# PORT OF SEATTLE MEMORANDUM

# COMMISSION AGENDA ACTION ITEM

Item No. 6c

Date of Meeting July 12, 2016

**DATE:** July 5, 2016

**TO:** Ted Fick, Chief Executive Officer

**FROM:** Wayne Grotheer, Director, Aviation Project Management Group

Michael Ehl, Director, Aviation Operations

**SUBJECT:** Restroom Upgrades at Concourses B, C, and D (CIP #C800697)

Amount of This Request: \$5,032,000 Source of Funds: Airport Development

Est. Total Project Cost: \$33,047,000

Source of Funds: Airport Development
Fund and Future
Revenue Bonds

## **ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to execute a design contract and prepare design and construction bid documents for the Restroom Upgrades at Concourses B, C, and D project at Seattle-Tacoma International Airport for an estimated \$5,032,000 of a total project cost of \$33,047,000.

#### **SYNOPSIS**

This project will renovate, enlarge and build new public restrooms on Concourses B, C, and D at the Airport. These restrooms have not been remodeled since 1992 and 2001. This project was originally intended to make renovations to the existing restrooms. Because of passenger traffic growth, the existing restrooms are too small resulting in long lines during peak periods of use. The project scope was increased to include additional restroom capacity.

Restrooms included in this project are the oldest and most deteriorated in the Airport. As Airport planning proceeds the restrooms in the main terminal, which were mainly refurbished in the early 2000s, will be evaluated and a determination of their condition and capacity will be performed to determine if upgrades are required.

# **BACKGROUND**

In 1992 the Airport completed a major remodel of Concourses B, C, and D and constructed the concourses' public restrooms. That year the Airport accommodated 16 million annual passengers. Today traffic exceeds 42 million annual passengers. There are frequently lines at many of these restrooms during peak travel periods due to their size and the increased passenger traffic.

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In the late 1990's the Port embarked on a multi-year project of restroom remodels in the Main Terminal and the North and South Satellites. While some minor updates were completed for a few of the restrooms on Concourses B, C, and D, most have not been renovated or enlarged.

The Concourses B, C, and D restrooms are old, outdated, and overcrowded. They are difficult to maintain due to the age of the finishes and fixtures, water infiltration and damage, limited air circulation and odors that have penetrated the finishes. Of the existing eight pairs of restrooms, three have not been remodeled since 2001, and five have not been renovated since their construction in 1992.

In 2015, Port staff undertook a study to determine future restroom capacity needs. The study utilized guidelines from the 2015 Airport Cooperative Research Program (ACRP) Guidebook for Airport Terminal Restroom Planning and Design. These ACRP guidelines allowed staff to calculate the optimal number of toilet fixtures required for each concourse based on a number of factors including, 1) the type of aircraft that gate on each concourse (fleet mix); 2) the number of seats filled on these aircraft (load factor); and 3) the number of aircraft loading and unloading passengers at the same time during peak periods (gate utilization). This study recommended increasing the total number of fixtures for each concourse as follows:

Location	Existing Fixtures	Recommended	Total To Be Provided
Concourse B	50	93	91
Concourse C	63	91	91
Concourse D	50	73	73

During the summer of 2015 electronic and manual counts of restroom use were also collected. These counts confirmed that there are lines of people waiting during several hours per day at many of our restrooms. The suggested square footage of restroom expansion in this project is aligned with these industry standards and observations of current conditions. On concourses where even more square footage could be identified for potential use, staff is recommending additional restroom amenities such as nursing mother's rooms and pet relief areas. These facilities are important to the traveling public and many other airports are providing them as well.

# PROJECT JUSTIFICATION AND DETAILS

The Airport has conducted quarterly customer satisfaction surveys using Airport Service Quality (ASQ) since 2011. Under the quality service area of "restroom cleanliness," the Airport has consistently under-performed relative to the top 25 North American peer airports. The lower customer satisfaction ratings can be attributed to the worn and outdated restrooms. Although restrooms are cleaned regularly, customers perceive the Airport restrooms as being unclean due to their age and condition. The ASQ results show that the availability and cleanliness of airport restrooms are very important. Restrooms are often the last place customers visit before their flights depart and the first place passengers visit when their flights arrive.

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Growing passenger numbers means many restrooms have lines of travelers waiting to use the facilities during peak times. This project will address capacity needs by developing additional restroom space. Because of the limited vacant space available in the public areas, this project will relocate tenants and construct building additions in order to enlarge restrooms.

Beyond cosmetic updates that make the restrooms more comfortable and appealing to passengers, recent work in these restrooms has revealed that water has infiltrated behind walls and under floor tiles. This has led to rusted and in some cases failed wall studs, loosening floor tile and standing pools of water.

# **Project Objectives**

The project's objectives are to improve capacity and ASQ scores for Concourses B, C, and D and to decrease Operations and Maintenance (O&M) costs for restrooms.

# Scope of Work

The project will renovate eight restrooms on Concourses B, C, and D. This project will increase restroom capacity by increasing the size of two existing restrooms; building new restrooms displacing existing tenant functions, and enlarging the building to add one additional new restroom. The scope will build new tenant space; relocate tenants; demolish existing restrooms to the framing; art relocation, storage and reinstallation; new piping; waterproof membrane; plumbing; fixtures; and restroom accessories i.e. hand dryers, soap dispensers; new flooring, lighting, and partitions.

Concourses B and C have two sets of restrooms and Concourse D has four sets. Construction will be phased at each concourse to ensure one or more sets of restrooms will be available while other sets are under construction.

#### Schedule

Commission authorization construction first phase:

Construction complete first phase:

Construction complete second phase:

Construction complete third phase:

Construction complete third phase:

Substantial completion entire project:

3rd Quarter 2018

4th Quarter 2019

4th Quarter 2021

4th Quarter 2022

#### FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	\$11,180,000	\$0	\$11,180,000
Budget Increase	\$21,867,000	\$0	\$21,867,000
Revised Budget	\$33,047,000	\$0	\$33,047,000
Previous Authorizations	\$55,000	\$0	\$55,000
Current Request for Authorization	\$5,032,000	\$0	\$5,032,000
Total Authorizations, including this request	\$5,087,000	\$0	\$5,087,000

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Remaining Budget to be Authorized	\$27,960,000	\$0	\$27,960,000
Total Estimated Project Cost	\$33,047,000	\$0	\$33,047,000

Project Cost Breakdown	This Request	Total Project
Design Phase	\$5,087,000	\$5,087,000
Construction Phase	\$0	\$26,019,000
Sales Tax	\$0	\$1,941,000
Total	\$5,087,000	\$33,047,000

# **Budget Status and Source of Funds**

This project, CIP #C800697 was included in the 2016-2020 capital budget and plan of finance with a budget of \$11,180,000. The project scope and budget were increased as follows: 1) signage, art impacts, and janitor's closet modifications were added to the project for a budget increase of \$2,020,000; and, 2) provisions for new restroom capacity were added to the project also for a budget increase of \$19,847,000. The capital budget increase of \$21,867,000 was transferred from the Aeronautical Allowance CIP (C800404) resulting in no net change to the Airport capital budget. The funding source will be the Airport Development Fund and future revenue bonds.

# Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$33,047,000
<b>Business Unit (BU)</b>	Terminal
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	.03 in 2021 and .07 in 2025

#### Lifecycle Cost and Savings

Currently a project is underway to standardize the fixtures and finishes for the Airport restrooms. The O&M project to improve costs related to restrooms was identified as a viable project to go through the LEAN Continuous Process Improvement (CPI) efforts and is nearing completion and the implementation of streamlined processes. While many efficiencies have been identified for implementation in the on-going O&M performed by the Airport, a new goal has been established related to 'all restrooms being 100% ready by 4:00 a.m. each day'. Standardization and LEAN process improvement efficiencies will decrease Airport O&M, but the new standard of having the restrooms fully functional each morning may offset this decrease. The scope of the project has expanded to include both renovation of existing restrooms as well as constructing additional restrooms due to the increased passenger volumes and the resulting capacity need which will increase O&M costs.

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A compilation of the impacts (increases & decreases) in Airport O&M can be better estimated during the design phase of the project at which time all stakeholders will be involved in the final standardization decisions.

## STRATEGIES AND OBJECTIVES

This project supports the Century Agenda strategy of "advancing this region as a leading tourism destination and business gateway" by improving the public restrooms on Concourse B, C, and D. Improving Airport restroom conditions will improve the passenger perceptions of Sea-Tac and help reach a key goal of the Century Agenda – to be the west coast gateway of choice for international travel.

This project supports the Century Agenda by minimizing the Airport's environmental footprint by conserving water through installing low flow toilets, urinals and fixtures.

The condition of restrooms and cleanliness ranks in the top three of importance to Sea-Tac customers as measured by the ASQ. This project supports the Aviation Division's strategic goal to increase Overall Customer Satisfaction score in the ASQ. This project is directly linked to the Aviation Division's ability to increase customer satisfaction. Restroom cleanliness and availability contributes to the quality of the overall customer experience.

This project has collaborated with the Economic Development's Small Business Group to maximize small business participation throughout the design by using a 20% small business participation goal.

# **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

Alternative 1) – Status Quo – Keep restrooms as they are today. Do not remodel or expand.

Cost Estimate: Capital \$0 Expense \$145,000 yearly

#### Pros:

- No capital investment.
- No closure of public restrooms for renovation.

#### Cons:

- The restrooms will continue to be impacted by their high use.
- This alternative would do nothing to improve the passenger experience in the restrooms and Sea-Tac's ASQ scores on restroom cleanliness would likely continue to decrease as the restrooms age and wear.
- This alternative would not solve problems behind walls (rusted studs, pooling water) and under flooring (water penetration), that have continuously deteriorated these restrooms due to lack of waterproof membrane to keep leaking water out.
- This alternative does not solve issues with odor and surfaces appearing unclean due to wear and tear.

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• The lavatory hangers installed in these restrooms do not support updated porcelain and fixtures adequately. Fixtures will begin falling off of the walls.

This is not the recommended alternative.

**Alternative 2**) – Update restroom finishes and fixtures only without tearing out walls and undertaking a complete renovation or addressing capacity issues. This alternative would include new toilets, urinals, sinks, flooring, hand dryers/paper towel holders, soap dispensers and stall enclosures.

Cost Estimate: Capital \$7,970,000 Expense \$39,000 yearly

#### Pros:

• Limited capital investment compared to full renovation and shorter closure of restrooms.

#### Cons:

- This alternative would not solve problems behind walls (rusted studs, pooling water) and under flooring (water penetration), that have continuously deteriorated these restrooms due to lack of waterproof membrane to keep leaking water out.
- This alternative will not allow fixture counts to be optimized.
- This alternative does not address capacity issues. Lines would continue to form and ASQ scores would likely be impacted.

This is not the recommended alternative.

**Alternative 3**) – Renovate existing restrooms, tearing out walls, and undertake a complete renovation. This alternative would include new toilets, urinals, sinks, flooring, hand dryers/paper towel holders, soap dispensers and stall enclosures.

Cost Estimate: Capital \$13,047,000 Expense \$0

#### Pros:

- This alternative provides the opportunity to rebuild Sea-Tac's public restrooms to a higher standard to handle the high volume of use they receive.
- This alternative also provides the opportunity to explore innovative restroom design that incorporates environmental sustainability, and is pleasing the customers. New finishes are generally easier to keep clean, and odor free. Less maintenance is required for new fixtures than older fixtures.
- Renovating these restrooms is the only likely way to improve ASQ scores in the restroom category.
- This project provides the opportunity to install low flow toilets, urinals, and faucets to conserve water resources in the restrooms related to this project.
- Completely demolishing and renovating the existing restrooms will assist in preventing further damage to the facility caused by water leaks within the existing wall cavities.

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• This alternative includes signage, art impacts and janitor's closets that were not included in the original scope.

#### Cons:

- This alternative is not intended to substantially improve capacity issues.
- This alternative involves closing restrooms for long period of time, up to 10 months at a time for renovation, which will exacerbate our current problem with demand exceeding availability.

This is not the recommended alternative.

Alternative 4) Renovate and enlarge existing restrooms and build new restrooms to address capacity.

Cost Estimate: \$33,047,000

#### Pros:

- This alternative provides the opportunity to rebuild Sea-Tac's public restrooms to a higher standard to handle the high volume of use they receive.
- This alternative provides an opportunity to increase restroom capacity.
- This alternative provides the opportunity to explore innovative restroom design that incorporates environmental sustainability, is pleasing the customers and also easier to maintain.
- Renovating these restrooms and adding capacity is the only likely way to improve ASQ scores in the restroom category.
- This project provides the opportunity to install low flow toilets, urinals, and faucets to conserve water resources in the restrooms related to this project.
- Completely demolishing and renovating the existing restrooms will assist in preventing further damage to the facility caused by water leaks within the existing wall cavities.
- This alternative provides an opportunity to explore the efficiencies of gender neutral restrooms.

#### Cons:

- This alternative involves closing restrooms for long periods of time, up to 10 months at a time for renovation, which will exacerbate our current problem with demand exceeding availability.
- In order to gain space on the concourse level several enabling projects must be completed and various airline office functions will need to be relocated.
- Building space for and vacating space currently leased adds time to the project delaying improvement, which are needed now.

#### This is the recommended alternative.

#### ATTACHMENTS TO THIS REQUEST

Restroom Project Map

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# PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

• None.