



**COMMISSION
AGENDA MEMORANDUM**

Item No.

6c

ACTION ITEM

Date of Meeting

March 12, 2019

DATE: March 4, 2019

TO: Stephen P. Metruck, Executive Director

FROM: Dave Wilson, Director, Aviation Innovation
James Jennings, Senior Manager, Aviation Properties
Wayne Grotheer, Director, Aviation Project Management

SUBJECT: Tenant Network Demarcation (DMARC) Upgrade – C800841

Amount of this request: \$2,093,000

Total estimated project cost: \$2,815,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to proceed with construction of the Tenant Network Demarcation Upgrade project at Seattle-Tacoma International Airport in the amount of \$2,093,000 to modernize phone and Internet access for port tenants. The total estimated cost for this project is \$2,815,000.

EXECUTIVE SUMMARY

This project will install standardized Port telecommunication network demarcation infrastructure (“DMARC” packages) to provide efficient “plug-in” capability for new and existing tenants and provide for expansion as tenants’ communication needs grow. These DMARC packages offer tenants a standard point of connection to the Airport’s communication network modernizing their phone and Internet access. At present it can take a tenant several months to establish new service when moving into a space that does not have updated communication infrastructure, leaving them without phone or Internet service for an extended period, which is not acceptable.

The DMARC installations will be completed through a Port Job Order Contract (JOC). Project staff will be working with the Diversity in Contracting Department and JOC contractor to assist in Women and Minority Business Enterprise (WMBE) program goals for participation per the scope of work and JOC contract requirements.

This project is included in the 2019 – 2023 capital budget and plan of finance. The project carries some risk associated with legacy infrastructure removal. Please see the ‘Additional Background’ section below for more discussion on project risk.

Meeting Date: March 12, 2019

JUSTIFICATION

Providing modern and efficient communication infrastructure is a basic landlord responsibility and an integral part of supporting our current and future Airport tenants. The Port’s standard communication infrastructure requires a DMARC in each lease space. The DMARC is the point where the Port-owned network ends and connects with the tenant’s on-premises wiring. It is the dividing line between the Port and tenant that determines who is responsible for installation and maintenance of wiring and equipment. This project provides modern high-speed fiber optic infrastructure to tenant spaces that will more easily allow a tenant to adjust the services it receives to support their growing data needs. It is also an important part of giving tenants a choice in their Internet service provider in the future.

At present, a sizable number of our tenant spaces are on outdated legacy copper communications wiring that restricts tenants’ data capacity. Further, new tenants are finding the process of providing data and voice connectivity in office spaces not currently connected to DMARCs to be unsatisfactory. Once a tenant leases an office, they could wait for an extended period for their Internet and telephone service while the legacy infrastructure provider extends connectivity to the space or the Port procures and connects a new DMARC in their space on an ad-hoc basis. This project identifies remaining leased spaces that are not already converted to modern telecommunication DMARCs, so when complete, all existing and future leasable tenant spaces will be connected to modern communications infrastructure.

Scope of Work

- (1) Install DMARC and network equipment in tenant spaces throughout the main terminal and South Satellite per design
- (2) Remove obsolete legacy network infrastructure and equipment as necessary
- (3) Trace existing legacy vendor cable pathways from tenant spaces that will receive a DMARC back to their source, identifying branches of legacy vendor cabling that support other tenant spaces that do not lie within the scope
- (4) Install conduit and network cable pathways from communication rooms to tenant lease spaces
- (5) Install and test Port provided telecommunication DMARC packages

Schedule

Commission construction authorization	2019 Quarter 1
Construction start	2019 Quarter 2
In-use date	Phased: 2019 Quarter 3 – 2021 Quarter 3

Cost Breakdown

	This Request	Total Project
Design	\$0	\$722,000
Construction	\$2,093,000	\$2,093,000
Total	\$2,093,000	\$2,815,000

Meeting Date: March 12, 2019

ALTERNATIVES AND IMPLICATIONS CONSIDERED

As part of the design authorization request, three alternatives were presented including the recommended alternative. Commission authorized the recommended alternative. The project continues to serve its identified need and the priority is unchanged. With design complete, the project seeks construction authorization to complete the project. The following alternatives discuss the pros and cons of cancelling or proceeding with the work.

Alternative 1 – Do not complete the project.

Cost Implications: Approximately \$200,000 spent to date would be expensed. While this would cost less it would not meet objectives and tenants would have fewer choices and find it more difficult to obtain or modify service.

Pros:

- (1) Frees up capital investment for other projects

Cons:

- (1) Impacts Port tenants’ productivity by not providing flexible, up-to-date, high-speed communications infrastructure
- (2) The Port cannot troubleshoot problems with the legacy communications infrastructure
- (3) Does not provide necessary end-user connections to allow tenants greater choice of communication providers and services in the future

This is not the recommended alternative.

Alternative 2 – Complete the project as described above.

Cost Implications: \$2,815,000.

Pros:

- (1) Eliminates new proprietary cabling installations by telecommunication service providers and tenants
- (2) Offers flexibility for all tenants to expand their communication technology requirements over time
- (3) Gives the Port efficient “plug-in” connectivity for new or existing tenants, improving customer service and maximizing revenue
- (4) Allows for quicker activation as tenants move in
- (5) Prepares for future greater communication choices and services to tenants

Cons:

- (1) Requires a large capital investment up front

This is the recommended alternative.

Meeting Date: March 12, 2019

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Current estimate	\$2,815,000	\$0	\$2,815,000
AUTHORIZATION			
Previous authorizations	\$722,000	\$0	\$722,000
Current request for authorization	\$2,093,000	\$0	\$2,093,000
Total authorizations, including this request	\$2,815,000	\$0	\$2,815,000
Remaining amount to be authorized	\$0	\$0	\$0

Annual Budget Status and Source of Funds

This project was included in the 2019-2023 capital budget and plan of finance with a cost estimate of \$2,815,000. The funding source will be the Airport Development Fund.

Financial Analysis and Summary

Project cost for analysis	\$2,815,000
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.01 in 2021

Future Revenues and Expenses (Total cost of ownership)

By removing old telecommunications infrastructure this project will likely reduce future costs.

ADDITIONAL BACKGROUND

This project includes scope to remove legacy wiring once it has been abandoned and tenants have connected to the new DMARCs. Due to the passage of time (most of this wiring dates to the terminal building construction in the 1970s) this legacy infrastructure is no longer well known and the task of identifying it is still not complete. To move the project forward and obtain the benefits of the DMARCs, construction is beginning now. Because of the lack of information on the legacy infrastructure, there is a risk that the removal scope may be larger than planned and may require additional funding to complete. The project team is coordinating closely with the legacy vendor to further identify and prepare to remove legacy wiring in these lease spaces once it is abandoned.

ATTACHMENTS TO THIS REQUEST

- (1) Tenant Network DMARC Upgrade Project PowerPoint

Meeting Date: March 12, 2019

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

September 26, 2017 – The Commission authorized \$722,000 for project design of the Tenant Network Demarcation (DMARC) Upgrade - C800841.