COMMISSION
AGENDA MEMORANDUM   **Item No.**   6b

ACTION ITEM   **Date of Meeting**   January 28, 2020

DATE: January 17, 2020

TO: Stephen P. Metruck, Executive Director

FROM: Matt Breed, Chief Information Officer

SUBJECT: Phone System Replacement (CIP #C801083)

Amount of this request: $3,900,000
Total estimated project cost: $3,900,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) proceed with the Phone System Upgrade project; (2) execute a contract for software, equipment, vendor implementation services, and recurring maintenance fees for up to ten years; and (3) use port staff for implementation. Total project cost for authorization of $3,900,000 is comprised of $1,900,000 in capital project costs and an estimated $2,000,000 in recurring maintenance fees for a period of up to ten years.

EXECUTIVE SUMMARY

This project will competitively procure and implement a system that will provide phone service for employees and tenants at 16 different port locations that include Seattle Tacoma International Airport, Pier 69, Pier 66 (Cruise Terminals of America), and Terminal 91. In addition to approximately 4,000 desk and conference phones, the phone system supports three call centers, 911 Dispatch, terminal and firehouse paging, parking and rental car facility call boxes, and Terminal and Rental Car Facility hotel direct lines. The port's Avaya/Nortel phone system was installed in 2007 and last upgraded in 2013. Due to the age of the system, we no longer receive software updates. Further, the equipment will no longer be supported in the next couple of years leaving the port vulnerable to system outages and increasing maintenance costs. A new phone system provides an opportunity for enhanced security, greater reliability, and more efficient system operations and maintenance.

Information and Communication Technology (ICT) will complete this project with a vendor selected through a request for proposal (RFP) process. The capital project, estimated at $1,900,000, was included in the 2020-2024 capital budget and plan of finance. Recurring maintenance costs estimated at $2,000,000 for up to ten years will be budgeted in the ICT Operating Budget.

JUSTIFICATION

This project provides important benefits for continued operations, security, and safety.

(1) Lack of full vendor support with no software updates increases the risk of failure and security vulnerabilities.
(2) Phone sets are failing at an increasing rate, replacements are difficult to procure, and we are paying a premium for outdated equipment to be compatible with an aging phone system.
(3) The current system is comprised of several different vendor technologies making system troubleshooting challenging. For example, in August 2019, the phone system was unavailable for a sustained period of time and efforts to resolve the issue were hampered by the lack of end-to-end diagnostic capabilities.
(4) Modern phone system architecture includes features that improve flexibility, capacity, and security.

Diversity in Contracting

Project staff are working with the Diversity in Contracting Department to determine if a direct women- and minority-owned business enterprise (WMBE) aspirational goal should be assigned. Typically, subcontracting opportunities under technology projects are limited.

DETAILS

Scope of Work

(1) Replace Avaya/Nortel phone system and related components
(2) Integrate new phone system with existing systems to provide continued services
(3) Review carrier-provided interchanges for cost saving opportunities in the network architecture
(4) After analysis on phone usage and preferences, replace up to 4,000 phones at 16 locations.

Schedule

Commission authorization	2020 Quarter 1
Procurement Completed	2020 Quarter 4
In-use date	2021 Quarter 4

Cost Breakdown   This Request   Total Project

Project	Hardware, Software, and Vendor Services	$1,125,000	$1,125,000
	Port Labor	$660,000	$660,000
	Taxes @ 10.1%	$115,000	$115,000
Project Total		$1,900,000	$1,900,000

Recurring Maintenance	Estimated $200,000 per year for up to ten years	$2,000,000	$2,000,000
Authorization		$3,900,000	$3,900,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Procure a cloud phone solution. Cloud phone solutions are systems hosted by a third-party provider and delivered through the internet.

Project Cost Implications: $1,800,000 - $2,500,000

Pros:
(1) The vendor has full responsibility for maintenance, reliability, and fail-over.
(2) Depending on scope of the implementation, there could be more integration with our current communication technology such as chat, conferencing, and team collaboration.

Cons:
(1) This solution likely precludes the port from leveraging current investments in communication technology such as interactive voice response and call center management because the vendor will require the use of their own hardware and software.
(2) While this alternative may work well for port employee phone service, there are several requirements that will likely need an on-premise, traditional phone service for integration with paging systems, call boxes, and tenant services. Multiple products will increase cost and complexity.
(3) Cloud solutions are new to the telephony industry. As such, products are not as robust, may not yet be as reliable, and will likely have frequent changes that hamper user acceptance.

This is not the recommended alternative.

Alternative 2 – Delay a system replacement

Project Cost Implications: $0

Project costs are delayed but recurring costs will escalate as phone system replacement parts are procured.

Pros:
(1) Project funds are available for other opportunities.

Cons:
(1) Risk of phone system failures increase. In August of 2019 the port had a major phone system outage with a delayed recovery due to the aging technology and lack of end-to-end diagnostic tools.
(2) Phone system equipment is currently failing at an increasing rate. We are purchasing outdated replacement equipment for compatibility with an aging system.

(3)   Security patches will no longer be available after software is not supported by vendor. This significantly increases cyber threat.

This is not the recommended alternative.

Alternative 3 – Procure new phone system leveraging recent telephony-related investments

Project Cost Implications: $1,900,000

Pros:
(1)   Procuring a new system ensures the port and tenants' phone communication system remains reliable for continued operations, safety, and security.
(2)   Leveraging the port's recent investments in communication technology reduces project costs and will result in a system that is easier to support and maintain.
(3)   Cloud based phone systems will likely mature rapidly in the next few years providing an interesting alternative for future benefit. This upgrade will provide the phone service stability needed over the next five to ten years until new options are viable.

Cons:
(1)   Funding is not available for other alternatives.
(2)   Integration with other office communication technology for port employees such as chat, conferencing, and team collaboration is not likely available with the recommended solution.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	$1,900,000	$2,000,000	$3,900,000
AUTHORIZATION			
Previous authorizations	$0	$0	$0
Current request for authorization	$1,900,000	$2,000,000	$3,900,000
Total authorizations, including this request	$1,900,000	$2,000,000	$3,900,000
Remaining amount to be authorized	$0	$0	$0

Annual Budget Status and Source of Funds

This project is included in the 2020-2024 capital budget and plan of finance for $1,900,000 under CIP #C801083, Phone System Upgrade. The funding source will be 81.3 percent Airport Development Fund and 18.7 percent General Fund. The recurring maintenance estimate of up to $2,000,000 will be budgeted annually in the ICT Operating Budget.

Financial Analysis and Summary

Project cost for analysis	$1,900,000
Business Unit (BU)	Corporate division allocations
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase
IRR/NPV (if relevant)	NA
CPE Impact	NA

Future Revenues and Expenses (Total cost of ownership)

ICT labor costs to support the new phone system are not expected to change significantly as a result of this project.

ATTACHMENTS TO THIS REQUEST

   None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

   None