

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 6b
Date of Meeting May 17, 2016

DATE: May 11, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Mike Tasker, Senior Manager, Aviation Facilities & Infrastructure
SUBJECT: Additional Space for Outbound Baggage within the International Arrivals Facility
(CIP #C800836)

Amount of This Request:	\$18,500,000	Source of Funds:	Future Revenue
Est. Total Project Cost:	\$18,500,000		Bonds
Est. State and Local Taxes:	\$1,600,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) approve the design and construction of the Additional Space for Outbound Baggage Project in an amount not to exceed \$18,500,000 and (2) approve design and construction of the project scope to be completed via a change order to a contract executed for an existing project; the International Arrivals Facility (IAF) design/build contract. The total estimated cost of this project is \$18,500,000.

SYNOPSIS

A major limitation of the baggage systems at Seattle-Tacoma International Airport (Airport) is make-up capacity. The required space necessary for efficient make-up operations is not available within the existing footprint. Two current projects, Baggage Optimization and NorthSTAR, will create additional baggage make-up space; however, system capacity will still not meet anticipated requirements in the near future. This project is the opportunity to add additional space to the IAF at the ramp level that can be used to reduce outbound baggage constraints. Adding this scope to the IAF program is the most cost effective and timely option to increase baggage make-up capacity. In order to seize this opportunity, this scope of work must be incorporated into the IAF program by June 30, 2016, when the design/build contractor procured for the IAF will start procurement of structural steel and foundations which establish the shape and scale of the IAF building.

Executing this project will add the scope necessary to construct and reserve additional space for outbound baggage, but it does not include design or installation of any baggage handling equipment. That scope will be detailed in coordination with evolving baggage handling operations and the Baggage Optimization program.

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This request also authorizes the design and construction of the project by the design/build contractor procured for the IAF project. The rationale for choosing this delivery method is simply pragmatic:

The purpose of this project is to capitalize on the opportunity presented by the existing South Ground Transportation lot development. That development is being performed by the IAF design/build contractor.

BACKGROUND

The outbound baggage system at the Airport is composed of four parts.

1. Input, where the bags are inserted into the system (e.g., ticket counters)
2. Screening, where the bags are scanned
3. Sortation, where the bag gets directed to the right airline
4. Make-up, where the bags are transferred to carts, going to the airplane

The outbound baggage system's operational capacity can be constrained by any of these four.

The Baggage Optimization project is currently designed for 45 Million Annual Passengers (MAP), with the ability to expand operations beyond that number in the future. Screening and sortation for the baggage systems can be handled inside the existing footprint of the facilities yet make-up devices will be constrained as there is not enough floor space in the existing facilities to accommodate them. To accommodate baggage operations beyond 45 MAP additional useable building footprint will have to be created in which to place make-up devices, and associated conveyor systems.

PROJECT JUSTIFICATION AND DETAILS

Growth in airline traffic at the Airport has exceeded planning projections putting pressure on all aspects of airport operations – gating aircraft, ticketing passengers, baggage screening and handling. A major limitation of the Airport's systems today, and in the future, is make-up capacity. Baggage make-up capacity is defined by the number of cart positions that can be staged to transfer bags from the make-up device to carts that go to airplanes. As the number of passengers and flights increase, the number of cart positions required to transfer the bags increases as well. The required space necessary for efficient make-up operations is not available within the existing footprint. Two current projects, Baggage Optimization and NorthSTAR, will create additional baggage make-up space; however, system capacity will still not meet anticipated requirements in the near future.

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Make-up position synopsis:

(assumes carts parked with hitch in the raised or “tongue up” position for maximized count)

Timeline	Cart Staging Positions	Shortfall (Carts)	MAP (Calculated Capacity)
Available (Today)	322		38.6
Required (Today)	370	48	42.3
Max Cap in Terminal	431		49.8
Required (Future)	473	42	54.0
Proposed	481		54.9

Maximum capacity in the terminal is after Baggage Optimization, NorthSTAR, and an additional baggage make-up device in South Satellite.

Make-up capacity shortfalls are currently being addressed by operationally inefficient workarounds, such as keeping transfers and bags for later flights out of the system.

IAF is the only programmed new facility footprint that has the potential to be useable as operational space for baggage make-up, as it connects to the ramp. It is anticipated that the IAF space could provide at least an additional 48 cart positions.

Project Objectives

This project provides the opportunity to:

- Create floor space in the IAF that can be used for operational needs, increasing operational flexibility within Airport’s limited footprint
- Realize additional floor space that is operationally contiguous and balance the disparity of cart positions on the south side of the airport
- Capture additional floor space without significant impact to the IAF schedule
- Reduce existing facilities constraint ahead of SAMP recommendations being implemented

Scope of Work

This project directs a change to the included scope of a current, in-progress project, the IAF, in order to reserve an area of approximately 40,000 square feet for future outbound baggage handling expansion use. That space is made available by directing the IAF to consolidate and relocate programmed US Customs and Border Protection (CBP) support and office space and transfer baggage re-check screening from the ground/ramp by adding an additional floor and a raised equipment platform.

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In the short-term, approximately 35,000 square feet will be made available for new baggage make-up at the completion of the IAF, currently scheduled for the third quarter of 2019.

In the long-term, an additional approximately 5,000 square feet will be available to add to the initial 35,000 square feet of outbound baggage make-up space when the in-progress Baggage Optimization project completes its scheduled tie-in of the IAF re-check baggage to the central in-line system, currently scheduled for the third quarter 2023.

Schedule

In order to seize the opportunity presented here without delaying the in-progress IAF project, this project must be incorporated into the IAF design prior to June 30, 2016, when procurement of the foundations and structural steel are scheduled to begin.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$18,500,000	\$0	\$18,500,000
Previous Authorizations	\$0	\$0	\$0
Current request for authorization	\$18,500,000	\$0	\$18,500,000
Total Authorizations, including this request	\$18,500,000	\$0	\$18,500,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$18,500,000	\$0	\$18,500,000

Budget Status and Source of Funds

This project is not included in the 2016-20 capital budget and plan of finance.

In the interest of expediting the project, the Port is electing to utilize the Discretionary Projects budget as defined by Article 6.4 of the Signatory Lease and Operating Agreement (SLOA III). Under this provision, the Port may categorize as exempt up to \$30 million on new projects that would otherwise require a MII vote. During the term of SLOA III the Port has not previously used any of the Discretionary Projects budget. The funding source will be future revenue bonds. The cost estimate for this project is \$18.5 million and budget will be transferred from the Aeronautical Allowance C800404 resulting in no net change to the Airport capital budget.

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Financial Analysis and Summary

CIP Category	Renewal and Enhancement
Project Type	Renewal and Replacement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$18,500,000
Business Unit (BU)	Terminal
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	CPE \$.05 in 2024

Lifecycle Cost and Savings

This project adds additional square footage to the ground/ramp area by relocating other functions to a mezzanine. The floor space created in this project will be part of the IAF building and will not appreciably change the life cycle cost for that facility.

STRATEGIES AND OBJECTIVES

This project addresses the Port's Century Agenda strategic objective to advance this region as a leading tourism destination and business gateway by making Seattle-Tacoma International Airport the West Coast "Gateway of Choice" for international travel.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Accept *status quo* - continue labor intensive and inefficient methods to transfer bags, for example, tail-to-tail (sorting bags on the ramp at the arriving aircraft and shuttling them to the departing aircraft).

Cost Implications: Manpower intensive and lost/misconnected bags. Airline costs not quantified.

Pros:

- (1) Saves \$18.5M in current project costs
- (2) Provides opportunity for the SAMP to consider and prescribe solution

Cons:

- (1) Strains the Airport's ability to sustain international service in a manner consistent with the Port's Century Agenda
- (2) Future operational requirements for baggage make-up go unmet and will constrain Minimum Connect Time (MCT)
- (3) Loss of potential lease revenue for use of subject space

This is not the recommended alternative.

Alternative 2 - Add a pre-engineered building on the ramp to create additional operational footprint.

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Cost Implications: \$24M

Pros:

- (1) Adds additional baggage make-up footprint to meet demand

Cons:

- (1) Impacts/reduces number of operable gates
- (2) Constrains flexibility and volume of aircraft operations

This is not the recommended alternative

Alternative 3 – Leverage IAF design and capacity to create additional operational footprint

Cost Implications: \$18.5M

Pros:

- (1) Adds additional baggage make-up footprint to meet demand
- (2) Creates additional leasable space
- (3) Least cost new footprint option
- (4) No impact to gates or aircraft operations

Cons:

- (1) Requires rapid decision process to take advantage of opportunity
- (2) Requires the expenditure of \$18.5M that could be used for other purposes

This is the recommended alternative.

ATTACHMENTS TO THIS REQUEST

- Computer slide presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- April 26, 2016 – IAF 1Q2016 Update