



# SEATAC INTERNATIONAL AIRPORT

## NORTHSTAR PROGRAM

PROGRAM COMMISSION UPDATE  
FIRST QUARTER 2014



## NORTHSTAR PROGRAM

### C800544 – NS NorthSTAR Program – George England, Program Manager

Overall management of the NorthSTAR program including program controls.

### C800556 – NS NSAT Renov NSTS Lobbies – Greg Vouros, Project Manager

Renovation and expansion of the North Satellite, including seismic reinforcement, gate relocations and penthouse.

### C800547 – NS Conc C Vertical Circulation – Joe Nessel, Project Manager

Exterior vertical circulation at Concourse C gates C-2/4, C-10/12 and C-14 to improve efficiency and customer service.

### C800545 – NS Main Terminal Improvements – Joe Nessel, Project Manager

Improvements to curbside, ticket lobby, Main Terminal north checkpoint (#5), and demolition of Zone 7 ticket counters.

### C800555 – NS Refurbish Baggage System – Ken Warren, Project Manager

Baggage system refurbishment in support of Alaska Air Group (AAG) operations in the North Satellite and Concourse D.

### C800554 – NS Concourse C&D Exterior Stairs – **Not Yet Approved**

New exterior stairs at Concourses C & D to enable aft loading of aircraft. (Project is currently Status 1.)



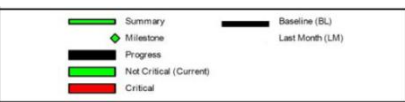
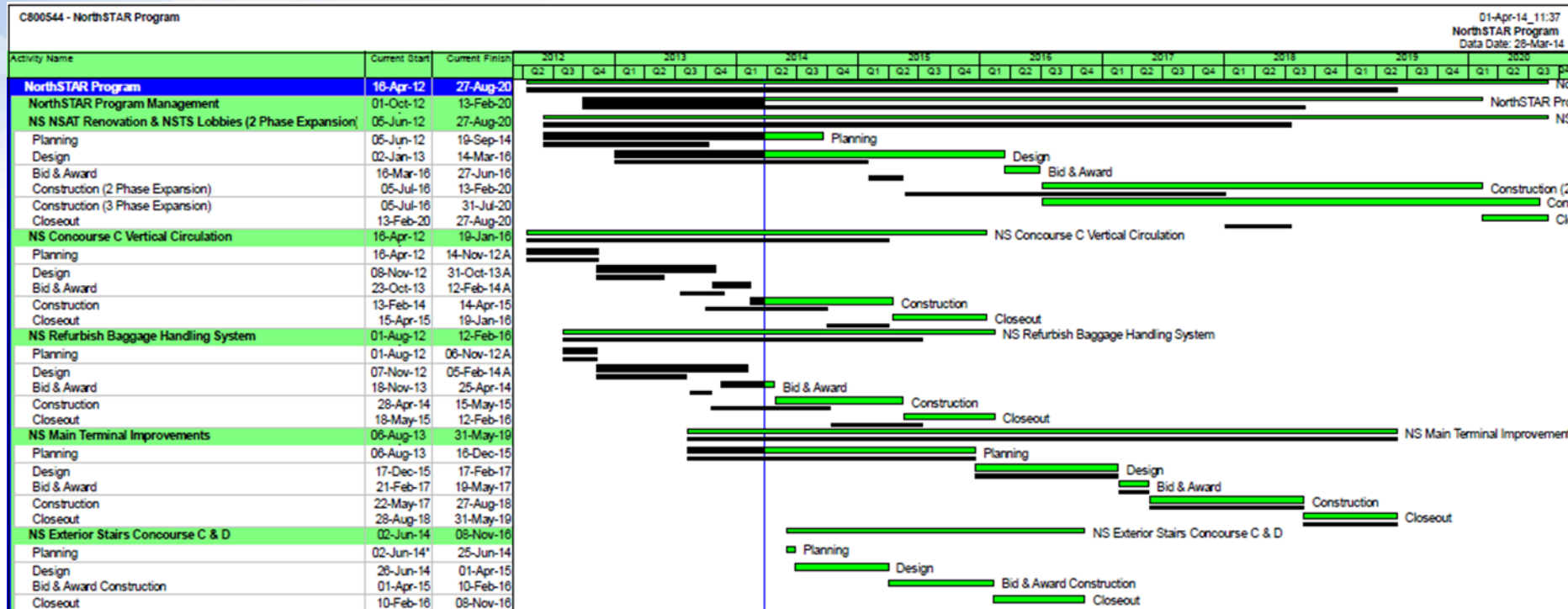
# NORTHSTAR PROGRAM OVERALL BUDGET

Estimated : \$490M

FINANCIAL STATUS: NorthSTAR Program								
	Original Budget \$	Approved Transfers/Trends \$	Current Budget \$	Current Authorization \$	Pending Transfers/Trends \$	Remaining Contingency \$	Expended to Date \$	Forecast at Completion \$
<b>C800544</b>								
NS NorthSTAR Program	\$ 13,000,000	\$ 2,400,000	\$ 15,400,000	\$ 3,600,000	\$ -	\$ 264,598	\$ 2,030,184	\$ 15,400,000
<b>C800545</b>								
NS Main Terminal Improvements	\$ 30,000,000	\$ (800,000)	\$ 29,200,000	\$ 1,500,000	\$ -	\$ 2,606,000	\$ 44,063	\$ 29,200,000
<b>C800547</b>								
NS Conc C Vertical Circulation	\$ 19,300,000	\$ (774,700)	\$ 18,525,300	\$ 18,511,311	\$ -	\$ 3,203,811	\$ 1,783,440	\$ 18,525,300
<b>C800555</b>								
NS Refurbish Baggage System	\$ 22,000,000	\$ (500,000)	\$ 21,500,000	\$ 21,500,000	\$ -	\$ 2,853,602	\$ 1,190,587	\$ 21,500,000
<b>C800556</b>								
NS NSAT Renov NSTS Lobbies	\$194,300,000	\$ 14,046,357	\$208,346,357	\$ 32,933,556	\$ 175,201,643	\$ 20,823,000	\$ 4,355,623	\$383,548,000
<b>MANAGEMENT RESERVE</b>	\$ -				\$ -	\$ 3,765,402		\$ -
<b>Subtotal</b>	<b>\$278,600,000</b>	<b>\$ 14,371,657</b>	<b>\$292,971,657</b>	<b>\$ 78,044,867</b>	<b>\$ 175,201,643</b>	<b>\$ 33,516,413</b>	<b>\$ 9,403,897</b>	<b>\$468,173,300</b>
<b>C800554</b>								
NS Exterior Stairs Conc C&D	\$ 21,400,000	\$ -	\$ 21,400,000	\$ -	\$ -	\$ 3,168,779	\$ -	\$ 21,400,000
<b>Total</b>	<b>\$300,000,000</b>	<b>\$ 14,371,657</b>	<b>\$314,371,657</b>	<b>\$ 78,044,867</b>	<b>\$ 175,201,643</b>	<b>\$ 36,685,192</b>	<b>\$ 9,403,897</b>	<b>\$489,573,300</b>
Expense / 104656 Alaska NSAT & Conc C			\$ 278,891	\$ 278,891	\$ -	\$ -	\$ 278,891	\$ 278,891
Expense / U00072 NS Tenant Impvmt			\$ 315,400	\$ 315,400	\$ -	\$ -	\$ 66,478	\$ 95,400
Expense / U00094 Conc C - PLB			\$ 275,000	\$ 275,000	\$ -	\$ -	\$ 48,940	\$ 275,000
Expense / U00095 Conc C - eGSE			\$ 500,000	\$ 500,000	\$ -	\$ -	\$ 23,525	\$ 500,000



# NORTHSTAR PROGRAM OVERALL SCHEDULE




	North STAR Program Progress			
	Design Phase		Construction Phase	
	Plan	Actual	Plan	Actual
North Satellite/STS Renov.	30%	17%	0%	0%
Conc C Vertical Circulation	100%	100%	45%	0%
Refurbish Baggage Handling	100%	100%	40%	0%
Main Terminal Improvemem	0%	0%	0%	0%
Conc C/D Exterior Stairs	0%	0%	0%	0%



## NORTHSTAR PROGRAM




### CIP: C800544 – NS NorthSTAR Program

 Program Behind Schedule

#### Accomplishments:

- Monthly Program Status Reviews with AAG.
- Received updated AAG organization chart with refined roles & responsibilities.
- Completed fourth quarter 2013 Commission briefing.
- Presented quarterly program update to the Airport Airlines Affairs Committee (AAAC) and at Port/AAG Summit.
- Developed initial public & employee communication plan for each project within the program.
- Developed project status legend for immediate awareness of project status as follows:

LEGEND:

-  - Reflects Good Status on Budget and Schedule
-  - Reflects Concern on Budget and No Float remaining on Schedule
-  - Reflects Additional Budget Required or Behind Schedule



## NORTHSTAR PROGRAM

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

#### **Progress:**

- Evaluating AAG's refined roles & responsibilities for incorporating into program's decision matrix.
- Updating program organizational chart to reflect AAG changes that better support the program.
- Updating overall program schedule to reflect schedule changes to each project.

#### **Issues:**

- Continue refining Program/Project specific performance metrics per Commission request.





## NORTHSTAR PROGRAM

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

#### Metrics:

Program Progress	Actual	Planned /Forecast
Cashflow (for 1st Qtr 2014)	\$1.91M	\$2.63M
Budget	\$314.7M	\$489.6M
Schedule % Complete	2.0%	5.1%
Contingency Remaining	\$36.69M	\$29.48M

#### Risks:

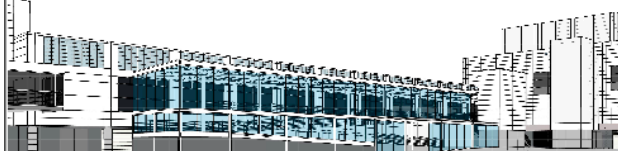
- Communication and coordination between multiple teams, stakeholders and people.
- Assure baseline schedule concurrence of all stakeholders.



## What's Going On?

### NEW COVERED WALKWAYS

The Port of Seattle, in partnership with Alaska Airlines, is building new covered walkways to shelter you from the weather, and enhance your experience all the way to your plane on the tarmac.



Gate C2

Upgraded Access Coming in Spring 2015

## UPGRADING YOUR EXPERIENCE

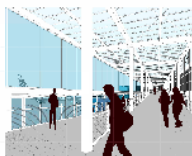
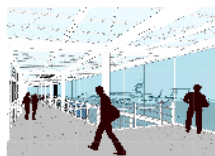
### New covered walkways coming in 2015

**What:** Gently sloping walkways, new covered ground walkways, and new elevators on Concourse C at C2, C10 & C16

**When:** Construction through Spring of 2015

**Why:** Improve your experience getting to and from the aircraft

- No more carrying bags up and down the stairs
- Better access for travelers with wheelchairs and strollers
- Shelter from the weather



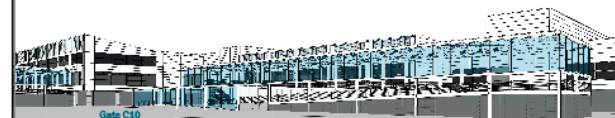
## COVERING YOUR JOURNEY

### Upgraded access coming in 2015

#### What to Expect:

- Construction primarily outside the terminal
- Walking around cones and going through construction tunnels to and from the aircraft
- Easy to follow pathways, clear signage, and assistance from employees to help you find your departure gate without delay

**This renovation is an unprecedented working arrangement between the Port of Seattle and Alaska Airlines to better serve passengers.**



Gate C10

SEATTLE-TACOMA INTERNATIONAL AIRPORT



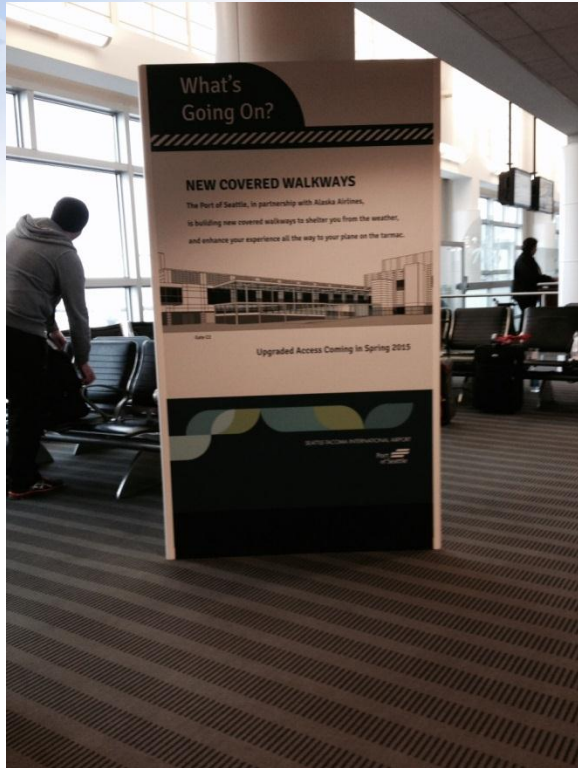
SEATTLE-TACOMA INTERNATIONAL AIRPORT



SEATTLE-TACOMA INTERNATIONAL AIRPORT







## NS NSAT RENOVATION & NSTS LOBBIES

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



Project Behind Schedule  
Budget Action Pending

#### Accomplishments:

- Completed the 15% conceptual design phase with the basis of design report that selected the best conceptual design for continued development.
- Briefed the Commission on the need and recommendation to expand the satellite and add five additional gates.
- Completed six days of multi-disciplinary design workshops to start 30% design.
- Refined construction phasing options and associated schedules validating two phased construction is viable.
- Completed NSAT Level-of-Service analysis that refined the concourse and penthouse floor plans to better balance holdrooms, concessions and circulation.
- Developed prioritized list of potential sustainable design options for further evaluation during design.
- Evaluated existing NSAT STS loop wayfinding signage recommending immediate interim improvements.
- Made decision to evaluate GCCM project delivery for NSAT renovation based on recent changes in law.
- Port and AAG determined piers are preferred if the NSAT baggage system is expanded.
- Incorporated dual door operations into NSAT at AAG's request for its evaluation.



## NS NSAT RENOVATION & NSTS LOBBIES

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

#### Progress:

- Refining details of holdrooms, restrooms, concession lease areas, support spaces, circulation, and shared public space.
- Developing and evaluating building massing studies.
- Staff collaborating to develop sustainable design concepts for the renovation to reduce energy and water use.
- Evaluating experiential sustainable concepts for possible inclusion into the design
- AAG evaluating implementation of dual door operations to NSAT design.
- Evaluating the incorporation of a tri-taxilane at the perimeter of NSAT.
- Continuing negotiations with the design team for the expansion of NSAT.
- AAG is continuing to develop innovative ways to process departing passengers at NSAT.
- Continuing to develop concepts for using technology to enhance passenger experience within NSAT.
- Developing phasing plans that will minimize passenger inconvenience during construction.
- Conducting passenger survey pertaining to STS transit between NSAT and main terminal.



## NS NSAT RENOVATION & NSTS LOBBIES

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

#### **Issues:**

- Commission had not yet authorized the expansion of the satellite and add five additional gates.
- Construction phasing options require coordination with AAG 2017 – 2022 projected gate operations.
- Procurement strategy for long-lead procurement items must be developed.
- Need decision by May 19, 2014 on AAG incorporating dual door operations into NSAT expansion.

#### **Risk:**


- Airlines nor Commission support expanding the satellite.
- Ability to minimize disruption to Airport operations (AAG & concessions) during construction.
- Extended overall project schedule due to Dual Door option evaluation and construction phasing.
- Inadequate existing electrical and mechanical infrastructure to support facility expansion.





## NS CONCOURSE C VERTICAL CIRCULATION

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

 Project has no float remaining on the Schedule

#### Accomplishments:

- Received 7 bids; Forma Construction Co. low at \$8,719,940; 15% below the engineer's estimate of \$10,249,300.
- Awarded contract to Forma.
- PCS removed four (4) passenger loading bridges in March. Impacted Horizon inbound flights at 1 gate during first bridge removal. Subsequent bridge removals occurred without issue.

#### Progress:

- Pre-construction submittals by Forma progressing well ; NTP for construction anticipated in April.
- Conducting extensive construction coordination between Port, AAG and respective contractors.

#### Issues:

- Complex phasing of sloped walkways to maintain airline operations during construction
- Extensive coordination with AAG ground level walkways construction.





## NS CONCOURSE C VERTICAL CIRCULATION

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

#### Metrics:

Concourse C Vertical Circulation	Actual	Anticipated / Planned
Delayed Outbound Bags	0	0
Delayed Outbound Flights	0	0
Safety Hazard Reports (Above Level 2)	0	0
Customer Complaints Received	0/mo	5/mo
Construction Change Orders Processed	0	0

Two situations: Had wingtip clearance item during restriping of aircraft positions that required monitoring AAG determined not a hazard. Delayed Horizon inbound morning flights at 1 gate during removal of the C10 loading bridge that AAG determined not a hazard since it was corrected in a timely manner.

#### Risk:

- Contractor impacted by changes to construction phasing due to operations.
- Addition of scope due to unforeseen aesthetic issues and changes to operations.





Horizon Planes new parking spaces



C12 Bridge Removal



Where old C4 walkway Came Out



C2 Temporary Walkway







737-800 Fit Test at new C8 Parking spot



## MAIN TERMINAL IMPROVEMENTS

### CIP: C800545 - NS Main Terminal Improvements



Project behind Schedule

#### Accomplishments:

- Advertised for Consultant to perform preliminary engineering and facility analysis.

#### Progress:

- Responding to proposers questions; statements of qualifications due in April.

#### Issues:

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

#### Risk:

- 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

#### Accomplishments:

- Commission authorized advertisement for bid and use of Port crews.
- Completed Bid documents incorporating independent reviewer comments, results from the completed C-92 Final Failure Analysis and removal of regulated materials (asbestos).
- Received building permit and advertised for bids in February.
- PCS began upgrades to baggage system in tunnel.

#### Progress:

- Responding to contractor questions and issue addenda as necessary.
- Closing out existing Consultant service directives and negotiating for construction support.
- PCS continues upgrading baggage system in tunnel

#### Issues:

- Consultant performance resulted in 8 week delay; notified responsible for associated future impacts.
- Extended Substantial Completion 26 weeks due to changes in design, Consultant performance, construction sequencing, operational constraints requested by AAG, scope additions and cost increases.





## NS REFURBISH BAGGAGE SYSTEM

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

#### Metrics:

Refurbish Baggage System	Actual	Anticipated / Planned
System Shutdowns	1	10
Operational Impacts	0	8
Unplanned System Downtime < 15 min	0	0
Construction Change Orders Processed	0	0

#### Risk:

- NSAT expansion decision may impact baggage handling system refurbishment requirements as to capability to handle forecasted bag volume and speed. Evaluating mitigation options.





Power Turn Demolition



Power Turn in Progress



Tunnel Power Turn



TC2 44 Installed



## NS CONCOURSE C&D EXTERIOR STAIRS

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

#### **Accomplishments:**

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

