

# Part 150 Noise and Land Use Compatibility Study Primer

StART - December 14, 2022

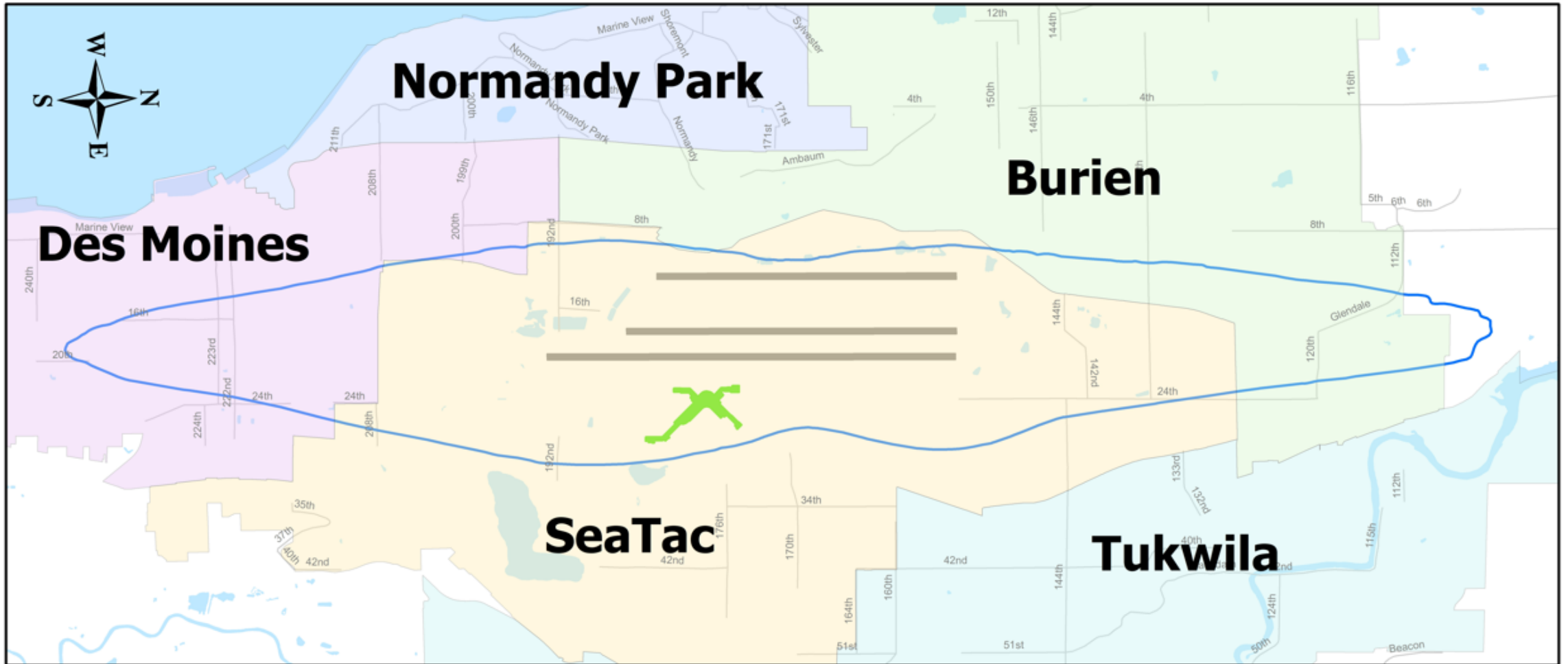
# Part 150 Overview

- 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 abatement and mitigation projects
- Part 150 studies focus on airport noise and land use incompatibilities within the 65 Day/Night Level (DNL) contour
- Updated 65 DNL noise contours are the required outcome of a Part 150
- FAA-approved mitigation measures become eligible for AIP funding at 80%

# DNL Noise Contour

- Day Night Level (DNL) – annual average of noise from aircraft operating at SEA
- Contours must be produced using the FAA-required Aviation Environmental Design Tool (AEDT)
- 65 DNL is the FAA-required metric and level
- Contours are depictions of the cumulative impacts of aircraft noise, and must be reviewed and approved by the FAA
- FAA will not allow the use of noise monitoring data to assess impacts
- The 65 DNL contour is the basis for land use analysis in the Part 150
- Current and future noise impacts will be assessed

# SEA 2018 DNL Contour



October 2021

# Part 150 Elements

- 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

# SEA Part 150 Studies

- Initial study completed in 1985, with updates in 1992, 2002 and 2014

## Elements include:

- Inventory of local residences/facilities
- Inventory of aircraft operations and fleet mix
- Air traffic forecast
- Extensive public involvement
- Committees
- FAA oversight and approval



# 2014 Part 150 Study Record of Approval

## – Noise Mitigation

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



# 2014 Part 150 Study Record of Approval

## – Noise Abatement

- 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 will be hired to lead the study and provide technical expertise
- Initial consultant scope of work complete
- Detailed project scope will be developed with chosen consultant
- Consultant procurement finalized by mid-year 2023
- Study development and data collection late 2023
- Full public study outreach anticipated early 2024
- Multi-year study that may take 4-7 years to complete

# QUESTIONS/DISCUSSION