

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

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

<b>Item No.</b>	<u>6f</u>
<b>Date of Meeting</b>	<u>June 25, 2013</u>

**DATE:** June 17, 2013  
**TO:** Tay Yoshitani, Chief Executive Officer  
**FROM:** Michael Ehl, Director, Airport Operations  
**SUBJECT:** Security Checkpoint Wait Time (CIP #C800388)

**Amount of This Request:** \$1,325,000      **Source of Funds:** Airport Development Fund  
**Est. State and Local Taxes:** \$50,000      **Est. Jobs Created:** unknown  
**Est. Total Project Cost:** \$3,600,000

**ACTION REQUESTED:**

Request Commission authorization for the Chief Executive Officer to (1) proceed with the Security Checkpoint Wait Time Project at Seattle-Tacoma International Airport; (2) execute contracts to purchase hardware, software, vendor services, and construction design services; and (3) authorize the use of Port staff for implementation. The amount of this request is \$1,325,000. The total project cost is estimated to be \$3,600,000.

**SYNOPSIS:**

The Airport's geographical location lends itself to a series of peak departure periods throughout the day. During these peaks, large groups of passengers are funneled unevenly through security checkpoints in short periods of time causing long lines and queuing area congestion. Recent news reports have highlighted long wait times due to summer travel when the number of passengers at the Airport increases by 15 to 20%. Data from the 2011 Airport Service Quality (ASQ) survey indicates wait time at the security checkpoints is one of the most important influences on overall customer experience, and the Airport ranks lower in this area than most of the 15 comparable domestic airports within the survey. In addition, security checkpoint wait time and customer service complaints ranked in the top five for complaints collected in 2011 and 2012.

The purpose of this project is to implement a system to capture and display checkpoint wait times for the traveling public so they can plan their arrival and quickly identify the security checkpoint that best meets their needs. Information and Communication Technology (ICT), Aviation Maintenance, and Airport Operations resources will collaborate to complete the project. Design services will be competitively procured. Construction elements will consist of electronic signage and wait time sensors that will be determined once a solution is selected. Construction

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authorization will be requested in a second subsequent authorization following design completion. Construction may be performed by a combination of Port Construction Services, maintenance crews, small works contractors and/or through a major works contract.

This project was included in the Aviation Division's 2013-2017 capital budget and plan of finance with a budget of \$864,000. The original estimate assumed a wait time system would be provided by the Transportation Security Administration (TSA) which has since been cancelled. The budget increase will be covered by a transfer from the Aeronautical Allowance CIP #C800404, resulting in no net change to the 2013-2017 capital budget and plan of finance. The source of funds for this project is the Airport Development Fund.

### **BACKGROUND:**

On November 19, 2001, the Aviation and Transportation Security Act was passed by Congress, creating the Transportation Security Administration (TSA) to strengthen the security of our nation's transportation systems. As a result, new security requirements have significantly changed the way airports utilize their existing facilities and passengers have seen a dramatic increase in the amount of time needed from check-in through aircraft boarding.

As the 15<sup>th</sup> busiest U.S. airport, an average of 45,000 enplaning passengers pass through the Sea-Tac security checkpoints every day. Most passengers will follow the most direct route from the ticket counter through the security checkpoint to their departure gate, although this is not always the quickest route through the security checkpoints during peak departure times.

### **PROJECT JUSTIFICATION:**

It is estimated that during peak periods, individual checkpoint processing can take in excess of 30 minutes while another checkpoint has more reasonable wait times at the same time. Providing travelers the information that will allow them to select a less busy checkpoint will reduce passenger stress, better balance checkpoint queues to reduce congestion, and reduce resources needed to manually balance checkpoint queues. In addition, concession sales could improve as passengers have more time before boarding and trend data can help with facility planning.

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

- Allow passengers to quickly identify the security checkpoint that best meets their needs before entering a checkpoint queue.
- Provide passengers with travel planning information prior to airport arrival.
- Balance checkpoint queues.

### **PROJECT SCOPE OF WORK AND SCHEDULE:**

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

- Procure and install a checkpoint wait time system at Sea-Tac's five security checkpoints in the main terminal.
- Procure and install approximately 24 electronic displays in the main terminal to show checkpoint wait time information and guide passengers to security checkpoints.

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- Publish wait time information on the Port website.
- Design the display and wait time system sensor installation.

### ***Schedule:***

Commission Authorization – Procurement/Design	June 2013
Procurement Complete	September 2013
Construction Design Complete	March 2014
Commission Authorization - Construction	March 2014
Construction Complete	September 2014
Installation Complete	November 2014

### **FINANCIAL IMPLICATIONS:**

<b><i>Budget/Authorization Summary:</i></b>	Capital	Expense	Total Project
Original Budget	\$864,000	\$0	\$864,000
Budget Increase	\$2,736,000		\$2,736,000
Revised Budget	\$3,600,000		\$3,600,000
Previous Authorizations	\$0	\$0	\$0
Current request for authorization	\$1,325,000	\$0	\$1,325,000
Total Authorizations, including this request	\$1,325,000	\$0	\$1,325,000
Remaining budget to be authorized	\$2,275,000	\$0	\$2,275,000
Total Estimated Project Cost	\$3,600,000	\$0	\$3,600,000

<b><i>Project Cost Breakdown:</i></b>	This Request	Total Project
Software/Implementation Services	\$450,000	\$450,000
ICT Project Management/Technical	\$350,000	\$350,000
Construction Design	\$300,000	\$300,000
State & Local Taxes (estimated)	\$50,000	\$50,000
Project Contingency	\$175,000	\$450,000
Construction	\$0	\$2,000,000 (*)
Total	\$1,325,000	\$3,600,000

(\*) NOTE: Construction is a conservative rough order magnitude estimate. Due to the potential for a high degree of variability in construction costs associated with the alternative technologies available, construction cannot be estimated with a greater degree of precision until the software solution is selected. The range of costs for construction is estimated at \$1,200,000 to \$2,000,000.

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

This project was included in the Aviation Division's 2013-2017 capital budget and plan of finance as a business plan prospective project with a budget of \$864,000 within CIP #C800388, Security Checkpoint Wayfinding. The budget increase will be covered by a transfer from CIP #C800404, Aeronautical Allowance, resulting in no net change to the 2013-2017 capital

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budget and plan of finance. The source of funds for this project 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>	\$3,600,000
<b>Business Unit (BU)</b>	Terminal
<b>Effect on business performance</b>	Will increase NOI after depreciation
<b>IRR/NPV</b>	N/A
<b>CPE Impact</b>	CPE will increase by \$0.02 in 2015.

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

An additional \$49,500 in annual recurring cost is estimated to cover software license and system maintenance costs. \$45,000 will be budgeted within the ICT Operating Budget and \$4,500 will be budgeted in the Aviation Maintenance Operating Budget.

### **STRATEGIC OBJECTIVES:**

This project supports the Century Agenda strategy to advance this region as a leading tourism destination and business getaway by improving customer service.

### **BUSINESS PLAN OBJECTIVES:**

This project supports the Aviation strategy to become one of the top ten customer service airports in the world by 2015 as measured by the Airports Council International (ACI) Airport Service Quality (ASQ) index.

### **ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:**

1. *Apply Additional Resources:* Personnel could be deployed to high-congestion areas to manually re-balance the loads leading into the checkpoints. This option does not improve passenger satisfaction and increases the operating expense to the Airport, TSA, and potentially law enforcement. This is not the recommended alternative.
2. *Utilize TSA Wait Time Data:* TSA funded an initiative to procure and install a system to collect and analyze checkpoint wait times at several airports in the U.S. including Sea-Tac. In October 2012, TSA canceled testing of the SITA/iQueue solution at Las Vegas and Indianapolis airports for unspecified reasons and does not have estimated implementation timeline. This is not the recommended alternative.
3. *Procure and implement a Checkpoint Wait Time Solution:* This solution will improve the customer experience by providing wait time information for each checkpoint throughout the

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main terminal allowing a passenger to select the best route to their boarding gate and better balancing checkpoint load. **This is the recommended alternative.**

### **OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:**

None.

### **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:**

None.