COMMISSION
AGENDA MEMORANDUM **Item No.** 4d

ACTION ITEM **Date of Meeting** December 12, 2017

DATE: December 6, 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: $0
Total estimated project cost: $17,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) proceed with construction and installation of automated screening lanes at security checkpoints 2, 3 and 5 at Seattle-Tacoma International Airport; and, (2) use Port crews for construction efforts. The total estimated cost of this project is $17,000,000.

EXECUTIVE SUMMARY

On July 25, 2017, the Commission authorized funding for the design, execution of a procurement contract and the use of Port crews for the Automated Screening Lanes (ASLs) project at Seattle-Tacoma International Airport (Airport). This request authorizes construction to complete the installation of the procured ASLs.

In September staff selected Vanderlande Industries, Inc. through a competitive procurement to provide the ASLs for this project and the International Arrivals Facility (IAF) project as well. Design has now begun for the installation. As the project has developed, (now through 30% design) staff now anticipates being able to complete the project within the existing authorized amount of $17,000,000. The cost reduction is due to a number of factors including reduction in the number of ASL lanes proposed for each checkpoint and deletion of checkpoint enclosure walls.

JUSTIFICATION

The Airport has seen unprecedented growth, wait times and space requirements in passenger traffic in the Airport's security queues. With security checkpoint queuing becoming one of the main choke points for passengers at the Airport, an ASL conversion will increase checkpoint efficiency, shorten queue lines and improve the overall customer experience.

ASLs have rapidly developed and expanded at other US airports, with Las Vegas McCarran International Airport being the most recent. ASLs are demonstrating a measurable increase in passenger throughput. 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. Due to current limitations with respect to some screening, existing non-ASL lanes will continue to be used at each checkpoint. This has reduced the number of ASL lanes procured.

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. Because the ASL lanes are larger, fewer lanes can fit at each checkpoint. This has also reduced the number of ASL lanes procured. At Checkpoint 2 the new layout will require a supervisor booth be replaced. Checkpoints 2 and 3 require relocation or replacement of private screening rooms as well.

New security grills will be installed at checkpoint 2. The selected vendor has proposed an equipment modification that will allow new security grilles to be used at the existing grille location, thereby avoiding the need to provide additional checkpoint enclosure walls for off-hours security.

ASL's will not be installed at checkpoint 1 or 4 due to the limited footprint and use. This project budget will procure ASL lanes for the IAF project, however, the checkpoint and infrastructure for the lanes will be constructed by the IAF team and not by this project.

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) Install additional electrical power and data communications for the ASLs
(2) Relocate existing checkpoint X-Ray equipment into the ASLs
(3) Reposition existing checkpoint equipment to their new locations
(4) Make revisions to Checkpoint 2 security grills
(5) Relocate flight information displays, a directory, and an advertising display
(6) Construct new supervisor booths and private screening rooms

Schedule

Activity

Construction start	2017 Quarter 4
In-use date checkpoint 5	2018 Quarter 1
In-use date checkpoints 2 and 3	2018 Quarter 2

Cost Breakdown	This Request	Total Project
Design	$0	$2,200,000
Procurement	$0	$9,000,000
Construction	$0	$5,800,000
Total	$0	$17,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not install the procured lanes at any of the checkpoints

Cost Implications: $32,000 (initial cost for this project which would have to be expensed)

Pros:

(1) No additional capital cost

Cons:

(1) No additional efficiency or throughput at checkpoints
(2) Most likely queue lines and congestion will stay similar or increase in size from our current situation
(3) Most likely require additional resources (expense) to manage queue and congestion 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 – Only install lanes at checkpoint 5

Cost Implications: $3,000,000

Pros:

(1) One checkpoint will be more efficient
(2) Less capital cost

Cons:

(1) Limited efficiency through the other checkpoints
(2) Most likely queue lines and congestion will stay similar or increase in size from our current situation
(3) Most likely require additional resources (expense) to manage queue and congestion in the future for non ASL checkpoints

(4) This would not achieve all of the airlines' goals of providing a better customer experience
(5) SEA would be behind the curve in security screening technology and would not be able to respond to the integration of CT technology as easily in the near future

This is not the recommended alternative.

Alternative 3 – Provide ASLs across all three checkpoints in a phased approach

Cost Implications: $17,000,000

Pros:

(1) Provides a much more noticeable increase in customer experience
(2) Greater potential to decrease queue lines and congestion
(3) Provides Airlines with their requested level of innovation at the checkpoint with increased customer experience

Cons:

(1) 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
Budget reduction/addition	($21,700,000)	$8,700,000	($13,000,000)
Revised budget	$8,300,000	$8,700,000	$17,000,000
AUTHORIZATION			
Previous authorizations	$17,000,000	$0	$17,000,000
Current request for authorization	$0	$0	$0
Total authorizations, including this request	$17,000,000	$0	$17,000,000
Remaining amount to be authorized	$13,000,000	$0	$13,000,000

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 has been sent out.

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, the estimated cost of the screening equipment is indicated in the Expense column.

Financial Analysis and Summary

Project cost for analysis	$17,000,000
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	$.05 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. In 2017 there were additional installs, the latest of these being McCarran International Airport.

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

July 25, 2017 – The Commission authorized design, purchase of equipment and use of Port crews.