



Part 150 Noise & Land Use Compatibility Study

Highline Forum | September 24, 2025



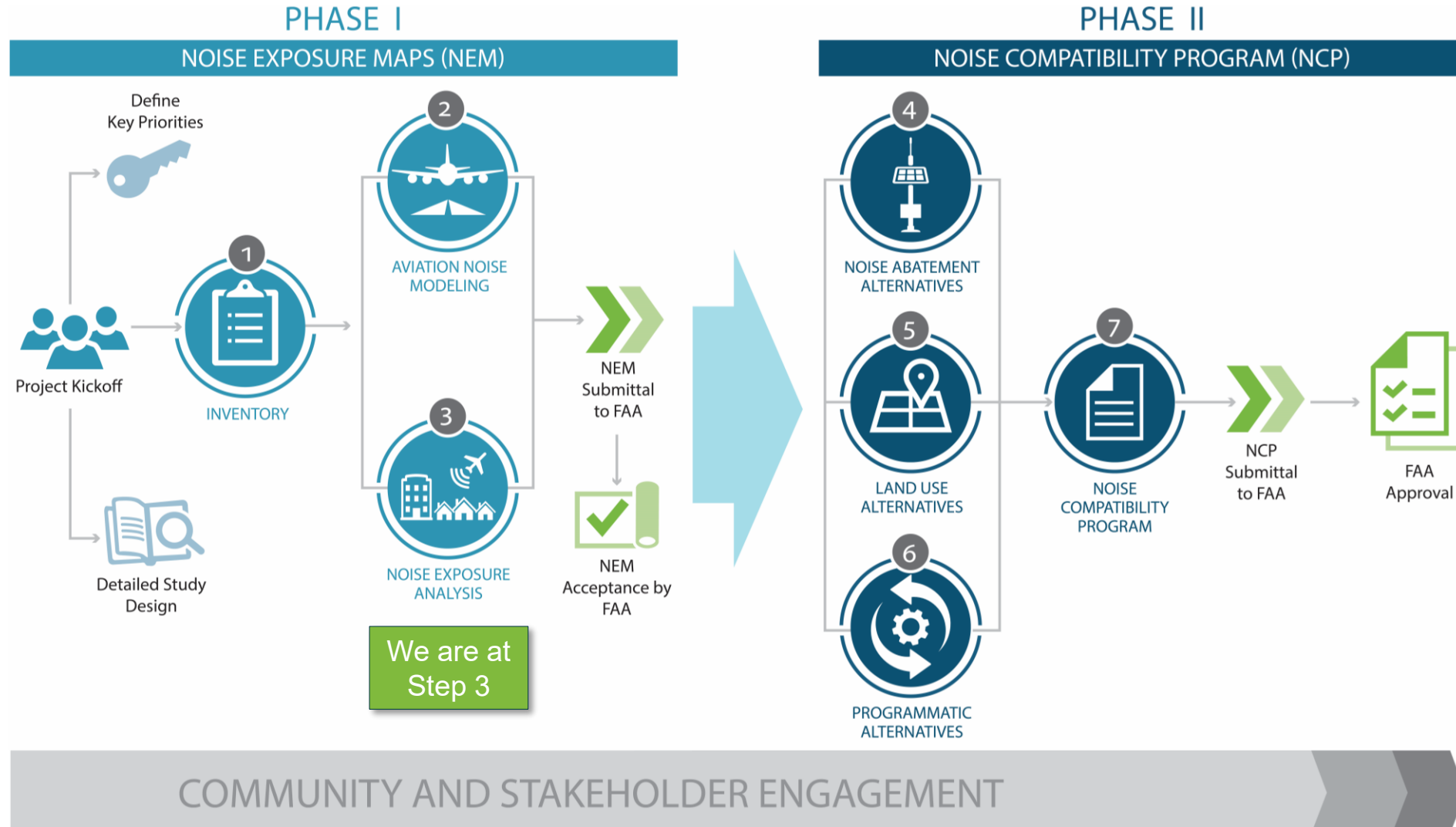
Presentation Topics

- Part 150 basic information
- Status and review of study work to date
- Noise Exposure Maps
- Noise Compatibility Program
- Project Schedule
- Public Meetings
- Questions

Part 150 Basic Information

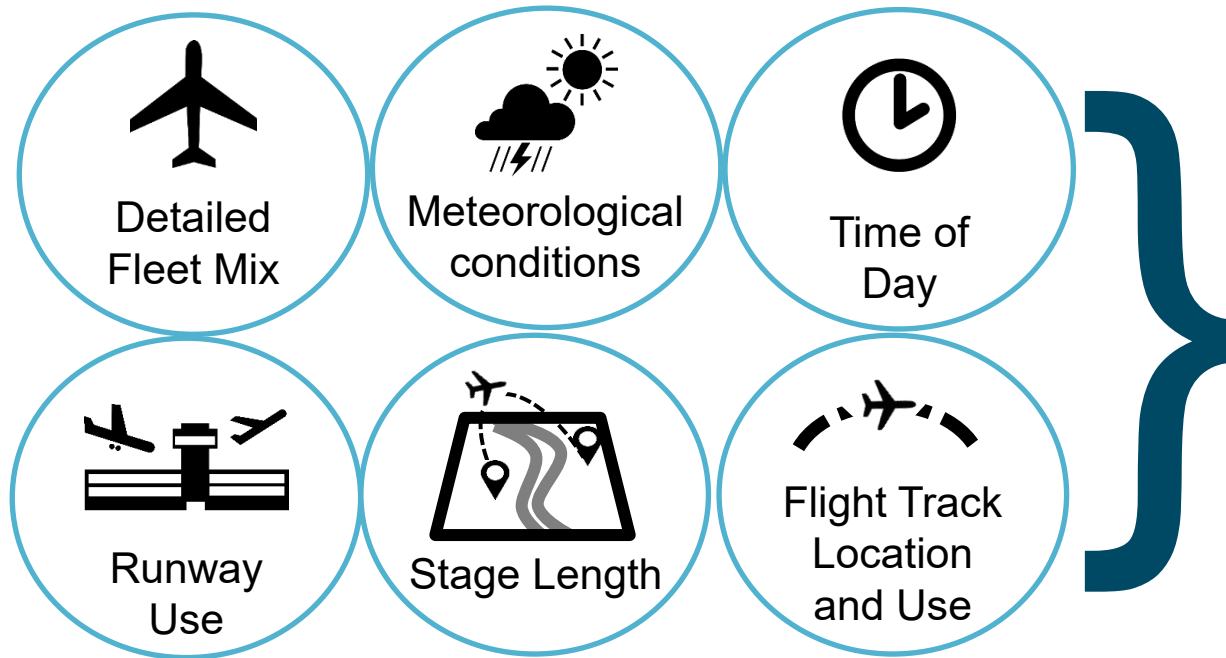
- Code of Federal Regulations 14 (CFR 14) Part 150 – FAA established study guidelines
- Airports must follow those guidelines to obtain FAA Airport Improvement Program (AIP) grant funding for sound insulation and noise abatement projects (funding at 80%)
- Part 150s focus on airport noise and land use incompatibilities within the 65 dB Day/Night Level (DNL) contour
- Use of noise modelling is required to assess noise impacts
- Updated 65 DNL noise contours are a required outcome of a Part 150, and form the basis for an updated Noise Remedy Boundary

Phases of a Part 150 Study



Noise Modeling for Base Year and Future Year

Modeling Inputs



Modeling Program



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

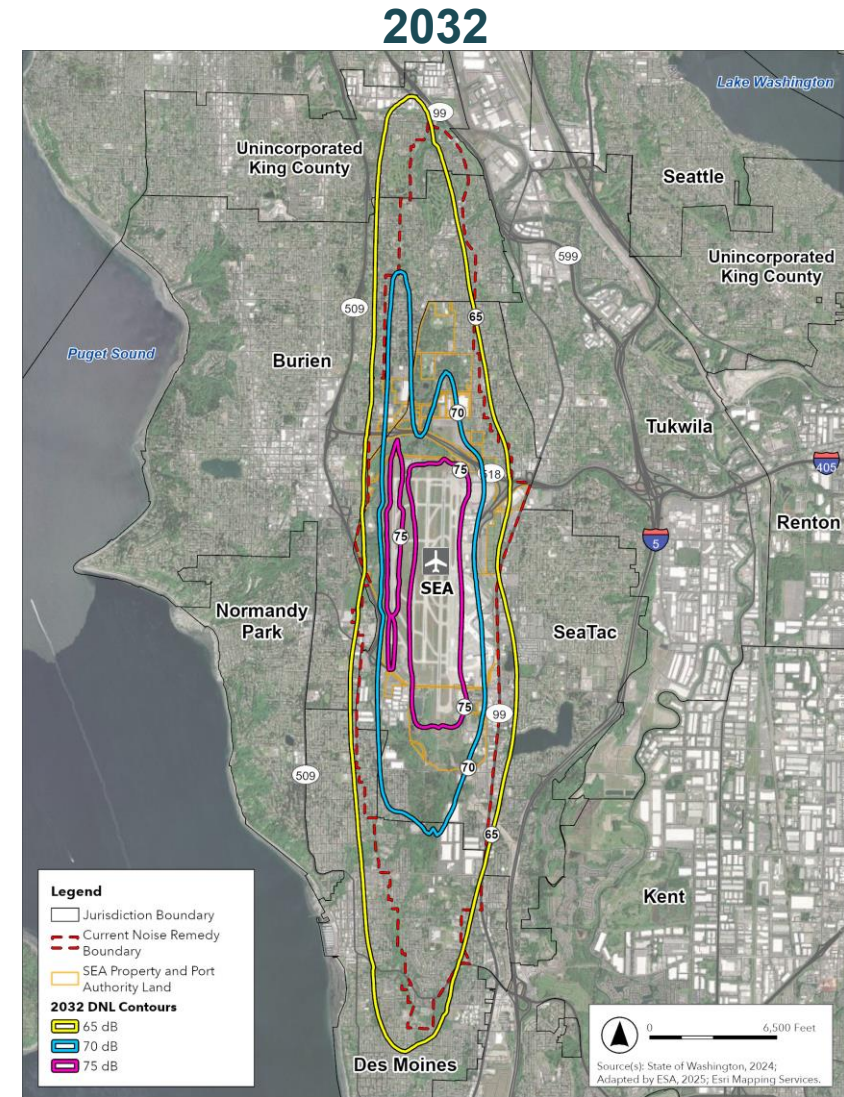
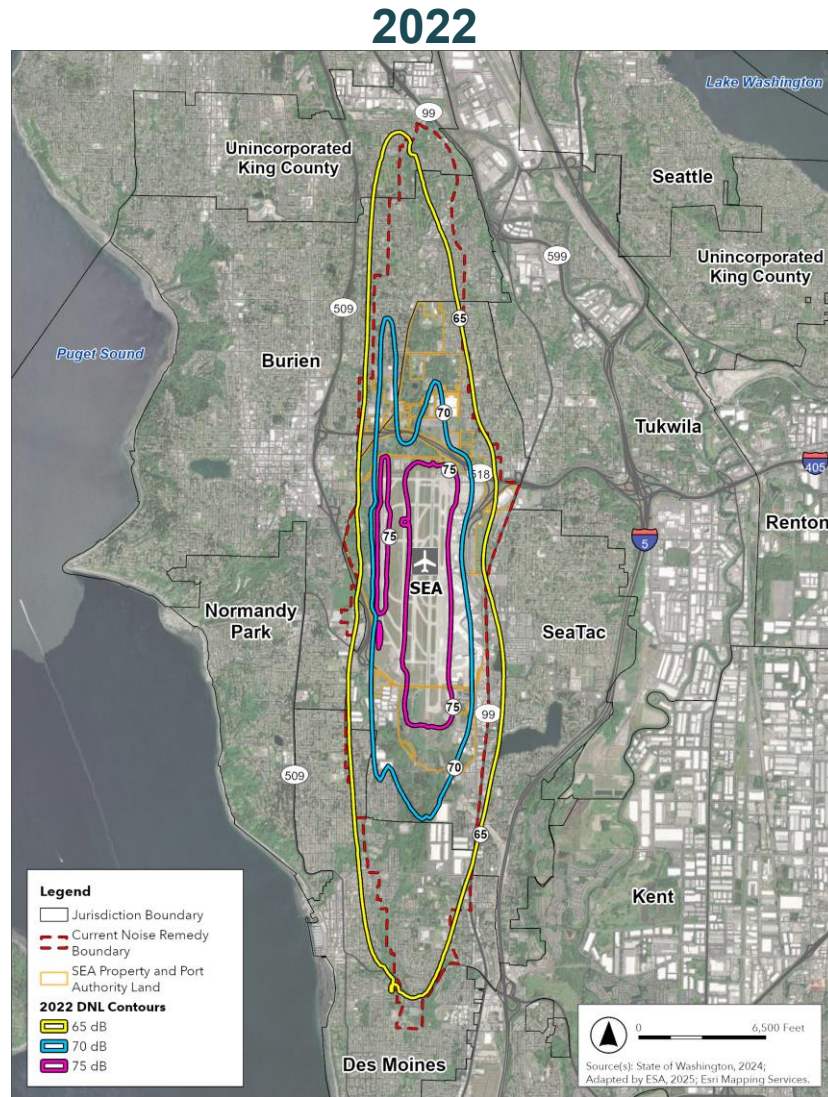
Noise Exposure

- 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)**

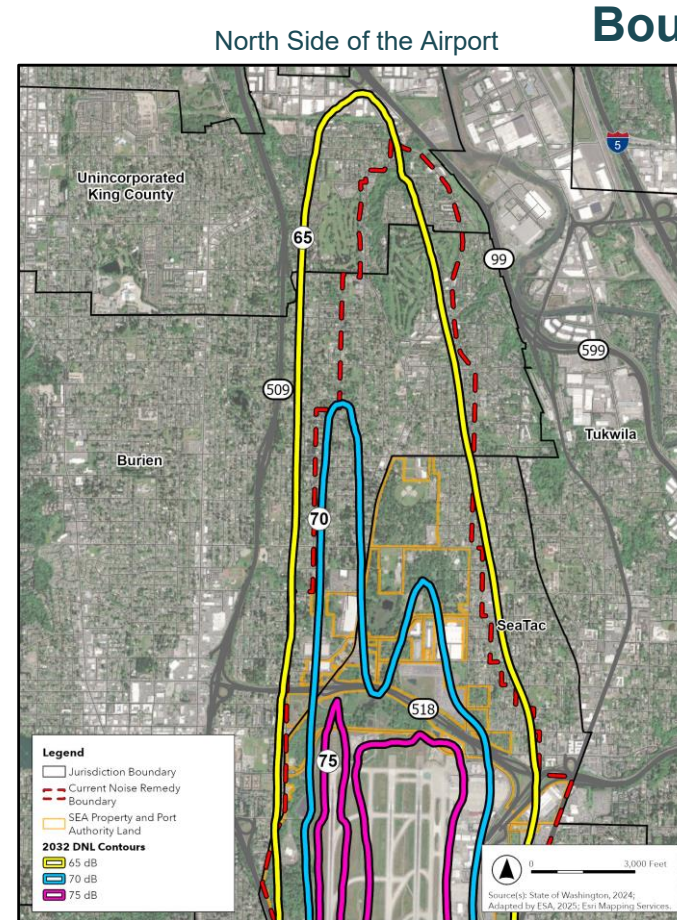
Noise Contours



Noise Contours

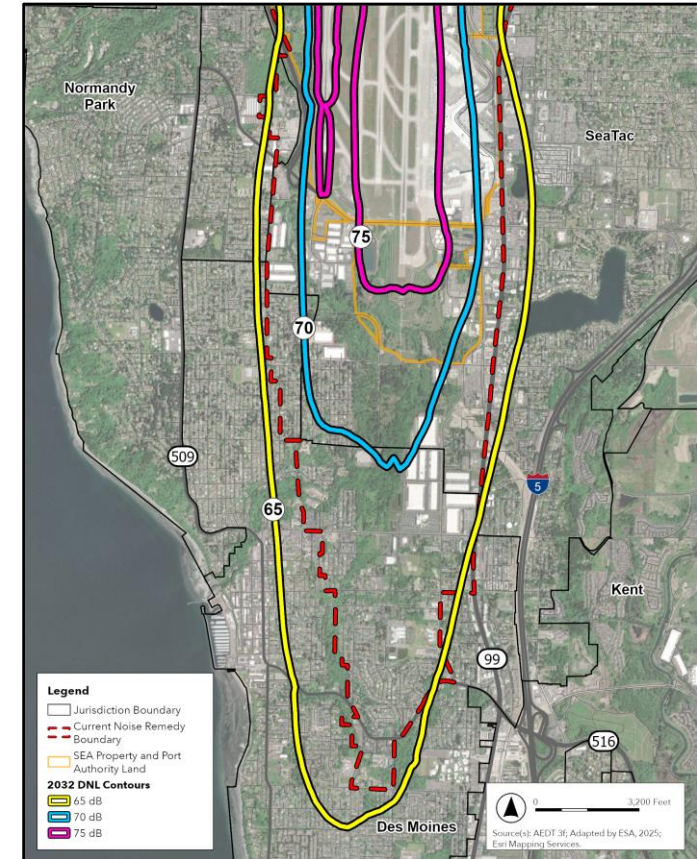
2032 and Current Noise Remedy

- 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)



Boundary

South Side of the Airport



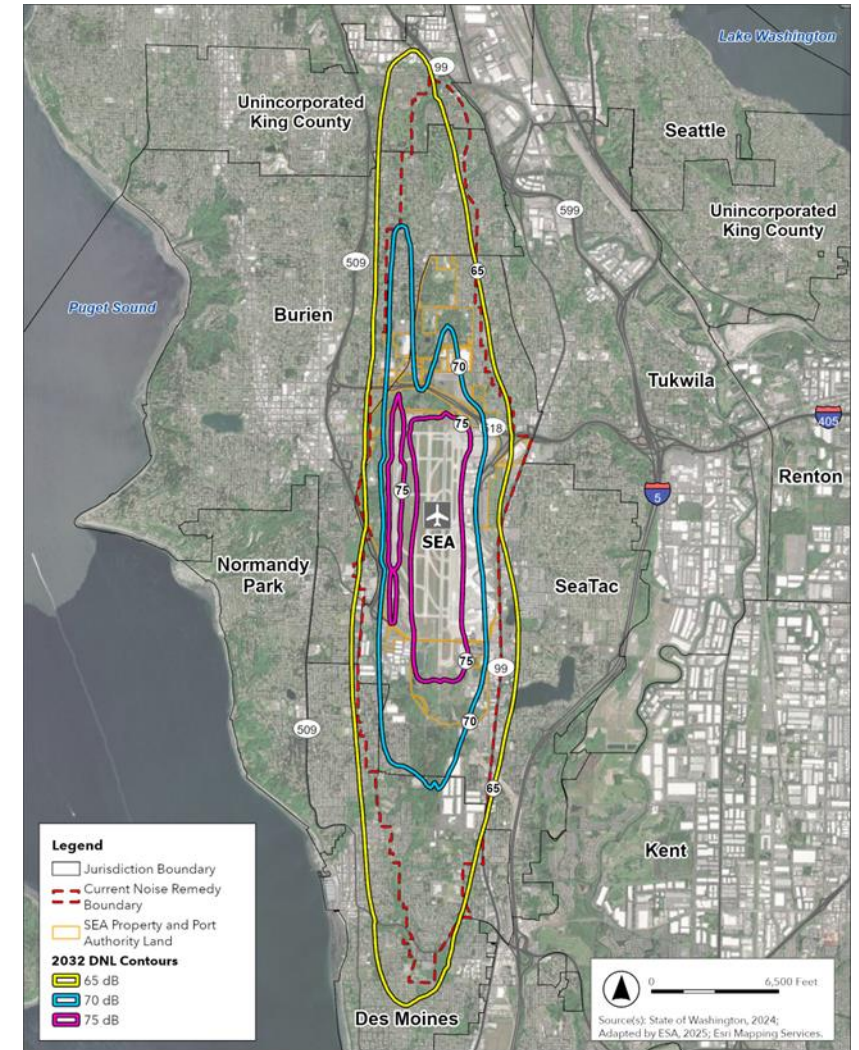
Land Use Planning in Part 150

- Identify noise incompatibilities within surrounding communities under FAA regulation
- Incompatible land uses at or above 65 DNL:
 - Residential*
 - Schools*
 - Places of worship*
 - Hospitals*
 - Nursing homes*
- Noise levels below 65 DNL is compatible with all uses



Status of NEM Work

- Finalizing Land Use Database
- Setting up Meetings with LU Jurisdictions to:
 - Verify Current & Planned Land Use Data
 - Review Local Policies & Regulations
- Identifying Noise Sensitive Uses
- Overlaying NEM Contours on Updated Land Use
- Drafting the NEM Report for public and FAA review



General Overview of Noise Compatibility Plan (NCP) Process



The NCP explores noise abatement, land use, and program management measures to minimize aircraft noise exposure



Input is solicited from study stakeholders, including the public



The FAA reviews entire NCP for completeness (e.g., technical, policy, effectiveness)



FAA has 180 days to review the NCP and issue their determination

FAA will review and approve/disapprove each recommended measure

Noise Abatement vs. Noise Mitigation

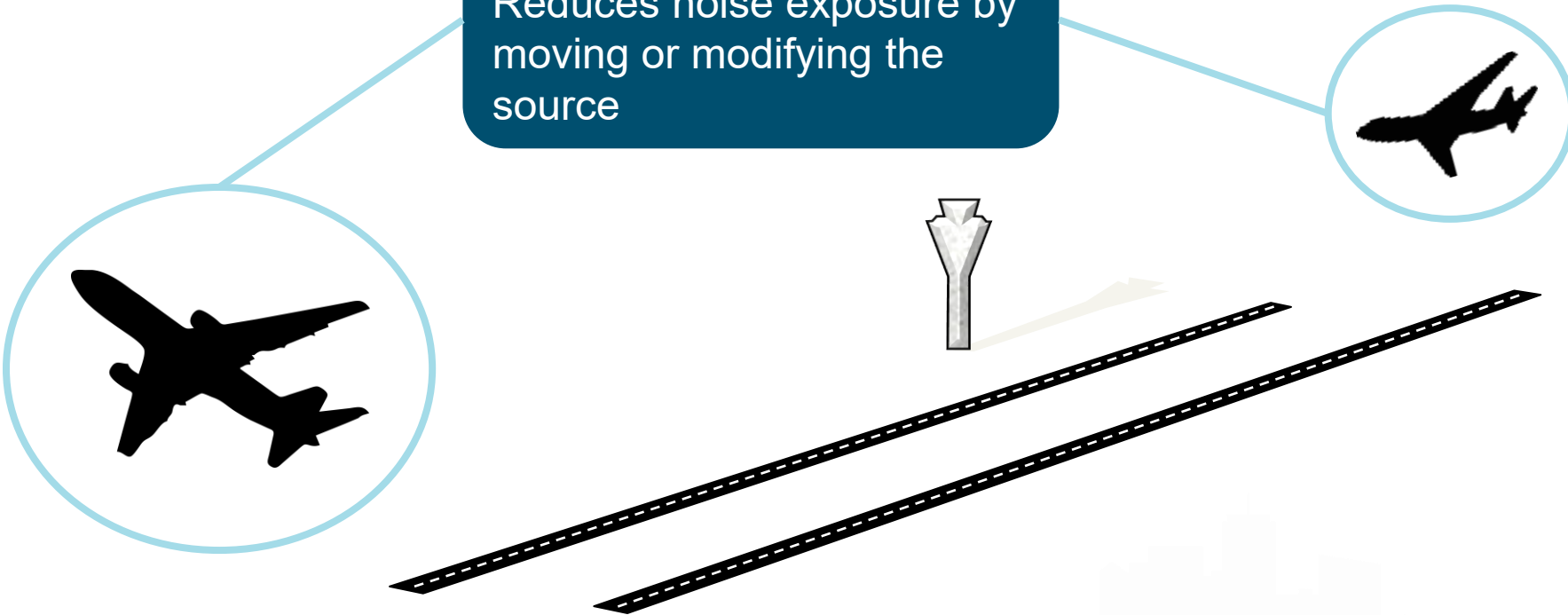
Noise Abatement

Reduces noise exposure by moving or modifying the source

Noise Mitigation

Addresses noncompatible land uses

- Preventative: addresses future uses
- Remedial: addresses existing uses

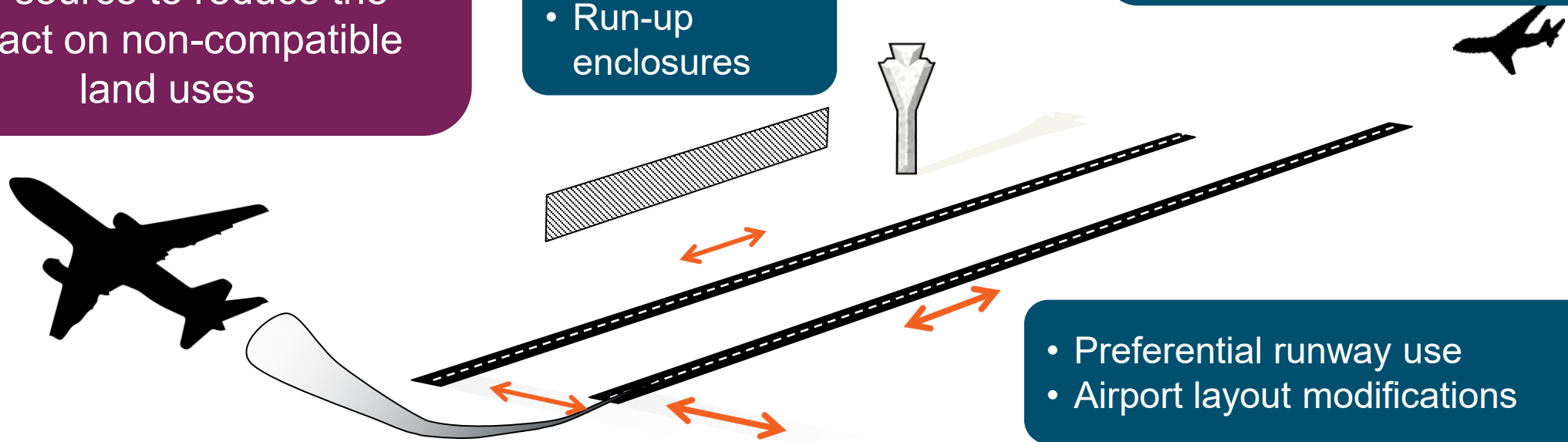


Types of Noise Abatement Measures

Noise abatement refers to measures to address noise at the source to reduce the impact on non-compatible land uses

- Noise barriers
- Run-up enclosures

- Noise abatement flight tracks
- Arrival/departure procedures
- Use restrictions (*subject to the requirements of 14 CFR Part 161*)



- Preferential runway use
- Airport layout modifications

Types of Land Use Measures

Land use measures address aircraft noise exposure through mitigating existing noise exposure on non-compatible land uses and/or prohibiting the introduction of new non-compatible land uses

Remedial Mitigation

- Land acquisition
- Sound insulation
- Aviation easements



Preventative Mitigation

- Land use controls
- Zoning
- Building codes
- Comprehensive plans
- Real estate disclosures

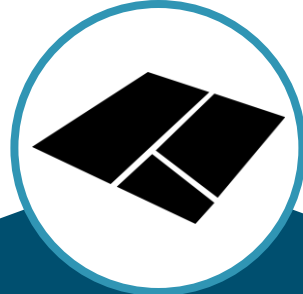
Example NCP Measures



Noise Abatement

- Noise abatement flight tracks
- Run-up enclosures
- Airport layout modifications
- Preferential runway use
- Arrival/departure procedures
- Use restrictions*
- Other actions proposed by stakeholders

*Subject to further notice, review, and approval requirements in 14 CFR Part 161



Land Use

- Remedial Mitigation
 - Land acquisition
 - Sound insulation
 - Aviation easements
- Preventative Mitigation
 - Land use controls
 - Zoning and/or Building codes
 - Comprehensive plans
 - Real estate disclosures
- Other actions proposed by stakeholders



Program Management

- Implementation tools
- Promotion, education, signage, etc.
- Monitoring
- Reporting
- NEM update
- NCP revision
- Other actions proposed by stakeholders

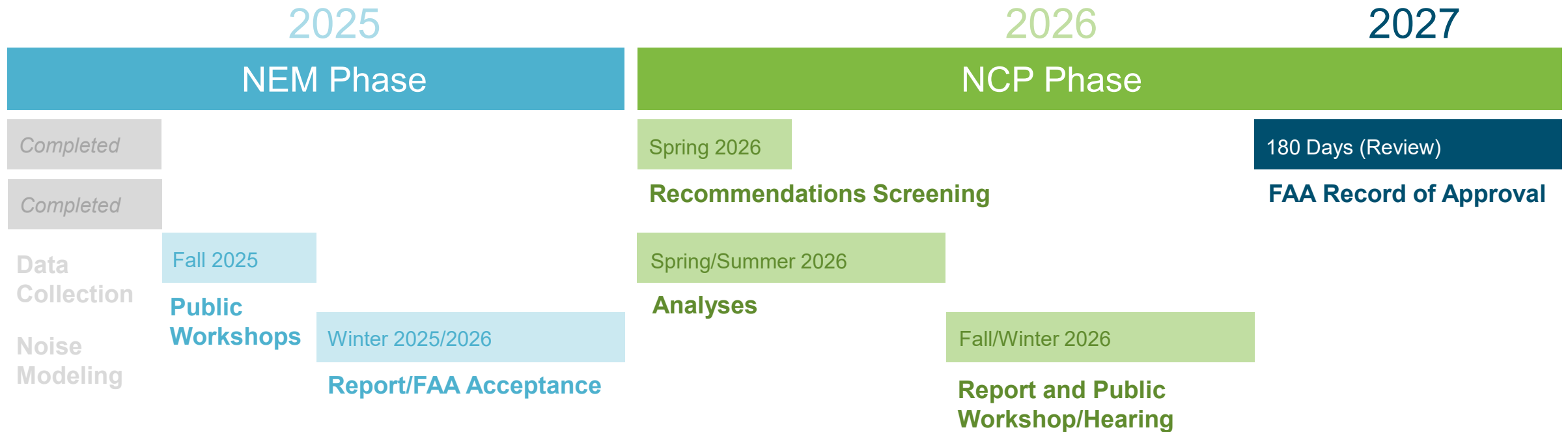
2014 Part 150 Study Recommendations*

- Noise Abatement Measures (2)
 - Ground Run-Up Enclosure (this was later determined to be infeasible in current airfield configuration)
 - Expand the Fly Quiet Program
- Land Use Mitigation Measures (4)
 - Sound insulate multi-family units based on updated Noise Remedy Boundary (NRB)
 - Offer avigation easements to mobile home residents
 - Evaluate noise levels at places of worship for inclusion in the Sound Insulation Program
- Program Management Measures (3)
 - Upgrade Noise Monitoring and Flight Tracking System
 - Periodically review and update the NEM and NCP as necessary
 - Continue to operate the Noise Office

*These are measures that were newly recommended in the 2014 Part 150 Study.



Part 150 Study Schedule



Upcoming In-Person Public Workshops

(1) Parkside Elementary School

2104 S 247th St
Des Moines, WA 98198
6:00 P.M. – 8:00 P.M.

Sept. 30th, 2025

(2) Seahurst Elementary School

14603 14th Avenue SW
Burien, WA 98166
6:00 P.M. – 8:00 P.M.

Oct. 2nd, 2025

(3) Glacier Middle School

2450 S 142nd Street
SeaTac, WA 98168
10:00 A.M. – 12:00 P.M.

Oct. 4th, 2025



Virtual Public Workshop

October 15th ,via Zoom

Presentation covering all information conveyed at in-person workshops followed by question and answer session

Further information about all workshops, including Zoom registration and mult-language needs can be found at the Study website: seapart150.com

Questions?

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