



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 6e

**ACTION ITEM**

**Date of Meeting** July 28, 2020

**DATE:** July 20, 2020  
**TO:** Stephen P. Metruck, Executive Director  
**FROM:** Laurel Dunphy, Director, Aviation Operations  
Wayne Grotheer, Director, Aviation Project Management Group  
**SUBJECT:** Parking Garage Elevator Modernization (CIP# C800789)

**Amount of this request:** \$16,160,000  
**Total estimated project cost:** \$23,276,000

**ACTION REQUESTED**

Request Commission Authorization for the Executive Director to advertise and execute a major works construction contract for the second phase of the Parking Garage Elevator Modernization Project at Seattle-Tacoma International Airport. The amount of this request is \$16,160,000 for a total estimated project cost of \$23,276,000.

**EXECUTIVE SUMMARY**

The Airport Parking Garage elevators provide vertical circulation services for millions of airport parking and ground transportation customers every month. Continued and reliable operations of these systems are vitally important to the traveling public, as well as Airport operations.

The first phase of this project will weatherize the 8th floor Parking Garage Sections B and C elevator cores, eliminate slip or trip hazards, and improve the customer experience in the Parking Garage elevator lobbies. The construction contract for this phase of work was recently executed, and a “notice-to-proceed” will be issued for this work on July 27, 2020. The second phase of the project replaces worn end-of-life elevator components with modern, energy-efficient systems in all five elevator cores in the Parking Garage.

**JUSTIFICATION**

This project provides for continued reliable vertical circulation services within the airport Parking Garage for the next ten plus years, while reducing repair costs and decreasing energy consumption. The modernized elevators will use energy efficient regenerative drives that use less energy and produce less waste heat. The total energy saving estimate is 56,000 to 211,000 kilowatt hours (kWh), per year. While this energy reduction represents just approximately 0.1 percent of the total airport electrical energy consumption, the project will contribute to the Port’s goal to be the greenest and most energy efficient port in North America. Additionally, this project will contribute to the Port’s Long-Range Plan to improve customer service.

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***Diversity in Contracting***

The project staff, in coordination with the Diversity in Contracting Department, have set a 5% woman and minority-owned business enterprise (WMBE) aspirational goal for the Phase 2 construction contract. A WMBE aspirational goal of 14% was established for the Phase 1 construction contract.

**DETAILS**

The first phase of the project was advertised for construction bids on April 7, 2020, and bids were received on May 7, 2020. Notice to Proceed is scheduled to occur on July 27, 2020, and substantial completion is estimated on January 2, 2021.

Phase 2 of the project is under final design review and is estimated to advertise for construction bids on August 28, 2020. To minimize negative impacts to customer service and ensure adequate vertical circulation, the construction will be completed over a 2.5-year period. Notice to proceed is scheduled for April 6, 2021.

***Scope of Work***

The second phase of the project will replace 10 elevators serving the Parking Garage Sections B and C elevator cores, replace nine of ten motor drives serving elevators in the Parking Garage Sections D and E elevator cores, and provide new call buttons, lighting and cab finishes in all 27 elevator cabs within the parking garage (including those in the Parking Garage Section A). These modifications will enhance the customer experience and maintain the operational integrity of the vertical conveyance system within the airport parking garage.

***Schedule***

The first phase of the project will be completed in the first quarter of 2021.

The second phase of the project contains the following milestones:

*Activity*

Construction start	2021 Quarter 2
In-use date (First Elevator Bank)	2022 Quarter 1
In-use date (Final Elevator Bank)	2023 Quarter 3

***Cost Breakdown – Phase 1***

	This Request	Total Work Project
Design	\$0	\$595,000
Construction	\$0	\$2,755,000
Sub-Total	\$0	\$3,350,000

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<b>Cost Breakdown – Phase 2</b>	This Request	Total Work Project
Design	\$0	\$3,766,000
Construction	\$16,160,000	\$16,160,000
Sub-Total	\$16,160,000	\$19,926,000

<b>Combined (Phases 1 &amp; 2) Cost Breakdown</b>	This Request	Total Project
Design	\$0	\$4,361,000
Construction	\$16,160,000	\$18,915,000
Total	\$16,160,000	\$23,276,000

**ALTERNATIVES AND IMPLICATIONS CONSIDERED**

The following alternatives and implications only apply to the second phase of the project.

**Alternative 1 – Status Quo – No action alternative**

Cost Implications: \$400,000 (expensed)

Pros:

- (1) Does not require capital investment.
- (2) Does not involve any shutdown of the current facilities.

Cons:

- (1) This option would result in the facility continuing to deteriorate until multiple failures occur.
- (2) This option would only delay necessary repairs to a future date when the elevator replacement program may be more expensive and more disruptive to day-to-day operations.
- (3) The Parking Garage facility would not experience the energy savings that the replacement systems would deliver.
- (4) Since the Parking Garage is a significant revenue source, a “planned” outage should be considered more desirable than an “unplanned” outage.

This is not the recommended alternative.

**Alternative 2 –** This option would completely replace the ten elevators in the Parking Garage Sections B and C elevator cores and make significant operational improvements to nine of ten elevators in the Parking Garage Sections D and E elevator cores. All 27 elevators within the parking garage will receive new call buttons, lighting and cab finishes (including those in Parking Garage Section A).

Cost Implications: \$19,926,000

Pros:

- (1) Minimizes the disruption to the Parking Garage in a controlled manner.

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- (2) The Parking Garage facility will experience the energy savings that the modernization program will deliver.
- (3) Would result in a total construction schedule of approximately 32 months.

Cons:

- (1) Results in a significant capital expenditure.

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

**FINANCIAL IMPLICATIONS**

***Cost Estimate/Authorization Summary***

	Capital	Expense	Total
<b>COST ESTIMATE</b>			
Original estimate	\$23,276,000	\$0	\$23,276,000
Previous changes – net	(\$25,000)	\$25,000	0
Current change	0	0	0
Revised estimate	\$23,251,000	\$25,000	\$23,276,000
<b>AUTHORIZATION</b>			
Previous authorizations	\$7,091,000	\$25,000	\$7,116,000
Current request for authorization	\$16,160,000	0	\$16,160,000
Total authorizations, including this request	\$23,251,000	\$25,000	\$23,276,000
Remaining amount to be authorized	\$0	\$0	\$0

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

The Parking Garage Elevator Modernization project (#C800789) is included in the 2020-2024 capital budget and plan of finance with a budget of \$23,251,000 for all phases. The funding source would be the Airport Development Fund and future revenue bonds.

This project is categorized as a non-aeronautical cost center, which does not impact the airline rate base.

***Financial Analysis and Summary***

Project cost for analysis	\$23,276,000
Business Unit (BU)	Parking
Effect on business performance (NOI after depreciation)	NOI after depreciation will decrease
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

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

Renovation is expected to reduce future repair costs and increase the operational availability of the system. The estimated useful life will be extended for all 27 elevators located in the parking garage. The new elevators in Sections PGB and PGC (10 elevators total) will have a useful life of approximately 20 years, while the remaining 17 elevators located in Sections PGA, PGD and PGE will have a useful life of 10 years.

**ATTACHMENTS TO THIS REQUEST**

1. Presentation slides

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

October 22, 2019 – The Commission authorized \$2,155,000 for the construction of the first phase of work.

January 22, 2019 – The Commission authorized \$4,251,500 for the design of the second phase of work.

May 8, 2018 – The Commission authorized \$595,000 for the design of the first phase of work.