

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4f
Date of Meeting July 12, 2016

DATE: July 5, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Wendy Reiter, Director, Aviation Security and Emergency Preparedness
Wayne Grotheer, Director, Aviation Project Management Group
SUBJECT: Security Exit Lane Breach Control – Phase 2 (CIP #C800605)

Amount of This Request:	\$1,300,000	Source of Funds:	Airport Development Fund
Est. Total Project Cost:	\$7,707,000		
Est. State and Local Taxes:	\$286,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) increase the authorized funds for the Security Exit Lane Breach Control Project – Phase 2 (CIP #C800605) by the amount of \$1,300,000 and (2) advertise and execute a public works contract to construct this project at Seattle-Tacoma International Airport. The total estimated project cost is \$7,707,000.

SYNOPSIS

With the unprecedented growth in passenger traffic the Airport's security checkpoints are strained. In January 2016, the lines of passengers awaiting security screening regularly approached one hour in duration. In an effort to reduce wait times, the airport in cooperation with the Transportation Security Administration (TSA) agreed to share surveillance staffing over the airport's security exits. A significant part of the way to assign additional TSA officers to screening is to complete the project to install automated exit lane breach control equipment.

BACKGROUND

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. Through agreement, the security exits are currently being staffed with Transportation Security Administration (TSA) officers at Concourse A and Concourse C exit lanes and Airport Security Personnel at North and

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South Satellite exits. Staffing of the exit lanes will cease once the security breach control equipment is installed, tested and approved.

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 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 and Fire Codes.

In June 2013 the Airport installed this technology at the Concourse B security exit as Phase 1 of this project. It was thoroughly tested by Airport security personnel, Port Police, and TSA representatives. It has performed well. In 2015 an addition was made to that project to add a third set of doors to improve security. The exit lane equipment for this proposed Phase 2 project already matches the three door model. Further, anti-piggybacking security equipment for the emergency (first responder) bypass lane was also installed and is proposed for this project.

In September 2013 the Commission authorized an earlier version of this project for construction. As construction was getting ready to begin, the project was stopped and the construction contract canceled due to unsatisfactory negotiations with the TSA over funding and responsibility. The equipment for this project was purchased in 2013 and has been stored since Phase 2 of the project was canceled in 2014. An aspect of the cost increase is to account for damaged and time worn parts that will need to be replaced. A review of the project sites and utility requirements has confirmed that it can still move forward without significant changes to the design.

PROJECT JUSTIFICATION AND DETAILS

Currently, four of five security exits at the Airport are staffed with both TSA staff and Port personnel 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 including satellite trains, 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 TSA and Port exit lane operating costs in the long term.

Prior to the pilot project that was completed at the Airport in June 2013, 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.

Project Objectives

- Staffing these lanes with guards is a significant recurring cost for both TSA and the Port. Technology-based security systems not only reduce the human risk factor and streamline process, but significantly reduce operating costs.

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- 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

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

Schedule

Project construction has been phased such that the need for staff to guard security exits will be eliminated by the First Quarter of 2018. The project will complete in the Second Quarter of 2018.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$3,500,000	\$0	\$3,500,000
Previous budget increases	\$2,907,000		\$2,907,000
Current Budget Increase	\$1,300,000	\$0	\$1,300,000
Revised Budget	\$7,707,000	\$0	\$7,707,000
Previous Authorizations	\$6,407,000	\$0	\$6,407,000
Current request for authorization	\$1,300,000	\$0	\$1,300,000
Total Authorizations, including this request	\$7,707,000	\$0	\$7,707,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$7,707,000	\$0	\$7,707,000

The additional budget increase is based on updating the design documents, escalation and rebid factors, additional Port costs, and the added scope of anti-piggybacking security equipment and the replacement of damaged parts.

Project Cost Breakdown

	This Request	Total Project
Design Cost	\$150,000	\$1,319,000
Construction Cost	\$864,000	\$5,931,000
State and Local Taxes (estimated)	\$286,000	\$457,000
Total	\$1,300,000	\$7,707,000

Budget Status and Source of Funds

This project (CIP #C800605) was included in the 2016-2020 capital budget and plan of finance. The budget increase was transferred from the Aeronautical Allowance CIP (C800404) resulting

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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	N/A
Key risk factors	N/A
Project cost for analysis	\$7,707,000
Business Unit (BU)	Airfield
Effect on business performance	NOI after depreciation will increase
IRR/NPV	NPV of \$6.8 million due to avoiding annual cost of staffing the exits (assuming all exits staffed by Port)
CPE Impact	\$.05 in 2019

Lifecycle Cost and Savings

There will be annual operating and maintenance cost increases to maintain the new system.

The annual cost of staffing the four exits that would be affected by this request is approximately \$1.8 million shared between the Port and the TSA. 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.

Small Business

In addition to meeting the region's air transportation needs, this project also supports the Port of Seattle's Century Agenda objective of small business utilization. The project team is working with the Port's Economic Development Division's Small Business team to establish an appropriate small business requirement on the construction contract.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) Status Quo - Do not increase the project budget. Do not install the units and expense the cost to date. Dispose of the purchased equipment and continue to staff the exits.

Cost Estimate: \$3,100,000 capital cost would be expensed; \$1,800,000 annual recurring cost for guards.

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Pros:

- Lowest capital cost

Cons:

- TSA guards would not be able to move to security screening ensuring longer security lines
- The security exits would continue to have increased vulnerability to breach
- Exit lane equipment would need to be surplused

This is not the recommended alternative

Alternatives 2) Increase the capital portion of the budget by only \$400,000 and install breach control technology at only 3 security exits. Do not install added scope of bypass lane reverse flow security equipment.

Cost Estimate: \$6,407,000 capital cost; \$450,000 annual recurring cost for guards at one exit.

Pros:

- Lower capital cost than Alternative 3
- The risk of security breach at the Airport's security exits would be reduced.

Cons:

- The bypass lanes would continue to be vulnerable to breach
- One exit would continue to be vulnerable to breach as well

This is not the recommended alternative

Alternative 3) Increase the budget by \$1.3 million and complete the project as originally scoped, plus the added scope of anti-piggybacking security equipment for the emergency (first responder) bypass lane.

Cost Estimate: \$7,707,000 capital cost; \$0 annual recurring cost for guards.

Pros:

- This alternative reduces the cost for guards to zero
- This alternative provides the greatest protection against security breach
- This alternative allows TSA guards to move to security screening tasks

Cons:

- This alternative has the highest capital cost

This is the recommended alternative

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ATTACHMENTS TO THIS REQUEST

- Diagram of Airport Security Exit Locations and illustration of a typical Security Exit Lane

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- January 6, 2015 – the Port Commission authorized increasing the project budget for the Security Exit Lane Breach Control-Phase 1 project (C800218) by \$252,000 to install an additional set of doors to the exit land breach control system and widen the existing emergency bypass lane, for a total cost of \$1,562,000.
- May 8, 2014 – the Port Commission was notified the Phase 2 project had only been 20 percent completed but was halted due to unsatisfactory negotiations with the TSA over funding and control.
- September 10, 2013 – the Port Commission authorized the purchase of breach control equipment and to advertise for bids and award and to execute a major construction contract for the Security Exit Lane Breach Control-Phase 2 project in the amount not to exceed \$5,757,000.
- 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 Land 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.