COMMISSION
AGENDA MEMORANDUM **Item No.** 6c

ACTION ITEM **Date of Meeting** July 25, 2017

DATE: July 17, 2017

TO: Dave Soike, Interim Executive Director

FROM: Wayne Grotheer, Director, Aviation Project Management Group
Michael Ehl, Director, Aviation Operations

SUBJECT: Automated Screening Lanes at Seattle-Tacoma International Airport (CIP#C800920)

Amount of this request: $17,000,000
Total estimated project cost: $30,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) proceed with design for automated screening lanes at Seattle-Tacoma International Airport, (2) execute a contract to purchase the screening lane equipment, and (3) use Port crews. This authorization is for $17,000,000 of a total estimated project cost of $30,000,000.

EXECUTIVE SUMMARY

Passenger loads at Sea-Tac International Airport (SEA) continue to increase and longer security lines at the security checkpoints are one result. This project will make modifications to the passenger screening lanes at the airport's security checkpoints to increase security effectiveness and efficiency and improve the passenger experience. Automated Screening Lanes (ASLs) automate bin conveyance and the screening process at the checkpoint allowing items to move through screening without physical intervention. This past year the Transportation Security Administration (TSA) has been testing ASLs at its national test facility. As this equipment testing is completed, TSA has granted approval for field verification at specific airports around the country. The results of field verification to date have demonstrated that, when properly configured, ASLs have shown a 30 to 40 percent increase in passenger throughput. Increases are achieved primarily through parallel divestment, alarm bag divert for continuous flow and automated bin return. Additional gains can be achieved through centralized/remote screening once approved by TSA in the future. Along with increasing effectiveness and efficiency, security is further enhanced by added cameras and RFID bins allowing the TSA to positively track the items in the screening process. These improvements will benefit the passenger experience at the airport.

While this project was not included in the 2017 – 2021 capital budget and plan of finance, staff recommends authorization at this time so that the initial installation can be completed by Q2 2018.

JUSTIFICATION

SEA has seen unprecedented growth in passenger traffic along with unprecedented wait times and space requirements in the Airport's security queues. ASL's have rapidly developed and expanded at other US airports with 25 lanes deployed in 2016 and another 75 planned in 2017. They are demonstrating a measurable increase in passenger throughput.

The TSA has now completed testing of two vendors' systems. This is the appropriate time to undertake procurement and installation of ASLs for this airport. With security checkpoint queuing becoming one of the main choke points for passengers at SEA, an ASL conversion will increase checkpoint efficiency, shorten queue lines and improve the overall customer experience. TSA has been a partner in this project though no federal funds are available to pay for it. Both Delta Air Lines and Alaska Airlines also support the installation of these lanes at the airport's security checkpoints.

DETAILS

This project will upgrade Passenger Security Checkpoints 2, 3 and 5 in a phased approach, one checkpoint at a time, taking security lanes out of service in pairs to install the ASL equipment. The new equipment will be integrated with the existing TSA X-Ray machines. The project will install new electrical and data infrastructure and relocate existing equipment to make room for the new lanes. ASLs are larger than the Airport's existing security checkpoint lanes. Security checkpoints will need to be reconfigured in order for the ASLs to fit. If necessary, new security grills, walls, or doors to provide off-hours closure will be installed. This will be determined during design after procurement of the lanes.

Scope of Work

Work will include making modifications to the screening lanes to increase security effectiveness and efficiency and improve passenger experience. These components include, but are not limited to, the following:

(1) Procure ASLs through a competitive best value procurement
(2) Install additional electrical power and data communications for the ASLs
(3) Relocate existing checkpoint X-Ray equipment into the ASLs
(4) Make revisions to the checkpoint security grills if needed
(5) Install new checkpoint enclosure walls if needed

Small Business

In an effort to maximize small business interest, Port staff will leverage the Port of Seattle's Small Business Generator program (PortGen) to outreach and to provide contracting training to all small and diverse businesses interested in this project.

Schedule

Activity	
Design start	Q3 2017
Commission construction authorization	Q1 2018
Construction start	Q2 2018
First In-use date	Q2 2018
Last In-use date	Q1 2019

Cost Breakdown	This Request	Total Project
Design	$3,800,000	$3,800,000
Procurement	$13,200,000	$13,200,000
Construction	$0	$13,000,000
Total	$17,000,000	$30,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not install Automated Screening Lanes.
Cost Implications: $0 capital.

Pros:

(1) No capital cost, freeing funds for other uses.

Cons:

(1) No additional efficiency or throughput at checkpoints
(2) Queue lines and congestion will stay similar or increase in size from the current situation
(3) As queue lines increase in size, additional queue management may be required in the future
(4) This would not achieve the airlines goals of providing a better customer experience

This is not the recommended alternative.

Alternative 2 – Implement only a pilot/demonstration of ASL at one checkpoint

Cost Implications: $11,000,000

Pros:

(1) Allows us to better understand how the checkpoints may change operationally to better understand the necessary modifications to the entire checkpoint
(2) Allows us to understand staffing levels for TSA and how that may affect overall checkpoint staffing

Cons:

(1) Much slower implementation if you plan to do all lanes later
(2) Only provides minimal relief for congestion and queues

(3) Airlines will not get the added customer experience in the magnitude and timing they are requesting
(4) Difficulty in securing the lanes during off hours due to size and length of new lanes

This is not the recommended alternative*.*

Alternative 3 – Provide ASLs across all checkpoints (in a phased approach)
Cost Implications: $30,000,000
Pros:

(1) Provides a noticeable improvement in customer experience
(2) Faster throughput provides a greater potential to decrease queue lines and congestion
(3) Provides Airlines with their requested level of innovation at the checkpoints with increased customer experience

Cons:

(1) Due to size, new ASLs could create egress and circulation issues which has to be accommodated in the project – space planning currently in progress
(2) Due to size, new ASLs may require new security walls to be put in place at most checkpoints (similar to checkpoint 5)
(3) Highest cost alternative

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$30,000,000	$0	$30,000,000
AUTHORIZATION			
Previous authorizations	$100,000	0	$100,000
Current request for authorization	$17,000,000	0	$17,000,000
Total authorizations, including this request	$17,100,000	0	$17,100,000
Remaining amount to be authorized	$12,900,000	$0	$12,900,000

Annual Budget Status and Source of Funds

The Automated Security Lane (CIP #C800920) was *not* included in the 2017-2021 capital budget and plan of finance. The budget was transferred from the Aeronautical Allowance (CIP #C800753), resulting in no net change to the capital budget. The funding source for this project will be future revenue bonds. The airlines were briefed at the airport airline affairs committee meeting on July 20, 2017, and a majority-in-interest (MII) vote ballot will be submitted subsequently.

The ownership of the screening equipment will be transferred to the TSA. Accordingly, the cost of the equipment will be accounted for as public expense. In the table above, all costs are shown as capital. The assignment of costs to public expense will be refined and updated during design.

Financial Analysis and Summary

Project cost for analysis	$30,000,000
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase
IRR/NPV (if relevant)	N/A
CPE Impact	$.09 in 2019

Future Revenues and Expenses (Total cost of ownership)

There will be no revenue or anticipated expenses to the Port. The ownership of the ASL equipment would be transferred to the TSA for consideration.

ADDITIONAL BACKGROUND

Checkpoint lines continue to get longer as passenger loads increase at airports nationwide. The TSA and other agencies have been looking for solutions to keep up with the demand. An innovation task force was established to foster innovation by integrating key stakeholders to identify and demonstrate emerging solutions that increase security effectiveness and efficiency, improve passenger experience and the flow of commerce, and deliver solutions that secure the freedom of movement throughout the nation's transportation system.

TSA has worked closely with airlines, airport authorities, and vendors to deploy 25 ASLs in 2016 across four large hub airports; Atlanta Hartsfield International Airport, Los Angeles International Airport, Chicago O'Hare International Airport and Newark International Airport.

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None