

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No.	6b
Date of Meeting	October 11, 2016

DATE: October 3, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Elizabeth Leavitt, Senior Director Environment & Sustainability
Stan Shepherd, Manager Airport Noise Programs
SUBJECT: Single-family sound insulation project authorization

Amount of This Request:	\$14,535,000	Source of Funds:	FAA Grants, Passenger Facility Charges and Airport Development Fund
Est. Total Project Cost:	\$14,535,000		

ACTION REQUESTED

Request a single Commission authorization for the Chief Executive Officer to (1) authorize funding; (2) execute a consulting contract for an estimated value of \$1,100,000; and (3) advertise, bid, award, and execute job order contract(s) for single-family residential sound insulation. The amount of funding authorization for this request is \$14,535,000.

SYNOPSIS

As part of the Port's long term commitment to communities surrounding the airport, it is necessary to offer sound insulation for 123 single-family residences that continue to be within the newest FAA approved noise contours. Approximately 9,400 single-family homes have already received sound insulation enhancements. Approximately 60% of the cost to insulate the 123 homes will be funded by FAA grants. In exchange for the sound insulation, homeowners provide the Port with an avigation easement recorded on the parcel for air rights allowing passage of aircraft overhead. Each home will require a pre- and post-noise audit to determine eligibility. The project has been approved within the Plan of Finance under CIP C200094. Project funding will include FAA AIP Grants, Passenger Facility Charges (PFCs), noise project funding reimbursement from the previous sale of noise-acquired land, and the Airport Development Fund. Sound insulation projects typically employ at least one local small business for on-site construction.

BACKGROUND

The Code of Federal Regulations (CFR) Title 14, Part 150, governs Airport Noise Compatibility Planning. Part 150 describes the processes by which airports identify and mitigate exposure of communities to airport noise.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 2 of 7

The Airport's noise mitigation program, under Federal Aviation Regulation Part 150, was established by the Commission in 1985 as one of the first voluntary airport noise mitigation programs in the country. In 1985, the Part 150 Study recommended an insulation program based on an estimate of the year 2000 noise impacts. As a result, the Airport identified approximately 10,000 homes as eligible for noise reduction treatment.

In 2014, the FAA approved the most recent Part 150 update, which was a culmination of several years of land use studies and public involvement. The Part 150 evaluated the current noise environment on the community and concluded that noise levels had declined based on operation levels and predominantly newer, quieter aircraft within the fleet mix. Due to the noise reduction, the FAA required that the Airport re-draw its noise remedy boundary to reflect the smaller noise footprint. Subsequently, the Airport Noise Office attempted to contact every eligible homeowner to ensure that they were given the opportunity to participate in the program before the new smaller boundary became effective at the end of 2015. As a result of that effort, 39 homes have been completed since 2014. To date, the Port has sound insulated approximately 9,400 single-family homes at an approximate cost of \$300 million.

The homes included in this authorization request have been eligible for noise insulation since 1985. The extent to which the owners will take advantage of this offer to participate is not clear. The budget is based on 100% participation.

PROJECT JUSTIFICATION AND DETAILS

Resolution No. 3683 was adopted by the Commission on October 22, 2013. This resolution included all recommendations from the Part 150 Study including sound insulation for single-family homes.

The goal of this program is to meet the requirements of Resolution No. 3683 to conduct an ongoing noise remedy program consisting of the insulation of homes.

Project Objectives

- Reduce the interior noise levels within single-family homes to at least 45 dB with a minimum 5 dB reduction by installing new sound rated windows, doors, ventilation, and other customized treatments approved by the FAA. All work is performed at no cost to the homeowners.

Scope of Work

The Port will provide funding and staff oversight of the program to provide sound insulation to eligible participants within the Noise Remedy Program Boundary. Airport Noise Programs estimates that approximately 123 homes may be eligible to participate in the program.

In order for a home to be eligible, it has to be built prior to the establishment of local building codes enacted to either meet or exceed the FAA standards for noise reduction. These dates include December 3, 1986, for the City of Des Moines and September 6, 1987, for all other areas

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 3 of 7

of King County. The FAA has also implemented a new requirement for all FAA-funded sound insulation projects for acoustical qualification based on a pre- and post-noise audit. Each home must be tested to ensure an interior noise level of at least 45 dB can be achieved through installing sound insulation, while achieving a minimum reduction of 5 dB.

In exchange for participation in the sound insulation program, all homeowners will be required to sign an avigation easement, which will be recorded on the parcel permanently with King County. An avigation easement provides the Port with protections for free and unobstructed passage of aircraft over the parcel.

The consulting contract will provide design, project management and construction management services to ensure all Federal Aviation Administration (FAA) sound insulation requirements and Airport Improvement Program (AIP) grant funding requirements. The construction work will be performed by a JOC with oversight from a consulting firm. The Airport Noise Office will be responsible for overall customer relations with homeowners. Port Construction Services (PCS) and the Project Management Group (PMG) will provide oversight to ensure high quality construction services are delivered to the project.

Schedule

Project Commencement	February 2017
Project Complete (estimate)	March 2019

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$12,312,000	\$2,223,000	\$14,535,000
Budget adjustments	\$2,223,000	-\$2,223,000	\$0
Revised budget	\$14,535,000	\$0	\$14,535,000
Previous Authorizations	\$0	\$0	\$0
Current request for authorization	\$14,535,000	\$0	\$14,535,000
Total Authorizations, including this request	\$14,535,000	\$0	\$14,535,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$14,535,000	\$0	\$14,535,000

Project Cost Breakdown

	This Request	Total Project
Construction Costs	\$10,516,000	\$10,516,000
Consulting Services	\$658,000	\$658,000
Regulated Materials Survey	\$308,000	\$308,000
Architectural Design	\$419,000	\$419,000
Administrative Costs	\$875,000	\$875,000
Contingency (5%)	\$671,000	\$671,000
State & Local Taxes (estimated)	\$1,088,000	\$1,088,000

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 4 of 7

Total	\$14,535,000	\$14,535,000
-------	--------------	--------------

Budget Status and Source of Funds

This project was included in the 2016-2020 capital budget and plan of finance within CIP C200094 with a budget of \$12,312,000. Costs originally anticipated to be expense (regulated materials management) have since been reclassified as capital, resulting in a capital budget increase but no net change in total project cost.

Source of funds will be from FAA AIP Grants, Passenger Facility Charges, reinvestment funds from the sale of previously purchased noise land and the Airport Development Fund. It's estimated that approximately \$8.4 million of the project budget will be from FAA AIP Grant funding.

Financial Analysis and Summary

CIP Category	Environmental/Community Relations
Project Type	Noise Mitigation
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$14,535,000
Business Unit (BU)	Airfield Movement Area
Effect on business performance	N/A
IRR/NPV	N/A
CPE Impact	Less than \$0.01

Due to the use of grants and PFCs, approximately 95% of the costs are estimated to be excluded from the airline rate base.

Lifecycle Cost and Savings

Once the project is complete and the avigation easement is permanently recorded on the parcel, there will be no further costs or savings incurred.

STRATEGIES AND OBJECTIVES

This project supports the Port's Century Agenda objective of meeting the region's air transportation needs at the Airport for the next 25 years. Mitigating the impacts of airport noise within the community ensures that the Airport can continue to serve the growing needs of the region while minimizing its impacts.

This project will support the following Aviation Strategic Goals:

- Lead the U.S. airport industry in environmental innovation and minimize the Airport's environmental impacts.
- Maintain valued community partnerships based on mutual understanding and socially responsible practices.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 5 of 7

Economic Development

This project could create limited duration construction jobs.

Environmental Responsibility

- Reduces interior noise levels within homes.
- The project will remove any harmful regulated materials that are identified within the sound insulation project area of homes.
- As a side benefit, the installation of new sound rated windows and doors may also provide cooling and heating energy efficiency for homeowners.

Community Benefits

This project is a derivative of the 2014 Part 150 study that was approved by the FAA. The project directly benefits the community by providing close-in communities that are impacted by aircraft noise some relief by sound insulating homes to reduce the interior noise levels.

Contracting within this project could provide work to small and disadvantaged business enterprises.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Contract each home one at a time with separate architectural contracts. This method was used by the Port approximately eight years ago.

Cost Implications: \$19,517,000

Pros:

- This alternative would follow conventional procurement practices.
- The process would allow for small business opportunities.
- Allows Port staff to have more control of the construction process.

Cons:

- This alternative creates extensive internal work for the Noise Office, the Project Management Group, and Central Procurement Office since each contract would have to be bid and awarded for each home.
- This alternative would be time consuming.
- This alternative would need additional Port oversight due to stringent FAA contracting and construction guidelines since the project will be newly funded by FAA grants.
- May encounter high contractor turnover rates and low or limited participation of contractors based on low bid.
- Highest overall cost with this method.

This is not the recommended alternative.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 6 of 7

Alternative 2 – Procure a job order contract (JOC) at a specified dollar amount to handle packages of two to four homes at a time. Procure a separate architectural contract. This method was used by the Port for the past five years.

Cost Implications: \$15,565,000

Pros:

- The Port has experience managing this type of procurement method.
- The process would allow for small business opportunities.
- A JOC creates efficiencies in being able to assemble packages of two to four homes to hand off to the prime contractor.

Cons:

- Requires extensive internal resources from Port staff to manage the contracts and oversee the work. Additional limited duration staff may be needed if the Port starts multiple insulation projects at one time.
- This contract method will need additional Port oversight due to stringent FAA contracting and construction guidelines since the project will be newly funded by FAA grants.

This is not the recommended alternative.

Alternative 3) – Procure a consulting firm to provide design, project management and construction management. Services include managing the process to ensure compliance with all stringent FAA sound insulation requirements and Airport Improvement Program (AIP) Grant funding requirements. Procure a job order contract (JOC) for sound insulation construction. Airport Noise staff will maintain overall responsibility for homeowner satisfaction.

Cost Implications: \$14,535,000

Pros:

- The firm administering the program would have experience implementing these types of FAA grant-funded projects throughout the U.S. at large airports.
- The process would allow for small business opportunities.
- This method would create efficiencies and alleviate Port staff time needed to address other programs and projects.
- Would potentially create cost savings by reducing staff time spent on managing projects from beginning to end.
- The Port would assume less risk with future liabilities of installation and products.
- The Port would remain in its primary role of customer relations to ensure the project is meeting the goal of creating and maintaining a supportive community.
- This is assumed to be the quickest method to complete the entire project.

Cons:

- This method may add more direct construction costs onto the program.
- Would add additional contracting with the use of a project administration firm.
- The Port would be one step removed from the day-to-day implementation of the program.

This is the recommended alternative.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 3, 2016

Page 7 of 7

ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- **October 22, 2013** – Second Reading and Final Passage of 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** – First Reading of Resolution No. 3683 concluding the Federal Aviation Regulation (FAR) Part 150 Noise and Land Use Compatibility Study Update for Seattle-Tacoma International Airport.