Item No.7a\_SuppDate of MeetingOctober 28, 2014

# SeaTac International Airport

# NorthSTAR Program

Program Commission Update
Third Quarter 2014



# NorthSTAR Program

The **North S**ea-**T**ac **A**irport **R**enovation (NorthSTAR) Program is an unprecedented working arrangement between the Port of Seattle and Alaska Airlines with the goal to better serve passengers and improve operational efficiency. This program brings together the north satellite expansion and renovation and several parallel projects, including related main terminal improvements; refurbished north satellite baggage system; and new exterior walkways, stairs and elevators at Concourse C.

### Purpose:

- Improve the travel experience from airport drop-off to flight departure
- Improve working environment for employees

#### Outcome:

- Facility modernization
- Seismic reinforcement of the North Satellite
- Enhanced traveler amenities
- New Contact Gates
- Long term energy savings and operational efficiencies

# NorthSTAR Program

Ken Warren, Project Mgr

#### **ACTIVE PROJECTS**

C800554 WP 104802 NS NorthSTAR Program Management
 C800556 WP 104791 NS NSAT Renovation NSTS Lobbies
 C800547 WP 104784 NS Conc C Vertical Circulation
 C800545 WP U00042 NS Main Terminal Improvements
 George England, Program Mgr
 Greg Vouros, Project Mgr
 Joe Nessel, Project Mgr

#### **PENDING PROJECTS**

C800555

C800554 WP TBD NS Exterior Stairs Conc C&D

#### **EXPENSE PROJECTS**

WP 104656 Alaska NSAT & Conc C (CLOSED)

WP U00072 NorthSTAR TI Work

WP U00094 PLB Relocation at C14

WP U00095 eGSE Relocation at Concourse C

WP U00129 CM Office

WP U00130 BHS RMM

WP U00137 Project Activation

WP 104792 NS Refurbish Baggage System

Doug Honeyman, Project Mgr Joe Nessel, Project Mgr Doug Honeyman, Project Mgr Joe Nessel, Project Mgr Ken Warren, Project Mgr Doug Honeyman, Project Mgr

#### Legend:



- Reflects Additional Budget Required or Behind Schedule

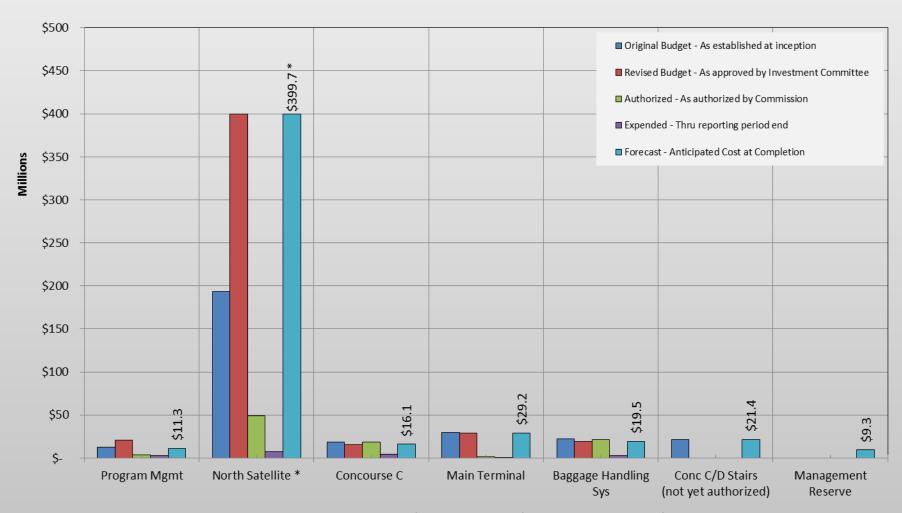
- Reflects concern on Budget or No Float remaining on Schedule

- Reflects Good Status on Budget and Schedule

Estimated Total: \$506M \*

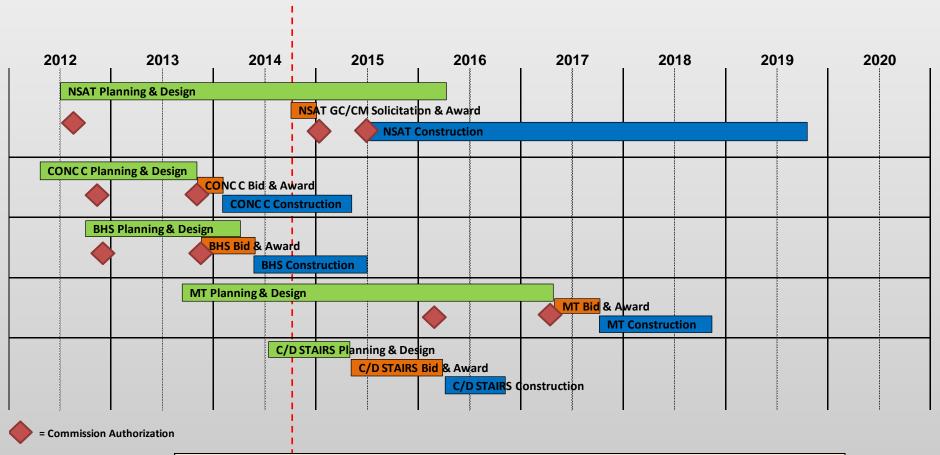
# NorthSTAR Program Overall Capital Budget

Approved: \$484M \*



- Forecasted cost include added aircraft gates and square footage at North Satellite for passenger hold rooms, concessions and increased level of service.
- Does not include \$7.7M "expense" costs for RMM and various expense efforts.

# NorthSTAR Program Overall Schedule



| NorthSTAR Program Progress       |        |        |              |        |         |        |  |
|----------------------------------|--------|--------|--------------|--------|---------|--------|--|
|                                  | Design |        | Construction |        | Overall |        |  |
|                                  | Plan   | Actual | Plan         | Actual | Plan    | Actual |  |
| North Satellite/STS Renovation   | 30%    | 29%    | 0%           | 0%     | 3%      | 3%     |  |
| Concourse C Vertical Circulation | 100%   | 100%   | 46%          | 46%    | 82%     | 82%    |  |
| Refurbish Baggage Handling Sys   | 100%   | 100%   | 96%          | 30%    | 98%     | 69%    |  |
| Main Terminal Improvements       | 0%     | 0%     | 0%           | 0%     | 0%      | 0%     |  |
| Concourse C/D Exterior Stairs    | 0%     | 0%     | 0%           | 0%     | 0%      | 0%     |  |

# NorthSTAR Program Management

### **CIP: C800544 – NS NorthSTAR Program Management**

Project Status Good

#### **Purpose:**

- Overall management of the program
- Provide programmatic oversight, coordination, controls, consistency and support between stakeholders and projects
- Ensure an efficient and successful execution of the entire program's objectives.

#### **Accomplishments**:

- Received updated roles & responsibilities for AAG staff engaged across the program
- Completed second quarter 2014 Commission briefing
- Identified and transferred \$5.2M potential savings from C800547 Conc C and C800555 Refurbish
   Baggage System into C800544 NorthSTAR Program management reserve.

#### **Progress:**

- Reviewing AAG staff roles & responsibilities for incorporating into the program's communication plan and decision 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 to update the Master Schedule to reflect most current baseline inclusive of changes to project design durations and scope.

# NorthSTAR Program Management

### **CIP: C800544 – NS NorthSTAR Program Management (continued)**

#### **Issues**:

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

#### **Metrics**:

| Project Metrics                          | Actual | Planned/<br>Forecast |
|--|--------|----------------------|
| Spending against Budget                  | \$2.5M | \$11.3M              |
| Overall Schedule Progress                | 27%    | 27%                  |
| Cashflow (for 3 <sup>rd</sup> Qtr. 2014) | \$223k | \$300k               |
| Contingency Remaining*                   | \$9.3M | \$0.94M              |
| SCS Participation (Program Mgmt)         | 30.8%  | 27.0%                |

<sup>\* -</sup> Includes Management Reserve.

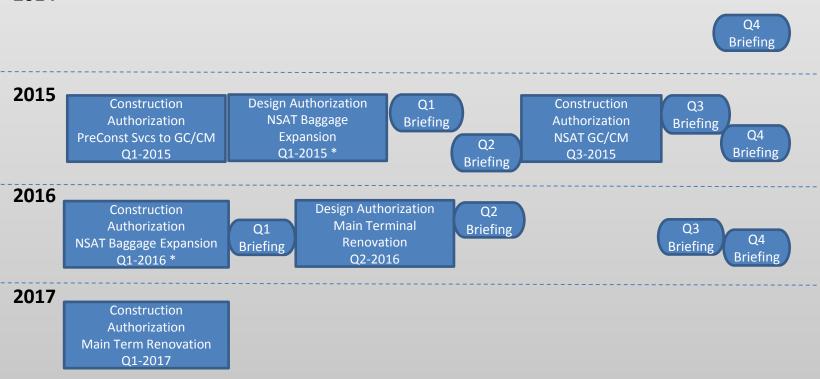
#### **Risks:**

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

# NorthSTAR Program Management

# CIP: C800544 – NS NorthSTAR Program Management (continued) ANTICIPATED COMMISSION ACTIONS

2014



<sup>\*</sup> NSAT Baggage Expansion not included in current NorthSTAR scope or budget.

### **NS NSAT Renovation & NSTS Lobbies**

Project Status Good

#### CIP: C800556 - NS NSAT Renovation & NSTS Lobbies

#### **Purpose:**

- Renovate and expand the satellite, including infrastructure, seismic reinforcement, gate relocations, north loop STS stations, and new penthouse shell
- Provide improved travel experience for customers, improved working environment for employees and long-term energy savings and operational efficiencies.

#### **Accomplishments**:

- Solicited for GC/CM Contractor, received four proposals and shortlisted 3 firms for interviews.
- Completed 30% design review and cost estimate reconciliation.
- Project remains within budget based on reconciled 30% cost estimate.
- Completed Sustainability Report with recommendations on what to design into the project.
- Completed the analysis of aircraft layouts and ground equipment at NSAT gates.
- Received Airline approval via MII process and Commission authorization to expand the satellite and the associated budget increase.

#### **Progress:**

- Continuing to evaluate gate utilization and availability during construction
- Continuing the selection process for a GC/CM contractor
- Finalizing the need to incorporate future NSAT baggage system expansion and infrastructure enhancement to support further expansion into the scope of NSAT building expansion
- Assisting AAG on analysis of aircraft layouts and ground equipment at NSAT gates.

# **NS NSAT Renovation & NSTS Lobbies**

#### CIP: C800556 - NS NSAT Renovation & NSTS Lobbies (continued)

#### **Issues:**

- Current forecasted construction completion date is Q3 2019.
- Procurement strategy for long-lead items must be developed.
- Dual taxi-lane impacts to scope and potential ramp equipment congestion.
- Decision on future NSAT baggage system capacity needed to allocate adequate space for additional piers.

#### **Metrics:**

| Project Metrics                 | Actual  | Planned/<br>Forecast |
|---------------------------------|---------|----------------------|
| Spending against Budget         | \$7.9M  | \$399.7M             |
| Overall Schedule Progress       | 3%      | 3%                   |
| Cashflow this reporting period  | \$2.5M  | \$2.5M               |
| Contingency Remaining           | \$36.9M | \$40.7M              |
| SCS Participation (Design)      | 22.4%   | 6.0%                 |
| SCS Participation (Construction | 0.0% *  | 0.0% *               |
| Apprenticeship Utilization      | 0.0% *  | 15.0%                |
| Minority Utilization            | 0.0% *  | 15.0%                |
| Women Utilization               | 0.0% *  | 10.0%                |
| Preferred Entry Apprentices     | 0 *     | 1 in 5               |

<sup>\*</sup> No information available yet – Too early to report

## NS NSAT Renovation & NSTS Lobbies

### **CIP: C800556 - NS NSAT Renovation & NSTS Lobbies (continued)**

#### Risks:

- Existing mechanical and electrical capacity may not be adequate for NSAT expansion.
- Modifications to the existing 400Hz motor generators may increase costs.
- Baggage handling system refurbishment requirement may be impacted by expansion decision.

### NS Concourse C Vertical Circulation

#### CIP: C800547 - NS Concourse C Vertical Circulation

**Project Status Good** 

#### **Purpose:**

- Install 1:20 sloped walkways and elevators at C2/4, C10 and C14 to improve vertical circulation.
- Increase operational efficiency and improve customer service and safety.

#### **Accomplishments**:

- Steel erected at C2 and C16. Elevator towers poured.
- AAG's Gate C2 Ground-Level Passenger Walkway nearing completion, opens late October.
- eGSE 100% design permitted for relocation, reinstallation construction at Gate C2, has commenced.
- Underground grease interceptor piping transferred to project to minimize disruption to airline.
- 90% technical review complete for C Concourse Employee Space (AAG tenant project).
- Identified and transferred \$3.2M potential savings to C800544 NorthSTAR Program management reserve.

#### **Progress:**

- Construction efforts progressing as planned.
- Review of Forma construction schedule to address delay.

#### Issues:

None



C2 Structural Steel Erection



C10 Elevator Shaft Pour







iway 13

# NS Concourse C Vertical Circulation

### CIP: C800547 - NS Concourse C Vertical Circulation (continued)

#### **Metrics:**

| Project Metrics                      | Actual | Planned/<br>Forecast |
|--------------------------------------|--------|----------------------|
| Spending against Budget              | \$4.3M | \$15.4M              |
| Overall Schedule Progress            | 82%    | 82%                  |
| Delayed Outbound Bags                | 0      | 0                    |
| Delayed Outbound Flights             | 0      | 0                    |
| Safety Hazard Reports (Level 2+)     | 0      | 0                    |
| Customer Complaints Received         | 0/mo   | <5/mo                |
| Construction Change Orders processed | 4      | 0                    |
| Contingency Remaining                | \$1.0M | \$2.0M               |
| SCS Participation (Design)           | 31.0%  | 33.4%                |
| SCS Participation (Construction)     | 2.7%   | 6.0%                 |
| Apprenticeship Utilization           | 0.0% * | 15.0%                |
| Minority Utilization                 | 0.0% * | 15.0%                |
| Women Utilization                    | 0.0% * | 10.0%                |
| Preferred Entry Apprentices          | 0 *    | 1 in 5               |

<sup>\*</sup> No information available yet – Too early to report

#### Risks:

• Unforeseen underground utilities

# Main Terminal Improvements

### **CIP: C800545 - NS Main Terminal Improvements**

Project Status Good

#### **Purpose:**

- Renovate the north portion of the Main Terminal improving curbside, ticket lobby area, Checkpoint (#5), signage and dynamic messaging.
- Improve the customer experience, operating efficiencies and overall aesthetics of the North Main Terminal.

### **Accomplishments:**

Landrum & Brown under contract for facility determination analysis.

#### **Progress:**

Kickoff meetings with project team to begin in early October.

#### Issues:

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

#### **Metrics:**

TBD

#### Risks:

Least defined scope relative to the program budget.

# NS Refurbish Baggage System

#### CIP: C800555 - NS Refurbish Baggage System

Project has no float remaining on the Schedule

#### **Purpose:**

- Refurbish existing baggage system to support Alaska Airlines operations on the North Satellite and Concourse D.
- Extend the service life of C88 at satellite and in tunnel and a portion of C92 in Concourse D.

#### **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 loop revised layout.
- Closed out existing design consultant service directives.
- Concourse D mini sort area demolition complete and ready for construction.
- Identified and transferred \$2.0M potential savings to C800544 NorthSTAR Program management reserve.

#### **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:

 North Satellite motor control center and independent loop design bulletins may delay North Satellite in use date.

### **CIP: C800555 - NS Refurbish Baggage System - Progress photos**



**CER Virtual Server Power Panel** 



NSAT motor control panel room regulated materials enclosure



NSAT regulated materials enclosure



Concourse D Conveyor Motor Control Panel

# NS Refurbish Baggage System

### **CIP: C800555 - NS Refurbish Baggage System (continued)**

**Metrics:** 

| Project Metrics                      | Actual | Planned/<br>Forecast |
|--------------------------------------|--------|----------------------|
| Spending against Budget              | \$2.2M | \$19.4M              |
| Overall Schedule Progress            | 69%    | 98%                  |
| System Shutdowns                     | 2      | 10                   |
| Operational Impacts                  | 0      | 0                    |
| Unplanned system Downtime <15 min    | 0      | 0                    |
| Construction Change Orders processed | 3      | 0                    |
| Contingency Remaining                | \$2.0M | \$1.3M               |
| SCS Participation (Design)           | 19.0%  | 14.3%                |
| SCS Participation (Construction)     | 0.0%   | 5.0%                 |
| Apprenticeship Utilization           | 0.0% * | 15.0%                |
| Minority Utilization                 | 0.0% * | 15.0%                |
| Women Utilization                    | 0.0% * | 10.0%                |
| Preferred Entry Apprentices          | 0 *    | 1 in 5               |

<sup>\*</sup> 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.
- TSA baggage optimization may have impacts to overall project schedule and scope. Coordinating with project manager to ensure systems are compatible and minimal revisions required for future optimization project.

## NS Concourse C & D Exterior Stairs

#### CIP: C800554 - NS Concourse C&D Exterior Stairs

#### **Purpose:**

• Add exterior stairs to Concourse C & D to enplane and deplane aircraft from the front and rear doors at locations identified by Alaska Air Group (AAG).

#### **Accomplishments**:

• This is a Status 1 prospective project. A decision whether to include in the program will be made in the future.