Part 150 Noise and Land Use Compatibility Study Primer

StART - December 14, 2022
Part 150 Overview

• 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

Des Moines

Normandy Park

Burien

SeaTac

Tukwila

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 3rd 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