

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4b
Date of Meeting July 12, 2016

DATE: June 27, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Jeffrey Brown, Director, Aviation Facilities and Capital Program
Wayne Grotheer, Director, Aviation Project Management Group
SUBJECT: C60 Interim Baggage Handling System Project (CIP #C800825)

Amount of This Request:	\$0	Source of Funds:	Airport Development Fund
Est. Total Project Cost:	\$14,200,000		
Est. State and Local Taxes:	\$579,000		

ACTION REQUESTED

Request Commission authorization, in accordance with Section 4.2.3.4 of the General Delegation of Authority, for the Chief Executive Officer to execute a major public works construction contract with the sole responsive and responsible bidder to perform the C60 Interim TSA Search Room Expansion/Enhancement Project at Seattle-Tacoma International Airport previously authorized on January 12, 2016.

SYNOPSIS

This action approves the bid for this project. The bid is less than the engineer's estimate and the project is within budget. Per the General Delegation of Authority, Section 4.2.3.4, because the bid was the only bid received, it is necessary for Commission approval.

The Commission approved design and procurement of this project on December 8, 2015. The Commission also authorized the advertisement and execution of a major public works contract for this project on January 12, 2016. The TSA Search Room Expansion/Enhancement work element bid was opened and found to be irregular, as there was only a single bidder, on June 16, 2016. The single bid, received from a qualified bidder, is in the amount of \$5,428,522, which is ten percent (10%) less than the engineer's estimate of \$6,055,000. As this work is considered necessary to meet the airlines' growth and baggage handling demands, the project team recommends accepting the current bid and authorizing execution of a major works contract with the sole responsible bidder. At this time there is no change to the C60 Interim project budget due to remaining project uncertainties.

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BACKGROUND

The C60 system was in the process of being assembled as part of the South Terminal Expansion Program (STEP) including construction of Concourse A when the events of September 11, 2001, occurred. As a result, the bag screening capability of C60 was dramatically and rapidly built to meet federal requirements while those requirements were still being developed. C60 was one of the first operational in-line baggage scanning systems in the country. As new systems were built and brought on line here in Seattle, lessons learned and best practices were added to avoid some of the challenges that accompanied the C60 system design.

Due to C60 capacity and performance issues during the summer of 2015, impacts to airline customers have occurred, including delayed flights, delayed baggage, and customer dissatisfaction. Delta Air Lines has indicated that the baggage system in Seattle is of great importance to them as they grow their operation. Other airline users of the C60 system have expressed similar concerns because of the impacts to their operations. Improving and upgrading the security tracking-zone will bring value to the overall operation. This project is critical to addressing airline's concerns as we move towards the next summer season.

PROJECT JUSTIFICATION AND DETAILS

This project, consisting of four distinct work elements, is focused on addressing the most urgent C60 baggage system challenges. These elements are being proposed to meet interim baggage capacity needs prior to optimization. This authorization request is specifically to improve the TSA search room and related components.

Interim improvement projects are necessary to keep up with airline customers' rapid growth of flights and passengers prior to when the Baggage Optimization project will affect this portion of the airport. Meetings with both airline and TSA leadership and their respective technical staff teams from across the country confirm that these interim elements are necessary.

The urgency of this work is very high. The Port's airline customers have demanded that the Airport find solutions to the frequent disruptions to their operations they experienced during the summer of 2015, and be prepared to handle an even larger volume of passengers on the system in 2016. The elements of this project are designed to address these concerns.

Project Objectives

The project is necessary for the following reasons:

- The C60 baggage system has exceeded capacity during peak operations;
- Twelve airlines regularly use C60 for normal operations and all airlines may use it for irregular operations;
- Delta Air Lines, the largest user of C60, intends to grow their operation for the next several years including adding 33 flights to the 2016 summer schedule;
- Baggage Optimization will not be ready to replace the C60 system for several years – estimated date of completion is 2023;

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Scope of work

There are four work elements currently included in the C60 Interim Baggage Handling System Project, one of which is a major construction contract. The status of these four work elements is:

1. The *Baggage Input Load Balancing* element adds crossover TX-4/TC9-OB1, which allows for better utilization between two screening loops in the system and improves efficiency. This element has been completed and in use since May 2016. This scope element had an estimated cost of \$970,000.
2. The *TSA Search Room Expansion/Enhancement* element will increase the TSA search room capacity; eliminate a single point of failure; incorporate reinsertion/rescreening equipment; and will improve the overall system functionality. This scope element has an estimated cost of \$7,730,000. New search tables to be utilized in this project will be purchased by the Baggage Optimization Phase 1 construction authorization. The tables will be temporarily utilized in the TSA Search Room Expansion/Enhancement project until Phase 4 of Baggage Optimization. The subject of this authorization request is accepting the current bid and authorizing execution of a major works contract with the sole responsible bidder for this element of work.
3. The *Security Zone Tracking Enhancements* element will reduce error bags sent to the TSA search room and improve the overall system capability and tracking. This element has three sub components: 1) Slope Modifications to the exits of the Explosive Detection System machines on seven (7) screening lines; this work has been completed and in use since April 2016; 2) Photo eye and Encoder replacement and relocation work will be completed by December 2016; 3) Re-control of the C60 baggage handling system will be completed by June 2017. This scope element has an estimated cost of \$5,200,000.
4. The *Clear Bag Reconciliation Scanners* element was cancelled due to TSA's security concerns and will not move forward. This scope element had an estimated cost of \$300,000.

Schedule

The baseline goal of this project was to complete design and construction of all elements prior to summer peak 2016 (Q3), or as soon thereafter as possible. As detailed above, we have met this summer 2016 goal for some but not for all project elements. Immediately authorizing this irregular bid may allow the TSA search room project element to be substantially completed before the end of 2016.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$14,200,000	\$0	\$14,200,000
Previous Authorizations	\$14,200,000	\$0	\$14,200,000
Current request for authorization	\$0	\$0	\$0
Total Authorizations, including this request	\$14,200,000	\$0	\$14,200,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$14,200,000	\$0	\$14,200,000

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Project Cost Breakdown

This Request

Total Project

Design Phase	\$0	\$4,599,000
Construction Phase	\$0	\$9,022,000
State Tax	\$0	\$579,000
Total	\$0	\$14,200,000

Budget Status and Source of Funds

This project was not included in the 2016-2020 capital budget and plan of finance. After the 2015 summer peak season, during which the C60 baggage system was regularly pushed to the breaking point, staff worked to identify solutions to the most critical problems. The budget for this project (C800825) was transferred from the aeronautical allowance CIP (C800404) resulting in no net change to the Aviation Division capital budget. Since the expected average life of the assets will be approximately seven years (until replaced by the Baggage Optimization project), the funding source will be the Airport Development Fund.

From project conception to expected completion, the C60 Interim project was designed to move at a rapid pace. The aggressive project schedule inherently carries high risks with scope, schedule, and budget. Work elements completed to date have been under budget and the TSA Search Room Expansion/Enhancement bid came in under the Engineer's Estimate; however, the project team is recommending the total project budget of \$14.2 million remain the same until further progress has been made. The remaining scope elements that have yet to be completed are considered high risk elements due to the complexity of the scope of work and uncertainty surrounding required TSA testing.

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Infrastructure Upgrades
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$14,200,000
Business Unit (BU)	Baggage Equipment cost center
Effect on business performance	NOI after depreciation will increase (capital costs added to airline rate base, amortized over 7 years)
IRR/NPV	N/A
CPE Impact	\$.09 in 2017

Lifecycle Cost and Savings

These elements are not anticipated to add significant cost or savings to the Aviation Maintenance budget. It is anticipated these elements will improve system performance as their primary objective. Staff recognizes the shorter useful life of these elements and is adjusting the amortization period accordingly.

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STRATEGIES AND OBJECTIVES

This project promotes the Port's Century Agenda objectives to make Sea-Tac Airport the West Coast "Gateway of Choice" for international travel, meet the region's air transportation needs at Seattle-Tacoma International Airport for the next 25 years, and encourage the cost-effective expansion of domestic and international passenger and cargo services.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Maintain status quo; do not award or proceed with the TSA Search Room project element.

Cost Implications: The design phase costs (approximately \$415,000) for this scope element would be expensed.

Pros:

- (1) No construction activity is required.
- (2) Not performing the work eliminates the associated operational impacts to airlines, TSA, and Port operations during the construction phase.
- (3) Less capital expenditure will be required.

Cons:

- (1) Not pursuing this work will result in the capacity and throughput of the TSA search room remaining the same as the current state. Customer service will continue to suffer.
- (2) The current search room is considered a significant limitation to the system during peak operations.
- (3) Performance of the system during heavy load operations will continue to be degraded as growth continues.

This is not the recommended alternative.

Alternative 2 – Cancel the bid and re-bid under the assumption that additional contractor interest can be achieved. This alternative assumes that future contractor outreach and/or an extension of the contract duration may result in more bidders than the previous effort.

Cost Implications: Additional Port soft costs. Potential to receive a higher or lower bid.

Pros:

- (1) Opportunity for increased competition.
- (2) Potential to receive an even lower bid.

Cons:

- (1) Re-advertising the project could result in the construction schedule being delayed enough to cause work to coincide with the next peak summer season in 2017.
- (2) No guarantee additional bids would materialize, and creates the potential of receiving a higher bid.

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- (3) Delaying this work will result in the capacity and throughput of the TSA search room remaining the same during the 2016 holiday season. Customer service will continue to suffer.
- (4) As the C60 system will eventually be replaced by the Baggage Optimization project, delaying this work will decrease the useful life of these capital improvements.
- (5) Extending the contract duration will result in increased soft costs for both the Port and contractor.
- (6) The responsive bidder has the necessary resources available at this time; re-bidding may result in these resources being re-allocated to projects outside the Port.

This is not the recommended alternative.

Alternative 3 – Accept the bid and authorize the execution of the major works contract with the sole responsible bidder.

Cost Implications: No additional cost to the airport, contractor's bid is 10% below the Engineer's Estimate.

Pros:

- (1) Fastest method to provide operational relief and efficiency gains for the C60 system, which will give the airlines, TSA, and the airport the best opportunity to be successful with continued growth.
- (2) Award contract below Engineer's Estimate, keeping project on budget.
- (3) Least impact to original completion schedule.

Cons:

- (1) Baseline construction is delayed due to the need to gain Commission authorization.

This is the recommended alternative.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- June 28, 2016 – Baggage Program Briefing
- January 12, 2016 – C60 Interim Baggage Handling System to advertise, award, and execute a major public works contract.
- December 8, 2015 – C60 Interim Baggage Handling System Project Design, use of Port crews, and equipment purchase authorization.
- June 23, 2015 – Baggage Optimization Briefing.