



COMMISSION
AGENDA MEMORANDUM

Item No. 7c

BRIEFING ITEM

Date of Meeting January 22, 2019

DATE: January 15, 2019

TO: Stephen P. Metruck, Executive Director

FROM: Arlyn Purcell, Director Aviation Environment and Sustainability
Stan Shepherd, Manager Airport Noise Programs

SUBJECT: Sea-Tac Sound Mitigation Briefing

EXECUTIVE SUMMARY

As part of the Port's long-term commitment to communities surrounding the airport, the Port offers sound insulation for eligible single-family homes, apartments, condominiums, places of worship, and schools located within the current Federal Aviation Administration (FAA) approved Airport Noise Compatibility Program (Part 150) noise remedy boundary. Sound insulation projects provide renovations at no cost to homeowners and include new windows, exterior doors, storm doors and ventilation to meet the FAA standard of a 45 decibel (dB) interior noise level. Approximately 80 percent of eligible costs are funded by FAA Airport Improvement Program (AIP) grants. Owners are required to sign an aviation easement in exchange for the improvements. The program began in 1985 and, to date, has insulated approximately 9,400 homes, 8 Highline School District Schools, 5 condominium complexes (246 units), and 14 buildings on the Highline College campus. In addition to sound insulation, the Port acquired 5 mobile home parks (359 home units), 69 homes north of the third runway impacted by airport noise and 1,400 single family homes associated with the third runway construction project.

Part 150 Study

The Part 150 Noise Compatibility Study process is designed to identify noise incompatibilities surrounding an airport, and to recommend measures to both correct existing incompatibilities and to prevent future incompatibilities. For Part 150 Study purposes, noise incompatibilities are defined as residences or public use noise-sensitive facilities and must be located within the 65 Day-Night Average Sound Level (DNL) noise contour and meet a stringent noise audit.

Seattle-Tacoma International Airport's first Part 150 Noise Compatibility Study was completed in 1985. A total of three study updates were completed in 1992, 2002, and 2014. The current noise remedy boundary was an outcome of the 2014 study update.

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Single Family Home Sound Insulation

The Airport Noise Office identified approximately 150 single-family homes located within the noise remedy boundary as potentially eligible for voluntary sound insulation. All homeowners were contacted, and the noise office received 49 completed applications. Acoustical testing was completed on 41 single family homes in July 2018. Of those 41 single-family homes, 36 qualified for the program with an average interior DNL noise level of 45 dB or greater. Construction is anticipated to begin in the first quarter of 2019.

Condominium Sound Insulation

The Airport Noise Office has identified three condominium complexes (approximately 240 units) located within the noise remedy boundary as potentially eligible for voluntary sound insulation. The Port is currently procuring a consulting firm to administer the program by providing project design and construction management. Once the consultant firm is selected (anticipated in the first quarter 2019), a schedule detailing homeowner outreach, acoustic testing, architectural design, cost estimation, construction, and closeout will be completed.

Apartment Sound Insulation

There are approximately 18 buildings (877 units) located within the noise remedy boundary that are potentially eligible for sound insulation. A pilot project consisting of one apartment complex to be determined by Port Noise staff would begin construction in 2022 at an estimated cost of \$2.3 million.

Places of Worship Sound Insulation

There are approximately seven places of worship located within the noise remedy boundary that are potentially eligible for sound insulation. A pilot project consisting of one place of worship to be determined by Port Noise staff would begin construction in 2023 at an estimated cost of \$1.1 million.

Voluntary Purchase of Avigation Easements on Parcels with Mobile Homes

Since mobile homes cannot be adequately sound insulated, it was recommended through the Part 150 to offer avigation easements to owners. The avigation easement protects the airport from future noise related litigation. It has been estimated that 88 mobile homes on private land parcels are eligible to participate at a potential cost of \$462,000. Project is estimated to begin in 2021.

Voluntary Acquisition of Residential Structures Located in the South Approach Transition Zone (ATZ) for the Third Runway

An ATZ is a defined area that extends 2,500 feet past the runway protection zone and was a product of the third runway supplemental Environmental Impact Study and the Part 150 as an eligible area for acquisition of residential parcels for noise compatibility purposes. The

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structures would be removed and the parcels converted to airport compatible land. Sixteen single-family homes and six apartment buildings have been identified as potentially eligible for the program. Project is estimated to begin in 2022.

Highline School District Sound Insulation

The Highline School District has a 2002 Memorandum of Agreement (MOA) with the Port and the FAA to sound insulate 15 noise-impacted schools at a total cost of \$100 million. As of December 2018, seven schools in the Highline School District remain to be sound insulated. In 2017, the Highline School District passed a bond for the reconstruction of Des Moines Elementary and Highline High School, both of which fall under the MOA. Construction, including insulation work, is currently underway at Des Moines Elementary. Highline High School will commence construction in mid-2019.

ATTACHMENTS TO THIS BRIEFING

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

July 10, 2018 – Commission authorized \$5,107,000 for procurement of a firm to provide consulting services for condominium complex noise remediation.

October 11, 2016 – Commission authorized \$14,535,000 for Single Family Sound Insulation.

October 22, 2013 – Commission adopted Resolution No. 3683 concluding the Federal Aviation Regulation (FAR) Part 150 Noise and Land Use Compatibility Study Update for Seattle-Tacoma International Airport

October 8, 2013 –Resolution No. 3683 concluding the Federal Aviation Regulation (FAR) Part 150 Noise and Land Use Study Update for Seattle-Tacoma International Airport was introduced.