

# Sea-Tac International Airport



## NorthSTAR Program

**Program Commission Fourth Quarter 2015 Update  
and North Satellite Project Update**



# NorthSTAR Program

The **North Sea-Tac Airport Renovation** (NorthSTAR) Program is being planned and delivered in collaboration with 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	Ken Warren, Project Mgr
	"	WP U00019	NS NSAT STS Roof Leak Repairs	Ken Warren, Project Mgr
	"	WP U00209	NS NSAT Art Program	Colleen McPoland, Project Mgr
	"	WP U00221	NS STS Train Display	Doug Honeyman, Project Mgr
	C800547	WP 104784	NS Conc C Vertical Circulation	COMPLETED
	C800545	WP U00042	NS Main Terminal Improvements	ON HOLD
	C800555	WP 104792	NS Refurbish Baggage System	COMPLETED

## EXPENSE PROJECTS

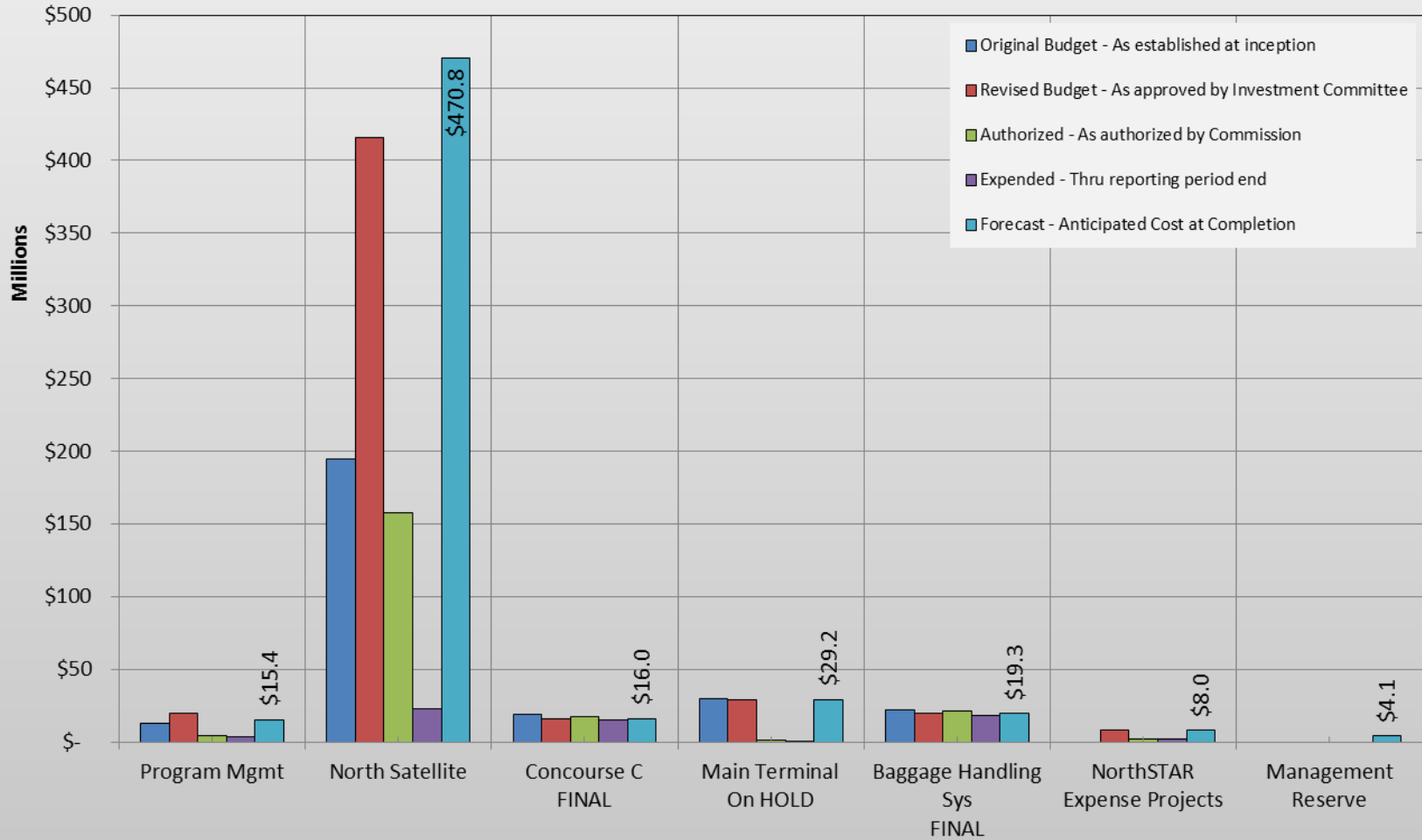
	WP 104656	Alaska NSAT & Conc C (CLOSED)	CLOSED
	WP U00072	NorthSTAR TI Work	Doug Honeyman, Project Mgr
	WP U00094	PLB Relocation at C14	COMPLETED
	WP U00095	eGSE Relocation at Concourse C	COMPLETED
	WP U00129	CM Office (Retired)	COMPLETED
	WP U00130	BHS RMM	COMPLETED
	WP U00137	Project Activation	Doug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

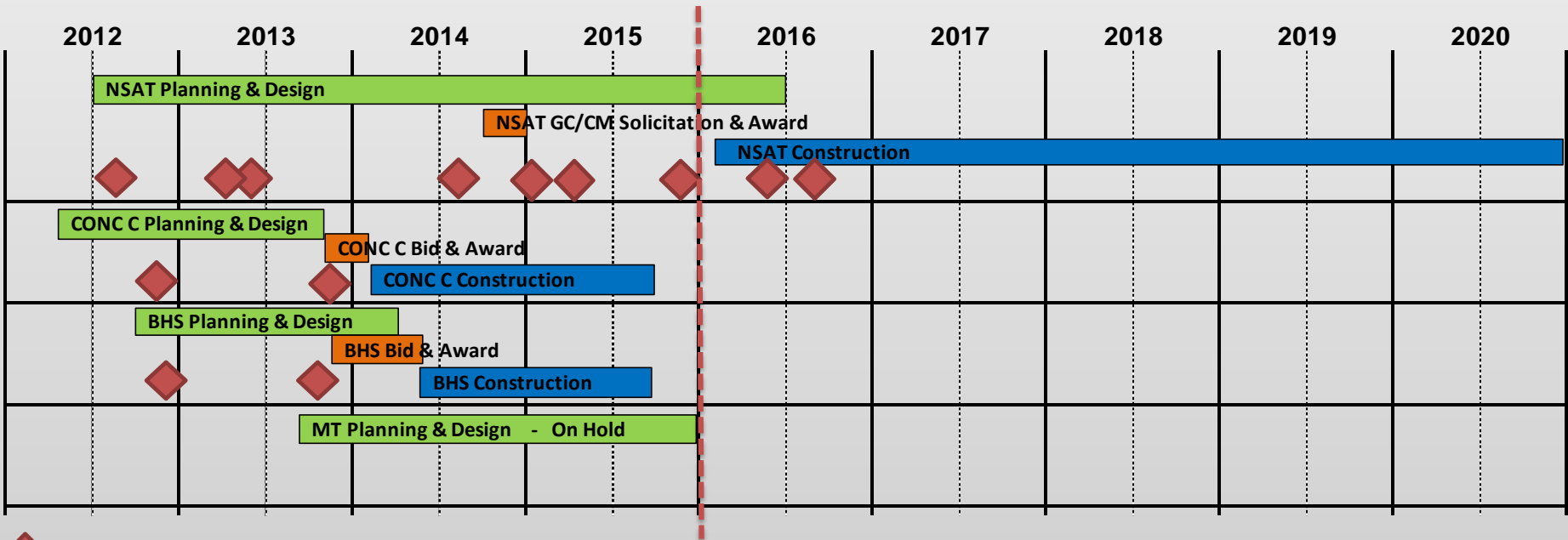
Approved Program: \$508M

# NorthSTAR Program Overall Budget



Q4 2015 – North Satellite conducting Value Engineering

# NorthSTAR Program Overall Schedule

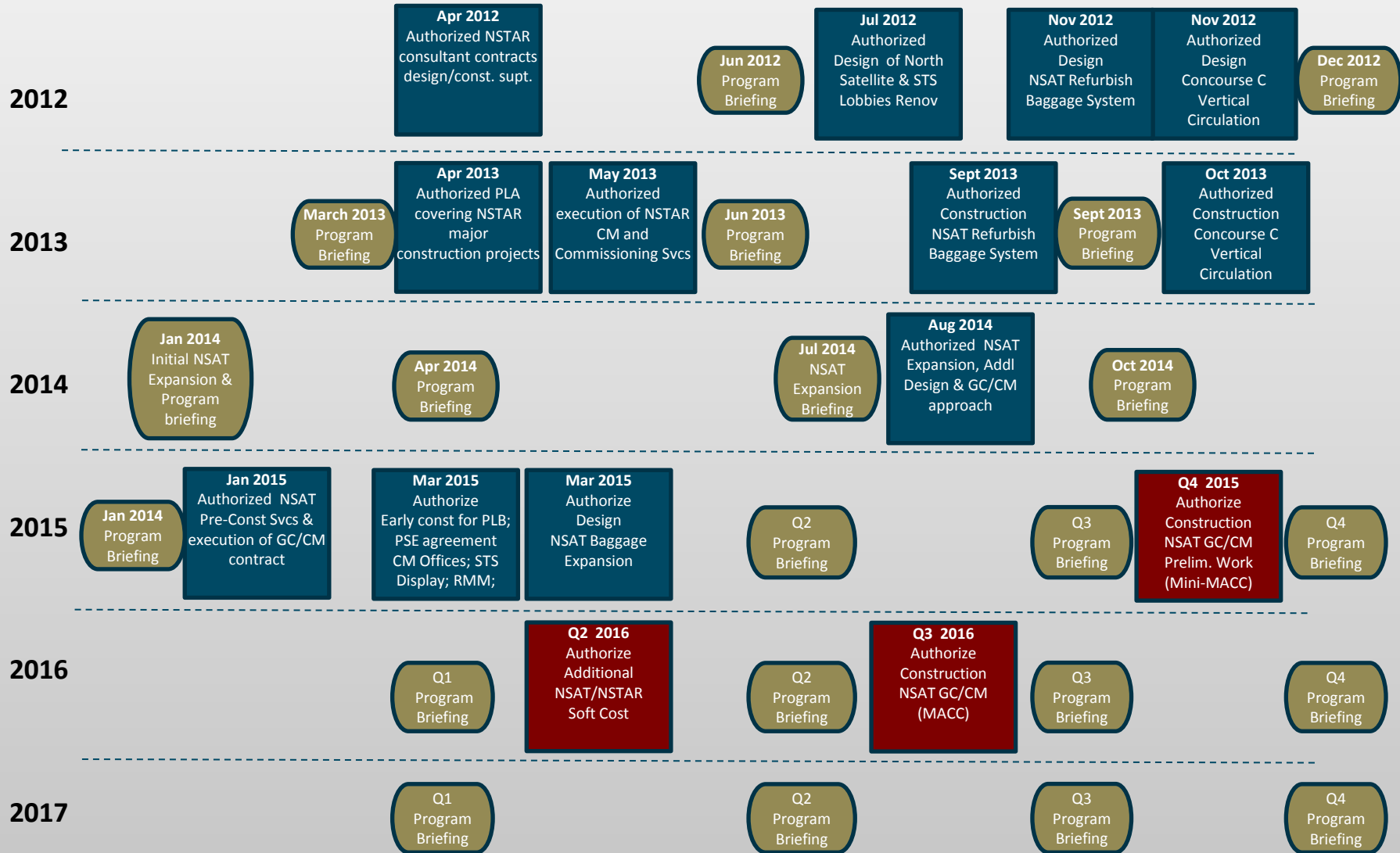


 = Commission Authorization

	Design		Construction		Overall	
	Plan	Actual	Plan	Actual	Plan	Actual
North Satellite/STS Renovation	94%	68%	0%	0%	9%	5%
Main Terminal Improvements	7%	4%	0%	0%	1%	1%
Concourse C Vertical Circulation	COMPLETE					
Refurbish Baggage Handling Sys	COMPLETE					

Q4 2015-Schedules & % Progress

# NorthSTAR Program Commission Action



## Commission Schedule – Past & Future

# NorthSTAR Program Management

**CIP: C800554 – 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:**

- Transferred \$750K from management reserve for continued program management.

## **Progress:**

- Continuing to update Program Master Schedule with changes to project schedules in design/construction.

## **Issues:**

- Resolving remaining design decisions and AAG concurrence have budget and schedule implications.
- Final SAMP recommendations could have implications with the MTI project.

**Q3 2015 Status – Program Management**

# NorthSTAR Program Management

## Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	52%	43%
SCS Participation (Program Management)	27.0%	20.8%*

\* denotes % of Prime Contractor Budget to date.

Financial Metrics	Budget/ Planned	Actual	Remaining
Estimated Total Costs *	\$19.5M	\$3.4M	\$16.1M
Estimated Contingency (including Mgmt Reserve)	\$0.94M		\$5.2M
Q4 Cashflow	\$236k	\$181k	

\* Contingency included

## Risks:

- Communication and coordination between multiple teams, stakeholders and people
- Maintain baseline schedule agreed to by all stakeholders
- Further budget implications and schedule delays due to NSAT decisions

Q4 2015 Metrics/Risks – Metrics within tolerance



# NSAT Renovation & NSTS Lobbies

**CIP: C800556 - NSAT Renovation & NSTS Lobbies**

◆ Project has budget & schedule concerns

## **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:**

- Commission approved \$98.1M to proceed with Preliminary Construction packages
- Received confirmation to incorporate most Value Engineering items with design impacts
- Refined Preliminary work and Phase 1 construction phasing to minimize aircraft position changes, fuel hydrant pit relocations and impacts to AAG's operations
- Resolved AAG's concerns about holdroom capacity, level of service (LOS) and blended concession seating
- Divided Preliminary work into 2 design packages

## **Progress:**

- Creating step-by-step construction phasing plan for Preliminary design packages
- Continuing to resolve AAG 60% design comments & existing holdroom LOS concerns
- Refining space allocation for AAG's Boardroom affected by value engineering

**North Satellite – Accomplishments and Progress**

# NSAT Renovation & NSTS Lobbies

## **Progress (continued):**

- Resolution of 60% design comments from Port Stakeholders
- 100% design of Preliminary Work Package #1 due January 2016 & construction starts end of Q1 2016
- Port & GC/CM discussing contract requirements, refining bid package scopes of work and finalizing construction phasing in preparation to begin work
- 90% design Preliminary Work Package #2 due early April 2016, 100% design due early June 2016 & construction starts Q3 2016
- 90% design of base building due Q2 2016, 100% design due end of Q3 2016 & construction start Q3 2017
- Phase 1 construction estimated to be complete in Q1 2019
- Phase 2 construction estimated to be complete Q4 2020

# NSAT Renovation & NSTS Lobbies

ID	Task Name	Start	Finish	2016				2017				2018				2019				2020				2021
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1	Commission Authorization Preliminary Work	12/8/2015	12/8/2015	◆																				
2	100% Design - Prelim Work Pkg #1	1/21/2016	1/21/2016	◆																				
3	100% Design – Prelim Work Pkg #2	6/3/2016	6/3/2016	◆																				
4	Commission Authorization - MACC	8/10/2016	8/10/2016	◆																				
5	100% Design – Base Building	9/14/2016	9/14/2016	◆																				
6	Construction – Prelim Work Pkg #1	3/29/2016	9/15/2016	■ PLB Relocation																				
7	Construction – Prelim Work Pkg #2	8/11/2016	11/30/2017	■ Mass Excavation for Expansion / Utility Reroute / Structural Steel																				
8	Construction – Base Building Phase 1	11/13/2017	1/30/2019	■ Phase 1 - Expansion Buildout																				
9	Construction – Base Building Phase 2	1/30/2019	12/21/2020	■ Phase 2 - Building Renovation																				

Project Schedule by Phase – Completion in Q4 2020

# NSAT Renovation & NSTS Lobbies

	Current Budget	60% PMG Estimate (Post VE)	Cost Growth
Design Phase	\$62.1 M	\$66.1 M	\$4.0 M
Construction Phase	\$325.0 M	\$360.3 M	\$35.3 M
Sales Tax	\$28.8 M	\$32.7 M	\$3.9 M
Subtotal (Capital)	\$415.9 M	\$459.1 M	\$43.2 M
Expense (RMM)	\$5.8 M	\$11.8 M	\$6.0 M
Total	\$421.7 M	\$470.9 M	\$49.2 M

## Updated progress:

- Finalizing reconciliation of 60% design estimates with Contractor
- Difference in total estimate remains at \$70M between Port & Contractor
- Forecasted total budget range remains at \$470-490 million
- Estimators developing collaborative process & common format for 90% estimate to align with how Contractors bid work
- Engineer's Estimates for all bid packages to be jointly developed by Port, Designer & Contractor with assurances Port gets best value for the project

**Project Cost Growth Summary – Cost estimate progress update**

# NSAT Renovation & NSTS Lobbies

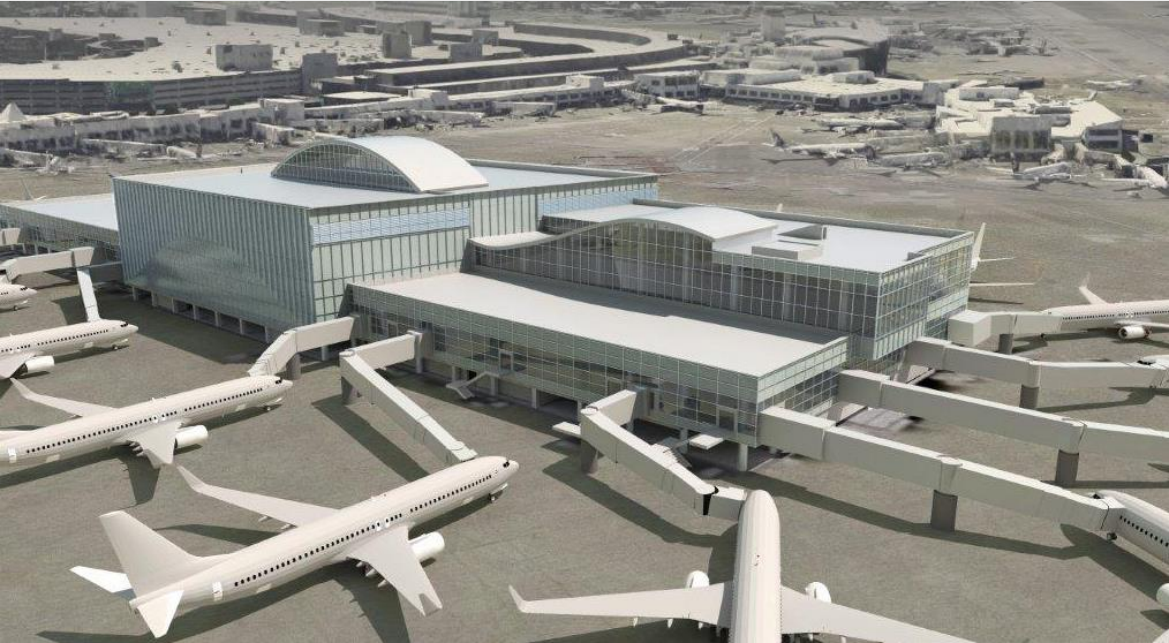
## Value Engineering Efforts

- Incorporating 46 VE items for an estimated net value of approximately \$20M
  - Delay Preliminary Construction design package by 2 months and 90% building design package by 3 months (cost impact included in net value above)
  - Additional \$800k design fee required and is included in the above net value.
- North end building envelope requiring more detailed analysis, revising the floor plan layout for the AAG boardroom and getting AAG's concurrence
- Challenge remains to balance savings while maintaining Port standards in appearance, functionality, maintainability, program requirements and AAG needs

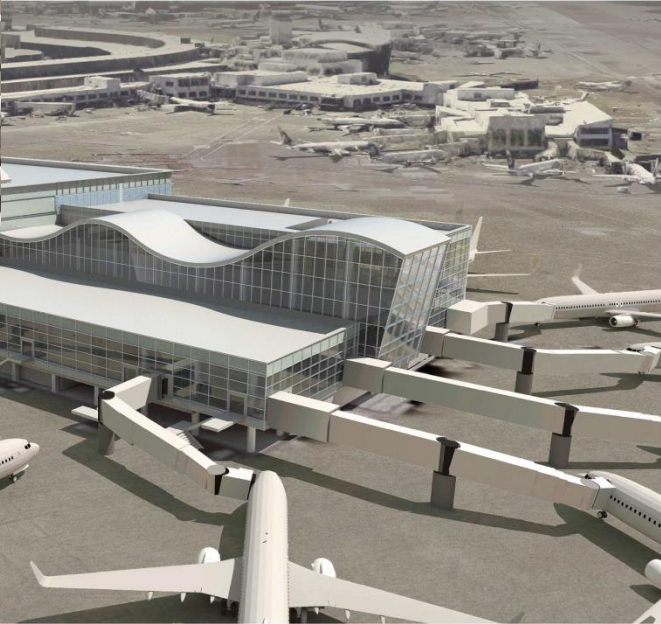
Value Engineering Process – Progress update

# NSAT Renovation & NSTS Lobbies

## Value Engineering – Exterior Renderings



**90% Progress**



**60% Design**

Value Engineering Process – Progress update

# NSAT Renovation & NSTS Lobbies

## Issues:

- AAG submitted letter identifying issues requiring resolution for concurrence
- Final definition and agreement required of AAG “betterments” (cost sharing items), including budget quantification

## Metrics:

Project Metrics	Budget/ Planned	Actual
Overall Schedule Progress	9%	5%
SCS Participation (Design)	3.3%	1.7%
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)	\$415.9M	\$21.8M	\$394.1M
Estimated Contingency	\$40.7M		\$35.1M
Q3 Cashflow	\$5.8M	\$3.9M	

**Q4 2015 Issues/Metrics – Metrics show delay & cost risk**

# NSAT Renovation & NSTS Lobbies

## Risks:

- Final reconciliation of the revised final project cost estimate with Contractor
- Implementing final construction phasing plan and terminal/airside modifications prior to construction that minimizes impacts to Customer's level of service, maintains operating gates, operational effectiveness, schedule impacts and construction cost
- Continued AAG requests for more detailed work sequencing still impacts completing the design and schedule of Preliminary Work Package 1
- Continued analysis of Phase 2 to increase number of operating gates
- AAG request for MII Ballot on budget increase
- Resolution of AAG & Port 60% comments requesting design and/or scope changes
- Impact of the aggressive construction market on cost and availability of materials and work force

**Risks – Final budget, AAG concurrence, and design scope**