PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 5b

Date of Meeting September 10, 2013

DATE: August 29, 2013

TO: Tay Yoshitani, Chief Executive Officer

FROM: Wayne Grotheer, Director, Aviation Project Management Group
Wendy Reiter, Director, Aviation Security and Emergency Preparedness

SUBJECT: Security Exit Lane Breach Control-Phase 2 (CIP #C800605)

Amount of This Request: $5,757,000 **Source of Funds:** Airport Development Fund

Est. State and Local Taxes: $387,000 **Est. Jobs Created:** 115

Est. Total Project Cost: $6,407,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to proceed with the purchase of breach control equipment and to advertise for bids and award and execute a major construction contract for the Security Exit Lane Breach Control-Phase 2 project at Seattle-Tacoma International Airport in an amount not to exceed $5,757,000. The total estimated project cost is $6,407,000.

SYNOPSIS

Security breaches can occur at terminal exits when people enter a secured area through an exit without passing through the security checkpoint. While security breaches are relatively rare, they are costly and disruptive to airlines and passengers since all passengers in the secure area may have to be re-screened, resulting in delayed flights and missed connections.

This project will reduce the potential for security breaches by providing building and system modifications to accommodate new automated exit lane breach control equipment and emergency bypass lanes at four security exits in the Airport terminal. The security exits are currently staffed with Transportation Security Administration (TSA) guards at a significant recurrent cost. In a change of policy, TSA has stated that, beginning in 2014, providing and paying for security at exits will be the responsibility of local airports.

Using automated security breach control equipment at each exit will reduce the risk of unauthorized access to the secure parts of the Airport caused by human error. The annual cost avoided by the four exits included with this authorization request amounts to approximately $1.8 million. This represents a payback of less than four years.

This request is to purchase security breach control equipment that was selected through a competitive process to modify the terminal spaces to accommodate the new equipment and

facilitate security and emergency exiting operations. The original scope and cost of the project was increased to improve the security exit equipment performance and to adjust emergency egress reconfigurations as required by the Building Code and the Fire Code. However, CPE actually declines $0.04 in 2015 because of costs avoided by this project.

This project is included in the 2013 – 2017 capital budget and plan of finance.

BACKGROUND

Exit lane breach control technology is new to the Airport and to the United States. These systems have been in use at European airports since 2001. A similar system has been successfully installed and is in use at Philadelphia. The Sea-Tac pilot project was among the first installations in this country, following the installation at Las Vegas in 2012. The project will reduce the risk of a security breach at the Airport. A security breach could require that all people inside the secure area exit and repeat the screening process, which is very costly and disruptive to airline operations and passengers. The project will also increase overall security and redeploy guard staff to reduce ongoing costs. The system prevents people from making unauthorized reverse-flow entry though the exit. If a person approaches the exit lanes from the unsecure side, an automated announcement will instruct them to stop. If the person proceeds farther, an alarm will sound and the exit doors will lock, preventing them from entering.

On October 23, 2012, the Commission authorized Phase 1 of the Security Exit Lane Breach Control project (C800218) (the pilot project) at the Concourse B security exit. Construction of this pilot project was completed in June. Before moving forward with Phase 2 of this project, which would install this same technology at the Airport's remaining four security exits, the Port, in partnership with local TSA representatives, successfully tested this new technology in place at the Concourse B security exit to ensure it meets all security requirements.

This current request for the Phase 2 project is for the purchase of equipment and construction for four additional security exit locations in the Airport terminal. Those locations are: Concourse A Security Exit, Concourse C Security Exit, Satellite Transit System (STS) South Main Station and STS North Main Station. Staff requests Commission authorization for this Phase 2 project to execute a contract for purchase of the breach control equipment and to advertise for bids and award and execute a major construction contract. The equipment for the Phase 1 pilot project was procured through a competitive process that was designed to allow the purchase of additional equipment for Phase 2.

PROJECT JUSTIFICATION AND DETAILS

Currently, the four security exits at the Airport are staffed with guards who prevent anyone from crossing these exits into the secure area without authorization. The current staffing situation causes an increased security risk when exit lanes are busy and the guard may become distracted. There have been incidents where "unauthorized reverse flow" has occurred, causing a shutdown in access to secure areas and delays for passengers. These delays are costly for both the airlines and the passengers whose flights are delayed when there is a security breach. The use of proven technology reduces the risk of a security breach and also allows reduced costs in the long term.

Prior to the pilot project that was recently completed at the Airport, this technology has been successfully tested and deployed at various European airports for more than a decade as a means to control traffic at security exits.

Since responsibility for providing security at the exits will transfer to airports beginning in 2014, implementing this project will permit the Airport to avoid incurring additional annual operating costs of approximately $1.8 million for the four exits associated with this authorization request. This represents a payback of less than four years.

Project Objectives

- Staffing these lanes with guards is a significant recurrent cost. Technology-based security systems not only reduce the human risk factor and streamline processes, but significantly reduce operating costs.
- The equipment will create secure exit lanes, utilizing partitions, doors, sensors, and alarms.
- It will automatically detect and prevent the backflow of people and objects through the exit lane from the non-secure to the secure side of the Airport terminal building.

Scope of Work

This project will purchase and install automated security exit lane breach control equipment, construct building and system modifications needed to accommodate the equipment and emergency bypass lanes where necessary at four security exits at the Airport.

Schedule

The project schedule is as follows:

- Request Commission Authorization for Design — January 2013
- Design — February - October 2013
- Equipment Testing Completed for Phase 1 Pilot Project — August 2013
- Request Commission Authorization for Equipment Purchase and Construction — September 2013
- Execute Equipment Purchase Contract — September 2013
- Advertise Construction Contract for Bid — November 2013
- Construction (Full Beneficial Occupancy) — February 2014 - October 2014

FINANCIAL IMPLICATIONS

Budget/Authorization Summary:	Capital	Expense	Total Project
Original Budget	$3,500,000	$0	$3,500,000
Budget Increases (Decreases)	$2,907,000	$0	$2,907,000
Revised Budget	$6,407,000	$0	$6,407,000
Previous Authorizations Including Preliminary Planning	$650,000	$0	$650,000
Current request for authorization	$5,757,000	$0	$5,757,000
Total Authorizations, including this request	$6,407,000	$0	$6,407,000
Remaining budget to be authorized	$0	$0	$0

The original project budget was based on an estimated cost of the new technology purchase and installation, adjusted for actual equipment costs. The project scope and cost estimate was subsequently increased to improve the performance of the breach control equipment, install more security cameras than first planned and construct emergency egress reconfigurations required by the Building Code and Fire Code. These changes were made as a result of the design process as well as test results from the Phase 1 project.

Project Cost Breakdown	This Request	Total Project
Construction	$2,358,000	$2,358,000
Port Purchased Equipment	$1,910,000	$1,910,000
Construction Management	$615,000	$615,000
Design	$10,000	$500,000
Project Management & Other Soft Costs	$363,000	$523,000
Permitting	$114,000	$114,000
State & Local Taxes (estimated)	$387,000	$387,000
Total	$5,757,000	$6,407,000

Budget Status and Source of Funds

This project (CIP #C800605) was included in the 2013-2017 capital budget and plan of finance as a business plan prospective project with a budget of $3.5 million. The budget increase will be transferred from the Aeronautical Allowance CIP (C800404) resulting in no net change to the capital budget. The funding source will be the Airport Development Fund.

Financial Analysis and Summary

CIP Category	Compliance
Project Type	Health, Safety and Security
Risk adjusted Discount rate	7.0%
Key risk factors	N/A
Project cost for analysis	$6,407,000
Business Unit (BU)	Airfield
Effect on business performance	NOI after depreciation will increase.
IRR/NPV	NPV of $4.8 million due to avoiding annual cost of staffing the exits.
CPE Impact	CPE will increase $.02 in 2015 due to this project, but no change to business plan forecast as this project was included. When factoring in the costs avoided, CPE will be reduced by $.04.

Lifecycle Cost and Savings

There will be annual operating and maintenance cost increases to maintain the new system and a reduction in the ongoing operating and maintenance costs for the existing portal backflow detector that is near the end of its useful life and will be removed.

The annual cost of staffing the four exits that would be affected by this request is approximately $1.8 million. Realizing this annual savings would mean a project payback of approximately four years.

STRATEGIES AND OBJECTIVES

The project supports the Port's Century Agenda objective of meeting the region's air transportation needs at Sea-Tac Airport for the next 25 years by improving security and customer service. It also supports the Airport's strategic goal of operating a world-class international airport by ensuring safe and secure operations through enhanced security.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) – Do Nothing. This results in continued operation with the current security risk factor and new annual staffing costs. This is not the recommended alternative.

Alternative 2) – Port construction of the entire automated exit lane system instead of purchasing readily-available manufactured equipment. This would not allow for cost-effective implementation of security exit breach controls. This is not the recommended alternative.

Alternative 3) – Proceed now with purchase of automated exit lane equipment and construction of the project at the four additional Airport terminal security exits. **This is the recommended alternative.**

ATTACHMENTS TO THIS REQUEST

- Diagram of Airport Security Exit Locations
- Illustration of a Typical Security Exit Lane

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- April 2, 2013 – the Port Commission authorized expansion of the scope of the Security Exit Lane Breach Control-Phase 1 project (C800218) to add a new exit lane and increase the project budget by $360,000 for a new total estimated project cost of $1,310,000.
- January 8, 2013 – the Port Commission authorized the design of the Security Exit Lane Breach Control-Phase 2 project (C800605) at Seattle-Tacoma International Airport. That authorization was for $590,000 of a total estimated project cost of $3,750,000.
- October 23, 2012 – the Port Commission authorized the design of building modifications to accommodate exit lane breach control equipment, and to use Port crews for construction of the Security Exit Lane Breach Control-Phase 1 project (C800218) at Seattle-Tacoma International Airport. That authorization was for $850,000 of a total estimated project cost of $950,000.