# PORT OF SEATTLE MEMORANDUM

# COMMISSION AGENDA STAFF BRIEFING

Item No. 7a

Date of Meeting October 28, 2014

DATE:	October 20, 2014
TO:	Ted J. 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: 2014 Third Quarter 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, is now scheduled for completion in 2020. This briefing addresses progress through September 30, 2014.

The 30% design development phase is complete and both the Port and AAG are collaboratively approving and obtaining concurrence in accordance with the April 5, 2012 Letter of Understanding. The result of the 30% design review by Port staff and AAG is that the program remains within the budget.

The North Satellite is the largest project within the overall program. The North Satellite requires significant renovation, infrastructure upgrades, and expansion to improve customer service and provide a balance of holdrooms, concessions, and circulation space to meet the overall program vision. The airlines approved through the Majority-In-Interest and the Commission authorized on August 5, 2014 to expand the North Satellite by 9 additional bays, to provide an additional 5 gates from the earlier program's planned 15 for a total of 20 gates, and the associated additional budget.

Staff publicly posted the solicitation to select a General Contractor/Construction Manager (GC/CM) contractor and has shortlisted 3 firms for interviews and cost proposal submittals. It is anticipated a selection of a GC/CM will be made by the end of 2014 and the Commission will be requested to approve award of the contract in January, 2015.

The initial scope of the program was 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

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scope meets the Airport and AAG goals for improved traveler experience and customer service.

# BACKGROUND

The NorthSTAR program consists of one programmatic capital project and 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

- Received updated roles & responsibilities for AAG staff supporting the program.
- Completed second quarter 2014 Commission briefing.
- Identified and transferred a total \$5.2M potential savings from C800547 Concourse C Vertical Circulation and C800555 NS Refurbish Baggage System into Program management reserve.

#### Progress

- Reviewing AAG staff roles & responsibilities to incorporate and update the program's communication plan and decision making matrix.
- Program coordinating with Division to assure airport-wide gate availability is not compromised during construction and project development aligns with the Sustainable Airport Master Planning effort.
- Continuing update to overall program master schedule to reflect schedule changes to each project.

#### Issues

• Tracking programmatic cost impacts due to current progress delays on specific NorthSTAR projects.

# Metrics

- Financial performance is reflected in the program budget summary (attachment A) and includes:
  - o Spending against Budget Actual \$2.5M; Forecast \$11.3M
  - o Overall Schedule Progress Actual 27%; Planned 27%
  - Cash flow for this reporting period Actual \$223k; Planned \$300k
  - Contingency remaining Actual \$9.3M; Forecast \$0.94M (inclusive of Management Reserve)
  - o SCS Participation (Program Mgmt.) Actual 30.8%; Planned 27.0%

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#### Risks

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

Estimated Capital Budget: \$20,600,000 \* (\*-Includes program management reserve) Scheduled Project Completion: February 2020

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

This project 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 of the NSAT 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 airlines approved via the Majority In Interest balloting, and on August 5, 2014 the Commission authorized the expansion of the North Satellite.

#### Accomplishments

- Solicited for a GC/CM Contractor, received four proposals and shortlisted 3 firms for interviews and final cost proposal.
- Completed the 30% design development process.
- The 30% design phase cost estimate shows the project remains within authorized budget.
- The 30% design Sustainability Report is complete and recommendations to incorporate into the NSAT and to pursue LEED certification were presented to Port and AAG Steering committees.
- Completed the analysis of aircraft layouts and ground equipment at NSAT gates.
- Received Airline approval via MII balloting and Commission authorization for expanding the satellite and the associated budget increase

#### **In Progress**

- Updating and refining gate availability and utilization during construction, as needed to refine construction phasing.
- Continuing the selection process for a GC/CM contractor.

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- Finalizing the need to incorporate the future NSAT baggage system expansion into the scope of NSAT building expansion.
- Evaluating whether or not NSAT renovation scope should include infrastructure enhancement to support further future expansion of NSAT, i.e. the "dog leg."
- Assisting AAG on analysis of aircraft layouts and ground equipment at NSAT gates.

## Issues

- Forecasted construction completion date will be determined once GC/CM contractor is on board and the impact of maximizing operating gates during construction is resolved. Currently completion is forecasted in Q3 2019.
- Procurement strategy for long-lead procurement items must be developed.
- Uncertainty of whether or not to delete dual taxi-lane from the NSAT scope of work, pending the test results of a taxi-lane mock-up by AAG pilots.
- Potential ramp equipment congestion resulting from proposed dual taxi-lane.
- Decision on future NSAT baggage system capacity needed to ensure adequate space for additional piers.

# Metrics

- Financial performance is reflected in the program budget summary (attachment A) and includes:
  - o Spending against Budget Actual 7.9M; Forecast \$399.7M
  - o Overall Schedule Progress Actual 3%; Planned 3%
  - Cash flow for this reporting period Actual \$2.5M; Planned \$2.5M
  - Contingency remaining Actual \$36.9M; Forecast \$40.7M
  - SCS Participation (Design) Actual 22.4%; Planned 6.0%
  - Apprenticeship Utilization Actual 0% \*; Goal 15%
    \* No information available yet too early to report

# Risks

- Inadequate existing electrical and mechanical infrastructure to support facility expansion.
- Modifications to the existing 400Hz motor generators may increase costs.
- Baggage handling system refurbishment requirement may be impacted by expansion decision.

Estimated Capital Budget:	\$399,732,944
Estimated Expense Budget:	\$5,800,000
Scheduled Project Completion:	June 2019

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## 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

- Forma Construction continuing construction activities on sloped walkways. Steel erected at gates C2 and C16 and underway at gate C10. Elevator towers poured. Preparing for opening of new access/egress route to aircraft via stairs and new AAG walkway at gate C2 in late October. Temporary walkways installed at all three locations by AAG/PCL.
- eGSE chargers removed from gate C2 and permitted for relocation.
- Underground grease interceptor piping scope and funds transferred into the project due to similar work and to minimize disruption to airline.
- 90% design review complete for C Concourse Employee Space (AAG tenant project).
- AAG planning temporary Boardroom VIP lounge tenant project on concourse level of the NSAT.
- Identified and transferred \$3.2M potential savings to C800544 NorthSTAR Program management reserve.

#### **In Progress**

- Construction activity proceeding at all 3 locations.
- Forma Construction schedule has 15-day delay. Continuing to work with contractor to mitigate delay and coordinate work activities with AAG and its contractor, PCL.

#### Issues

• None.

#### 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:
  - Spending against Budget Actual 4.3M; Forecast \$16.0M
  - o Overall Schedule Progress Actual 82%; Planned 82%

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- o Number of delayed outbound bags Actual 0; Planned 0
- o Number of delayed outbound flights Actual 0; Planned 0
- Number of safety hazard report incidences Actual 0; Planned 0
- Number of customer complaints received Actual 0; Planned <5/mo.
- o Construction Change Orders Processed Actual 4; Planned 0
- Contingency Remaining \$1.0M; Planned \$2.0M
- o SCS Participation (Design) Actual 31.0%; Planned 33.4%
- o SCS Participation (Construction) Actual 2.7%; Planned 6.0%
- Apprenticeship Utilization Actual 0% \*; Goal 15%
  - \* No information available yet too early to report

## Risks

• Unforeseen underground utilities.

Estimated Capital Budget:	\$15,400,000
Estimated Expense Budget:	\$775,000
Scheduled Project Completion:	April 2015

# 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's customers through improvements to the building circulation, wayfinding, technology infrastructure, checkpoint reconfiguration, and anticipated changes in the way AAG processes arriving passengers.

#### Accomplishments

• Landrum & Brown under contract for facility determination analysis.

#### **In Progress**

• Kick off meetings with project team to begin in early October.

#### Issues

- Coordination with NSAT design concept to ensure a cohesive look/feel.
- Coordination with AAG & TSA on security checkpoint 5 reconfiguration.
- Coordination with upcoming Sustainable Master Plan and Terminal Development Strategy.

#### Metrics

• TBD

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#### Risks

• Least defined scope and budget relative to the program budget.

Estimated Capital Budget:	\$29,200,000
Scheduled Project Completion:	October 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.

#### Accomplishments

- Baggage control system and virtual servers installed and operating for north end of terminal.
- Construction commenced.
- Design bulletin released requesting contractor pricing of baggage conveyor independent mainline revised layout at the North Satellite.
- Closed out existing design consultant service directives.
- Concourse D mini-sort area demolition completed and ready for construction.
- Identified and transferred \$2.0M potential savings to C800544 NorthSTAR Program management reserve.

#### **In Progress**

- Abatement for North Satellite baggage motor control center nearing completion.
- Concourse D mini-sort area on schedule to be in use by November 24, 2014.

#### Issues

• None

#### 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:
  - Spending against Budget Actual \$2.2M; Budget \$19.4M
  - o Overall Schedule Progress Actual 69%; Planned 98%

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- o Number of system shutdowns Actual 2; Planned 10
- Number of operational impacts Actual 0; Planned 0
- Number of unplanned system downtime periods exceeding 15 minutes Actual 0; Planned 0
- Number of construction change orders processed Actual 3; Planned 0
- Contingency remaining Actual \$2.0M; Planned \$1.3M
- o SCS Participation (Design) Actual 19.0%; Planned 14.3%
- o SCS Participation (Construction) Actual 0%; Planned 5.0%
- Apprenticeship Utilization Actual 0% \*; Goal 15%
  \* No information available yet too early to report

#### Risks

- NSAT expansion decision may impact baggage handling system refurbishment requirements as to capability to handle forecasted bag volume and speed. Evaluating mitigation options.
- Design consultant performance may delay in use date.
- North Satellite motor control center and independent loop design changes may delay North Satellite in use date
- Airport baggage optimization project may have impacts to this project's schedule and scope. Coordinating with project manager to ensure systems are compatible and minimal revisions required for optimization project construction.

Estimated Capital Budget:	\$19,482,500
Estimated Expense Budget:	\$520,000
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.

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#### 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
Scheduled Project Completio	n: 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)

- 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.

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

- 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.

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- 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 the 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.