PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA **Item No.** 6c

Date of Meeting August 11, 2009

DATE: July 24, 2009

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Ehl, Director Airport Operations
Robert F. Riley, Director, Aviation Capital Improvement Program

SUBJECT: C1 – C88 Baggage Handling System connection project at Seattle-Tacoma International Airport (CIP # C800170).

ACTION REQUESTED

Request authorization for the Chief Executive Officer to perform full design documents; prepare, execute, award, and amend service agreements; and execute service directives for C1 to C88 Baggage Handling Connection project (CIP # C800170) at the Seattle-Tacoma International Airport (Airport) for an estimated cost of $280,000. The ultimate cost for the constructed project is estimated to be $2,800,000.

SYNOPSIS

The two baggage handling systems (BHS) involved are in the north Main Terminal (C1 and C88); C88 feeds the North Satellite. Alaska Airlines is growing its presence at the North Satellite, taking additional gates and re-arranging their locations in cooperation with United Airlines (UA). Today Alaska must make up all baggage for flights departing the North Satellite by using the Alaska pier sortation system located on the ramp level of Concourse D. This requires all bags destined for the North Satellite to be transported via tugs towing carts across the aircraft parking areas and active taxilanes. A connection between the Alaska baggage system and the North Satellite system will automate this transport through an existing underground tunnel and thereby reducing vehicle traffic to improve operational efficiency, air quality, and safety. The airlines who operate at the Airport have formally agreed to go ahead with this project.

BACKGROUND

This project connects the C1 baggage handling system (BHS) to the C88 BHS. It installs two High-Speed Diverters (HSD) plus additional baggage conveyor length that will connect the two C1 sortation loops to the C88 BHS which goes to the North Satellite (NSAT). Once Alaska Airlines' outbound baggage flow has passed the C1 security screening matrix and entered the Alaska pier sortation system, a portion of it can be routed to the NSAT's pier sortation system to Alaska's NSAT gate operations. Currently, only bags screened by the C88 BHS (UA outbound

baggage) are conveyed to the North Satellite pier sortation system. This will add capacity for Alaska Airlines baggage make-up operations, and will increase carrier/gate use flexibility in the overall north main terminal baggage system by making use of the available capacity at the North Satellite BHS.

PROJECT DESCRIPTION/SCOPE OF WORK

Project Statement:
This project will connect the new C1 Baggage Screening Facility to the C88 North Satellite Baggage Sortation System by June 2011 for $2,800,000.

Project Objectives:
1) Improve future flexibility in baggage introduction point to ultimate destination, i.e., common use ticket counters.
2) Address Alaska Airline's request to connect baggage from their ticket counter to North Satellite sortation system.
3) Provide a connection consisting of two new conveyor paths that connect both systems post-screening.

Scope of Work:
Develop infrastructure to accommodate the installation and operation for two conveyor line connections from C1 mainlines to C88 conveyor lines. Infrastructure development will, at a minimum, include:

1) Site preparation for installation of conveyors.
2) Removal of regulated materials as required.
3) Installation of electrical power and control systems.
4) Installation of communication system.
5) Installation of conveyor equipment.
6) Re-striping tug lanes and bagwell area.
7) Installation and revisions to fire sprinklers systems.
8) Structural and mechanical revisions to the base building.
9) Commissioning of conveyor systems.
10) Testing of conveyor systems.
11) Training to Airport and airline staff.
12) Closeout of completed project.

STRATEGIC OBJECTIVES

Ensure Airport and Seaport Vitality

The project provides enhanced capacity and flexibility in critical baggage infrastructure, especially for the Airport's largest customer in utilizing the North Satellite.

Exhibit Environmental Stewardship through Our Actions

This project is in alignment with the Port's goal of improving the long term sustainability of its facilities and operations. This project supports and encourages airline environmental initiatives. This project has a generally positive effect on the environment to the extent that automated baggage handling systems reduce airport and airline reliance on less energy efficient baggage conveyance alternatives (tugs, trucks, etc.). Passengers will benefit from faster, more reliable, baggage screening.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

Original Budget	$2,800,000
Budget Increase	$0
Revised Budget	$2,800,000
Previous Authorizations	$0
Current request for authorization	$280,000
Total Authorizations, including this request	$
Remaining budget to be authorized	$2,520,000

Project Cost Breakdown	This Request	Total Project
Construction costs	$0	$2,028,000
Port furnished equipment	$0	$0
Sales tax	$0	$193,000
Outside professional services	$200,000	$243,000
Aviation PMG and other soft costs	$80,000	$336,000
Total	$280,000	$2,800,000

Source of Funds

This project was included in the 2009-13 capital budget. It was deleted from the budget due to the general economic crisis, but now it is once again desired and justified. A surplus budget to cover this project will be transferred from C-1 to Aeronautical New Projects. Hence the budget for this CIP (C800170) will be transferred from the Aeronautical New Projects, so there will be no change in the overall capital budget. The funding source will be the Airport Development Fund and/or future revenue bonds.

Financial Analysis

CIP Category	New/Enhancement
Project Type	Infrastructure Renewal/Replacement
Risk adjusted Discount rate	N/A
Key risk factors	N/A
Project cost for analysis	$2,800,000
Business Unit (BU)	Terminal
Effect on business performance	Increase NOI
IRR/NPV	N/A
CPE Impact	Will increase CPE by $.03. However, no change to 2009-13 business plan forecast since budget for Aeronautical New Projects will be reduced.

From a financial analysis perspective, the Port will incur increased Operation and Maintenance (O & M) costs of about $65,000 per year. These O & M costs are the expenses related for required staffing, tools and supplies and the requirement for ongoing maintenance and periodic component renewal as well as energy consumption.

ALTERNATIVES CONSIDERED/RECOMMENDED ACTION

At one time, the Concourse D baggage pier sortation system was adequate when Alaska Airlines operated far fewer flights than today. However, the current pier configuration now has become very inefficient based on Alaska's current flight operations. The piers have become extremely difficult to operate ergonomically during heavy utilization, since they are a double-stacked design and the concourse does not allow the baggage tugs/carts to drive through for easier cart staging. Alaska must constantly re-position bag carts in and out by hand, which is a much more labor intensive operation than a drive through configuration would permit. Alaska wishes to reduce labor costs in this area, but that is difficult to accomplish as the current Concourse D pier configuration actually drives more labor expense to operate in order to make flights departures on time. Also, the Concourse D pier system is one of the oldest at the airport and will eventually need major maintenance or replacement. This project will help relieve heavy utilization so maintenance work can be performed.

Alternatives Considered:

1. Connect the C1 baggage sortation (with screening matrix) to the C88 make-up system in the NSAT. This will give Alaska the baggage make-up capacity at the correct location in relationship to their gates at the NSAT. The Port will also be able to generate additional lease income from Alaska utilizing these piers. Alaska strongly supports this approach. This is the recommended alternative.

2. Alaska could take additional make-up capacity by using the former American Airline's make-up device now that it is integrated into the C1 system. However, Alaska has indicated that use of this device would create extra long transit time for bags to be delivered to aircraft. This is not the recommended alternative.

3. Alaska could relocate a portion of their ticket counter check-in operations to the six empty ticket counter positions north of the United Airlines ticket counters. That would put the baggage from those positions in the C88 system at the NSAT. However, this would be impractical as Alaska would then have an inefficient "split" ticket counter operation and they would also have to segregate passengers at the ticket counters into those boarding at the NSAT gates versus those boarding at Concourse C & D (which is served by the C1 baggage make-up system). This runs counter to their service objectives for ticketing and would likely confuse travelers. This is not the recommended alternative.

4. Additional baggage make-up facilities could be constructed as part of a Main Terminal expansion but would be cost prohibitive at this point in time and is not planned until well into the future. This is not the recommended alternative.

ECONOMIC IMPACTS

The Port will generate additional lease income from Alaska Airlines.

ENVIRONMENTAL SUSTAINABILITY/COMMUNITY BENEFITS

There are significant benefits with reductions in traffic with a result in lower fuel consumption, air emissions and vehicular congestion on the airport ramp. The project will improve the efficiency of the airlines' operations.

TRIPLE BOTTOM LINE SUMMARY

This project will provided tangible improvements to BHS operational flexibility. This common use system will allow for maximum utilization by multiple airlines, help insure passenger safety, improve airport security, and improve customer service for both passengers and airline partners. This project is expected to help reduce the overall operating costs of the airlines. Reduced ramp vehicular traffic will result in increased ramp safety, decreased air emissions, and decreased fuel consumption. Environmental benefits include cleaner air and improved airfield safety.

PROJECT SCHEDULE

• Commission Authorization to Start Design	August 2009
• Start Design	August 2009
• Design complete	January 2010
• Commission Authorization to Bid and Increase Budget	February 2010
• Bid Advertisement	February 2010
• Commission Authorization to Award (if necessary)	April 2010
• Construction Start	May 2010
• Construction Complete	November 2010

PREVIOUS COMMISSION ACTION

On October 23, 2007 (Item 8a) the Commission authorized for construction of Interim and Final Baggage Screening Systems at Seattle-Tacoma International Airport, for an additional $34,000,000 for the project, which brings the total authorization to $230,517,104.