

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**  
**ACTION ITEM**

**Item No.** 4c  
**Date of Meeting** October 10, 2016

**DATE:** October 3, 2016  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** Wendy Reiter, Director Aviation Security  
**SUBJECT:** Airport Breach/Duress Alarm System Upgrade Project (CIP #C800805)

<b>Amount of This Request:</b>	\$750,000	<b>Source of</b>	Airport Development
<b>Est. Total Project Cost:</b>	\$750,000	<b>Funds:</b>	Fund
<b>Est. State and Local Taxes:</b>	\$30,000		

**ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to (1) proceed with the Airport Breach/Duress Alarm System Upgrade project; (2) procure required hardware, software, vendor services, and maintenance; and (3) use Port staff for implementation, for a total project cost not to exceed \$750,000.

**SYNOPSIS**

Breach/Duress Alarm System buttons are installed at checkpoints, concourse exits, and other customer facing locations throughout Seattle-Tacoma International Airport (Sea-Tac) to provide a manual alarm that will send an immediate notification to Sea-Tac Transportation Security Administration (TSA), Port 911/Dispatch and the Airport Communication Center (ACC) of security or safety events. Security events can result in the shutdown of checkpoints, concourse exits, airline boarding operations, and a train connecting the terminals, therefore rapid response and resolution of these incidents is critical to ensuring the timely return to normal airport operations.

This project will upgrade infrastructure, address capacity concerns for growth over the next five to ten years, and automate manual processes to ensure the continued reliability and efficiency of the Sea-Tac Breach/Duress Alarm System. Information & Communication Technology (ICT), Aviation Maintenance, and Aviation Operations resources will complete the project for an estimated \$750,000.

**BACKGROUND**

The Airport Breach/Duress Alarm System began with alarms at checkpoints and concourse exits. In the last five years, the number of alarms has grown significantly to address possible threats at checkpoint podiums, private security screening rooms, guard shacks, search areas at employee-

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only entrances, and other key locations throughout the Airport. Additional alarms cannot be added without degradation of the information provided to alarm responders.

Breach or duress alarms are manually triggered by security personnel in situations such as an unscreened passenger entering the sterile area (breach) or an incident requiring police assistance occurs at a checkpoint or other designated area (duress). The alarms send audible and visual notifications to the Port's 911 Dispatch and the ACC. If an alarm is triggered at a checkpoint, the alarm system will also send a visual notification to the TSA checkpoint supervisor and initiate strobe lights in the area.

### **PROJECT JUSTIFICATION AND DETAILS**

Security is a key concern for the Airport and continued reliability on the Breach/Duress Alarm System, flexibility to expand alarms when needed, and improved efficiency of emergency responders is critical to passenger and Airport personnel safety.

#### ***Project Objectives***

- Accurate, timely, and comprehensive breach and duress alarm notifications are sent to the appropriate parties including TSA, Port 911/Dispatch, Port Police, and ACC.
- Improved efficiency in alarm response through the automation of manual processes.
- Increased capacity to add alarms as needed.
- A single alarm notification system for the Port 911 Dispatch and ACC through system consolidation.

#### ***Scope of Work***

- Upgrade of aging server and communication equipment.
- Integration with the Video Surveillance System to provide automatic visual information for emergency responders and an easy-to-use graphic display.
- Integration with the 911 Dispatch system to improve efficiency and ensure comprehensive information is passed to responders.
- Integration with the planned door alarm system to reduce the number of systems required to triage and dispatch responders.

#### ***Schedule***

Commission Approval	October 2016
Procurement Complete	January 2017
Project Complete	December 2017

### **FINANCIAL IMPLICATIONS**

#### ***Budget/Authorization Summary***

	Capital	Expense	Total Project
Original Budget	\$750,000	\$0	\$750,000
Previous Authorizations	\$0	\$0	\$0

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Current request for authorization	\$750,000	\$0	\$750,000
Total Authorizations, including this request	\$750,000	\$0	\$750,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$750,000	\$0	\$750,000

### ***Project Cost Breakdown***

	This Request	Total Project
Hardware/Software	\$380,000	\$380,000
Vendor Services	\$144,000	\$144,000
Port Labor	\$192,000	\$192,000
State & Local Taxes (estimated)	\$34,000	\$34,000
Total	\$750,000	\$750,000

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

This project was included in the 2016-2020 capital budget and plan of finance as a \$750,000 business plan prospective project within CIP #C800805, Airport Breach/Duress Alarm System Upgrade. The source of funds is the Airport Development Fund.

### ***Financial Analysis and Summary***

<b>CIP Category</b>	Renewal/Enhancement
<b>Project Type</b>	Technology
<b>Risk adjusted discount rate</b>	N/A
<b>Key risk factors</b>	N/A
<b>Project cost for analysis</b>	\$750,000
<b>Business Unit (BU)</b>	Terminal Building
<b>Effect on business performance</b>	N/A
<b>IRR/NPV</b>	N/A
<b>CPE Impact</b>	\$0.01

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

Maintenance and support for this system is estimated to increase by \$41,000 annually for software licenses. This will be budgeted in the Aviation Maintenance Operating Budget for 2018.

## **STRATEGIES AND OBJECTIVES**

This project will support the following Century Agenda and Aviation Strategic Goals.

- Advance this region as a leading tourism destination and business gateway
- Meet the region's air transportation needs at Sea-Tac Airport for the next 25 years
- Position the Puget Sound region as a premier international logistics hub

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Security and safety are two of the most important components of a successful airport. This project will add the capacity required for breach and duress alarms, ensure continued system availability and long-term reliable performance, and improve efficiencies to help quickly triage, react, and resolve security and safety incidents.

### **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

#### **Alternative 1 – Defer the upgrade**

Cost Implications: \$0

Pros:

- (1) Capital funds are available for other efforts.

Cons:

- (1) Due to capacity issues, new breach or duress alarms cannot be added without degrading the information available to fully inform alarm responders.
- (2) Video cameras will continue to be manually controlled.
- (3) Redundant data entry into the Port 911/Dispatch system will continue.

This is not the recommended alternative.

**Alternative 2 – Upgrade the Breach/Duress Alarm System as in the recommended option (alternative #3 below) and wire down all non-wired alarms.**

Cost Implications: \$860,000

Pros:

- (1) All alarms will utilize the same infrastructure.
- (2) Wired alarms are less susceptible to failure or interference.

Cons:

- (1) Often a wireless architecture is needed to meet urgent security requirements for new breach or duress alarms, and the new system must accommodate this architecture. If future wireless alarms are accepted, there is no reason to wire down the few alarms that are currently wireless.
- (2) This alternative adds an estimated \$110,000 to the project cost.

This is not the recommended alternative.

**Alternative 3 – Procure and configure an additional module for existing software and eliminate manual processes with system integration.**

Cost Implications: \$750,000

Pros:

- (1) This alternative leverages existing software and wiring infrastructure.

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- (2) Immediate access to alarm information will be available to responders and security stakeholders.
- (3) Additional alarms can be added to meet future expanding requirements.
- (4) New tools will be implemented to improve business process and communication.

### Cons:

- (1) Annual maintenance costs are estimated to increase by \$41,000.

**This is the recommended alternative.**

## **ATTACHMENTS TO THIS REQUEST**

- None

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- None