PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 6d

Date of Meeting August 9, 2016

DATE: August 1, 2016

TO: Ted Fick, Chief Executive Officer

FROM: Mike Ehl, Director Airport Operations
Peter Garlock, Chief Information Officer

SUBJECT: Airport Subway System Information Displays Improvement (CIP #C800782)

Amount of This Request:	$2,570,000	**Source of Funds:**	Airport Development Fund
Est. Total Project Cost:	$2,570,000		
Est. State and Local Taxes:	$155,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) proceed with the Airport Subway System Information Displays Improvement project; (2) procure required hardware, software, vendor services, and maintenance; and (3) use Port staff for implementation, for a total project cost not to exceed $2,570,000.

SYNOPSIS

As passenger enplanements grow and the diversity of our customer base rises with the increase in international travel, information about Port Satellite Transit System (STS) operations and way-finding in multiple languages is critical for effective customer communication and the efficient movement of travelers. The Airport Subway System Information Displays Improvement project will procure and install a fully integrated digital signage system for inside STS subways and outside in Airport subway stations capable of displaying variable messages in multiple languages with video and graphics.

This project will procure, via a competitive procurement, an information display system fully integrated with our subways in the STS. Information & Communication Technology (ICT), Aviation Maintenance, and Port Construction Services (PCS) resources will complete the project. $2,200,000 in funding for this project was included in the 2016-2020 capital budget and plan of finance. The remaining $370,000 for the capital funding will be transferred from the aeronautical allowance CIP (C800404) to the project (C800782) resulting in no net change to the Aviation Division capital budget. The budget increase is attributed to the inclusion of signage in the subway stations, which was not originally in scope for project.

BACKGROUND

It is estimated that 50,000 people speaking 59 different languages are using the Port STS subways daily. Many of these travelers are transferring between flights requiring them to find their way to another gate, often on a different concourse. The most difficult connection to make, particularly for non-English speakers, is a transfer between the North and South Satellites.

The 21 Port STS subway cars and six subway stations are currently equipped with light-emitting diode (LED) displays that present limited information on subway status, safety, and way finding. This system was last updated in 2003 and has capability to hold up to five languages but display only two at one time.

PROJECT JUSTIFICATION AND DETAILS

Good customer service is an important Airport strategy and clear way-finding, safety information, and subway status have one of the biggest impacts on our traveling public. With record increases in passengers expected in 2016, the efficient movement of passengers through the airport becomes critical. Clear information in multiple languages will decrease the anxiety and frustration of passengers using the Port subway system.

Project Objectives

- Reduce confusion and lessen the anxiety of passengers using the Port subway system by displaying clear way-finding, safety information, and subway status information in multiple languages.
- Improve the efficiency of traveler movement as passenger volume increases
- Increase the flexibility and capacity of information displays to provide real-time, relevant information to passengers.

Scope of Work

- Procure and install a dynamic digital signage system for the STS subway cars and subway stations.
- Install wireless access points at key subway stations to ensure rapid updates of information.

Schedule

Commission Approval	August 2016
Procurement Complete	February 2017
Project Complete	February 2018

FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	$2,200,000	$0	$2,200,000

Budget increase	$370,000	$0	$370,000
Revised budget	$2,570,000	$0	$2,570,000
Previous Authorizations	$0	$0	$0
Current request for authorization	$2,570,000	$0	$2,570,000
Total Authorizations, including this request	$2,570,000	$0	$2,570,000
Remaining budget to be authorized	$0	$0	$0
Total Estimated Project Cost	$2,570,000	$0	$2,570,000

Project Cost Breakdown	This Request	Total Project
Hardware/Software/Vendor Services	$1,700,000	$1,700,000
ICT and Aviation Maintenance Labor	$118,000	$118,000
Design	$115,000	$115,000
Construction	$582,000	$582,000
State & Local Taxes (estimated)	$155,000	$155,000
Total	$2,570,000	$2,570,000

Budget Status and Source of Funds

$2,200,000 in funding for this project was included in the 2016-2020 capital budget and plan of finance. The remaining $370,000 for the capital funding will be transferred from the aeronautical allowance CIP (C800404) to the project (C800782) resulting in no net change to the Aviation Division capital budget.

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Technology
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	$2,570,000
Business Unit (BU)	Terminal Building
Effect on business performance	N/A
IRR/NPV	N/A
CPE Impact	$. 02

Lifecycle Cost and Savings

Maintenance and support for this system is estimated to increase by $100,000 annually for the software license and parts. This will be budgeted in the Aviation Maintenance Operating Budget for 2018.

STRATEGIES AND OBJECTIVES

This project will support the following Century Agenda and Aviation Strategic Goals.

- Advance this region as a leading tourism destination and business gateway
- Meet the region's air transportation needs at Sea-Tac Airport for the next 25 years
- Position the Puget Sound region as a premier international logistics hub

As passenger numbers grow and congestion increases, improvements in way-finding, safety information, and subway status in multiple languages is an important customer service initiative to alleviate anxiety and improve passenger flow.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Continue using LED displays

Cost Implications: $0

Pros:

(1) Capital costs of $2,570,000 can be allocated to other projects

Cons:

(1) The system will not have the capacity to display additional languages, dynamic messages, or robust way-finding that will help improve the traveler experience and operational efficiencies.

This is not the recommended alternative.

Alternative 2 – Replace the displays within the STS subway cars only. No new displays in subway stations.

Cost Implications: $2,000,000

Pros:

(1) Capital costs of $570,000 can be allocated to other projects.
(2) The future master plan for way-finding and visual messaging may include some of the content proposed for the subway station displays. If these displays are driven by the subway information system, there may be design or capability gaps when a larger Airport-wide system is deployed.

Cons:

(1) There will be content on the subway station displays that would require integration with the subway system. This could be lost if implemented with a third party solution.
(2) The timeline for the master plan is unknown and could be several years to implement.

This is not the recommended alternative.

Alternative 3 – Procure and install a subway information system in the subways and subway stations

Cost Implications: $2,570,000

Pros:

(1) Variable messaging, multi-media displays integrated with the subway system will provide valuable information to travelers on subway connections and way-finding in multiple languages to more efficiently guide customers to their chosen destination.

(2) The subway displays providing valuable customer service related information will likely be available several years earlier than if waiting for the way-finding and variable messaging master plan.

Cons:

(1) The future master plan for way-finding and visual messaging may include some of the content proposed for the subway station displays. If these displays are driven by the subway information system, there may be design or capability gaps when a larger Airport-wide system is deployed.

This is the recommended alternative.

ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- On June 14, 2016, Commission approved a project to expand the STS Subway Countdown Displays currently in the North Satellite subway stations to the South Satellite and shuttle stations. This separate effort will replace existing LED displays also in the STS subway stations. Coordination between the two projects will occur to ensure consistency in design and implementation.