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COMMISSION

AGENDA MEMORANDUM Item No. 8m

ACTION ITEM Date of Meeting November 8, 2022

DATE: October 26, 2022

TO: Stephen P. Metruck, Executive Director

FROM: Stan Shepherd, Sr Manager, Airport Noise Programs

Tom Fagerstrom, Airport Noise Programs Coordinator

SUBJECT: Authorization to Contract for Part 150 Noise and Land Use Compatibility Study Consulting Services

Amount of this request: \$6,000,000

Total estimated project cost: \$7,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to initiate an update to the Part 150 Noise and Land Use Compatibility Study and to procure consultants, develop scopes of work, and to design, implement and guide the next SEA Part 150 Noise and Land Use Compatibility Study Update. The Port anticipates the project will be reimbursed approximately 80% through the FAA's Airport Improvement Program (AIP) grant funding with the remaining 20% being funded by the Airport Development Funds (ADF).

EXECUTIVE SUMMARY

A Part 150 Noise and Land Use Compatibility Study is required by the Federal Aviation Administration (FAA) to update airport noise compatibility programs and establish eligibility for Airport Improvement Program (AIP) grant funds. SEA's last Part 150 update was completed and approved by the FAA in 2014.

In 1985 the Port completed the first Part 150 Study at SEA. Since that time there have been three other updates to the Study in 1993, 2002, and 2014. Through our Part 150 noise mitigation programs, flight tracking, noise monitoring, and airline outreach incentive programs, the Port has been a national leader in both sound mitigation and noise abatement. To date we have spent over \$400 million on total mitigation programs including home and school insulation, and property acquisition and relocations associated with the Third Runway project. Noise Abatement programs have encouraged airline usage of newer and quieter aircraft, promoted high FAA compliance levels with noise abatement flight paths and procedures, and deployed a comprehensive flight tracking and noise monitoring system.

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A Part 150 Study is a multi-year effort that assesses current and future aircraft noise levels and their associated effects on the surrounding communities. The study establishes land use guidelines and identifies areas of significant aircraft noise and incompatible land uses. Part 150 regulation establishes that an area is considered impacted by aircraft noise when located within a 65 DNL noise contour. DNL is an annual average of aircraft noise and is the FAA required noise metric to be used in Part 150 studies.

The consulting team chosen for the study will typically consist of professionals in land use planning, public relations, aviation noise, and environmental issues. In addition to consultants, Port employees will participate in the update in the areas of land use planning, GIS applications, community outreach, environmental evaluations, and noise. The work that will be performed by the consulting team is highly technical and must be consistent with federal regulations and address a wide array of community interests.

JUSTIFICATION

Since the completion of the previous Part 150 update in 2014, many changes have taken place in the airport's noise environment. Airline fleets have changed due to the introduction of some newer generation aircraft. Regional population growth has led to steadily increasing passenger demands on SEA. Aircraft operations (takeoff and landings) have increased, and associated noise is a concern for local communities.

Diversity in Contracting

In compliance with FAA's rules and regulations, the Port will be required to utilize U.S. DOT's Disadvantage Business Enterprise (DBE) program (CFR 49 Part 26). Staff is working with the Diversity in Contracting Department to identify the appropriate DBE goal for this study.

DETAILS

Scope of Work

The major focus of the Part 150 Noise and Land Use Compatibility Study update will be to determine and analyze any changes in the 65 DNL noise environment compatibility since the completion of the previous update in 2014 to determine if any additional sound insulation programs could be eligible. Other areas of focus will include analysis of SEA's noise abatement programs, noise monitoring locations and possible opportunities for improved deployment.

Other elements of the Part 150 process will include:

- Developing a Public Involvement Plan
- Developing an inventory of existing conditions
- Preparing (or evaluating existing) Aviation Demand Forecasts
- Evaluating the need for additional noise measurements
- Preparing an existing conditions DNL noise contour
- Preparing a future 5-year conditions DNL noise contour

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- Evaluating land use and community noise impacts based on prepared contours
- Evaluating noise abatement procedure alternatives
- Preparing a final Noise Compatibility Plan (NCP)

Schedule

Part 150 studies are multi-year efforts that include extensive community outreach and involvement. An initial schedule of milestones leading to project kickoff is included in this section. Staff will return to the Commission multiple times to provide updates on the progress of the study, associated costs, and community involvement.

Activity Timeframe

Commission authorization to contract 2022 Quarter 4

Consultant Advertisement 2022 Quarter 4

Consultant selection 2023 Quarter 2

Project scope agreement & data collection 2023 Quarter 3

Full project kickoff/public outreach 2024 Quarter 1

Cost Breakdown This Request Total Project

Project Cost \$6,000,000 \$7,000,000

Total \$6,000,000 \$7,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Delay the Part 150 to 2025

Cost Implications:

This would result in less spending of approximately \$500K in 2023 and \$1M in 2024.

Pros:

- (1) No costs spent on this project in 2023 & 2024

Cons:

- (1) The FAA could stop funding noise projects until a new NCP was developed through a Part 150.

(2) Any additional community noise mitigation would be further delayed.

(3) Costs would certainly continue to rise in future years through a delay and total project cost would likely be significantly higher.

This is not the recommended alternative.

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Alternative 2 – Do not perform the Part 150 update.

Cost Implications:

Savings of approximately \$7M in 2023 thru 2026 expense budget.

Pros:

- (1) Cost savings to the Port.

Cons:

(1) The update is necessary to evaluate noise impacts and to continue the airport's eligibility for federal grants.

(2) Current noise impacts of SEA operations on the community would not be known.

- (3) Public trust in Port noise mitigation efforts would be compromised.
- (4) With this alternative the FAA would most likely stop issuing grants for noise projects. This is not the recommended alternative.

Alternative 3 – Perform the update using a combination of both consultant and Port staff.

Cost Implications:

The study is estimated to cost up to \$7M with a noise consulting team on-board.

Pros:

- (1) The combination of consultants and in-house Port staff allows the technical work, coordination with FAA, and the public outreach to occur in the most effective way.
- (2) Public trust in the study and noise mitigation efforts is enhanced.

Cons:

- (1) Part 150 studies have unforeseen challenges that can affect consultant costs and schedules.
- (2) Out-of-town consultant scheduling.

This is the recommended alternative.

#### FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary Capital Expense Total

#### COST ESTIMATE

Original estimate \$0 \$7,000,000 \$7,000,000

#### AUTHORIZATION

Previous authorizations 0 \$1,000,000 \$1,000,000

Current request for authorization 0 \$6,000,000 \$6,000,000

Total authorizations, including this request 0 \$7,000,000 \$7,000,000

Remaining amount to be authorized \$0 \$0 \$0

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Previous authorization of \$1M was included with the April 12, 2022, legal settlement agreement (see Previous Commission Actions listed below) to begin procurement and planning for the Study.

#### • Annual Budget Status and Source of Funds

This project will be included in the Noise Programs department operating expense budget on an annual basis for the years 2023 through 2026. The Port anticipates it will be reimbursed approximately 80% through the FAA's Airport Improvement Program (AIP) grant with the remaining 20% being funded by the Airport Development Funds (ADF). The spending cashflow is approximately \$500K in 2023, \$2M in 2024, \$2M in 2025 and \$2.5M in 2026.

#### Financial Analysis and Summary

Project cost for analysis \$1,400,000 after AIP grants reimbursement

Business Unit (BU) Airfield Movement Area cost center

Effect on business performance NOI after depreciation will increase due to inclusion of (NOI after depreciation) capital (and operating) costs in airline rate base.

IRR/NPV (if relevant) N/A

CPE Impact Less than \$0.01 in 2023-2026

#### ENVIRONMENTAL SUSTAINABILITY/COMMUNITY BENEFITS

This update will enable the Airport to evaluate any operational changes, and associated noise effects, as a result of increased operations and airline fleet changes. Prior noise contours will be compared with current contours to determine if greater or lesser noise impacts exist. If greater impacts exist, that information will be useful to planning future Port and FAA noise mitigation efforts for the community.

#### ATTACHMENTS TO THIS REQUEST

- (1) Part 150 Study Update Resolution No. 3683

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PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

October 25, 2022 – The Commission was briefed on the SEA Part 150 Noise and Land Use Compatibility Study Update. This briefing included an overview of what a Part 150 is and the plan to begin a new update.

April 12, 2022 – The Commission authorized a legal settlement agreement that included a commitment to engage a consultant to conduct a full Part 150 update for SEA Airport which will include noise contours for the airport and to make a budget commitment in 2023 for funding commencement of the update. This action also included the authorization of \$1M to begin the Part 150 Study Update.

October 22, 2013 – The Commission approved Resolution No. 3683, which updated the Part 150 program by adding operational and land use elements to the Airport's Noise Compatibility Plan, which was formally approved by the FAA in 2014.

December 12, 2000 – The Commission approved Resolution 3443, which updated the Part 150 program by adding operational and land use elements to the Airports Noise Compatibility Plan, which was formally approved by the FAA in 2002.

July 13, 1993 – The Commission adopted Resolution No. 3144 which Amended the Part 150 program to include additional operational and land use elements to the Airports Noise Compatibility Plan.

January 8, 1985 – The Commission adopted Resolution No. 2943; creating the first Seattle-Tacoma International Airport Part 150 program which established the Port's Noise Acquisition and Insulation programs.

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