PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA STAFF BRIEFING

Item No. 7b

Date of Meeting July 14, 2015

DATE: July 7, 2015

TO: Ted Fick, Chief Executive Officer

FROM: George England, Program Leader, Aviation Project Management Group

Michael Ehl, Director, Aviation Operations

Dave Soike, Director, Aviation Facilities and Capital Programs

SUBJECT: 2015 Q2 Update on the Airport's NorthSTAR Program

SYNOPSIS

The NorthSTAR program (NS) is an outcome of Alaska Air Group's (AAG's) goal to concentrate and consolidate the operations of Alaska Airlines and Horizon Airlines at the north end terminal facilities of the airport. The NorthSTAR program includes five renovation projects. The program, which is a collaborative effort of the Port and AAG, was initially defined in a conceptual study prepared by AAG and its consultant in 2011. Working with this conceptual study, the Port and AAG refined the scope to meet the long-term goals of both the Port and AAG. In some cases, scope and budget from other parallel capital projects have been incorporated into the NorthSTAR program to ensure compatibility of design and efficiencies of construction. The revised scope meets the Airport and AAG goals for improved traveler experience and customer service. AAG submitted on June 23 and 24, 2015 three signed decision worksheets affecting the following projects within the NorthSTAR program:

- North Satellite Renovation and Expansion Project
- Main Terminal Improvements Project
- Concourse C & D Exteriors Stairs Project.

In addition, AAG has requested two taxilane configurations around the North Satellite be in place throughout construction. Since these requests were recently received, it is premature to assess the budget implications. The project team will determine any impacts during the 60% design review for the NSAT project and as the Main Terminal Improvement project completes the facility planning preliminary design.

The program is currently scheduled for completion in 2020. This briefing addresses progress on the program and each project through June 30, 2015.

BACKGROUND

The following is a summary of accomplishments, progress, issues, metrics and risks specific to the NorthSTAR programmatic capital project and each of the five capital construction projects:

Ted Fick, Chief Executive Officer July 7, 2015 Page 2 of 10

1. CIP C800544 NorthSTAR Program Management & Controls

This umbrella project is comprised of cost estimating, cost controls, scheduling and overall management support for the five capital renovation projects within the NorthSTAR program.

Accomplishments

- Updated NorthSTAR webpage in conjunction with Port Public Affairs.
- Received revised AAG organization chart that realigns the AAG NSTAR team to their corporate changes and the remaining work on the program.
- Received three signed decision worksheets from AAG, one each for the North Satellite Renovation, Main Terminal Improvements and Concourses C & D Exterior Stairs as described under each project.

Progress

 Continued update of overall program master schedule with changes to each project schedule in design/construction

Issues

- Tracking programmatic impacts due to delays on specific NorthSTAR projects
- Any budget implications of AAG's decisions will be evaluated during the third quarter.

Metrics

- Financial performance is reflected in the program budget summary (Supplement A PowerPoint) and includes:
 - o Cumulative Spent against Budget Actual \$3.1M; Budget \$18.8M
 - o Overall Schedule Progress Actual 38%; Planned 43%
 - o Cash flow for this reporting period Actual \$207k; Planned \$246k
 - Contingency remaining Forecast \$5.0M; Budget \$0.94M (inclusive of Management Reserve)
 - Small Contractor Supplier (SCS) Participation (Program Mgmt.) Actual 16.5%;
 Planned 27.0%

Risks

- Communication and coordination between multiple teams, stakeholders and people
- Assure baseline schedule concurrence of all stakeholders

Estimated Capital Budget: \$18,764,150 *

(*Includes program management reserve)

Scheduled Project Completion: August 2020

Ted Fick, Chief Executive Officer July 7, 2015 Page 3 of 10

2. CIP C800556 NS North Satellite (NSAT) Renovation & North Satellite Transit System (NSTS) Lobbies

This project is the largest within the overall program and includes the renovation of the North Satellite (NSAT) and the satellite transit system (STS) north loop stations at the Main Terminal, Concourse C, and the North Satellite. While the renovation of the STS station lobbies is relatively minor in scope, the NSAT renovation is significant and includes expansion of the NSAT to improve customer service and provide a balance of holdrooms, concessions, and circulation space to meet the overall program vision. The scope includes the removal of all regulated materials, seismic reinforcement of the NSAT, replacement of all infrastructure systems within the NSAT, expansion of the NSAT by nine structural bays to accommodate 5 additional gates, the addition of a rooftop structure for Alaska Airlines' Board Room and a destination restaurant, the rebuilding of the NSAT concourse level interior, and the renovation of non-public support spaces on the ramp and STS levels. The NSAT scope will also incorporate sustainable building elements and the data and communications infrastructure to accommodate the anticipated needs of the Port, AAG and the travelling public.

The NSAT 60% design completed and submitted for review, an eight week delay from the previous update. Multiple design workshops for each of the major design areas (architectural, mechanical, electrical, structural, etc.) plus dining/retail concession and holdroom configuration have been held with AAG and Port stakeholders.

Accomplishments

- Finalized key elements of the 60% Architectural design
- Received Commission approval to expand the NSAT baggage handling system
- Submitted 30% Baggage Handling System (BHS) Expansion design for stakeholder review
- Performed additional Aircraft parking/ground service equipment (GSE) layout analysis at AAG request.
- Interviewed, selected and awarded the Mechanical Contractor/Construction Manager (MC/CM) and Electrical Contractor/Construction Manager (EC/CM) contractors under the Hensel Phelps General Contractor Construction Manager (GC/CM) contract.
- Initial Construction Phasing concepts presented by Hensel Phelps to Port and AAG.
- Received signed decision worksheet from AAG to delete the Dual Door scope of work added to the project at AAG's request during 30% design.
- 60% design complete and submitted June 30th for Port review.

In Progress

• Continuing to evaluate other sustainable features, airfield layout plans and construction phasing options for incorporation into the overall design package.

Ted Fick, Chief Executive Officer July 7, 2015 Page 4 of 10

Issues

- Current forecasted construction completion date is Q3 2020 based on the delay in completion of the 60% design Procurement strategy for long-lead procurement items must be developed to minimize potential for additional delays
- Impacts of AAG required taxi-lane reconfiguration must be identified
- Final definition and agreement required of AAG "betterments" (cost sharing items)
- Any budget implications of AAG's decisions will be evaluated during the 60% design review period.

Metrics

- Financial performance is reflected in the program budget summary (attachment A) and includes:
 - o Cumulative Spent against Budget Actual \$15.2M; Budget \$415.8M
 - o Overall Schedule Progress Actual 3%; Planned 7%
 - o Cash flow for this reporting period Actual \$3.6M; Planned \$3.8M
 - o Contingency remaining Forecast \$35.6M; Budget \$40.7M
 - o SCS Participation (Design) Actual 1.0%; Planned 3.3%
 - o Apprenticeship Utilization Actual 0% *; Goal 15%
 - * No information available yet too early to report

Risks

- Scope additions absorbed by the project at 30% design may adversely impact budget; Evaluate at conclusion of 60% design cost estimate approximately in third quarter, 2015
- Delayed resolution of critical issues may impact design schedule and subsequent early construction packages
- Various taxilane configurations requested by AAG impact construction phasing and work areas
- Developing a final construction phasing plan that minimizes impacts to customer's level of service and maintains consistency, balanced against viable operating gates, operating effectiveness, schedule impacts and construction costs

Estimated Capital Budget: \$415,812,944 **Estimated Expense Budget:** \$5,800,000 **Scheduled Project Completion:** August 2020

3. CIP C800547 NS Concourse C Vertical Circulation

This project, which includes work being constructed and coordinated by Port and Alaska Airlines contractors, will provide new vertical circulation cores for improved vertical circulation between the concourse and the ground levels for Alaska Airlines/Horizon Air customers at three locations on Concourse C: Gates C2, C10, and C16. This work will provide covered, non-temperature controlled sloped walkways with elevator(s) between concourse and ground levels. The vertical circulation cores will consist of a light roof structure with glazed side panels to protect passengers from the weather and new door openings from the concourse to the vertical circulation cores. This project will improve passenger circulation to the aircraft from concourse to ground level on Concourse C for Horizon Air passengers.

Ted Fick, Chief Executive Officer July 7, 2015 Page 5 of 10

Accomplishments

- Gates C2, C10 and C16 walkways opened in April. Two of four elevators opened in May and June, remaining elevator installations continuing.
- AAG ground level walkways at C10 and C16 opened in April.
- C Concourse Employee Space (AAG tenant project) opened in June

In Progress

- Punch list of walkways in progress.
- Elevator installations behind schedule.
- Installation of thirty-eight (38) remaining electric GSE (eGSE) chargers, at Gates C10 through C16, to be complete July 2015

Issues

• C2A, and C10 elevators 10 weeks late. Aggressive construction market for vertical circulation impacting availability of qualified workforce

Metrics

- Financial performance is reflected in the program budget summary (attachment A)
- Based on the final construction plans, the following metrics will reflect the performance during construction:
 - o Cumulative Spent against Budget Actual \$13.9M; Budget \$16.7M
 - o Overall Schedule Progress Actual 97%; Planned 100%
 - o Number of delayed outbound bags Actual 0; Planned 0
 - o Number of delayed outbound flights Actual 0; Planned 0
 - o Number of safety hazard report incidences Actual 0; Planned 0
 - o Number of customer complaints received Actual 1/mo; Planned <5/mo.
 - o Construction Change Orders Processed Actual 29; Planned 0
 - o Contingency Remaining Forecast \$1.4M; Budget \$2.0M
 - o SCS Participation (Design) Actual 29.3%; Planned 33.4%
 - o SCS Participation (Construction) Actual 14.0%; Planned 6.0%
 - o Apprenticeship Utilization Actual 14.0%; Goal 15%

Risks

• Elevator installation continues to be impacted by workforce shortage resulting from busy construction market

Estimated Capital Budget: \$16,777,350 **Estimated Expense Budget:** \$1,233,500 **Scheduled Project Completion:** May 2015

Ted Fick, Chief Executive Officer July 7, 2015 Page 6 of 10

4. CIP C800545 NS Main Terminal Improvements

The Main Terminal scope begins at the departure drop-off curb and ends at the Main Terminal north STS station. Although the least defined element of the NorthSTAR program, the project will reconfigure the north end of the ticket lobby, the existing airline ticket office and ticket counters, and the north checkpoint. This project will focus on the efficient movement and processing of AAG, cruise, and other customers through improvements to the building circulation, wayfinding, technology infrastructure, checkpoint reconfiguration, and anticipated changes in the way AAG processes arriving passengers.

Accomplishments

- Presented draft final alternatives to stakeholders in May of security checkpoint size and configurations and ticket lobby passenger check-in and circulation options.
- Received signed decision worksheet from AAG deleting their tenant improvement scope of the project.

In Progress

- Performing further sensitivity analysis of checkpoints and ticketing. Complete analysis in July.
- AAG will remain involved due to their tenant projects within or adjacent to the project area.

Issues

- Coordination with upcoming Sustainable Airport Master Plan
- Any budget implications of AAG's decision will be evaluated as the facility planning effort is completed in August.

Metrics

• TBD

Risks

• Developing final scope that minimizes investment anticipating the Sustainable Airport Master Plan and AAG's changing ticketing operations

Estimated Capital Budget: \$29,200,000 **Scheduled Project Completion:** November 2018

5. CIP C800555 NS Refurbish Baggage System

This project will refurbish the existing baggage systems in support of AAG operations on the NSAT and Concourse D. The work will extend the service life of part of the C92 baggage systems, the C88 North Satellite systems, and the C88 tunnel systems. Some of the processing and transit times may be decreased but capacity will not be increased.

Ted Fick, Chief Executive Officer July 7, 2015 Page 7 of 10

The project will speed up the tunnel conveyors and will replace aging conveyor belts, motors, drives, and controls of the existing tunnel and North Satellite systems as required improving reliability and full functionality.

Accomplishments

- C88 and C92 conveyor system modifications are complete and system is operational
- Began C92 Automated Bag Tag Reader (ATR) replacements

In Progress

- Completing remaining punchlist items and finalizing access/platform modification issues
- C92 ATR replacements ongoing through June 2015.
- C92 Power Turns are scheduled to complete after the summer passenger load decreases

Issues

- Issues associated with access points, platform modifications and additional power turn replacements have delayed substantial completion.
- Resolution of potential acceleration and inefficiency claims submitted recently by contractor.

Metrics

- Financial performance is reflected in the program budget summary (attachment A)
- Based on the final construction plans the following metrics will reflect the performance during construction:
 - o Cumulative Spent against Budget Actual \$15.9M; Budget \$19.4M
 - Overall Schedule Progress Actual 89%; Planned 100%
 - o Number of system shutdowns Actual 9; Planned 10
 - o Number of operational impacts Actual 0; Planned 0
 - Number of unplanned system downtime periods exceeding 15 minutes Actual 0;
 Planned 0
 - o Number of construction change orders processed Actual 37; Planned 0
 - o Contingency remaining Forecast \$0M; Budget \$1.3M
 - o SCS Participation (Design) Actual 9.6%; Planned 14.3%
 - o SCS Participation (Construction) Actual 5.2%; Planned 5.0%
 - o Apprenticeship Utilization Actual 26.3%; Goal 15%

Risks

- Budget risk as project was notified by contractor of a potential claim. Evaluating the level of this
 risk.
- Schedule has no float remaining; however performance to date has met each schedule interim deadline.

Estimated Capital Budget: \$19,362,500 **Estimated Expense Budget:** \$640,000 **Scheduled Project Completion:** May 2015

Ted Fick, Chief Executive Officer July 7, 2015 Page 8 of 10

6. CIP C800554 NS Concourse C & D Exterior Stairs

This project, if approved, would add exterior stairs to Concourse C and D gate lobbies to enable the aft loading and unloading of aircraft at locations identified by AAG. This is currently a prospective "status 1" project, and therefore is not included in the capital budget and plan of finance

Accomplishments

 Received signed decision worksheet from AAG deleting this project. The program budget will be adjusted in Q3

In Progress

Nothing to report

Estimated Budget: \$21,400,000 **Estimated Expense Budget** TBD **Scheduled Project Completion:** TBD

ATTACHMENTS TO THIS BRIEFING

• Attachment A - Quarterly Commission Update PowerPoint

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

North Sea-Tac Airport Renovations (North STAR) (CIP #C800544)

- April 28, 2015 NorthSTAR Program status update
- January 27, 2015 NorthSTAR Program status update
- October 28, 2014 NorthSTAR Program status update.
- August 19, 2014 NorthSTAR Program status update.
- May 27, 2014 NorthSTAR Program status update.
- January 14, 2014 NorthSTAR Program status update.
- September 24, 2013 NorthSTAR Program status update.
- June 25, 2013 –NorthSTAR Program status update.
- April 9, 2013 The Commission authorized the Chief Executive Officer to enter into a project labor agreement covering the NorthSTAR program's five major construction projects.
- March 26, 2013 –NorthSTAR Program status update.
- June 26, 2012 The Commission received a briefing on the status of the Airline Realignment Program and budget restructuring in association with the NorthSTAR Program.
- April 4, 2012 Authorizations for the North Sea-Tac Airport Renovations program for: 1) preliminary project funding; 2) execution of consulting contracts for design/construction support services and project management services; and 3) use of Port crews and consultants to conduct regulated materials management surveys and field support services for preliminary project planning tasks.

Ted Fick, Chief Executive Officer July 7, 2015 Page 9 of 10

North Satellite Renovation & North Satellite Transit Station Lobbies (CIP #C800556)

- March 28, 2015 The Commission authorized three NSAT related items:
 - o Expand the baggage handling system increasing the project scope for \$14,400,000 and \$1,954,000 to complete the design.
 - o Entering into a developer agreement with Puget Sound Energy and \$200,000 in reimbursement for the design and construction of underground gas infrastructure.
 - o \$5,300,000 to
 - Prepare four locations to accommodate temporary passenger loading bridges, to construct temporary construction offices.
 - To complete construction of a Satellite Transit System (STS) North loop Dynamic Display system.
 - \$600,000 in expense funds for regulated materials management for AAG's tenant improvement project.
 - Approval to use Prot crew labor and small works contractors to complete early project work.
- August 5, 2014 The Commission authorized expansion of the NSAT, \$191,323,143 budget increase, \$15,717,800 to complete the design, execute amendments to existing consulting contracts; execute future consulting contracts and use of and to advertise for General Contractor/Construction Manager (GC/CM) alternative public works contractor.
- July 22, 2014 NSAT Expansion Briefing
- April 16, 2014 Seattle-Tacoma International Airport Capital Program Briefing
- January 14, 2014 –NSAT expansion briefing.
- May 28, 2013, Commission authorized the execution of separate service agreements for Construction Management Services and Commissioning Services, of approximate values of \$10 million and \$1.5 million.
- December 11, 2012 The Commission was briefed on the Vertical Conveyance Modernization Project Aero Phases 1 and 2 and the possibility of adding the specified elevators and escalators to the NorthSTAR program.
- July 24, 2012 Commission authorized \$32,000,000 for the design of the NorthSTAR NSAT Renovation and NSTS Lobbies project.
- April 10, 2012 The Commission authorized the execution of consultant contracts for design and construction support services; program management services; and the completion of site surveys for regulated materials management, in the amount of \$1,200,000.

NorthSTAR Concourse C Vertical Circulation Project (CIP #C800547)

- October 22, 2013 Commission authorized \$16,145,000 for advertising for bids, executing a
 major construction contract, executing a tenant reimbursement agreement with Alaska Air
 Group, using Port crews to provide construction services for the Concourse C Vertical
 Circulation.
- November 6, 2012 Commission authorized the design for the 1:20 sloped walkways and elevator(s) at Gates C2, C10-12, and C14 on Concourse C.

NorthSTAR North Main Terminal Improvements Project (CIP #C800545)

Ted Fick, Chief Executive Officer July 7, 2015 Page 10 of 10

December 3, 2013 – Commission authorized \$1,500,000 for preliminary engineering up to 30% design.

North Satellite Refurbish Baggage System Project (CIP#C800555)

- September 24, 2013 The Commission authorized staff to: (1) advertise, award, and execute a major public works contract for the construction of the North Satellite Refurbish Baggage System Project; and (2) authorize the use of Port crews.
- July12, 2013 The Commission was notified of 1 added scope item and 2 scope items moved into the scope previously identified as suggested scope.
- November 6, 2012 The Commission authorized staff to prepare design documents and use Port crews to support site investigation needed to develop the contract documents, in the amount of \$3,760,000.