

Part 150 Noise and Land Use Compatibility Study Update

SEA Stakeholder Advisory Round Table
October 28, 2026



Part 150 Study Update Topics

Part 150 Noise Study Basics

Review of work done to date

Noise Compatibility Program work underway

Public Workshops and study schedule



Part 150 Study Basics

- Code of Federal Regulations 14 (CFR 14) Part 150 – FAA established study guidelines
- 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 approximately 80%
- Environmental Science Associates (ESA) is the consultant leading the Study
- Plan to have FAA-approved final Part 150 document in mid-2028

Phases of this multi-year Study

Two main phases of a Part 150:

- Noise Exposure Maps (NEM) – base and future year noise impacts
Includes flight path data, aircraft fleet mix, air traffic forecast
Local land-use inventory
- Noise Compatibility Plan (NCP) – what measures can the airport take within federal regulation to address impacts?
Noise abatement, land use and programmatic measures
FAA Record of Approval

Both phases include extensive public outreach and engagement

Noise Exposure Maps (NEM) Report

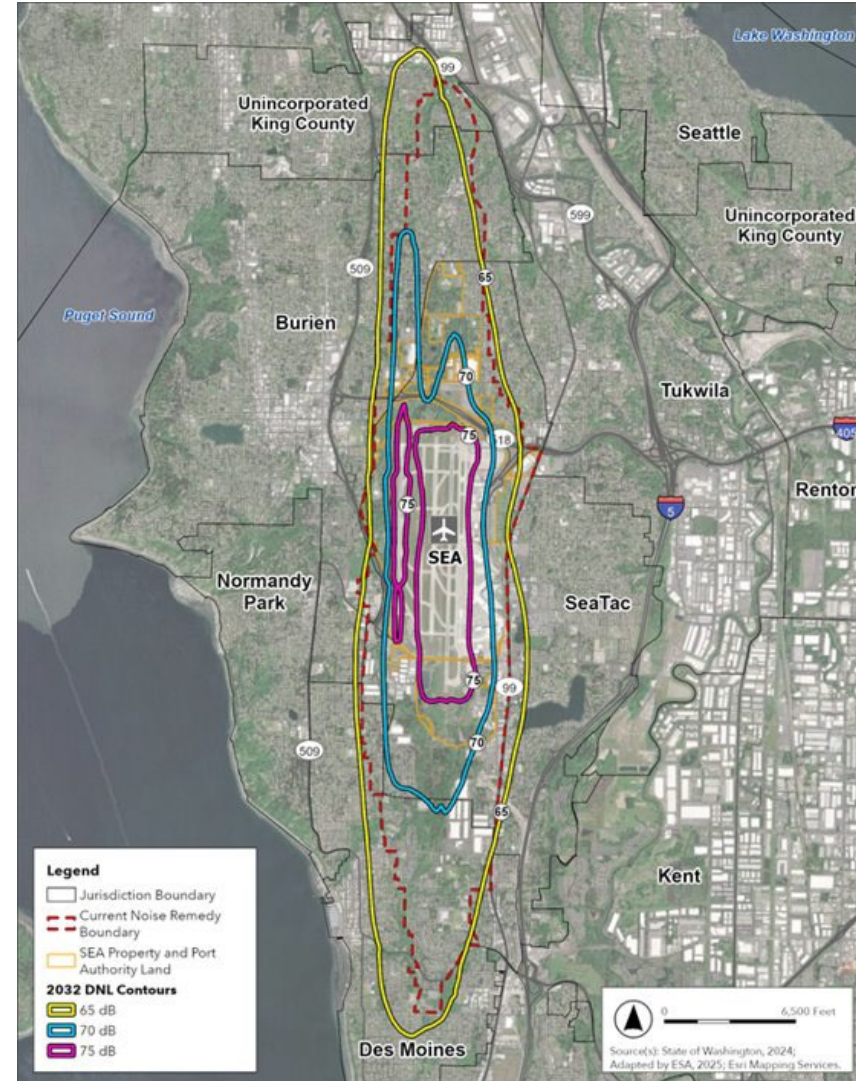
- Completed in May and available at the study website:
seapart150.com

Report includes:

- Detailed base and future year 65 DNL noise contour maps
- Aircraft operational data used in the noise model
- Preliminary land use data within the noise contours
- Review of public outreach efforts to date
- Public comments and responses to date

2032 DNL Noise Contour & Current NRB

- Day Night Level (DNL) – annual average of noise from aircraft operating at SEA – with a weighted nighttime penalty.
- Contours must be produced using the FAA-required Aircraft Environmental Design Tool (AEDT)
- 2032 DNL contour will be the basis for future Noise Remedy Boundary



Noise Compatibility Plan (NCP)

Measures proposed with the goal of lessening noise exposure

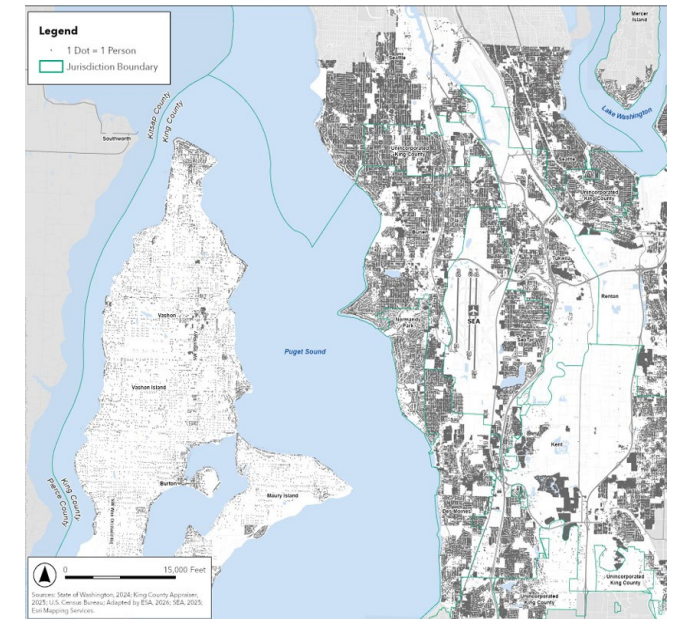
Consists of three components:

- Noise Abatement Measures – limiting noise at the source
- Land Use Measures – increasing noise compatibility
- Programmatic Measures – improving the initiatives and tools used by the airport

Possible Noise Abatement Measures

- **Goal: Lessening noise at the source**
 - Higher approach angle for arriving aircraft
 - Offset south-flow approach path
 - North-flow departure path proposal
 - Increased usage of Elliott Bay path
 - Changes to westside approach procedures

All proposed noise abatement measures require analysis and approval from FAA



3.5 Degree Increased Glideslope for Arrivals

- Increase arrival aircraft altitudes by raising the descent angle on final approach from 3 degrees to 3.5 degrees
- Evaluated increasing the aircraft descent angle for:
 - All runways 24 hours a day
 - Runways 16R and 34L only during the nighttime hours (10 PM – 7 AM)
- Additional benefits below DNL 65

All Runways – All Day



Land Use	Change in Population from 2032 NEM
Single Family	-1,230
Multi-Family	-1,569
Mobile Home	-29
Vacant	-
Mixed-Use	-2
Total	-2,830

Source: ESA, 2006; State of Washington, 2004.

Runway 16R/34L – Nighttime Only



Land Use	Change in Population from 2032 NEM
Single Family	-484
Multi-Family	-726
Mobile Home	-18
Vacant	-
Mixed-Use	-
Total	-1,229

Source: ESA, 2006; State of Washington, 2004.

Runway 16L and 16R Offset Approaches (nighttime)

- Maximize flying over commercial/industrial corridors north of the Airport
- Assumed 20% of nighttime (10 PM - 7 AM) arrivals on the HAWKZ, MARNR, and JAWBN procedures would utilize offset approaches
 - Represents 8% of all nighttime arrivals
 - ~2,898 annual/7.94 Annual Average Day (AAD) operation
- Additional benefits below DNL 65



Land Use	Change in Population from 2032 NEM
Single Family	-12
Multi-Family	-
Mobile Home	-
Vacant	-
Mixed-Use	-
Total	-12

Source: F16-0030-0000-0000-0000

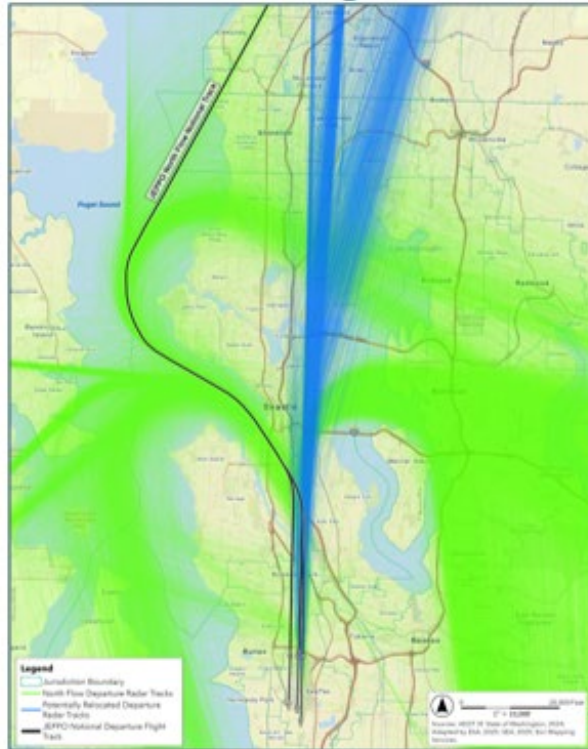


Land Use	Change in Population from 2032 NEM
Single Family	-11
Multi-Family	-
Mobile Home	-
Vacant	-
Mixed-Use	-
Total	-11

Source: F16-0030-0000-0000-0000

North-flow Departure Corridor

Notional Flight Track



Source: ESA, 2020.

Results



- Straight-out north flow departures to use the existing JEPPPO departure procedure
- Represents 4% of all 2032 forecast north flow departures
 - ~2,530 annual/6.9 AAD operations
- Additional benefits below DNL 65

Land Use	Change in Population from 2032 NEM
Single Family	-2
Multi-Family	-
Mobile Home	-
Vacant	-
Mixed-Use	-
Total	-2

Possible Land Use Measures

– Goal: Increasing Noise Compatibility

- Continuation of single-family and multi-family sound insulation
- Long-term transient lodging insulation
- Increased eligibility for first time insulation - new 1998 build date
- Encourage improvements to King County noise coding online information
- Encourage real estate disclosures

New Noise Remedy Boundary will be developed from 2032 contour using block-rounding with FAA approval

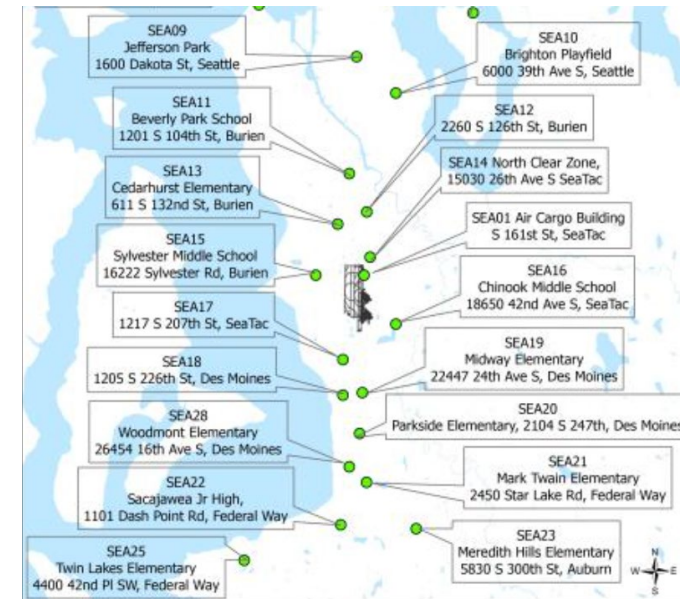


Possible Programmatic Measures

– Goal: Improve the tools used by airport

- Updated/improved Fly Quiet Program
- Improve tools that the community can utilize online
- Analysis of noise monitor locations
- Active Noise Control System
- Continuing to operate the Noise Office

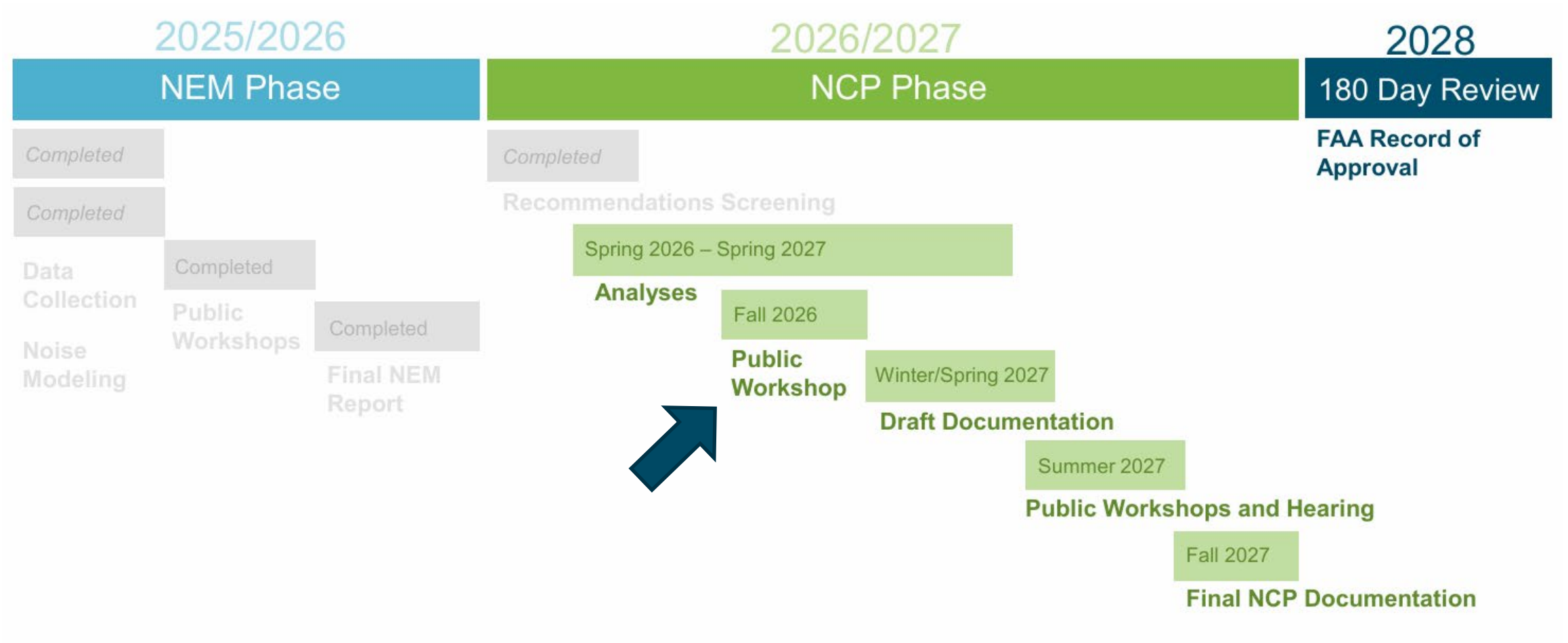
Many programmatic measures are considered voluntary and generally do not require FAA approval



Continuing Study Engagement

- Public Workshops in 2024, 2025 and 2026
- Study briefings and informational meetings continuing for the duration of the Study
- Part 150 Technical Review Committee meetings
- Study website: seapart150.com
- Port email address for Study questions: p150@portseattle.org
- Comments to the Study team are welcome anytime

Part 150 Study Schedule



Part 150 Study NCP Public Workshops

October 17, at Cedarhurst Elem School in Burien

October 19, at McMicken Heights Elem School in SeaTac

October 20, at Midway Elem School in Des Moines

- Detailed information shared with attendees on the potential benefits of all currently proposed measures
- New details covering land use measures – 1998 build date
- Videos displaying flight path and altitude details of the various proposed Noise Abatement Measures
- Interactive video map of 2032 noise contour
- Total of 48 attendees for the three Workshops

Discussion/Questions

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