PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA STAFF BRIEFING

Item No. 7c

Date of Meeting April 28, 2015

DATE: April 22, 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 Q1 Update on the Airport's NorthSTAR Program

SYNOPSIS

The NorthSTAR program 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 Alaska Air Group, 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.

The program is currently scheduled for completion in 2020. This briefing addresses progress on the program and each project through March 31, 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:

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

- Re-organized Port project management team structure due to retirement of Port Design Project Manager
- Presented program update to Airport & Airline Affairs Committee (AAAC) and fourth quarter 2014 Commission briefing
- Completed transition of Consultant Program Scheduler

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Progress

• Updated overall program master schedule with changes to each project schedule in design/construction

Issues

• Tracking programmatic impacts due to delays on specific NorthSTAR projects

Metrics

- Financial performance is reflected in the program budget summary (Supplement A PowerPoint) and includes:
 - o Cumulative Spent against Budget Actual \$3.0M; Budget \$18.8M
 - o Overall Schedule Progress Actual 36%; Planned 41%
 - o Cash flow for this reporting period Actual \$230k; Planned \$310k
 - o Contingency remaining Forecast \$5.0M; Budget \$0.94M (inclusive of Management Reserve)
 - o SCS Participation (Program Mgmt.) Actual 14.8%; 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

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 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 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.

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The NSAT 60% design phase is progressing for an early June submittal, 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

- Issued Notice to Proceed on January 12, 2015 for Hensel Phelps (HP) as the General Contractor/Construction Manager (GC/CM). Initial authorization for \$5M for preconstruction service. HP staff participating in construction phasing discussions, design workshops, schedule review and development and preparing solicitation for Electrical & Mechanical CM firms.
- Received Commission approval for \$1,954,000 to design the \$14.4M for NSAT baggage handling system expansion.
- Conducted AAAC briefing on March 19, 2015.
- MII ballot for the NSAT baggage handling system expansion is complete and ready for submission to the airlines for vote.
- Finalized decision to pursue Leadership in Environmental and Energy Design (LEED) certification and help initial kickoff meeting. This included the GC/CM.
- Completed Safety Risk Assessment (SRA) for tri-taxilane. Implementation to begin in May for interim period until early work construction begins.

In Progress

- Hensel Phelps leading evaluation of construction phasing options with Port and AAG to maximize gate availability, revenue opportunities, and utilization during construction.
- Refining 60% design elements. Continuing design workshops/progress meetings with AAG and Port stakeholders
- Evaluating level of LEED certification attainable, as well other sustainable features to incorporate into the project
- Initiate trial operation of tri-taxilane continues to ensure safe operations
- AAG designing temporary Boardroom VIP lounge tenant project on concourse level of the NSAT

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
- 60% design submittal delayed 8 weeks due to extended review/coordination by AAG for Tri taxilane operation, timely input by AAG project team due to inadequate staffing, and Port stakeholder design inputs and performance of the design team. Tri taxilane benefits operations by allowing either single or dual taxilane use but requires wider operations space which impacts aircraft parking around NSAT and Concourse C.

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• Ramp and apron layout will not accommodate all ground service equipment

Metrics

- Financial performance is reflected in the program budget summary (attachment A) and includes:
 - o Cumulative Spent against Budget Actual \$12.0M; Budget \$415.8M
 - o Overall Schedule Progress Actual 3%; Planned 7%
 - o Cash flow for this reporting period Actual \$2.2M; Planned \$2.5M
 - o Contingency remaining Forecast \$35.6M; Budget \$40.7M
 - o SCS Participation (Design) Actual 0.9%; 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
- Dual Boarding and Tri-taxilane constrain AAG's operational effectiveness
- Customer level of service within holdrooms and building during renovation a concern of AAG's

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.

Accomplishments

- Gates C2, C10 and C16 walkways have structural steel erected, precast concrete walkway panels installed, and translucent roofing completed. Elevator installations continuing
- Gates C2 and C10 new doors and stairs for access to/egress from aircraft continue in use

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• Installed laminated glass panels at the Gate C16 walkway

In Progress

- Construction activity progressing at all 3 walkways for occupancy in April. Elevator installations behind schedule
- Continuing to work with contractor to coordinate work activities with AAG and its contractor, PCL, for adjacent ground level walkway construction
- C Concourse Employee Space (AAG tenant project) under construction with completion expected May 2015
- Thirty-eight (38) remaining eGSE chargers, at Gates C10 through C16, to be complete June 2015

Issues

• C10 Elevator 4 – 5 weeks late. Aggressive construction market 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 \$10.8M; Budget \$16.8M
 - o Overall Schedule Progress Actual 82%; Planned 89%
 - 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 2/mo; Planned <5/mo.
 - o Construction Change Orders Processed Actual 29; Planned 0
 - o Contingency Remaining Forecast \$1.3M; Budget \$2.0M
 - o SCS Participation (Design) Actual 27.7%; Planned 33.4%
 - o SCS Participation (Construction) Actual 16.8%; Planned 6.0%
 - o Apprenticeship Utilization Actual 13.1%; Goal 15%

Risks

- Elevator installation impacted by workforce shortage resulting from aggressive construction market
- Congested work area and coordination with AAG's covered walkway project.

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

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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 preliminary alternatives to stakeholders in March of security checkpoint size and configurations, and ticket lobby passenger check-in and circulation options.

In Progress

• Update passenger forecasts and develop final alternatives for ticketing lobby and security checkpoint in 2nd Quarter 2015

Issues

- Coordination with AAG & Transportation Security Administration (TSA) on security checkpoint 5 reconfiguration
- Coordination with upcoming Sustainable Airport Master Plan

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.

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.

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Accomplishments

- Completed abatement for Motor Control Room and Baggage Service Office at North Satellite.
- A portion of the North Satellite baggage system (C88) began operating March 16, 2015. C92 baggage system tested, commissioned and operating.
- Conducted safety related tour of C88 system in NSAT identifying a number of revisions.

In Progress

- Completing remaining NSAT C88 work with focus on operating safety as construction continues.
- Automated Bag Tag Reader (ATR) replacement of C92 to complete before May 1, 2015.
- Complete commissioning and turnover of NSAT C88 expected May 15, 2015.

Issues

- Safety of both baggage and construction workers at NSAT as work is completed within the operating baggage area.
- 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 \$13.5M; Budget \$19.4M
 - o Overall Schedule Progress Actual 79%; Planned 79%
 - o Number of system shutdowns Actual 5; Planned 10
 - o Number of operational impacts Actual 1; Planned 0
 - Number of unplanned system downtime periods exceeding 15 minutes Actual 0;
 Planned 0
 - o Number of construction change orders processed Actual 19; Planned 0
 - o Contingency remaining Forecast \$0M; Budget \$1.3M
 - o SCS Participation (Design) Actual 9.2%; Planned 14.3%
 - o SCS Participation (Construction) Actual 7.8%; Planned 5.0%
 - o Apprenticeship Utilization Actual 16.4%; 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.

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

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

None

In Progress

Nothing to report

Risks

- Safety of passengers, employees and construction crew during construction
- Definition of contractor access and laydown areas

Issues

- Definition of contractor access and laydown areas
- Lack of defined scope (full complement of gates undetermined at this time)
- Agreement with AAG on cost responsibility

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)

- 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.

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- 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:

 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.

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

- March 28 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 crel 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.

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• 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)

• 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.