COMMISSION AGENDA
ACTION ITEM

Item No.	6d
Date of Meeting	January 26, 2016

DATE: January 13, 2016

TO: Ted Fick, Chief Executive Officer

FROM: Dave Soike, Director Aviation Facilities and Capital Program
Peter Garlock, Chief Information Officer

SUBJECT: Sea-Tac Mobile Application & Indoor Navigation (CIP #C800800)

Amount of This Request:	$500,000	**Source of Funds:**	Airport Development Fund
Est. Total Project Cost:	$500,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) proceed with the Sea-Tac Mobile Application & Indoor Navigation project at Seattle-Tacoma International Airport; (2) procure required hardware, software, and vendor services; (3) use Port staff for implementation; and (4) procure vendor services for maintenance, for a total project cost not to exceed $500,000.

SYNOPSIS

Per a 2014 survey, 88 percent of Seattle-Tacoma International Airport travelers carry smartphones, and they increasingly rely on and expect mobile application availability for traveling services. The Port of Seattle currently supports a mobile version of our internet site but that functionality is limited without the features available on today's location-aware smartphone.

The purpose of this project is to procure services to develop a smartphone application for the Airport to be used by the traveling public for way-finding, promotion of the Airport's dining and retail businesses, and provision of customer service information.

In addition, the project will procure and install beacon infrastructure throughout the Airport to assist with way-finding and support airline requests. Information Communication Technology (ICT) and Port Construction Services (PCS) resources will complete the project. Total project costs are estimated to be $500,000. Funding for this project was included in the 2016-2020 capital budget and plan of finance. Recurring hardware license and maintenance costs will be budgeted within the ICT department operating budget.

BACKGROUND

The smartphone has become the most important travel-related communication device used by our passengers, and its role as a virtual tour guide will make it the key to future customer service offerings. Per the 2014 global survey on Passenger IT Trends, 76 percent of travelers with smartphones use a mobile travel application and 43 percent say it has made a definite improvement in their travel.

Beacons are a technology that many businesses such as Walmart, Macy's, and several airports use to guide customers or passengers, improve their experience, and boost revenue by transmitting a unique identifier to smartphones. Placed throughout the Airport and parking garage, the beacons work with a smartphone application by providing location information that allows the application to present turn-by-turn directions and trigger coupons or important notifications relevant to their location. Airlines are also embracing this technology and Airports Council International (ACI) is considering beacon architecture recommendations for common use infrastructure.

PROJECT JUSTIFICATION AND DETAILS

A Sea-Tac mobile application and beacon infrastructure offer a new way to communicate with our traveling customers. This new application will allow us to offer a variety of services to the 88 percent of customers who own a smartphone; giving them choices for information consumption that include the ability to:

- Promote our products and services
- Notify travelers of flight changes and ground transportation options
- Personalize way finding within the terminal and parking garage with estimated walking time and distances
- Highlight special interest areas such as kids play areas, Mother's Zone, Art Program Tour, Scavenger Hunts, and Environmental Programs

Project Objectives

The proposed smartphone application will be designed to enhance the experience of connecting, arriving, and departing Sea-Tac passengers by satisfying the following objectives.

- Fulfill the Airport traveler's desire for mobile customer service.
- Provide a mobile advertising platform to promote Sea-Tac's dining and retail businesses.
- Publish an interactive and innovative way-finding tool that integrates with modern indoor navigation technology.
- Protect passenger location privacy by conforming to established industry best practice with a required "opt-in" location request.

Scope of Work

- Procure services to develop iPhone and Android Smartphone applications that meet Sea-Tac objectives. This mobile application will be available on Apple and Google stores for download by Airport travelers.
- Procure and install beacon infrastructure that will be used to deliver location-aware features.

Schedule

Commission Approval	January 2016
Procurement Complete	July 2016
beacon Installation Complete	August 2016
Smartphone Application Complete	February 2017

FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	$500,000	$0	$500,000
Previous Authorizations	$0	$0	$0
Current request for authorization	$500,000	$0	$500,000
Total Authorizations, including this request	$500,000	$0	$500,000
Remaining budget to be authorized	$0	$0	$0
Total Estimated Project Cost	$500,000	$0	$500,000

Project Cost Breakdown	This Request	Total Project
SmartPhone App Vendor Development	$189,000	$189,000
Beacon Procurement and Configuration	$90,000	$90,000
Beacon Installation	$50,000	$50,000
ICT Labor	$163,400	$163,400
State & Local Taxes (estimated)	$7,600	$7,600
Total	$500,000	$500,000

Budget Status and Source of Funds

This project was included in the 2016-2020 capital budget and plan of finance as a $500,000 business plan prospective project within CIP #C800800, Sea-Tac Application & Indoor Navigation. The source of funds is the Airport Development Fund.

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	$500,000
Business Unit (BU)	Terminal Building
Effect on business performance	N/A
IRR/NPV	N/A
CPE Impact	$.01 in 2017

Lifecycle Cost and Savings

An estimated $25,000 increase in annual maintenance costs to support the beacon hardware and $75,000 increase in annual software maintenance costs to support enhancements critical in public facing applications are expected as a result of this project. This will be budgeted in the ICT Operating Budget.

STRATEGIES AND OBJECTIVES

This project will support the following Century Agenda and Aviation Strategic Goals through the availability of a mobile application that includes way-finding, flight information, and support for our dining and retail tenants through location-aware services.

- Advance this region as a leading tourism destination and business getaway
- Operating a world-class international airport by anticipating and meeting the needs of our tenants and passengers
- Become one of the top ten customer service airports in North America

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Develop additional features for our mobile website instead. The project cost estimate for this alternative is approximately $200,000.

Pros:
- A project was just completed to convert web content to a mobile platform so adding features to this infrastructure is less costly than the recommended alternative.

Cons:
- While a mobile website is a critical part of any business communication and advertising strategy, it does not allow for integration with phone capabilities such as global positions systems, fingerprint sensors, accelerometer, light sensors, proximity sensors, and compasses. These are the features that will provide the personalized experience offered through a smartphone application.

This is not the recommended alternative.

Alternative 2 – Develop a smartphone application without beacon infrastructure for location-aware capabilities. The project cost for this alternative is approximately $350,000.

Pros:

- A Sea-Tac mobile application even without location-aware capabilities facilitated by the beacon infrastructure will initially provide customer service enhancing features such as flight, retail, and dining information.

Cons:

- This solution does not leverage the benefits from the modern location-aware technology that will allow us to provide important way-finding features and targeted information.

This is not the recommended alternative.

Alternative 3 – Develop a location-aware smartphone application with beacon infrastructure.

Pros:

- A Sea-Tac application that incorporates indoor navigation technology can provide real-time and location sensitive information, unlike the other alternatives. This alternative offers the greatest number of customer service and advertising features for our passengers and access to the most powerful modern tools available for location, way finding, and push advertising.

Cons:

- The project cost for this alternative exceeds the other solutions.

This is the recommended alternative.

ATTACHMENTS TO THIS REQUEST

- Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- None