

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
STAFF BRIEFING

Item No. 7b

Date of Meeting September 24, 2013

DATE: September 13, 2013
TO: Tay Yoshitani, Chief Executive Officer
FROM: Stan Shepherd, Manager, Airport Noise Programs
SUBJECT: Part 150 Noise and Land Use Compatibility Study Update and Recommendations

SYNOPSIS

The Part 150 Noise and Land Use Compatibility Study Update (Part 150 Study) is designed to identify significant existing and future noise impacts, as defined by the Federal Aviation Administration (FAA), within areas surrounding Sea-Tac Airport and recommend actions to address those impacts.

Today's briefing will inform Commissioners about the May 15 public open house public hearing, the State Environmental Policy Act (SEPA) review, and will offer a final review of the noise mitigation recommendations currently included in the Draft Commission Resolution and Part 150 Study Update.

The public comment period for the Part 150 Study recommendations and SEPA review ran from April 15 through May 30 and approximately 70 comments were received on the study. Responses to the comments received have been completed and will be included in Part 150 documents. The next step in the process will be for Commission to adopt a resolution to approve the study and authorize staff to submit to the FAA for final review and approval.

On April 12, 2013, the Port issued the SEPA Threshold Determination of Non-Significance (DNS) of Proposed Action. The Port determined that the proposal would not have a probable significant adverse impact on the environment. The SEPA public comment period ran from April 15 through May 30. The SEPA Final Determination was issued on August 30 and should be final after the 21-day appeal period is complete on September 20.

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BACKGROUND AND OUTREACH

The Part 150 Study Update process began in 2009. The Commission has been briefed seven times on the study in public session. To date, the Port has sponsored five Part 150 Study public events:

- February 24, 2010 – in Des Moines.
- June 9, 2010 – in Burien.
- October 27, 2010 – in Des Moines.
- April 9, 2011 – at Sea-Tac Airport.
- May 15, 2013 – in Burien.

All outreach events were designed for maximum public involvement and were well-attended.

Briefings were also provided, as requested, to the following groups:

- Federal Way City Council.
- SeaTac City Council.
- Des Moines City Council.
- North Hill Community Club.
- City of SeaTac Hotel/Motel Committee.
- Highline School District Board of Directors.
- Citizens Against Sea-Tac's Expansion Community Group.
- Burien City Council.
- Normandy Park City Council.

Members of the study team also met multiple times with elected stakeholders at the local, state, and federal levels, to keep them apprised of the process and solicit input.

Other public involvement efforts:

- Periodic briefings to the Highline Forum to ensure that elected leaders in the airport communities were kept informed and had the ability to offer input throughout the process. To date, the Highline Forum has received eight briefings.
- Seven Technical Review Committee (TRC) meetings, during which the study team solicited feedback on technical issues related to the study. The TRC is comprised of land-use planners from local airport communities and representatives from the FAA, Puget Sound Regional Council, Boeing Field, Washington State Department of Transportation, and the Alaska Air Group.
- A dedicated data review session, during which the public could ask questions and learn about the noise metrics used in a Part 150 Study.

A combined open house and official public hearing was conducted on May 15, 2013. Approximately 80 people attended. In addition to Port staff, representatives from the

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consultant team of Landrum & Brown and staff from the FAA were on hand to answer questions on the study. A licensed court reporter was available at the meeting, so attendees could formally offer public comments regarding the Part 150 Study Update and the SEPA review process. Responses to comments from this meeting and all others received from April 15 through May 30 have been completed and will be included within the Part 150 Study Update appendix documentation. A summary of the public comments received will be provided to the Commission at today's briefing.

PART 150 STUDY UPDATE PROCESS

During the Part 150 Study Update process, the public was requested to provide their perspective on which mitigation items should be proposed as options in the study. Input received during the first four public meetings generated a long list of suggested recommendations. Using the FAA's established criteria for Part 150 community noise mitigation, the list was refined to recommendations that could potentially provide a noise reduction within the 65 Day Night Level (DNL) contour and would be allowable under Part 150 regulations.

After the study update is approved by the FAA, Port staff will prepare for the Commission a prioritization plan for the implementation of the approved noise mitigation recommendations. Final FAA approval of the Part 150 noise mitigation recommendations qualifies these recommendations for potential FAA Airport Improvement Program (AIP) grant funding; however, approval of the recommendations does not guarantee AIP grant funding or the Port's ability to commit resources.

PART 150 STUDY RECOMMENDATIONS

The Part 150 Study recommendations are categorized as follows: 1) Continuing measures with some modification; 2) Continuation of existing measures without modification; 3) New measures; and 4) Program management measures, such as employee staffing and computer equipment and resources, which will assist with noise program implementation and management. (Note that the cost estimates provided are preliminary and subject to change.)

Continuing Measures with Some Modification

- Single Family Homes Sound Insulation: Continue offering sound insulation to eligible homes within the revised Noise Remedy Program Boundary. A potential new element to this program is including air conditioning as part of the sound insulation package for single family homes. Homes that have already received an insulation package would not be eligible for air conditioning.
 - Cost of adding air conditioning for one home: \$12,500
 - Number of remaining homes identified: 193
 - Total cost estimate: \$2,412,500

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- **Multi-Family Owner-Occupied Sound Insulation:** Offer sound insulation to eligible multi-family, owner-occupied residences (condominiums) within the revised Noise Remedy Program Boundary.
 - Number of individual condominium units identified: 320
 - Total cost estimate: \$21,440,000, or \$67,000 per unit

- **Voluntary Acquisition of Residential Homes Located in the South Approach Transition Zone (ATZ) for the 3rd Runway.**
 - Number of single family homes identified: 16
 - Number of apartment buildings identified: 6
 - Total cost estimate: \$10,000,000

- **Maintenance of Run-Up Regulations:** Continue with existing measures and modify to include the use of the recommended Ground Run-Up Enclosure (GRE).

- **Fly Quiet Program:** Continue to implement the existing Fly Quiet Program and modify to include different airline categories to enhance the program.

Continuing Measures without Modification

- **Insulation of Schools:** As Port, Federal Aviation Administration (FAA) and State funding permits, continue the sound insulation program for Highline Community College buildings and schools in the Highline School District that were previously identified as eligible.

- **Property Advisory Service:** Provide residents and property owners within the nearby communities access to timely and factual information concerning noise programs and options for mitigation.

- **Local Government Remedy Support:** Encourage the local jurisdictions to undertake projects, provide services, and adopt laws that make them more compatible with airport operations.

- **Funding for Land Use and Noise Compatibility Planning:** Assist local public agencies having planning authority within the 65 DNL Noise Contour to apply for reimbursable funding for specific off-airport land use and noise compatibility planning efforts that are consistent with the Part 150 guidelines and the Port's noise compatibility goals.

- **Prepare Cooperative Development Agreements:** Continue to address development potential within local jurisdictions for areas included within the revised Noise Remedy Boundary.

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- **Explore Limited Rescheduling of Nighttime Flights:** This measure involves the voluntary rescheduling of aircraft flight times for nighttime short-haul flights.
- **Use VOR Radials to Curb Aircraft Drifting from Noise Abatement Tracks:** This measure uses very high frequency (VHF) Omnidirectional range radials (VOR) to prevent departing aircraft from drifting off the runway heading tracks as specified in the FAA Tower Order.
- **Preferential Runway Use:** This measure implemented a preferential runway system during the nighttime hours for operations through the north flow nighttime noise abatement corridor.
- **Use of Flight Management System (FMS) Procedures:** This measure is designed to encourage the use of FMS procedures to improve noise abatement corridor compliance.
- **Use of Ground Equipment:** This measure recommends the installation of power and conditioned air in existing and newly constructed gates to minimize the use of aircraft auxiliary power units.

New Measures

- **Multi-Family Tenant Occupied Sound Insulation:** Offer sound insulation to eligible apartment buildings inside the revised Noise Remedy Program Boundary, starting with a pilot project to determine the project's feasibility.
 - Number of individual apartment units identified: 1,157
 - Total cost estimate: \$46,280,000, or \$40,000 per unit
 - Estimate for a feasibility study for one complex – approximately \$1,100,000 (included in total cost estimate above) based on a 20-24 unit apartment building
- **Church and Places of Worship Sound Insulation:** Conduct a study to evaluate the noise levels at various churches and places of worship within the revised Noise Remedy Program Boundary to determine the feasibility of providing sound insulation to these buildings.
 - Estimated cost of this study is approximately \$40,000
- **Voluntary Purchase of Avigation Easements on Individual Parcels with Mobile Homes:** Work with property owners and local jurisdictions to explore options to discontinue the use of mobile homes as residences on single family zoned properties, within the revised Noise Remedy Program Boundary.
 - Number of identified mobile homes on private land: 88
 - Total cost estimate for purchase of avigation easements only: \$440,000, or \$5,000 per unit

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- Potential additional cost if removal or relocation of the structure is required: costs TBD
- Establish Feasible Locations for a Ground Run-up Enclosure (GRE): A GRE is a large three-sided structure within which aircraft can perform required engine testing, thereby resulting in a quantifiable noise reduction impact on the surrounding communities. The Part 150 identified three feasible locations on the airfield. There are operational and cost issues associated with each of the feasible locations on the airfield. Concurrent with the Part 150 Study and within the context of the Airport's future operational needs, Port staff will develop more detailed construction cost estimates and facilities layouts for GRE site alternatives within the upcoming Sustainable Airport Master Plan.
 - Cost of structure only (not including site prep): \$6,000,000 to \$10,000,000
 - Cost of site preparation (dependent on location) \$10,000,000 to \$25,000,000

Program Management Measures

- Replace and Upgrade the Noise Monitoring and Flight Tracking System: The current system is more than 12 years old and is recommended to be replaced with newer technology innovations that require comprehensive updates to the existing system.
 - Total cost estimate for replacement of flight tracking system and 25 permanent noise monitoring stations: \$2,000,000
- Periodically Review and if Necessary, Update the Noise Exposure Maps (NEMs) and the Noise Compatibility Program (NCP): Port Staff will periodically review the NEMs and NCP to determine whether any significant changes have occurred to the noise environment in accordance to the FAA's guidelines.
- Continue to Operate the Noise Programs Office: The Port will adequately staff and operate the Noise Programs Office to carry out provisions of the Part 150 Study and provide noise-related community resources.

FINANCIAL IMPLICATIONS

Assuming all proposed noise mitigation recommendations in the current Part 150 Study are approved by the Commission and the FAA, all recommendations receive 80% of eligible costs through AIP grant funding, and the Port is able to commit resources to cover its share (20% or more) of the funding match, the total project capital costs will be approximately \$131,575,000.

Internal operating costs of these programs are assumed to be met with existing resources. Though the total amount expected to be spent will vary on a year-to-year basis, an

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average of \$13,157,500 each year over a 10-year period may be necessary to fund these projects.

Staff will work with the Office of Social Responsibility to follow federal Disadvantaged Business Enterprise (DBE) guidelines to allow for small business opportunities.

NEXT STEPS

A Commission resolution for adoption of the Part 150 Study Update is scheduled for first reading on October 1, 2013, followed by second reading and approval on October 8. After Commission approves the resolution, the study documents will be submitted to the FAA for review. It is anticipated that the FAA will issue the Federal Register notice in November 2013, which will start the 180-day review period. If no delays are encountered during the review, we anticipate that the FAA will issue the Record of Approval (ROA) by May 2014.

ATTACHMENTS TO THIS BRIEFING

- Computer slide presentation.
- Draft Part 150 Study Update Commission Resolution.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- **January 15, 2013** – Part 150 Noise and Land Use Compatibility Study Update.
- **October 2, 2012** – Part 150 Noise and Land Use Compatibility Study Update.
- **August 23, 2011** – Part 150 Noise and Land Use Compatibility Study Update Briefing and Policy Roundtable with Mayors (or their representatives) from Burien, Des Moines, Federal Way, Normandy Park, SeaTac and Tukwila.
- **June 28, 2011** – Part 150 Noise and Land Use Compatibility Study Update held in Federal Way.
- **October 26, 2010** – Part 150 Noise and Land Use Compatibility Study Update.
- **June 22, 2010** – Part 150 Noise and Land Use Compatibility Study Update.
- **March 23, 2010** – Part 150 Noise and Land Use Compatibility Study Update held in Normandy Park.
- **February 23, 2010** – Part 150 Noise and Land Use Compatibility Study Update and Policy Roundtable with mayors (or their representatives) from Burien, Des Moines, Federal Way, Normandy Park, SeaTac and Tukwila.
- **November 23, 2009** – Authorization for the Chief Executive Officer to update the Part 150 Noise Compatibility Plan Study for an approximate cost of \$2.5 million, representing an increase of \$1.5 million over the previously authorized amount.

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- **June 23, 2009** – Authorization for the Chief Executive Officer to procure and execute a contract for consultant services to implement an update to the Part 150 Noise Study for an estimated cost of \$500,000 to \$1 million.