Part 150 Study Technical Review Committee

Meeting #3 | June 9, 2025

Port of Seattle®

Agenda

- Welcome
- Reminder – Purpose and Role of TRC
- Summary of TRC Meetings #1 and #2
- Study Progress
- Land Use Compatibility
- Noise Monitoring
- Community Outreach
- Updated Project Schedule
- Questions

Welcome – TRC

TRC Members

- Alaska Airlines – Lynae Craig
- Delta Airlines – Kalena Glover
- King County – TBD
- Burien – Liz Stead
- Des Moines – Jason Woycke
- SeaTac – Zach Shields
- Federal Way – Matthew Blinstrub
- Normandy Park – Jeff Watson
- Tukwila – Neil Tabor

TRC Liaisons

- FAA
  - Seattle CEO – Sky Laron
  - Western Service Center ATO – Rodney Lindbeck
  - Western Service Center ATO – Joe Bert
  - SEA ATC – Jason Poole
- Port of Seattle
  - Tom Fagerstrom
  - Ryan McMullan
  - Paris Edwards
  - Tom Hooper

Purpose of the TRC

- The Port created the TRC to obtain feedback throughout the Part 150 Study
- The study will evaluate ways to reduce noncompatible land use to the greatest extent possible within 14 CFR Part 150 guidelines
- A variety of key stakeholders were asked to join the TRC to represent their community/organization and to provide technical advice related to the Study
- The Port will respect and consider the TRC's technical input, but retains responsibility for, and decision-making authority on, the SEA Part 150 Study

Role of the TRC

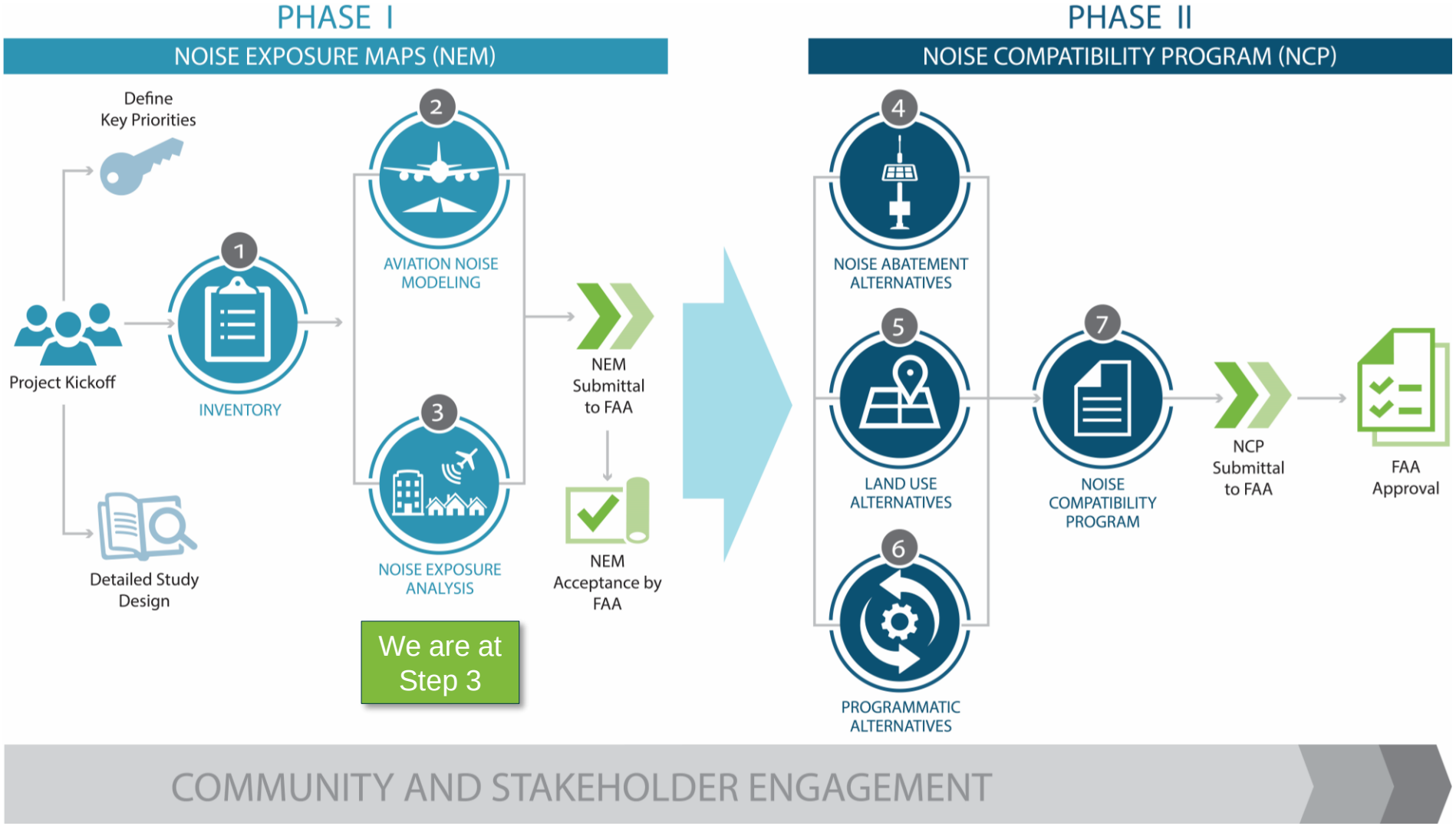
- The TRC's role is to support the SEA Part 150 Study
  - Review study assumptions
  - Provide technical feedback within the context of the Part 150 Study
  - Review and give feedback on possible noise mitigation and noise abatement measures to reduce the impacts on noise sensitive land uses within DNL 65
- TRC members should express the interests of their organization and/or constituents
  - TRC members should respect the range of opinions expressed by fellow TRC members
- TRC members are expected to advise their organization and/or constituents of the TRC's discussions

Summary of TRC Meetings #1 and #2

- TRC Role, Purpose, Charter, Participation
- Airport Overview and History of Part 150 Efforts
- Part 150 Study Overview and Regulatory Environment
- Introduction to Noise and Modeling
- Overview of Land Use Compatibility
- Overview of Community Outreach
- Land Use Data Collection
- Noise Monitoring
- Preliminary Schedule

Study Progress

Phases of a Part 150 Study



Noise Modeling

- Aircraft noise modeling allows:
  - Calculation of noise exposure at any point
  - Depicting annual average aircraft noise exposure
  - Predicting future aircraft noise exposure
  - Assessing changes in noise impacts resulting from runway configuration changes or new runways
  - Assessing changes in fleet mix and/or number of operations
  - Evaluating operational procedures
- Aviation Environmental Design Tool (AEDT) is FAA's approved noise model
  - AEDT was released in 2015 and replaced the Integrated Noise Model (INM), which was used for SEA's prior Part 150 Studies

Noise Modeling

Modeling Inputs

- Detailed Fleet Mix
- Meteorological conditions
- Time of Day
- Runway Use
- Stage Length
- Flight Track Location and Use

Modeling Program

Aviation Environmental Design Tool (AEDT)

Noise modeling generates noise contours which are then overlaid on a land use map to identify noncompatible land uses.

Noise Exposure

- The Amount of Noise Exposure is determined by:
  - Aircraft types
  - Stage length (AEDT input for takeoff weight based on distance to destination)
  - Number of average annual day operations
  - Nighttime weighting (1 nighttime operation = 10 daytime operations)
- The Noise Exposure Distribution is determined by:
  - Runway configuration and use
  - Flight track locations
  - Flight track use

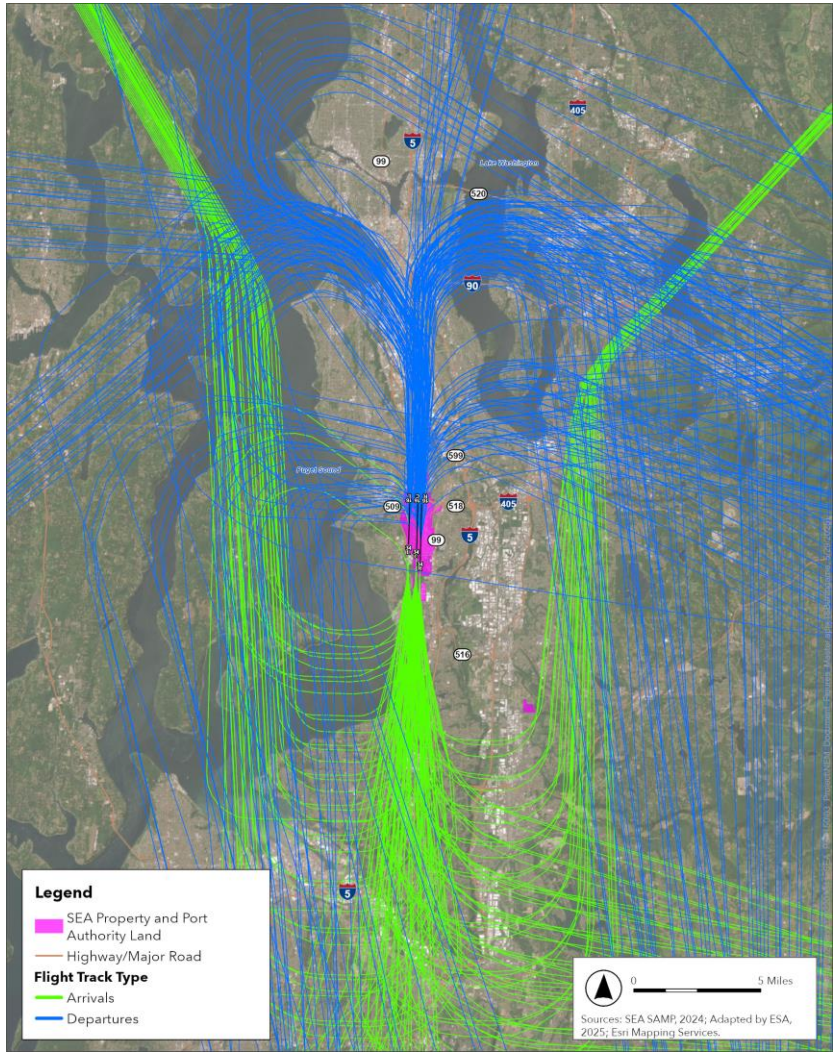
Aviation Environmental Design Tool (AEDT)

Alignment with SAMP NTP Environmental Review

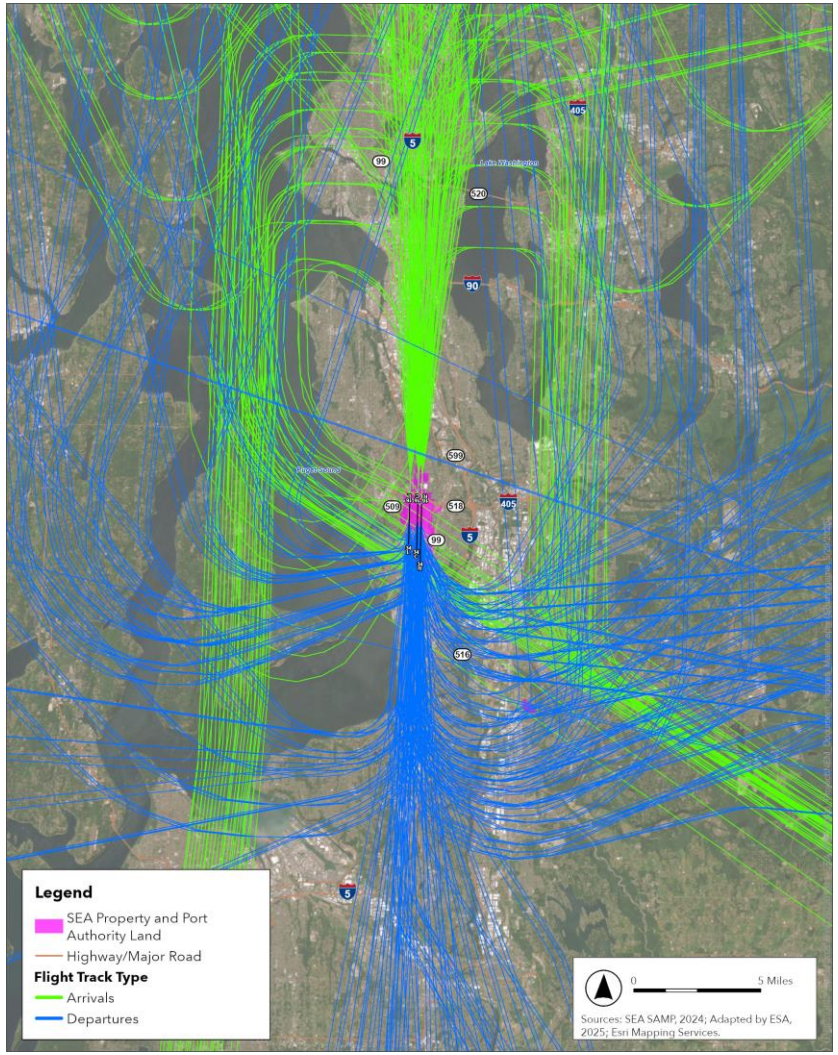
- Using SAMP forecasts and noise modeling for the Part 150 Study
  - Includes retirement of older aircraft
- NEMs will include Base Year (2022) and Future Forecast Year (2032)
  - Further in the future than a typical Part 150 (5 years) which includes the forecast for larger projected growth
  - 2032 will be the basis for evaluating potential NCP recommendations
- NEM Report is in process
- NEMs will still be submitted to FAA for acceptance as required by 14 CFR Part 150

Flight Tracks

North Flow

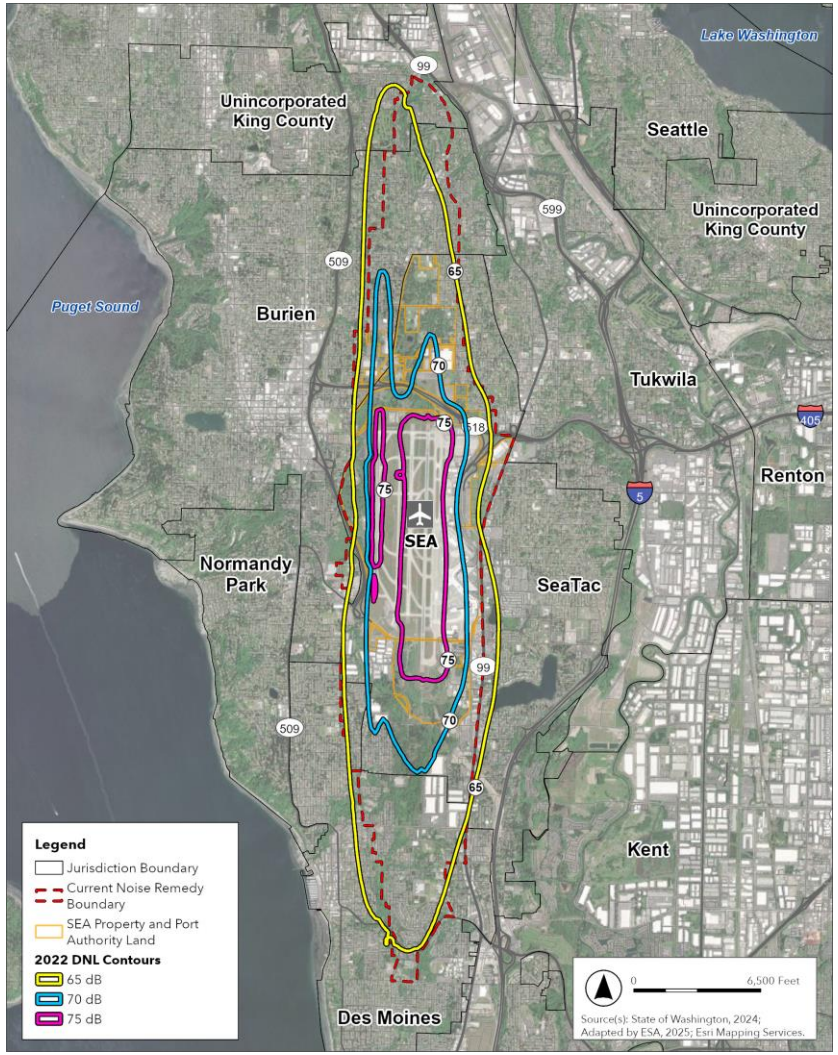


South Flow

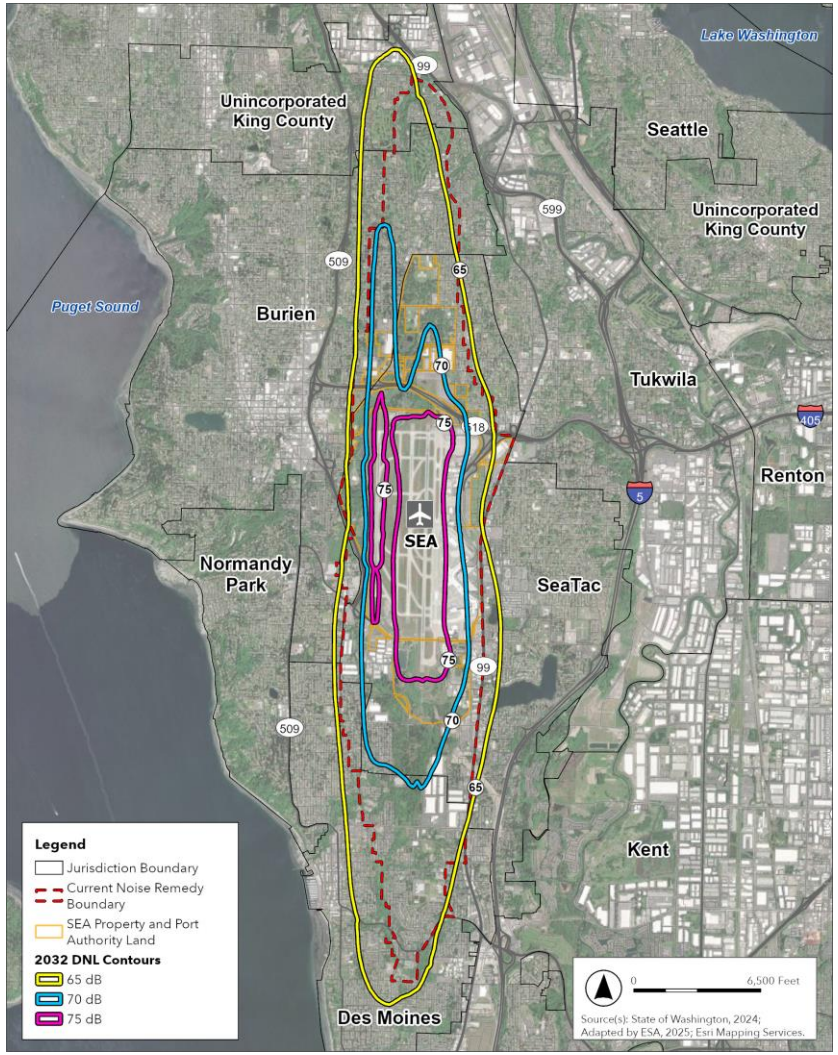


Noise Contours

2022



2032

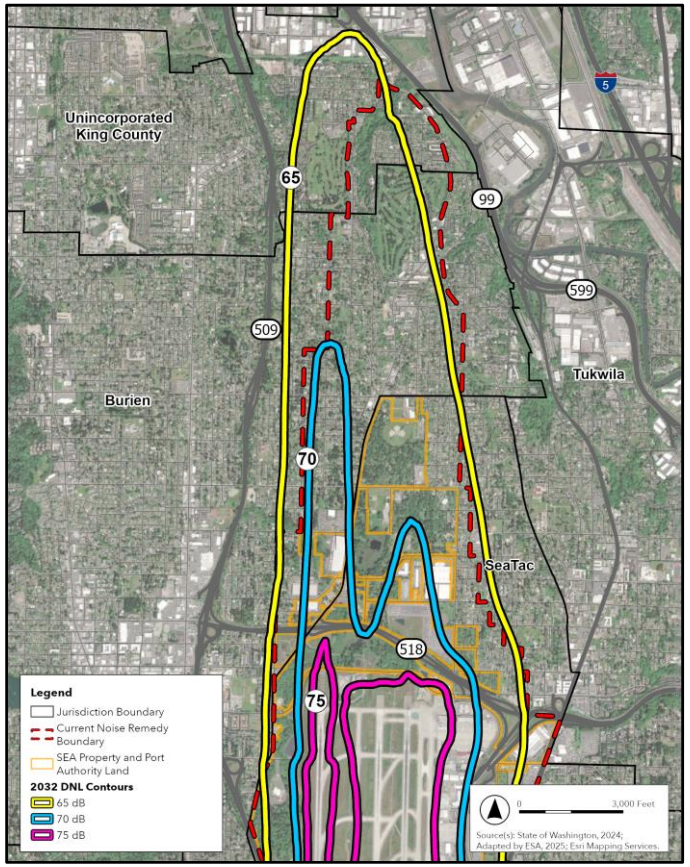


Noise Contours

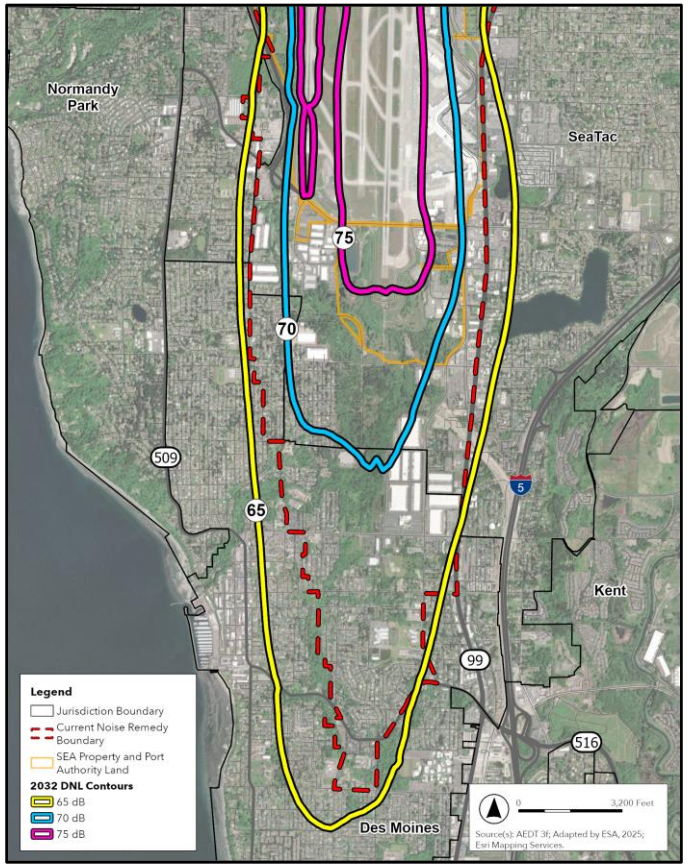
- Land use changes between 2032 and current Noise Remedy Boundary (NRB)
  - Parcels added to northwest area outside of the NRB (Burien and unincorporated King County)
  - Parcels added to south and southwest areas outside of the NRB (Des Moines)
  - Parcels added to the east outside of the NRB (SeaTac)
  - Parcels outside of 2032 DNL contour near the northeast boundary of NRB (Burien and unincorporated King County)

2032 and Noise Remedy Boundary

North Side of the Airport



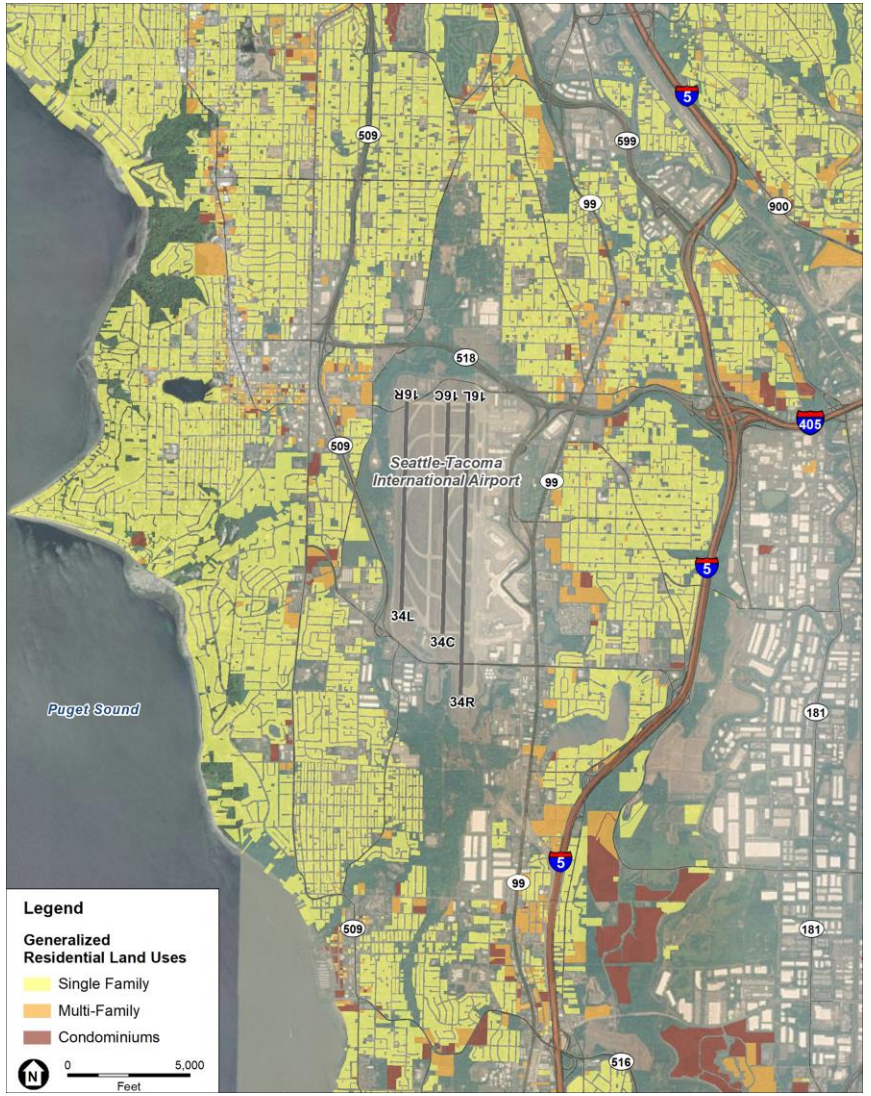
South Side of the Airport



Land Use Compatibility

Land Use Compatibility

- Land Uses
  - Existing and future land use
  - Parcel data
  - Zoning
  - Jurisdictional boundaries and neighborhoods
- Noise Sensitives Uses
  - Residential
  - Places of worship
  - Schools, colleges and universities
  - Libraries/cultural institutions
  - Hospitals and residential healthcare facilities
  - Daycare and assisted living facilities
  - Historic properties
- Data Sources
  - State of Washington Geospatial Services (statewide tax parcel data and Department of Revenue land use codes)
  - King County
  - Washington State



Land Use Discussion with Local Jurisdictions

- **What We Need from Local Jurisdictions**
  - Current & Planned Land Use Data
    - Understanding zoning regulations, residential areas, commercial developments, and future planning initiatives.
      - Any existing land use regulations related to aircraft noise including notification or disclosure areas
      - Any community redevelopment areas that could result in a change in land use types or intensities
    - Identification of schools, hospitals, historic sites, and other noise-sensitive areas.
  - Local Policies & Ordinances
    - Review of regulations that may impact aircraft operations or noise compatibility planning.
      - Any regulations incorporating sound level reduction (SLR) requirement for land uses (aviation and non-aviation)
  - Community Feedback
    - Insights into residents' concerns and expectations regarding noise impacts and potential mitigation strategies.

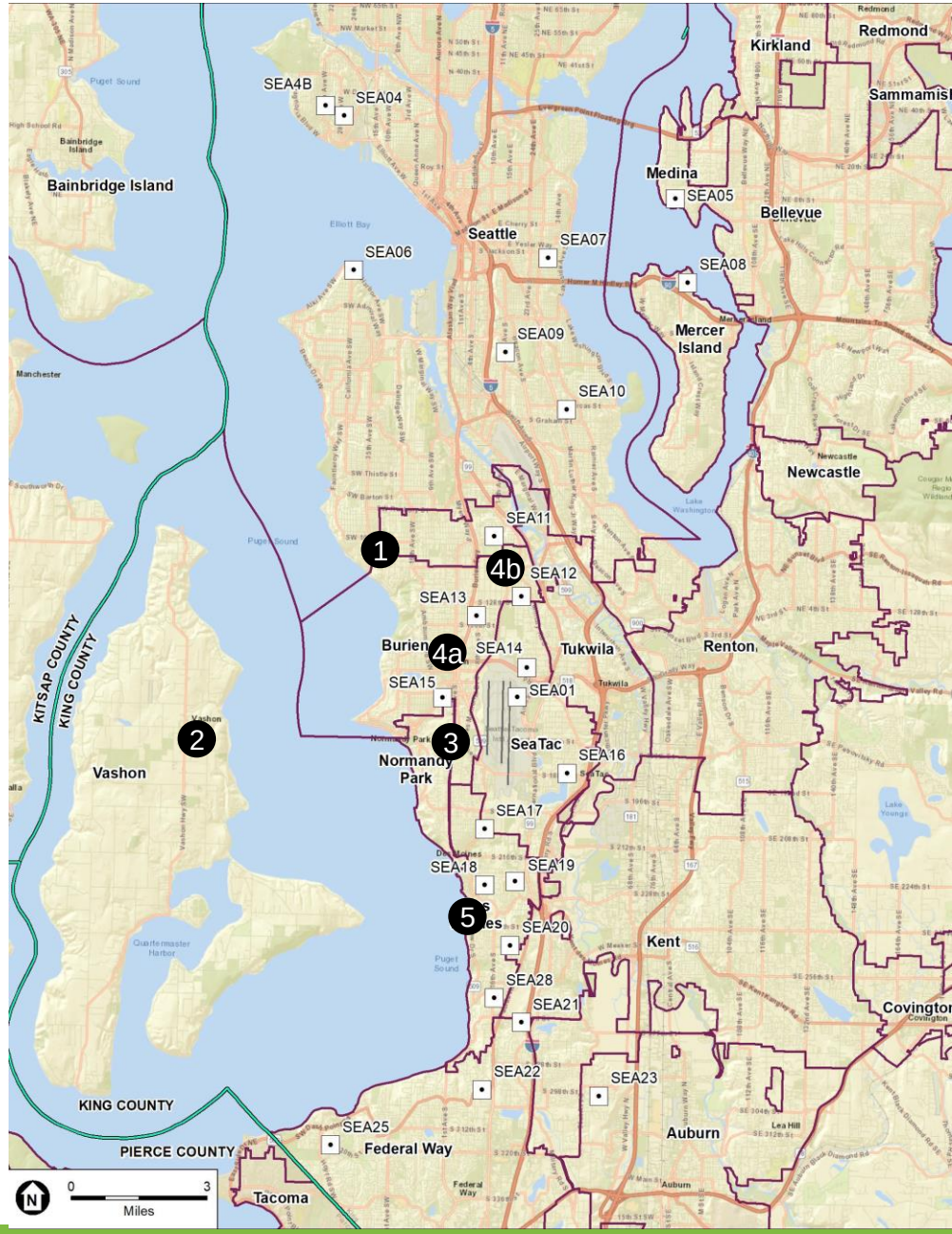
Land Use Discussion with Local Jurisdictions

- **Some of the Questions We'll be Asking**
  - How are land use planning decisions made regarding high-noise areas?
  - How can we collaborate to ensure effective noise compatibility planning?
- **Why It's Important**
  - Supports Noise Compatibility Planning
    - Helps identify areas where land use mitigation efforts can be prioritized
  - Enhances Community Engagement
    - Ensures local perspectives are considered when shaping solutions
  - Improves Long-Term Planning
    - Aligns aircraft operations with sustainable land use practices
  - Facilitates Compliance
    - Supports adherence to FAA regulations and best practices

Noise Monitoring

Noise Monitoring Program

- Collected two weeks of data each at five locations in November 2024 and March 2025:
  - South Seattle
  - Vashon
  - Normandy Park
  - Burien
  - Des Moines
- Supplements SEA's permanent noise monitoring system
- Noise events being correlated to flight operations (using NOMS)
- Operations during those dates/time
  - Representative mix of North Flow and South Flow operations
  - Mix of weather conditions
- Information will be presented as supplemental information in the NEM Report

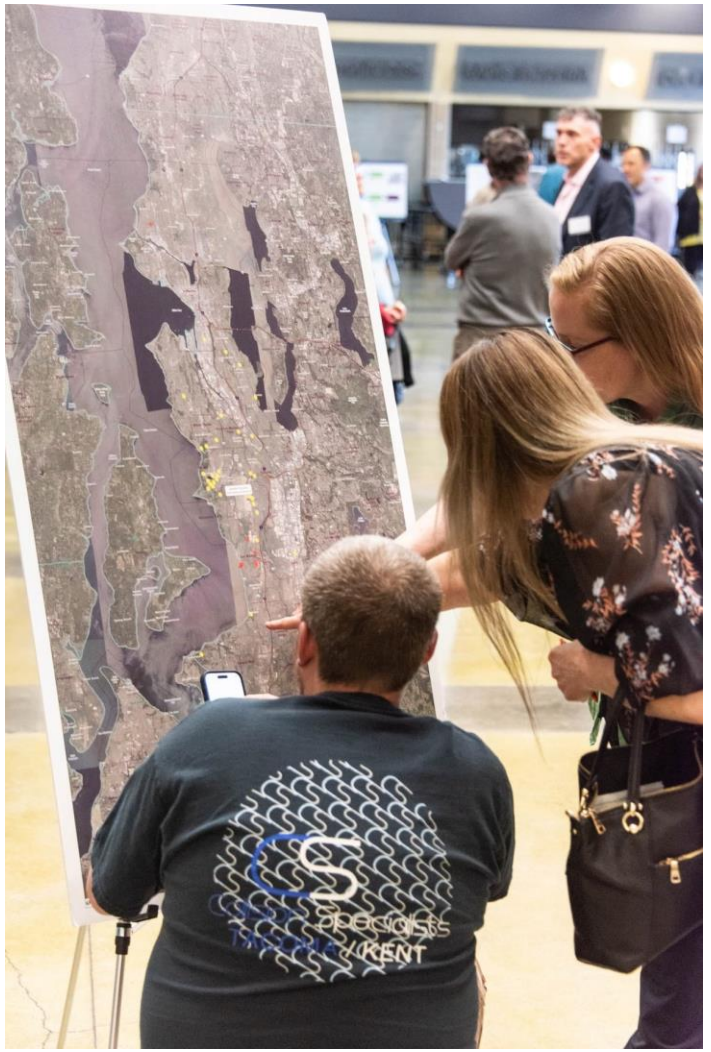


Community Outreach

Community Outreach

- Planned Workshops
  - To follow publication of the Draft NEM Report; soliciting feedback on the NEM report as well as ideas for the NCP
  - Similar format as Kickoff Workshops (June 2024)
  - Anticipated to be held early to mid-October

- Community Events
  - The Port attended community events over the past year in support of the Part 150 Study
  - Continued outreach at community festivals and events over the summer



Communications

- Project Website: https://SEAPart150.com
  - Project Information
  - Process
  - FAQs
  - Tentative Schedule
  - Public Draft and Final NEM and NCP Reports
  - Reference Material
- Communication and Feedback:
  - Upcoming meetings including location/dates/times
  - Part 150 Study-related comment portal
  - Links to other websites/resources

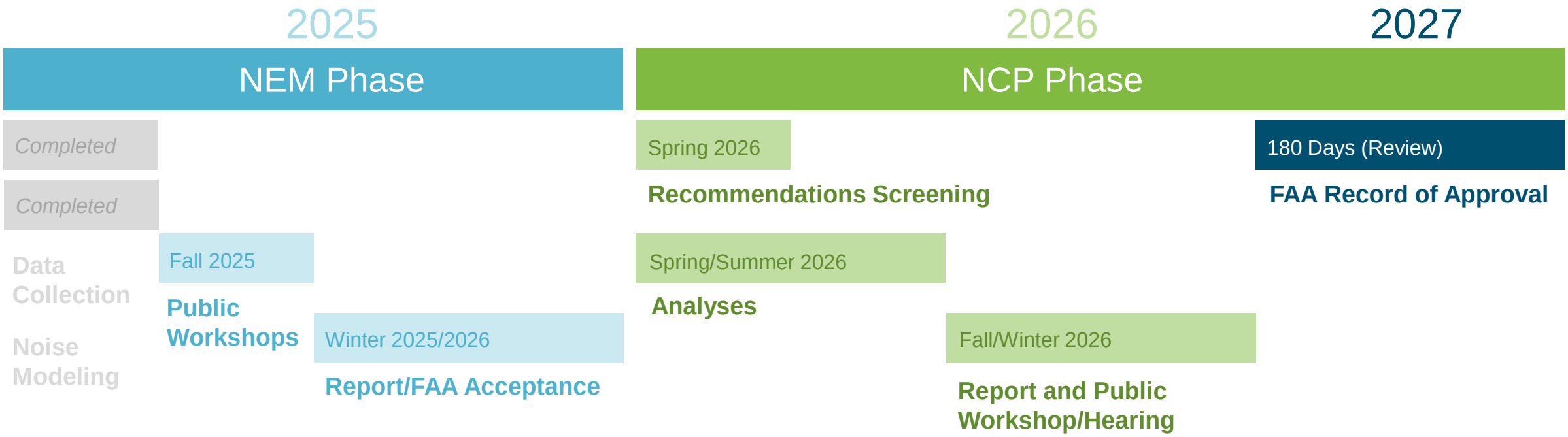
Project Overview

The Port of Seattle will begin a new multi-year Part 150 Noise and Land Use Compatibility Study update for SEA Airport in 2024.

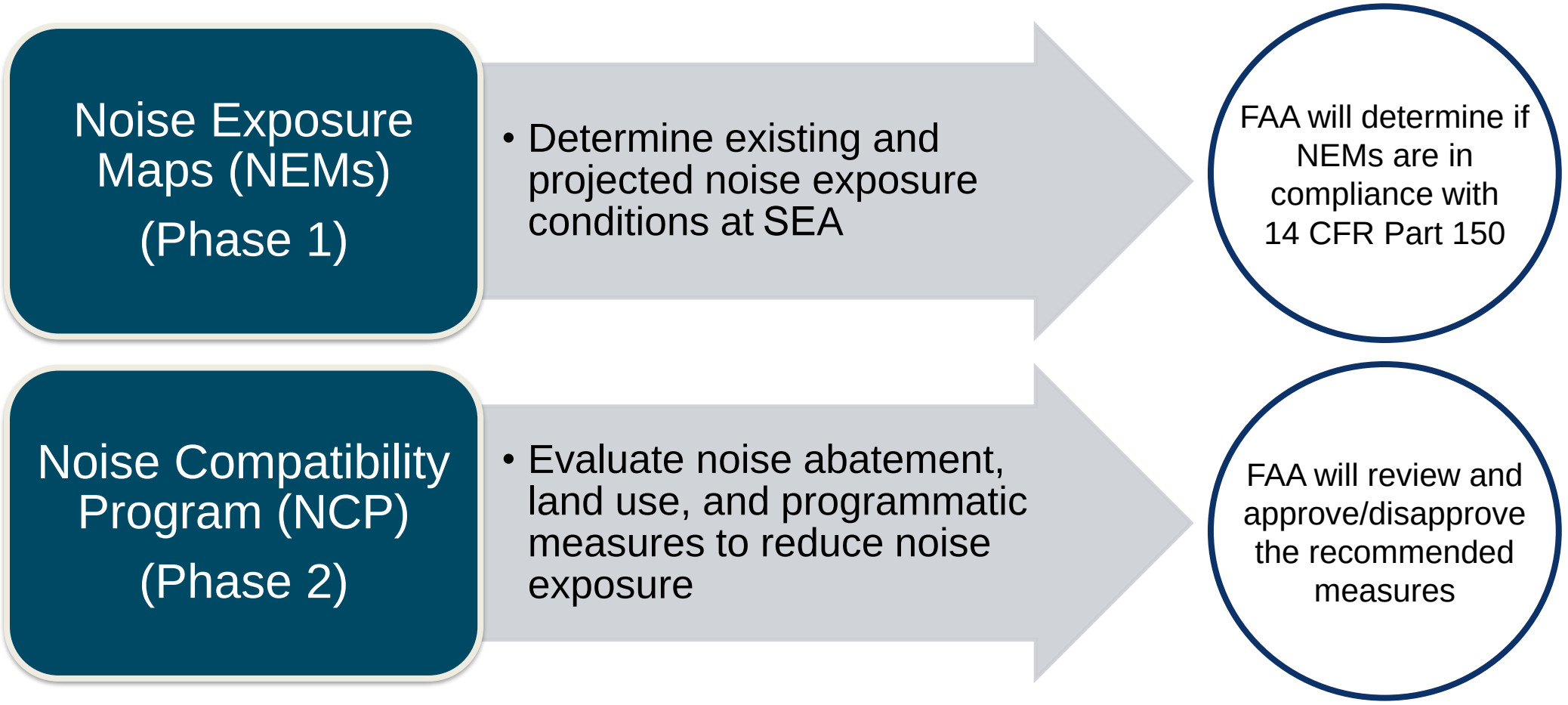
A Part 150 Noise and Land Use Compatibility Study is a voluntary FAA program that sets guidelines for airport operators to document aircraft noise exposure, and to establish noise abatement and compatible land use programs. These noise abatement procedures and/or mitigation programs must be approved by the FAA in order to qualify for potential federal funding. This will be the fourth Part 150 update undertaken at SEA Airport since the initial study was conducted in 1985.

Project Schedule

Part 150 Study Schedule



Part 150 Study Outcomes



Future TRC Meetings

Technical Review Committee

- TRC Meeting #4 (Tentative)

Early Fall 2025

- Reminder notices will be sent out in advance of each meeting
- Following the meeting, TRC materials will be posted on the Project Website at www.seapart150.com

Questions?