

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4b
Date of Meeting November 11, 2014

DATE: November 3, 2014
TO: Ted J. Fick, Chief Executive Officer
FROM: Michael Ehl, Director, Airport Operations
Wayne Grotheer, Director, Aviation Project Management Group
SUBJECT: 2015 Airfield Pavement Replacement Program (CIP #C102573)

Amount of This Request: \$200,000 **Source of Funds:** Airport Development Fund
and Future Revenue Bonds
Est. State and Local Taxes: TBD
Est. Total Project Cost: \$1,761,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to 1) design, prepare construction documents, and implement temporary measures as necessary to replace distressed pavement and joint sealant for the 2015 Airfield Pavement Replacement Program at Seattle-Tacoma International Airport (Sea-Tac) in the amount of \$200,000 and 2) for the utilization of a project labor agreement (PLA) for this project. The total estimated project cost is \$1,761,000.

SYNOPSIS

This project is part of an ongoing Pavement Management and Maintenance Program (PMMP) as required by the 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 is included in the 2015 – 2019 capital budget.

BACKGROUND

The 2015 Airfield Pavement Replacement Program is a continuation of the programmatic approach of replacing distressed concrete pavement panels and joint sealant as part of a multi-year program.

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It is estimated, based on historic panel distress levels that approximately 12 panels on the airfield, in random locations, will need to be replaced by 2015. Work will also include joint sealing taxiway B and taxilane W, between taxiways N and Q.

Depending upon where pavement panels are replaced, it may be necessary to design and implement temporary measures, to mitigate airline impacts due to aircraft gate closures. Closure of gates can occur if distressed pavement panels are found near gates, which may cause reassignment of domestic and international flights to alternate gates. 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 current budget for CIP C102573 is \$24,602,213. The funds utilized through the end of the 2014 construction season are expected to be \$22,841,213. The current estimate for the 2015 Airfield Pavement Replacement Program is \$1,761,000.

This project may also be bundled with other 2015 Airfield Improvement Projects (AIP) to increase efficiencies between AIP contracts. This would 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 caused by work interruptions. Staff recommends that this project utilize a project labor agreement.

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 apron pavement. The design will include utilities, temporary striping and lighting and other scope items related to the project.

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Schedule for Panel and Joint Seal Replacement:

Begin Design	November 2014
Final Design	April 2015
Commission Authorization for Construction	March 2015
Advertise	April 2015
Onsite Construction	August - November 2015

FINANCIAL IMPLICATIONS

Capital Expense Total Project

Budget/Authorization Summary

Original Budget	\$30,800,000	\$0	\$30,800,000
Previous Budget Decrease	\$6,197,787	\$0	\$6,197,787
Revised Budget	\$24,602,213	\$0	\$24,602,213
Previous Authorizations	\$27,679,495	\$0	\$27,679,495
Current request for authorization	\$200,000	\$0	\$200,000
Total Authorizations, including this request	\$27,879,495	\$0	\$27,879,495
Remaining budget to be authorized	\$1,561,000	\$0	\$1,561,000
Total Estimated Project Cost	24,602,213	\$0	\$24,602,213

The authorized amount far exceeds the revised budget due to budget savings on previously authorized work under this project.

Project Cost Breakdown

This Request Total Project

Design Phase	\$160,000	\$2,214,265
Construction Phase	\$40,000	\$20,815,706
State & Local Taxes (estimated)	\$0	\$1,572,242
Total	\$200,000	\$24,602,213

Budget Status and Source of Funds

This project, CIP #C102573, is included in the 2015 – 2019 capital budget and plan of finance. The funding sources will include the Airport Development Fund and future revenue bonds. The Port plans to issue revenue bonds in 2015 to fund multiple 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	\$1,761,000

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Business Unit (BU)	Airfield Apron and Airfield Movement Area Cost Centers
Effect on business performance	NOI after depreciation will occur
IRR/NPV	N/A
CPE Impact	\$.01 by 2016, but no change to business plan forecast as this project was included.

Lifecycle Cost and Savings

Annual Operating and Maintenance costs are not anticipated to change appreciably. The replacement of concrete panels will result in cost avoidance for maintaining them.

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 the Airport'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 sustainable practices will be considered and implemented when practicable.

Community Benefits

Increasing safe operations at Seattle-Tacoma International Airport allows the community and local business owners to prosper from the jobs and passengers the airport generates.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

1) Do nothing: This alternative would result in an increased risk to airfield operations as pavement failures occur and an increased risk to airfield safety from concrete debris resulting from distressed pavement. This is not the recommended alternative.

2) Replace distressed pavement and joint seal on the airfield during the 2015 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.**

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ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- On July 1, 2014, the Commission authorized the rejection of all bids received for the previously advertised contract for the 2014 Airfield Pavement Replacement Project and authorized the re-advertisement of a revised project.
- On August 6, 2013, the Commission authorized the use of a project labor agreement for the 2014 Airfield Pavement Replacement Program.
- On April 2, 2013, the Commission authorized \$300,000 and for the Chief Executive Officer to complete the design and perform any advance preparatory work for the 2014 Airfield Apron Pavement Replacement Program
- On March 26, 2013, the Commission authorized for the Chief Executive Officer to advertise and execute a single construction contract comprised of Airfield Panel Replacement and Joint Seal Replacement (CIP #102573) and Runway 16C/34C Panel Replacement. This authorization request is for \$8,967,000, and the estimated total cost of the complete project is \$9,377,000.
- On July 24, 2012, the Commission authorized \$200,000 and for the Chief Executive Officer to complete the design and perform any advance preparatory work for the 2013 Airfield Apron Pavement Replacement project.
- On April 10, 2012, the Commission authorized an additional \$1,467,000 because the bids exceeded the engineer's estimate by greater than 10 percent; and authorized the Chief Executive Officer to execute a contract in the amount of \$6,553,964 with the low responsive and responsible bidder for the 2012 Exterior Gates and Airfield Improvement Projects. This authorization increased the budget by \$1,467,000 due to the higher than expected bids, for a total project cost of \$10,500,000.
- On January 24, 2012, the Commission authorized \$4,707,000 and for the Chief Executive Officer to advertise and execute a construction contract that included Apron Pavement Replacement, Exterior Gate Improvements, Runway 16C/34C Panel Replacement, and South Snow Dump Pavement Expansion.
- On July 26, 2011, the Commission authorized \$465,000 and for the Chief Executive Officer to complete the design and perform any advance work in support of the 2012 Pavement and Joint Replacement and Sealant Project for non-runway concrete pavement panels, joint seal replacement, spall repair, and associated or temporary

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facilities, such as striping, lighting, etc., on the Aircraft Operations Area.

- On March 1, 2011, the Commission authorized \$6,235,000 and for the Chief Executive Officer to advertise and execute a construction contract that included slot drain, pavement, and joint seal replacement at the South Satellite and perform installation of temporary facilities in concourses.
- On August 10, 2010, the Commission authorized \$394,000 and for the Chief Executive Officer to direct staff to: 1) proceed with project management, design, environmental support, and preparation of 100 percent design level construction documents for the replacement of slot drains, pavement and joint seal at the South Satellite at Seattle-Tacoma International Airport; 2) execute and award outside professional service agreements; 3) pre-purchase common-use gate equipment; and 4) allow Port Construction Services to self-perform, advertise for bids, and execute and award small works construction contracts for common use equipment installation.