



**COMMISSION
AGENDA MEMORANDUM**

Item No.

8d

ACTION ITEM

Date of Meeting

October 22, 2019

DATE: October 11, 2019

TO: Stephen P. Metruck, Executive Director

FROM: Wendy Reiter, Director Aviation Security
Jeffery Brown, Director Aviation Facilities and Capital Programs
Wayne Grotheer, Director Aviation Project Management

SUBJECT: Checkpoint 1 Relocation Design Authorization (CIP #C801093)

Amount of this request: \$10,000,000

Total estimated project cost: \$30 million - \$40 million

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) advertise and execute a consultant contract to prepare design and construction bid documents for the relocation of Checkpoint 1 at Seattle-Tacoma International Airport, (2) use Port crews for design support and enabling construction activities, and (3) purchase owner-supplied security screening equipment, all of which in an amount not to exceed \$10,000,000 of a total estimated project cost between \$30 million and \$40 million.

EXECUTIVE SUMMARY

This project is needed to improve the level of service for airline passenger security screening at the Airport. The Airport currently has five checkpoints spread across the ticketing level. The current Checkpoint 1 located at the south end of the Ticketing Level is undersized, has an inefficient configuration, and cannot accommodate the newer Automated Screening Lane technology that is utilized in the Airport's other checkpoints. With the current conditions, Checkpoint 1 is only suitable for pre-check passengers, which limits the airport's overall screening flexibility and effectiveness. The relocation of Checkpoint 1 would enable other Main Terminal checkpoint and check-in improvements as part of the Main Terminal Optimization Plan (MTOPT).

This project will relocate Checkpoint 1 from its current location on the Ticketing Level to the lower Baggage Claim Level to provide additional screening throughput flexibility and a more adequate level of service for our passengers. Along with supporting upgrades, the project will create new queuing, travel document verifications, and additional security screening lanes with Automated Screening Lane technology.

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Due to the urgency of this project, we are requesting project authorization prior to completion of project definition. Seeking project authorization prior to completion of project definition adds greater uncertainty to project scope and therefore project cost, hence the cost estimate is shown as a range.

This project will be subject to airline review though a majority-in-interest (MII) vote.

JUSTIFICATION

Inability to accommodate efficient technology and adequate queuing for passenger security processing at Checkpoint 1 will result in continued deterioration of passenger level of service in the Main Terminal as demand increases. Passenger security screening at the Airport is experiencing stints of systemic failure, resulting in excessive wait times and impacts to other terminal processes. Without implementation of additional security screening capacity and efficiency, it is distinctly possible that queues will become unmanageable, resulting in more and more missed flights.

Relocation of Checkpoint 1 to the lower level would provide additional processing capacity and operation area to improve passenger level of service. An enhanced Checkpoint 1 would provide additional compliant screening lanes, Transportation Security Administration (TSA) support spaces, adequate queuing to meet peak demand, and flexibility to accommodate current and evolving screening protocols. This lower level checkpoint will serve all passengers but will primarily benefit passengers using the South Satellite Concourse and passengers dropped off on the arrivals curb during peak departure periods, helping to mitigate curb congestion. It also introduces new opportunities for demand management, which are being considered in other initiatives. Passengers using Checkpoint 1 would have direct access to the South Satellite Transit System (STS) platform and ultimately any gate.

DETAILS

Scope of Work

This project will relocate the existing Checkpoint 1 from its current location on the Ticketing Level to a new expanded location on the Baggage Claim Level.

To accelerate delivery of the new Checkpoint, the Port will be developing a Project Definition Document (PDD) concurrently with the procurement of the Project Designer. The risk with this accelerated approach is that the scope may change or increase as the project is further defined. The PDD is scheduled to be completed in Quarter 1 of 2020 and will further inform the scope enumerated below.

At this time, the scope includes the following elements:

- (1) New security lanes with the latest screening equipment
- (2) Demising of security checkpoint from the rest of the Bag Claim level and Gina Marie Lindsey (GML) Arrivals Hall

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- (3) Removal of Bag Claim 1 device
- (4) Expansion of glass wall around the GML Hall and the Grand Staircase
- (5) Removal of architectural elements to increase circulation in the GML Hall
- (6) Provide code compliant egress from the new Checkpoint
- (7) Vertical Circulation Upgrades
 - a. Low end estimate includes the upgrade of a single elevator
- (8) Investigation of other vertical circulation improvements that may be required
 - a. High end estimate includes the replacement of four elevators and the creation of new escalators from the skybridge to the bag claim level
- (9) Relocation of *The Clearing* art wall
- (10) New flight information displays
- (11) Updated wayfinding signage
- (12) Demolition and closure of existing Checkpoint 1 on the ticketing level

Since the project definition is not yet complete, we do not yet know if additional potential scope elements (such as structural upgrades, electrical capacity, and heating ventilation and air conditioning capacity) identified in the planning work to date will be required and if so, their cost and schedule impact on the project. The work to be done in the coming months will refine this.

Diversity in Contracting

Project team is working with the Diversity in Contracting team to conduct outreach and the setting of a women- and minority-owned business enterprise (WMBE) aspiration goal for this project.

Schedule

Activity

Design start	2020 Quarter 1
Commission construction authorization	2020 Quarter 4
Construction start	2021 Quarter 1
In-use date	2022 Quarter 1

Note that additional scope items may delay project completion.

Cost Breakdown Low End Range

	This Request	Total Project
Design	\$5,500,000	\$5,800,000
Long lead time equipment purchase	\$2,500,000	\$2,500,000
Construction	\$2,000,000	\$21,700,000
Total	\$10,000,000	\$30,000,000

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Cost Breakdown High End Range

	This Request	Total Project
Design	\$5,500,000	\$5,900,000
Long lead time equipment purchase	\$2,500,000	\$2,600,000
Construction	\$2,000,000	\$31,500,000
Total	\$10,000,000	\$40,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Expand existing Checkpoint 4

Cost Implications: \$70,000,000

Pros:

- (1) Expands existing checkpoint
- (2) Keeps all checkpoints on ticketing level

Cons:

- (1) Adding lanes at this checkpoint requires closure of two existing neighboring Airport retail locations
- (2) Greater impact to travelling public during expansion of checkpoint
- (3) Checkpoint 4 is not included as a final state of the MTOP and therefore the investment would be considered temporary and would most likely need to be demolished in the future.

This is not the recommended alternative.

Alternative 2 – Keep Checkpoint 1 on the Ticketing Level as-is

Cost Implications: \$0

Pros:

- (1) No capital investment required
- (2) All checkpoints will remain on ticketing. Less confusion for the traveling public

Cons:

- (1) Does not increase checkpoint capacity
- (2) Current checkpoint will continue to only screen pre-check travelers

This is not the recommended alternative.

Alternative 3 – Relocation Checkpoint 1 to Bag Claim Level

Cost Implications: \$30,000,000-\$40,000,000

Pros:

- (1) Creates ideal amount of space for queuing, document check, screening, and re-composure
- (2) Provides additional area for passenger screening without expanding the building footprint

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- (3) Locating a passenger screening checkpoint on a different level than existing checkpoints and with additional lanes is likely to provide a moderate benefit to the TSA staffing formula and may result in additional TSOs allocated to the Airport.
- (4) Existing Checkpoint 1 location can remain operational during a portion of construction activities
- (5) Allows other portions of the MTOP program to proceed without having to reduce capacity (based on the current airport wide passenger screening capacity).

Cons:

- (1) Baggage claim level is not a typical location for passenger screening and wayfinding to this checkpoint will likely be challenging to resolve.
- (2) Requires additional TSA staff.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary – Low End of Range

COST ESTIMATE	Capital	Expense	Total
Original estimate	\$27,500,000	\$2,500,000	\$30,000,000
AUTHORIZATION			
Previous authorizations	\$300,000	\$0	\$300,000
Current request for authorization	\$7,500,000	\$2,500,000	\$10,000,000
Total authorizations, including this request	\$7,800,000	\$2,500,000	\$10,300,000
Remaining amount to be authorized	\$19,700,000	\$0	\$19,700,000

Cost Estimate/Authorization Summary – High End of Range

COST ESTIMATE	Capital	Expense	Total
Original estimate	\$37,500,000	\$2,500,000	\$40,000,000
AUTHORIZATION			
Previous authorizations	\$300,000	\$0	\$300,000
Current request for authorization	\$7,500,000	\$2,500,000	\$10,000,000
Total authorizations, including this request	\$7,800,000	\$2,500,000	\$10,300,000
Remaining amount to be authorized	\$29,700,000	\$0	\$29,700,000

As noted elsewhere in this memo, project definition is not yet complete and project scope is not yet fully set. These cost estimates are Rough Order of Magnitude.

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Annual Budget Status and Source of Funds

This CIP C801093 Checkpoint 1 Relocation was not included in the 2019-2023 capital budget and plan of finance. The budget has been transferred from the Aeronautical Reserve CIP (C800753) resulting in no net change to the Aviation capital budget. The funding source will be the Airport Development Fund and future revenue bonds.

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	\$30,000,000; \$40,000,000
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	\$0.08 in 2022 if cost = \$30million; \$0.10 if cost = \$40 million

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

July 23, 2019 – Briefing: Main Terminal Optimization Plan