# PORT OF SEATTLE MEMORANDUM

<b>COMMISSION AGENDA</b>	Item No.	5d
	Date of Meeting	April 5, 2011

**DATE:** March 25, 2011

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** Dave Soike, Director, Aviation Facilities and Capital Program

Wayne Grotheer, Director, Aviation Project Management Group

**SUBJECT:** Design of Bag Claim Device 14 and Lower Inbound Conveyor Replacement

(CIP # C800374)

**Amount of This Request:** \$539,000 **Source of Funds:** Existing Revenue Bonds

**Total Estimated Cost:** \$3,900,000

#### **ACTION REQUESTED:**

Request Port Commission authorization for the Chief Executive Officer to proceed with design of the Claim Device 14 and Lower Inbound Conveyor Replacement at Seattle-Tacoma International Airport (Airport). The amount of this request is \$539,000. The total cost of the project is \$3,900,000.

#### **SYNOPSIS:**

Baggage claim device 14 is used exclusively by Alaska Airlines and Horizon and experiences constant, heavy use since these airlines represent about half of the passenger traffic using the Seattle-Tacoma International Airport. The useful service life of this claim device is fifteen years. Claim device 14 has been in use for eighteen years and is worn out to the point of requiring major repair to maintain reliable customer service. Original manufacturer replacement parts are unavailable. Access to the lower feed conveyor for maintenance and jam clearing is difficult and poses a safety hazard.

This project will replace the slope-plate bag claim device 14 and associated controls, in addition to removing the lower feed conveyor and replacing it with a new overhead feed. Doing so will avoid emergency repair costs and service disruptions due to downtime for repairs. Updating claim 14 will help to improve baggage delivery times for the airlines. The amount of this request is \$539,000 for design, and the total cost of the project including future construction authorizations is \$3,900,000. The design should be completed in August 2011.

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#### **BACKGROUND:**

The claim device 14 slope plate, lower feed conveyors, and associated controls will be replaced with an overhead feed conveyor. The existing overhead feed conveyor and associated controls will be updated to current technology. The existing lower feed conveyor is routed through the overhead of the satellite train maintenance facility transfer table area and over an electrical power center in the north service tunnel. Access to these conveyors for maintenance and jam clearing is difficult and dangerous due to their location and lack of adequate catwalks. The existing layout of these conveyors causes excessive jams. To clear jams on these conveyors, maintenance personnel must crawl down the decline conveyor. In addition, these conveyors were installed in 1971 and are older, narrower conveyors that have unavailable or hard to find parts. The lower feed conveyer will be removed, a new upper feed will be added and to serve claim device 14.

#### **PROJECT JUSTIFICATION:**

This claim and its associated feed conveyors are used exclusively by Alaska and Horizon and experience constant use that has worn out the equipment. Also safe access for Airport maintenance worker needs to be improved.

## Project Objectives:

- Replace slope plate bag claim device 14.
- Replace control system to eliminate obsolete equipment.
- Reduce emergency repair costs.
- Reduce baggage jams and decrease the maintenance response requirements.
- Updating critical system redundancy to ensure availability for use by the airlines.
- Improve air carrier baggage delivery times.
- Add overhead feed conveyor to accommodate larger luggage and provide a safe working environment for maintenance.

#### PROJECT SCOPE OF WORK AND SCHEDULE:

#### Scope of Work:

Replace existing claim 14 slope plate unit with a new slope plate unit of similar size and configuration. Replace existing lower inbound conveyor system with new and rerouted inbound overhead conveyor. Work will include demolition, structural, fire protection, lighting, heating, ventilation and electrical upgrades.

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#### Schedule:

Commission Authorization to Start Design
 Start Design
 Design Complete
 Commission Authorization to Bid
 Bid Advertisement
 Construction Start
 Construction Complete
 April 2011
 August 2011
 September 2011
 October 2011
 January 2012
 May 2012

# **FINANCIAL IMPLICATIONS:**

## **Budget/Authorization Summary:**

Original Budget	\$3,900,000
Revised Budget	\$3,900,000
Previous Authorizations	\$0
Current request for authorization	\$539,000
Total Authorizations, including this request	\$539,000
Remaining budget to be authorized	\$3,361,000

# Project Cost Breakdown: This Project Total Project

Construction Costs	\$0	\$2,700,000
Sales tax	\$0	\$254,000
Port engineering professional services	\$285,000	\$285,000
Aviation PMG and other soft costs	\$254,000	\$661,000
Total	\$539,000	\$3,900,000

#### **Budget Status and Source of Funds:**

This project is included in the 2011-2015 capital budget and plan of finance as a committed project, CIP # C800374. The funding source will be existing revenue bond proceeds.

## **Financial Analysis and Summary:**

CIP Category	New/Enhancement
Project Type	Infrastructure Renewal/Replacement
Risk adjusted Discount rate	N/A

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Key risk factors	N/A
Project cost for analysis	\$3,900,000
Business Unit (BU)	Terminal, airline equipment
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	Will increase CPE by \$0.02 in 2013. However, no change to 2011-15 business plan forecast since this project was included.

#### **Lifecycle Cost and Savings:**

Annual Operating and Maintenance costs are not forecasted to appreciably change, and will be analyzed after the design is complete, and more specific information is available.

#### **ENVIRONMENT AND SUSTAINABILITY:**

This project demonstrates environmental sustainability by improving existing Port assets and better utilizing existing resources. This project has a generally positive effect on the environment to the extent that automated baggage handling systems reduce airport and airline reliance on less energy efficient baggage conveyance systems. Passengers will benefit from faster, more reliable, conveyance systems.

#### **STRATEGIC OBJECTIVES:**

This project promotes the Port's strategic goals to "Ensure Airport and Seaport Vitality" and "Be a Catalyst for Regional Transportation Solutions" by providing the airlines with greater facility flexibility. Flexible operations will allow for greater and more efficient utilization of the Airport's existing facilities. The project provides enhanced capacity and flexibility in critical baggage infrastructure, especially for the Airport's largest customer.

#### **BUSINESS PLAN OBJECTIVES:**

The aeronautical business strategy aims to strike a right balance between meeting the needs of our airline customers and the traveling public through cost effective means. Minimizing new construction by making new operational improvements with up-to-date equipment and technology helps to minimize costs to the airlines. The use of technology and thoughtful long-term planning are key elements of the strategy.

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#### **TRIPLE BOTTOM LINE SUMMARY:**

This project saves the Port the future cost of repairing obsolete conveyor equipment, supports the Port's goal to standardize conveyor equipment, and provides the flexibility the Airport needs to operate more efficiently. The traveling community will also benefit from increased airline availability to modern, functional baggage equipment.

#### ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

ALTERNATIVE 1: Proceed with design for Claim Device 14 and Lower Inbound Conveyor Replacement. We will return to the Commission to request authorization to advertise and award after completion of design. **This is the recommended action.** 

ALTERNATIVE 2: Do nothing: Leaving the baggage systems as-is will negatively impact daily airline baggage operations, maintenance repairs, safety and the travelling public since baggage deliveries will become less reliable. This action is not recommended.

## OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

None

#### **PREVIOUS COMMISSION ACTION:**

None