

SeaTac International Airport



NorthSTAR Program

**Program Commission Update
First Quarter 2015**



NorthSTAR Program

The **North Sea-Tac Airport Renovation** (NorthSTAR) Program is a collaboration between the Port of Seattle and Alaska Airlines to better serve passengers and improve operational efficiency. This program consists of renovating and expanding the north satellite, improving the north main terminal, refurbishing the 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 and working environment for employees

Outcome:

- Facility modernization ; seismic reinforcement; enhanced traveler amenities; new contact gates; long-term energy savings; and operational efficiencies

Mission Statement

ACTIVE PROJECTS

●	C800554	WP 104802	NS NorthSTAR Program Management	George England, Program Mgr
●	C800556	WP 104791	NS NSAT Renovation NSTS Lobbies	Joe Nessel, Project Mgr
●	"	WP U00019	NS NSAT STS Roof Leak Repairs	Joe Nessel, Project Mgr
●	"	WP U00209	NS NSAT Art Program	Colleen McPoland, Project Mgr
◆	C800547	WP 104784	NS Conc C Vertical Circulation	Joe Nessel, Project Mgr
●	C800545	WP U00042	NS Main Terminal Improvements	Joe Nessel, Project Mgr
▲	C800555	WP 104792	NS Refurbish Baggage System	Ken Warren, Project Mgr

PENDING PROJECTS

C800554 WP TBD NS Exterior Stairs Conc C&D

EXPENSE PROJECTS

	WP 104656	Alaska NSAT & Conc C (CLOSED)	
●	WP U00072	NorthSTAR TI Work	Doug Honeyman, Project Mgr
●	WP U00094	PLB Relocation at C14	Joe Nessel, Project Mgr
●	WP U00095	eGSE Relocation at Concourse C	Doug Honeyman, Project Mgr
●	WP U00129	CM Office	Joe Nessel, Project Mgr
▲	WP U00130	BHS RMM	Ken Warren, Project Mgr
●	WP U00137	Project Activation	Doug Honeyman, Project Mgr
●	WP U00148	MCP Expansion Tenant Move	Ken Warren, Project Mgr
●	WP U00167	Misc Expense - NSAT	Joe Nessel, Project Mgr
●	WP U00207	NSAT RMM - Contaminated Soils	Joe Nessel, Project Mgr
●	WP U00208	NSAT RMM - Asbestos Removal	Joe Nessel, Project Mgr

Legend:

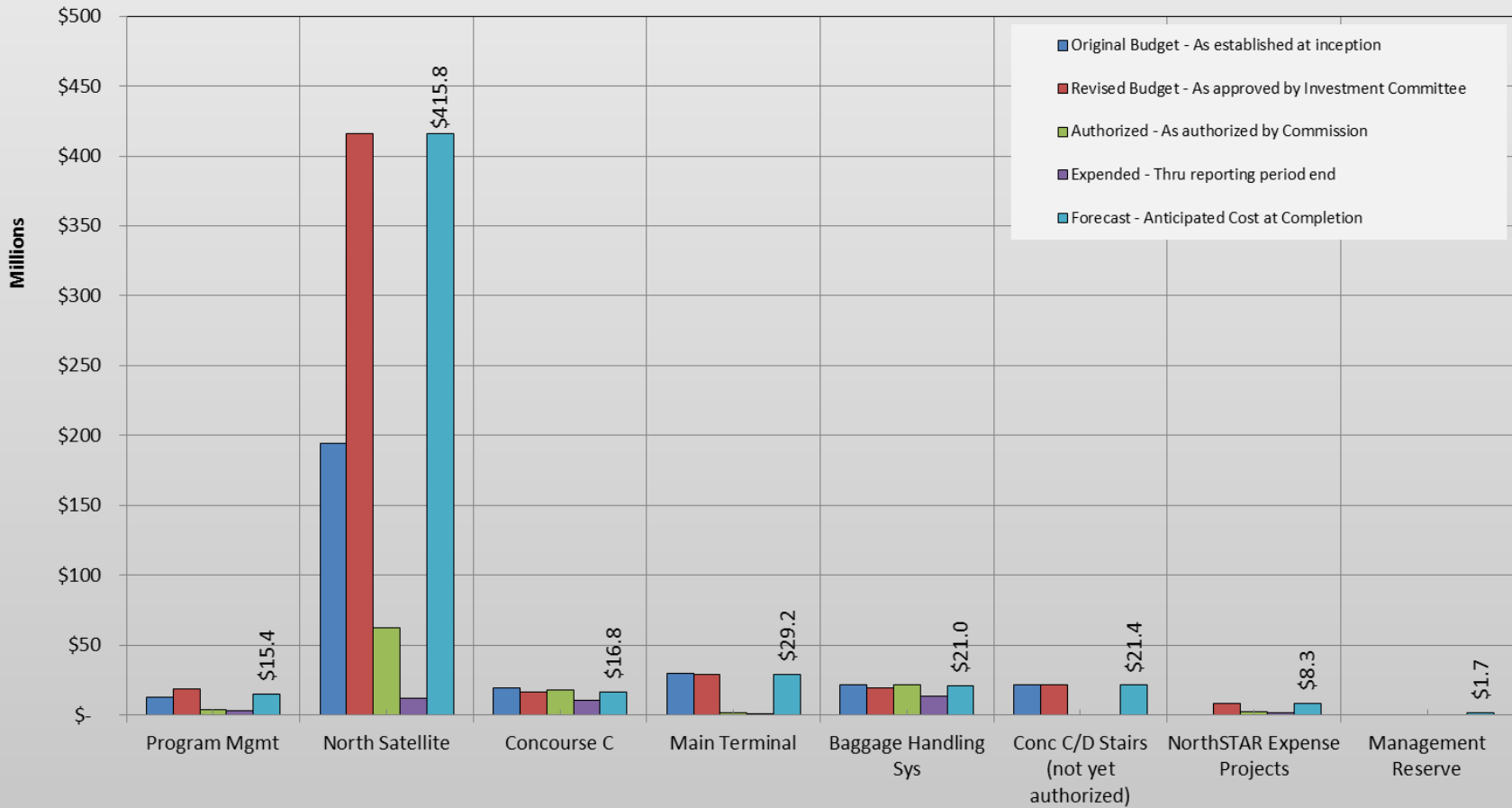
- ◆ - Reflects Additional Budget Required or Behind Schedule
- ▲ - Reflects concern on Budget or No Float remaining on Schedule
- - Reflects Good Status on Budget and Schedule

Estimated Total : \$530M

Approved: \$508M*

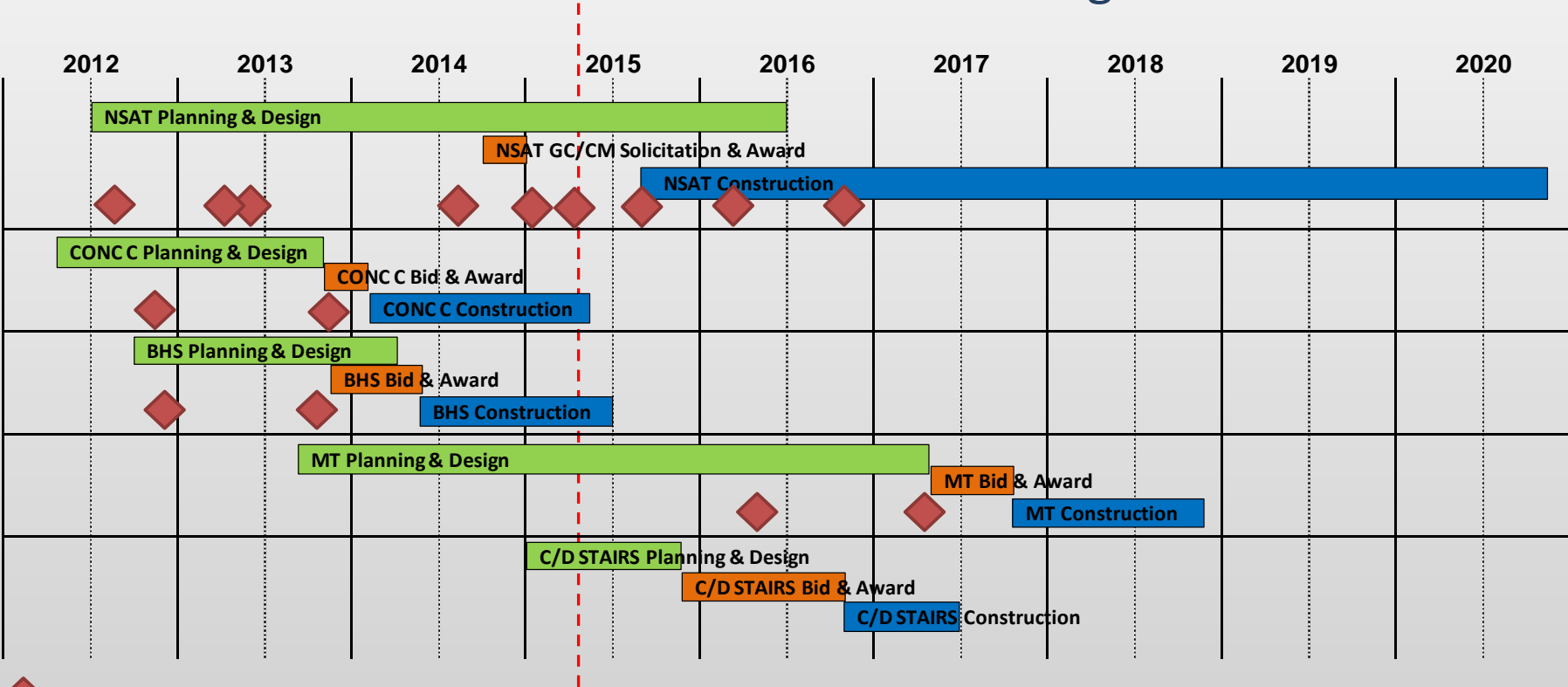
(* Conc C/D Stairs remaining to be authorized)

NorthSTAR Program Overall Budget



Q1 2015 - Program operating within budget

NorthSTAR Program Overall Schedule

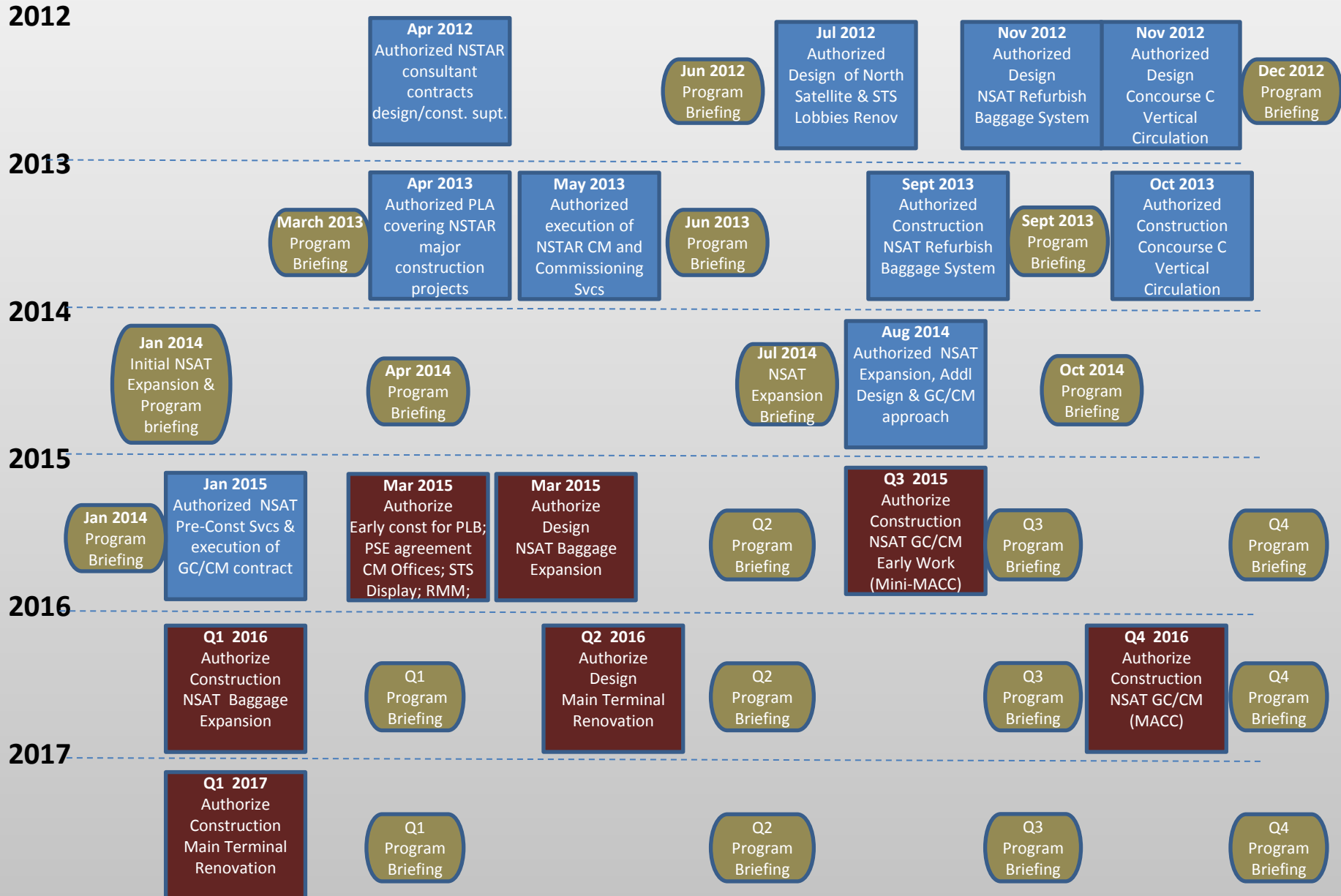


◆ = Commission Authorization

NorthSTAR Program Progress						
	Design		Construction		Overall	
	Plan	Actual	Plan	Actual	Plan	Actual
North Satellite/STS Renovation	70%	51%	0%	0%	7%	3%
Concourse C Vertical Circulation	100%	100%	94%	86%	95%	88%
Refurbish Baggage Handling Sys	100%	100%	85%	85%	86%	86%
Main Terminal Improvements	3%	3%	0%	0%	1%	1%
Concourse C/D Exterior Stairs	0%	0%	0%	0%	0%	0%

Q1 2015 - Schedules/% Progress – Concourse C & Baggage behind

NorthSTAR Program Commission Action



NorthSTAR Program Management

CIP: C800544 – NS NorthSTAR Program Management

 Project Status Good

Purpose:

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

Accomplishments:

- Re-organized Port project management team structure due to a retirement
- Replaced Consultant Program Scheduler
- Presented update to AAAC

Progress:

- Updated Master Schedule with changes to project schedules in design/construction.

Issues:

- Tracking programmatic impacts due to delays on specific NorthSTAR projects

Q1 2015 Progress – Program Management

NorthSTAR Program Management

CIP: C800544 – NS NorthSTAR Program Management (continued)

Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	41%	36%
SCS Participation (Program Management)	27.0%	14.8%

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs *	\$18.8M	\$3.0M	\$15.8M
Estimated Contingency (including Mgmt Reserve)	\$0.94M		\$5.0M
Q1 Cashflow	\$310k	\$230k	

* Contingency included

Risks:

- Communication and coordination between multiple teams, stakeholders and people
- Maintain baseline schedule agreed to by all stakeholders

Q1 2015 Metrics/Risks – Metrics within tolerance

NS NSAT Renovation & NSTS Lobbies

CIP: C800556 - NS NSAT Renovation & NSTS Lobbies

 Project Status Good

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:

- Progressing 60% Design Submittal – Resolved most significant open building design issues
- Implemented Dual Door architectural modifications
- Commission authorized \$1,954,000 for designing baggage system expansion
- Prepared MII ballot to expand NSAT baggage handling system; awaiting submission
- Finalized decision to seek LEED certification and held kickoff meeting; silver obtainable
- Executed contract with Hensel Phelps, General Contractor/Construction Manager (GC/CM)
- Hensel Phelps began preconstruction services; conducted pull planning session & phasing review

Progress:

- Hensel Phelps leading evaluation of construction phasing options with Port & AAG to maximize gate utilization and availability during construction
- Continue evaluating other sustainable features to incorporate into building design

Q1 2015 North Satellite – Design progressing, contractor started, pursuing LEED

NS NSAT Renovation & NSTS Lobbies

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

Issues:

- Current forecasted construction completion date is Q3 2020
- Procurement strategy for long-lead items must be developed
- Tri (Dual) taxi-lane, Port and AAG design inputs delayed 60% design by 8 weeks
- Ramp and apron layout will not accommodate all ground service equipment

Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	7%	3%
SCS Participation (Design)	3.3%	0.9%
SCS Participation (Const)	0.0% *	0.0% *
Apprenticeship Utilization	15.0%	0.0% *
Minority Utilization	15.0%	0.0% *
Women Utilization	10.0%	0.0% *
Preferred Entry Apprentices	1 in 5	0 *

* No Information available yet – Too early to report

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs (including Contingency)	\$415.8M	\$12.4M	\$403.4M
Estimated Contingency	\$40.7M		\$35.6M
Q1 Cashflow	\$2.5M	\$2.2M	

Q1 2015 Issues/Metrics – North Satellite – competing demands delaying project

NS NSAT Renovation & NSTS Lobbies

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

Risks:


- Scope additions absorbed by project at 30% may adversely impact project budget; Evaluate budget at conclusion of 60% design cost estimate Q3, 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

Q1 2015 Risks – North Satellite – Budget, schedule & operations

NS Concourse C Vertical Circulation

CIP: C800547 - NS Concourse C Vertical Circulation

Purpose:

 Project is behind schedule

- Install 1:20 sloped walkways and elevators at C2, C10 and C16 to improve vertical circulation.
- Increase operational efficiency and improve customer experience and safety.

Accomplishments:

- C2, C10, & C16 Walkways: Steel erected, translucent roofing and precast concrete walkway panels installed. Elevator installs continuing.
- C16 Walkway: Laminated glass panels installed.
- C2 and C10: Use of new doors and stairways continuing.

Progress:

- Construction efforts progressing for walkway completions by beneficial completion date. Elevator installs behind schedule.
- Extensive daily coordination between Port and AAG's Contractors due to congested work areas
- Thirty-eight (38) remaining eGSE chargers complete by June 2015

Issues:

- C10 Elevator 4 – 5 weeks late. Aggressive construction market impacting availability of qualified workforce.

Q1 2015 - Concourse C – Progress – Ramps nearly done, elevators late



C2 Phase 2 Walkway Interior



C10 Phase 2 Walkway Exterior



Q1 2015 Concourse C Construction Photos - Ramps

C16 Walkway w/ Laminated Glass



C16 Walkway Interior

NS Concourse C Vertical Circulation

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

Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	89%	82%
Delayed Outbound Bags	0	0
Delayed Outbound Flights	0	0
Safety Hazard Reports (Level 2+)	0	0
Customer Complaints Rec'd	<5/mo	2/mo
Construction Change Orders processed	0	29
SCS Participation (Design)	33.4%	27.7%
SCS Participation (Construction)	6.0%	16.8%
Apprenticeship Utilization	15.0%	13.1%
Minority/Women Utilization	25.0%	8.0%
First Year Apprentices	25.0%	18.5%

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs (including Contingency)	\$16.8M	\$10.8M	\$6.0M
Estimated Contingency	\$2.0M		\$1.3M
Q1 Cashflow	\$3.4M	\$2.4M	

- Customer complaints associated with length of alternate route for wheelchair-assisted passengers during recent phases of construction

Risks:

- Elevator installations impacted due to workforce shortage resulting from aggressive construction market
- Congested work area and coordination with AAG's covered walkway project

Q1 2015 Concourse C - Metrics/Risks – Elevators behind schedule

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:

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

Progress:

- Update passenger forecast and develop final alternatives for ticketing lobby and checkpoints

Issues:


- Coordination with NSAT design concept to ensure a cohesive look/feel, AAG & TSA on Checkpoint 5 reconfiguration and Sustainable Airport Master Plan

Risks:

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

Q1 2015 – Main Terminal - Progress/Risks – Developing more alternatives

NS Refurbish Baggage System

 Project has no float remaining on the Schedule

CIP: C800555 - NS Refurbish Baggage System

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:

- 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 – identified a number of revisions

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.

Q1 2015 – Baggage – Progress – Partially operational, safety issues, contractor claims

CIP: C800555 - NS Refurbish Baggage System

C88 Mainline 1 Conveyor
back in operation



C88 Mainline 1 Operating



C88 Motor Control Room
operating



Q1 2015 – Baggage - Construction Photos – Completed baggage elements

NS Refurbish Baggage System

CIP: C800555 - NS Refurbish Baggage System (continued)

Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	79%	79%
System Shutdowns	10	5
Operational Impacts	0	1
Unplanned System downtime > 15 min.	0	0
Construction Change Orders processed	0	19
SCS Participation (Design)	14.3%	9.2%
SCS Participation (Construction)	5.0%	7.81%
Apprenticeship Utilization	15.0%	16.4% *
Minority/Women Utilization	33.0%	29.1% *
First Year Apprentices	50.0%	56.4% *

* Early in the project – expect numbers to increase over time

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 milestone.

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs (including Contingency)	\$19.4M	\$13.5M	\$5.9M
Estimated Contingency	\$1.3M		\$0M
Q1 Cashflow	\$4.9M	\$3.6M	

Q1 2015 – Baggage - Metrics/Risks – On schedule but very tight, budget

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

Q1 2015 – Exterior Stairs – On Hold