



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 8j

**ACTION ITEM**

**Date of Meeting** December 13, 2022

**DATE :** November 16, 2022  
**TO:** Stephen P. Metruck, Executive Director  
**FROM:** Krista Sadler, Director Technology Delivery  
**SUBJECT:** **Storage Area Network Refresh (C801342)**

**Amount of this request:** \$750,000  
**Total estimated project cost:** \$750,000

**ACTION REQUESTED**

Request Commission authorization for the Executive Director to 1) proceed with the Storage Area Network Refresh project and 2) execute contract(s) for hardware, software, and implementation services for a total project cost not to exceed \$750,000.

**EXECUTIVE SUMMARY**

This project will refresh the Port's Enterprise Storage Area Network (SAN), a critical part of the overall Enterprise technology infrastructure. The Port SAN hosts over 1000 physical and virtual servers that run our applications and supports the data backups that keep our information secure. Systems hosted on the SAN include the Port website, PeopleSoft Financials and Human Capital Management, emergency response systems, Maritime and Aviation maintenance work order and asset management system, and hundreds of additional systems that are critical to the business of the Port.

Maintenance on the SAN expires in July 2023, after which we will no longer receive security patching or general maintenance services to assist with problems and equipment failures. Extended maintenance is available, but 4-year costs are similar or slightly higher than the recommended refresh alternative. This planned project is part of the 2023-2027 plan of finance as a \$750,000 CIP. This project will be completed by Information and Communication Technology (ICT).

**JUSTIFICATION**

The Port's Enterprise technology infrastructure includes many components that support the communications, systems, and applications that are critical to Port operations, cyber security protection, and resiliency. Equipment refreshes and software upgrades protect our infrastructure

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by ensuring security patch and maintenance availability. The Enterprise SAN is a vital component of this technology infrastructure to ensure the efficient and secure storage of Port information.

Benefits of new SAN technology include:

- (1) Security, performance, and feature advances in upgraded storage infrastructure help maintain current system up-time and support evolving business needs.
- (2) Storage management software will be deployed to optimize the infrastructure and support cloud-based expansion.

***Diversity in Contracting***

Project staff will work with the Diversity in Contracting Department to determine if a direct women-and-minority-owned business enterprise (WMBE) aspirational goal should be assigned.

**DETAILS**

***Scope of Work***

- (1) Procure and install new storage controllers and associated equipment with the most current software in the SEA Data Center.
- (2) Migrate data from the old equipment to the new SAN.

***Schedule***

*Activity*

Commission authorization	2022 Q4
Procurement Complete	2023 Q2
In-use date	2023 Q4

***Cost Breakdown***

	This Request	Total Project
Equipment, Software, and Vendor Services	\$660,000	\$660,000
Port Labor	\$90,000	\$90,000
<b>Total</b>	<b>\$750,000</b>	<b>\$750,000</b>

**ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1** – Pay for extended maintenance on existing equipment and software

Cost Implications: \$1,002,000 in Expense for extended maintenance

Pros:

- (1) Capital funding and Port resources are available for other efforts.
- (2) The Port would continue to receive security patches and important maintenance benefits.

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Cons:

- (1) The 4-year total cost of extended maintenance is similar or exceeds the cost of new equipment and software with 4 years of reduced maintenance and additional cloud storage.
- (2) New feature and efficiency benefits would not be available.
- (3) Will still need to replace some equipment that is end of life.

This is not the recommended alternative.

**Alternative 2 – SAN Refresh**

Cost Implications: \$750,000

Pros:

- (1) The Port’s Enterprise technology infrastructure will be less vulnerable to failure due to equipment outages.
- (2) Updated equipment and software will receive security patches and remediations.
- (3) SAN components will adhere to latest security protocols to improve our security monitoring capabilities.
- (4) Increase capacity will support the growth of data.

Cons:

- (4) Capital funds and Port resources are not available for other efforts.

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

**FINANCIAL IMPLICATIONS**

<b><i>Cost Estimate/Authorization Summary</i></b>	Capital	Expense	Total
<b>COST ESTIMATE</b>			
Original estimate	\$750,000	\$0	\$750,000
<b>AUTHORIZATION</b>			
Previous authorizations	\$0	\$0	\$0
Current request for authorization	\$750,000	\$0	\$750,000
Total authorizations, including this request	\$750,000	\$0	\$750,000
Remaining amount to be authorized	\$0	\$0	\$0

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

This project was included in the 2023-2027 capital budget and plan of finance for \$750,000. The project will be funded with 82.1% Airport Development Fund and \$17.9% General Fund.

***Financial Analysis and Summary***

Project cost for analysis	\$750,000
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Business Unit (BU)	Division-wide allocation
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

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

We are not expecting significant change in recurring maintenance and licensing costs as a result of this project.

**ATTACHMENTS TO THIS REQUEST**

None

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

None