



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 8f

**ACTION ITEM**

**Date of Meeting** April 11, 2023

**DATE:** April 3, 2023

**TO:** Stephen P. Metruck, Executive Director

**FROM:** Eileen Francisco, Director, Aviation Project Management  
Wendy Reiter, Director, Aviation Security

**SUBJECT: Keys for Card Readers Design and Construction Authorization (CIP# C801185)**

**Amount of this request:** \$2,850,000

**Total requested project cost:** \$2,900,000

**ACTION REQUESTED**

Request a single Commission authorization for the Executive Director to (1) complete the design of the Keys for Card Readers project at Seattle-Tacoma International Airport, and (2) advertise and award a major works construction contract for its construction. The total project estimated cost is \$2,900,000.

**EXECUTIVE SUMMARY**

Seattle-Tacoma International Airport is divided into two zones, one publicly accessible and one secured and accessible only to authorized personnel. This project will improve security at ten (10) baggage conveyor belt doors at the Airport's ticketing lobby by treating seven (7) doors with Airport Access Controls and ten (10) doors with cameras. These improvements will facilitate Port security management, monitoring, and investigations. This project will also replace one manually operated door with an automated roll-up door. This new door and the enclosure surrounding the conveyor pathway will be fire-rated to meet current building code requirements. The anticipated total project value is \$2.9 million.

**JUSTIFICATION**

This project increases airport security by installing access control at the baggage conveyor belt doors at the ticketing lobby with direct access from the public to the secured areas of the airport. This project focuses on the baggage induction points that do not currently have access control system card readers. This will allow for proper auditing and tracking of access to these areas. This will also allow for employee access to be added and removed expeditiously. In addition, this project will provide alarm when the doors are left open, reducing the safety issue if someone tries to go through the door. The Alarm Response Monitor (ARM) will now have the ability to receive the alarm and dispatch security when deemed necessary.

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***Diversity in Contracting***

The project staff intends to utilize an existing Indefinite Delivery Indefinite Quantity (IDIQ) Contract (P00320886) that has an established 25% WMBE aspirational commitment associated with the design. In partnership with the Diversity in Contracting department, this project will look for opportunities to further increase the established commitment under this service directive. In partnership with Diversity in Contracting, we have established an 8% WMBE aspirational goal associated with construction.

**DETAILS**

Initially, the project anticipated replacing four manually operated baggage conveyor belt doors with automated access control doors along with adding access control to operate another six doors for a total of ten doors being replaced or upgraded. As project definition progressed it became clear that three doors would be best completed by other projects that would be modifying these doors anyway at some point in the near future. Thus, the project will upgrade seven existing baggage conveyor belt doors that are operated with keys to doors that will be operated through the Airport’s access control system in the Airport’s ticketing lobby while adding cameras to view all 10 doors. These upgrades are listed in more detail below.

***Scope of Work***

Includes

- (1) Convert six (6) keyed baggage conveyor belt doors in the ticketing lobby from key locks to card readers.
- (2) Replace one (1) manual baggage conveyor belt door with a 2-hour fire-rated automated access control door.
- (3) Improve the fire-rating of the conveyor enclosure behind the replaced door to a 2-hour fire-rated assembly.
- (4) Install ten (10) security cameras at the baggage conveyor belt doors.

***Schedule***

*Activity*

Design start	2023 Quarter 2
Construction start	2024 Quarter 4
In-use date	2025 Quarter 2

***Cost Breakdown***

	This Request	Total Project
Design	\$550,000	\$600,000
Construction	\$2,300,000	\$2,300,000
<b>Total</b>	<b>\$2,850,000</b>	<b>\$2,900,000</b>

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**ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1** – Replace 4 baggage induction doors, construct code required 2-hour area separation walls, install 10 card readers, and install 10 security cameras.

Cost Implications: \$5,000,000

Pros:

- (1) Provides increased security.
- (2) Standard across multiple doors to allow for maintainability.
- (3) Immediate ability to get a notification when a door is left open.
- (4) Immediate ability to grant or remove access privileges.

Cons:

- (1) Requires larger capital expenditure, more than double the current budget.
- (2) Door retrofit may be impacted due to existing infrastructure that may be in the way.

This is not the recommended alternative.

**Alternative 2** – Install 6 card readers and 10 cameras. Replace no doors.

Cost Implications: \$2,000,000

Pros:

- (1) Requires smaller capital expenditure.
- (2) Provides increased security.
- (3) Standard across multiple doors to allow for maintainability.
- (4) Immediate ability to grant or remove access privileges.
- (5) Immediate ability to get a notification when a door is left open.

Cons:

- (1) Four existing doors not replaced would still be keyed.
- (2) Will not provide the immediate ability to add or remove access at all doors.
- (3) Will not prove an immediate ability to get a notification for the door if left open at all doors.

This is not the recommended alternative.

**Alternative 3** – Replace 1 baggage conveyor door, install 7 card readers, and install 10 security cameras.

Cost Implications: \$2,900,000

Pros:

- (1) Provides increased security.
- (2) Requires medium capital expenditure.
- (3) Allows other projects to remain fully in control of their own scopes and not rely on this project to complete one element, i.e., the conveyor door(s).
- (4) Immediate ability to grant or remove access privileges.
- (5) Immediate ability to get a notification when a door is left open.

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Cons:

- (1) 3 existing doors not replaced would still be keyed until the Airline Realignment and American Airlines projects are carried out.
- (2) Will not provide the immediate ability to grant or remove access at all doors.
- (3) Will not provide the immediate ability to get a notification when a door is left open at all doors.

***This is the recommended alternative.***

**FINANCIAL IMPLICATIONS**

<b><i>Cost Estimate/Authorization Summary</i></b>	<b>Capital</b>	<b>Expense</b>	<b>Total</b>
<b>COST ESTIMATE</b>			
Original estimate	\$1,946,000	\$0	\$1,946,000
Current change	\$954,000	\$0	\$954,000
Revised estimate	\$2,900,000	\$0	\$2,900,000
<b>AUTHORIZATION</b>			
Previous authorizations	\$50,000	\$0	\$50,000
Current request for authorization	\$2,850,000	\$0	\$2,850,000
Total authorizations, including this request	\$2,900,000	\$0	\$2,900,000
Remaining amount to be authorized	\$0	\$0	\$0

***Annual Budget Status and Source of Funds***

The Keys for Card Readers #C801185 is included in the 2023-2027 capital budget and plan of finance with a budget of \$1,946,000. The capital budget increase of \$954,000 was transferred from the Aeronautical Allowance CIP C800753 resulting in no net change to the Airport capital budget. The funding sources will be the Airport Development Fund and future revenue bonds.

***Financial Analysis and Summary***

Project cost for analysis	\$2,900,000
Business Unit (BU)	Airfield Movement Area
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase due to inclusion of capital (and operating) costs in airline rate base.
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.01 in 2025

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***Future Revenues and Expenses (Total cost of ownership)***

Aviation Maintenance anticipates a minimal increase in ongoing operations and maintenance costs to maintain the additional security equipment and roll-up doors. While the impact from this individual project is minimal, the overall impact from upcoming security projects will likely require an additional Electrical and Electronic systems technician to support ongoing operations and maintenance.

**ATTACHMENTS TO THIS REQUEST**

None

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

None