

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4c
Date of Meeting February 24, 2015

DATE: February 17, 2015
TO: Ted Fick, Chief Executive Officer
FROM: Michael Ehl, Director, Airport Operations
Wayne Grotheer, Director, Aviation Project Management Group
SUBJECT: 2016-2020 Airfield Pavement Program (CIP #C800483) / 2016 Airfield Pavement Project

Amount of This Request: \$200,000 **Source of Funds:** Airport Development Fund and Future Revenue Bonds

Est. Total Project Cost: \$6,500,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to:

- 1) Design, prepare construction documents, and implement advanced measures as necessary to replace distressed pavement and joint sealant for the 2016 Airfield Pavement portion of the 2016-2020 Airfield Pavement Program at the Seattle-Tacoma International Airport in the amount of \$200,000; and
- 2) Utilize a project labor agreement (PLA) for this project. The total estimated program cost is \$32,500,000. The 2016 portion is estimated at the projected average yearly cost of \$6,500,000.

SYNOPSIS

This project is part of an ongoing Pavement Management and Maintenance Program (PMMP) as required by the Federal Aviation Administration (FAA). The PMMP includes replacing aged and distressed pavement and joint sealant in non-runway areas. Many sections of airfield pavement have exceeded their 20-year service life and have become cracked and damaged. The PMMP is necessary for safe and efficient aircraft operations. Replacing damaged pavement on the airfield supports the long-term strategy of the Port's Century Agenda objective to "Meet the region's air transportation needs at Seattle-Tacoma International Airport for the next 25 years." This project was included in the 2015 – 2019 capital budget and plan of finance.

BACKGROUND

The 2016 Airfield Pavement Program is a continuation of the programmatic approach of replacing distressed pavement and joint sealant as part of a multi-year program.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

February 17, 2015

Page 2 of 5

Replacing aging pavement and joint sealant on the airfield ensures safe operations at Sea-Tac. The Port will take advantage of these replacements by also replacing in-pavement utilities and slot drains, when it makes sense, as well as removing abandoned utilities within the general work area.

The focus of this CIP is to replace pavement and joint sealant in areas that are most problematic on the airfield. This will often occur along the taxiway and taxilane centerlines, as this is where the majority of stress occurs. This includes emergent distressed areas on the airfield as well as areas surrounding the aircraft gates. It will be in the Port's best interest to coordinate construction activities with future projects in order to mitigate gate closures and disruptions to airline traffic.

This CIP will also replace whole sections of asphalt pavement with concrete, as the asphalt is no longer structurally adequate to handle the weight of aircraft and their ground support equipment (GSE), around the passenger terminal areas. For example, there have been safety issues and equipment problems around Concourse C and the South Satellite, related to asphalt rutting from GSE.

The project may require advance measures to temporarily relocate aircraft operations, if the terminal gates that are impacted are not part of the Common Use System; as was the case in 2011. These costs may include, temporary passenger signage, temporary podiums, and airline software installation at the temporary podiums, etc. Port staff will return to the Commission to request additional funding in the event that extensive temporary modifications for reassigning gates and parking areas are required that exceed the authorized funds.

The estimated total capital project cost for the 2016-2020 Airfield Pavement Program is projected to be \$32,500,000. This CIP will have an average annual budget of \$6.5 Million, based on past pavement replacement expenditures.

This pavement replacement work may also be combined with other construction projects as appropriate for contracting purposes to increase efficiencies. The contracting methodology will be addressed when Port staff returns to Commission for Construction Authorization.

Maintaining critical airfield assets supports the Port's Century Agenda objective to meet the region's air transportation needs at Seattle-Tacoma International Airport for the next 25 years. The PMMP maintains the integrity of airfield pavements and efficient airport operations. Deferring panel and joint sealant replacement could potentially increase risk to airfield operations and drive costs higher in the future.

Project Labor Agreements have been used on past airfield projects in order to reduce risk to operations impacts and construction schedule delays caused by labor disharmony. A single Project Labor Agreement will be utilized throughout the entire program, but will be evaluated annually.

The annual project contracts will include goals for small contractors and suppliers (SCS); which is determined by the Office of Social Responsibility (OSR). SCS goals will provide

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

February 17, 2015

Page 3 of 5

opportunities for a variety of small businesses to participate. An SCS evaluation will be conducted annually through the OSR.

PROJECT JUSTIFICATION AND DETAILS

Project Objectives

- Replace aged pavement and joint sealant as part of the PMMP
- Provide stable pavement conditions
- Support the Port's Century Agenda

Scope of Work

Produce final design for the 2016 pavement replacement. The design will include utilities, temporary striping and lighting and other scope items related to the project.

2016 Schedule for Panel and Joint Seal Replacement:

| | |
|---|-----------------------------|
| Begin Design | Quarter 1, 2015 |
| Final Design | Quarter 4, 2015 |
| Commission Authorization for Construction | Quarter 1, 2016 |
| Advertise | Quarter 1, 2016 |
| Onsite Construction | Quarter 2 – Quarter 3, 2016 |

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

| | Capital | Expense | Total Project |
|--|--------------|---------|---------------|
| Original Program Budget | \$32,500,000 | \$0 | \$32,500,000 |
| Previous Authorizations | \$20,000 | \$0 | \$20,000 |
| Current request for authorization | \$200,000 | \$0 | \$200,000 |
| Total Authorizations, including this request | \$220,000 | \$0 | \$220,000 |
| Remaining Program Budget to be authorized | \$32,280,000 | \$0 | \$32,280,000 |
| Total Estimated Project Cost (2016) | \$6,500,000 | \$0 | \$6,500,000 |
| Total Estimated Program Cost | \$32,500,000 | \$0 | \$32,500,000 |

2016 Project Cost Breakdown

| | This Request | Total 2016 Project |
|---------------------------------|--------------|--------------------|
| Design Phase | \$200,000 | \$220,000 |
| Construction Phase | \$0 | \$5,683,400 |
| State & Local Taxes (estimated) | \$0 | \$596,600 |
| Total | \$200,000 | \$6,500,000 |

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

February 17, 2015

Page 4 of 5

Budget Status and Source of Funds

The Airfield Pavement Program for 2016-2019, C800483 is included in the 2015-2019 capital budget and plan of finance with a budget of \$32,500,000. This CIP will have an average annual budget of \$6.5 Million, based on past pavement replacement expenditures. The design and construction for the 2016 work will be funded by a combination of the Airport Development Fund and future revenues bonds. The Port anticipates issuing revenue bonds in 2015 to fund a number of projects.

Financial Analysis and Summary

| | |
|---------------------------------------|--------------------------------------|
| CIP Category | New/Enhancement |
| Project Type | Renewal & replacement |
| Risk adjusted discount rate | N/A |
| Key risk factors | N/A |
| Project cost for analysis | \$6,500,000 (2016 work) |
| Business Unit (BU) | Airfield Apron Area |
| Effect on business performance | NOI after depreciation will increase |
| IRR/NPV | N/A |
| CPE Impact | \$0.03 CPE in 2017 |

Lifecycle Cost and Savings

Annual Operating and Maintenance costs are not anticipated to change appreciably. Replacing pavement will result in maintenance cost avoidance.

STRATEGIES AND OBJECTIVES

Maintaining critical airfield assets supports the Port's Century Agenda objective to "Meet the region's air transportation needs at Seattle-Tacoma International Airport for the next 25 years."

TRIPLE BOTTOM LINE

Economic Development

This project furthers Sea-Tac's business plan objectives to operate a world-class international airport by ensuring safe and secure operations and by managing our assets to minimize the total long-term cost of ownership.

Environmental Responsibility

During repair and maintenance activities, various environmental practices will be considered and implemented. This includes, but is not limited to, using fly ash or slag within the cement mixture as practicable, integrating green stormwater infrastructure, and the recycling of removed

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

February 17, 2015

Page 5 of 5

pavement. This project also exemplifies the Port's Sustainable Asset Management Policy (ES-15) by using a comprehensive renewable/replacement schedule that minimize operations and maintenance costs using environmentally preferable materials.

Community Benefits

Maintaining safe operations at Sea-Tac allows the community and local business owners to prosper from the jobs and passengers the airport generates.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

1) Status Quo: Deferment of pavement rehabilitation increases both safety and operational risk for the airport and the airlines. Distressed and/or failed pavement that is left in continual use may result in debris that could potentially be ingested by aircraft engines resulting in safety issues and major costs to the affected airline. This alternative could possibly result in the need for emergency repairs that may occur at inopportune times at higher costs. This is not the recommended alternative.

2) Replace distressed pavement and joint seal on the airfield during the 2016 construction season. This allows for the programmatic replacement of aged and distressed pavement as well as replacement of joint seal. **This is the recommended alternative.**

ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- None