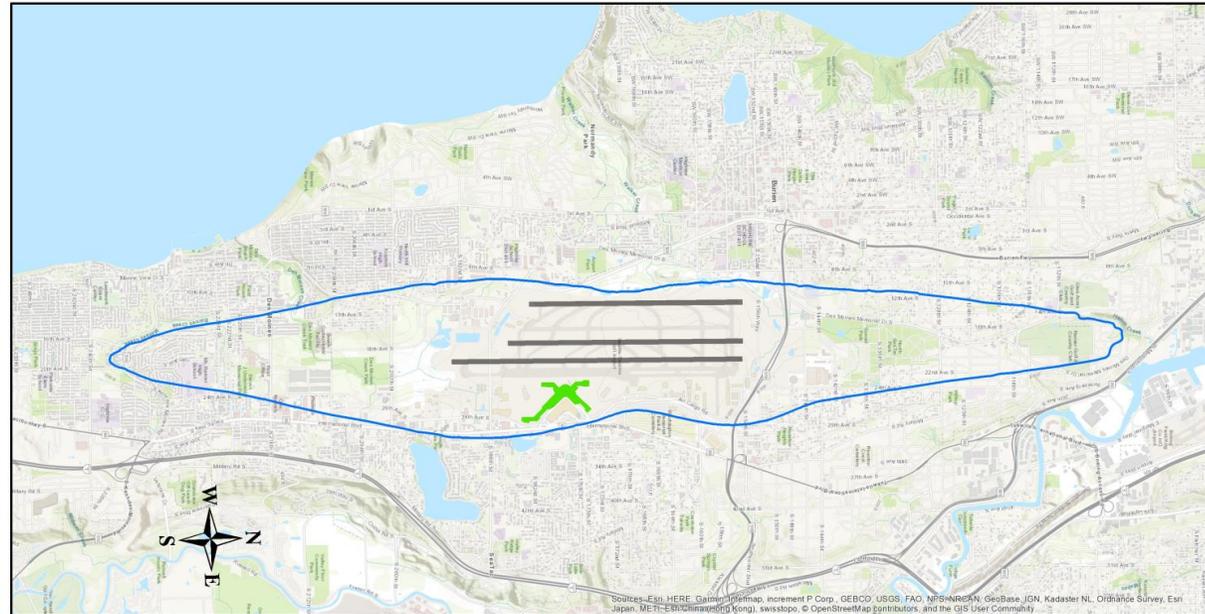
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*Both phases include extensive public outreach and engagement*

# DNL Noise Contour

- Day Night Level (DNL) – annual average of noise from aircraft operating at SEA – with a weighted nighttime penalty. 65 DNL is the FAA-required metric and level
- Contours must be produced using the FAA-required Aircraft Environmental Design Tool (AEDT) and must use the 65 DNL noise metric
- Current and future (5-year) noise impacts will be assessed in study

*The future 5-year contour from previous Part 150 in 2014 is the basis for the current Noise Remedy Boundary*



# SEA Part 150 Studies

- Initial study completed in 1985 (boundary established)
- Study updates
  - 1992
  - 2002
  - 2014 (original boundary updated)
- Extensive public involvement essential, and is FAA requirement



# Part 150 Land Use Planning

- Identify noise incompatibilities within surrounding communities - below 65 DNL is compatible with all uses
- Incompatible land uses at or above 65 DNL:
  - Residential
  - Schools
  - Places of worship
  - Hospitals
  - Nursing homes
  - Daycare facilities with licensed educators
- Evaluate new potential noise abatement initiatives
- Evaluate ongoing programs from past Part 150 Studies



# 2014 Part 150 Study Record of Approval

## – Sound Insulation/Noise Mitigation

- Updated noise remedy boundary
- Continuation of single-family sound insulation
- New: Condominium sound insulation
- New: Apartment sound insulation
- New: Places of Worship sound insulation
- Voluntary acquisition of residential in 3<sup>rd</sup> runway South Approach Transition Zone (ATZ)



# 2014 Part 150 Study Record of Approval

## – Noise Abatement examples

- Continuation of Aircraft Maintenance Run-up restrictions
- Continuation of the Fly Quiet Program including monitoring noise abatement procedures in place
- Ongoing monitoring of the Noise Abatement Corridors
- Evaluate and Upgrade the Noise Monitoring System
- Continue to operate the Noise Programs Office



# New SEA Part 150 Study Update

- Consulting firm Environmental Science Associates (ESA) is leading the study and providing technical expertise
- Initial study scope completed and approved by FAA
- Public outreach efforts underway
- Part 150 Study Kickoff Workshops in early June
- Scheduled Technical Review Committee meetings
- Data collection (aircraft operations, land use etc.) underway

# Part 150 Study Kickoff Public Workshops

- June 5, 6:00pm to 8:00pm at Gregory Heights Elem School in Burien
- June 6, 6:00pm to 8:00pm at Mt Rainier High School in Des Moines
- June 8, 10:00am to 12noon at Glacier Middle School in SeaTac

*Events will in an open house format with various stations covering a range of study-related topics. Port staff and consultant team will be on hand to provide information and answer questions*

# Continuing Study Engagement

- Study briefings and informational meetings will continue for the duration of the Study
- Outreach efforts to harder-to-reach local communities
- Consultant-hosted comprehensive website coming soon
- Port website: [SEA Part 150 Noise Study | Port of Seattle \(portseattle.org\)](https://portseattle.org/SEA-Part-150-Noise-Study)
- Port email address for Study questions: [p150@portseattle.org](mailto:p150@portseattle.org)

# Discussion/Questions

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