PORT OF SEATTLE MEMORANDUM

Fund

COMMISSION AGENDA ACTION ITEM

 Item No.
 4h

 Date of Meeting
 June 9, 2015

DATE: June 1, 2015

TO: Ted Fick, Chief Executive Officer

FROM: David Soike, Director, Aviation Facilities and Capital Program

Wayne Grotheer, Director, Aviation Project Management Group

SUBJECT: Airport Parking Garage Emergency Intercoms (CIP #C800648)

Amount of This Request: \$521,000 **Source of Funds:** Airport Development

Est. Total Project Cost: \$536,000

Est. State and Local Taxes: \$25,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to authorize (1) the preparation of design and construction documents to update the Airport parking garage emergency phone system, and (2) use of Port crews to construct the project.

SYNOPSIS

This project is a complete overhaul and modernization of the Airport parking garage emergency phone system. The project will mitigate the risk of failure by obsolete phone equipment, and correct the inability to determine the location of 911 requests for assistance in the parking garage.

BACKGROUND

The Airport parking garage emergency call stations are essentially two systems operating in parallel and encompasses both a 1970's era phone handset system, currently maintained by the Port of Seattle Fire Department, and a 1990's era intercom system, currently maintained by Aviation Maintenance. Neither system has the ability to locate the caller to aid the 911 dispatcher. The 1970's era phone handsets are no longer manufactured, and replacement parts for the system are difficult to find or are not available. The 1990's era intercoms are dependable and are currently used throughout much of the Airport.

Today's emergency call stations, phone handsets and intercoms, are not consistently located throughout the parking garage. For example, there are intercoms in two of the stairwells on the east side of the parking garage, one on each floor, but there are no intercoms in the other stairwells. The south elevator bank has an intercom on each floor, the other elevator banks do

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not. Variation in locations depending on where you are in the parking garage can make emergency call stations hard to find.

PROJECT JUSTIFICATION AND DETAILS

Key performance problems are the lack of consistency in the location of the emergency call stations, two disparate systems are currently required and the inability to obtain parts for the older system. These two systems must be monitored by different departments – 911 Dispatch and Fire Department. Finally, the current systems do not automatically locate the person needing assistance. Therefore, the Fire Station and 911 Dispatcher cannot locate a caller automatically and must rely on the caller's ability to identify their location during an emergency.

An emergency phone system is not required by code; however, providing one is standard industry practice.

Project Objectives

Improve public safety:

- Remove obsolete equipment
- Locate the new emergency call stations in consistent, central locations, to enable the public to easily find them
- Enable the emergency call stations to indicate the location of the caller to 911 dispatch

Scope of Work

Design will be performed by an existing IDIQ consultant and the work will be performed by port crews and small works contractors. In order to mitigate the risks associated with the current emergency phone system this project includes the following components:

- Decommission the phone handset system
- Relocate intercoms from the garage stairwells and intercoms located in the southern portion of the parking garage to central locations at elevator banks on each floor of the parking garage and to the walkway leading to the Light Rail Station
- Connect each intercom with communications cabling to the existing 911 system
- Revise signage to help passengers locate the emergency call stations

Schedule

Complete Design 3rd Quarter 2015 Demolition 4th Quarter 2015 Complete Construction 4th Quarter 2015

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FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	\$440,000	\$100,000	\$540,000
Budget Increase/Decrease	(\$62,000)	\$58,000	(\$4,000)
Current Budget	\$378,000	\$158,000	\$536,000
Previous Authorizations	\$15,000	\$0	\$15,000
Current request for authorization	\$363,000	\$158,000	\$521,000
Total Authorizations, including this request	\$378,000	\$158,000	\$536,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$378,000	\$158,000	\$536,000

Project Cost Breakdown	This Request	Total Project
Design Phase	\$132,000	\$147,000
Construction Phase	\$364,000	\$364,000
State & Local Taxes (estimated)	\$25,000	\$25,000
Total	\$521,000	\$536,000

Budget Status and Source of Funds

This project was included in the 2015 - 2019 capital budget and plan of finance with a budget of \$440,000. Since that time, the cost estimate has been refined resulting in a capital cost reduction and an operating cost increase for a net reduction of \$4,000 in the total project cost. The funding source will be the Airport Development Fund.

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$536,000
Business Unit (BU)	Landside – Public Parking
Effect on business performance	NOI after depreciation will decrease
IRR/NPV	N/A
CPE Impact	None

Lifecycle Cost and Savings

The project removes obsolete equipment that was maintained by the Fire Department at minimal cost. Removal of this equipment will not affect lifecycle costs and the Fire Department staff will not be reduced as a result of this project. The project also relocates several intercoms to central locations. The intercoms are proven hardware and require little maintenance. Airport Maintenance anticipates no impact to operation and maintenance (O&M) costs as a result of this project.

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STRATEGIES AND OBJECTIVES

The project supports the Port's Century Agenda objective of meeting the region's air transportation needs at Sea-Tac International Airport for the next 25 years by improving security and customer service. It also supports the Airport's strategic goal of operating a world-class international airport by ensuring safe and secure operations through enhanced security.

TRIPLE BOTTOM LINE

Environmental Responsibility

This project reuses existing intercoms. The project will recycle wire to be removed when possible.

Community Benefits

The project supports public safety.

<u>ALTERNATIVES AND IMPLICATIONS CONSIDERED</u>

Alternative 1) Keep the status quo. This alternative would leave the emergency phone handsets and intercoms call station in place.

Capital Cost: \$0.

Pros:

• The phone handset parts could be repaired or decommissioned as they fail. The existing intercoms would remain in place. The Port could delay expenditure of the cost of system design and replacement, using the funds for other purposes.

Cons:

• This alternative does not address lack of consistency in location of emergency call stations throughout the parking garage and today's systems can't automatically provide the caller's location to 911 Dispatch. This alternative does improve reliability or public safety. This is a no-cost alternative.

Alternative 2) Remove the obsolete phone handset system. Expand installation of the intercoms to all elevator banks and to stairwells on the east side to the garage. Intercoms will be located at each of the 5 elevator banks with one on each of the 8 floors for a total of 40 locations (8 are currently located at the southernmost elevator bank) and they will be located at each of the 6 eastern stair wells with one on each floor for a total of 48. This involves removing all obsolete phone handsets, removing intercoms from the south section of the Airport parking garage, relocating intercoms to the elevator banks and to the stair wells on the east side of the parking garage (one per floor at each location), and relocating one intercom to the walkway leading to the Light Rail Station. The relocated intercoms would be connected to a more modern communication system connected to the Airport's computer network. This allows 911 Dispatch to automatically locate the person needing assistance.

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Capital Cost: \$900,000; Expense: \$158,000.

Pros:

• This alternative satisfies the need to remove the obsolete phone handsets, removes intercoms from arbitrary locations in southern area of the parking garage and allows the 911 Dispatch to automatically locate the person needing assistance. Also, this alternative adds intercoms to the eastern stairwells in locations that have no emergency call stations; this will make finding an intercom along the eastern side of the parking garage easier.

Cons:

• The phone handsets and intercoms will not be located between parking stalls. This will require travelers or employees to use intercoms at elevator banks, stairwells or use their cell phones. The emergency call stations in the east stairwells are easier to find; however, most travelers use the elevators for vertical circulation. Adding call stations to the east stairwells is not cost effective. Adding locations in the stairwells adds over \$500,000 without appreciably increasing safety.

Alternative 3) This alternative is similar to alternative 2 with the following exception: intercoms will not be installed in stairwells on the east side of the parking garage. This alternative removes the obsolete phone handsets and expands the intercom locations to all elevator banks. Intercoms will be relocated to each of the 5 elevator banks with one on each of the 8 floors for a total of 40 locations (8 are currently located at the southernmost elevator bank). This involves removing obsolete devices, removing intercoms from the south section of the Airport parking garage, relocating intercoms to the elevator banks and relocating one intercom to the walkway leading to the Light Rail Station. The relocated intercoms would be connected to a more modern communication system connected to the Airport's computer network. This allows 911 Dispatch to automatically locate the person needing assistance.

Capital Costs: \$378,000; Expense: \$158,000

Pros:

• This alternative satisfies the need to remove the obsolete phone handsets, removes intercoms from arbitrary locations in the southern portion of the parking garage and eastern stairwells, and allows the 911 Dispatch to automatically locate the person needing assistance. As stated in alternative 2, the emergency call stations in the east stairwells are easier to find; however, most travelers use the elevators for vertical circulation. Adding call stations to the east stairwells is not cost effective. This approach has lower cost than alternative 2.

Cons:

• The intercoms will not be located between parking stalls nor stairwells. This will require travelers or employees to use intercoms at elevator banks or use their cell phones.

This is the recommended option.

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ATTACHMENTS TO THIS REQUEST

• PowerPoint Presentation.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

• None.