

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 6d

ACTION ITEM

Date of Meeting May 24, 2016

DATE: May 16, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Ralph Graves, Managing Director Capital Development Division
George England, Program Leader, Aviation Project Management Group
SUBJECT: North Satellite Renovation & North Satellite Transit Station Lobbies Project (NSAT)
(CIP #C800556); NorthSTAR Program (CIP# C800544)

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) increase the North Satellite Renovation & North Satellite Transit Station Lobbies (NSAT) project scope and budget (capital and expense) by \$121,219,098 for a revised total budget of \$542,902,042; (2) increase authorization by \$11,000,000, \$5,000,000 for continued NorthSTAR Program/Project Management services (CIP# C800544) for a new total of \$9,350,000 and \$6,000,000 for NSAT design and overall project support (CIP# C800556) for a new total of \$163,718,000; (3) amend service agreements with Jacobs Project Management Company and AECOM; and (4) authorize the use of port crews and small works contractors to perform work for the project.

SYNOPSIS

This memo requests authorization for additional scope and budget, both capital and expense to complete the design of the NSAT project. Staff has completed the 60% design and reconciliation of the estimated cost. The NSAT project cost estimate has increased by \$121.2 million from \$421.7 million established in March 2015 to \$542.9 million, a growth of 28.7%. Of this increase, \$35.4 million is for additional scope added at 30% design, \$40.0 million is for additional scope added at 60% design, and \$45.8 million is for cost estimate changes due to market conditions and mitigation of operational impacts during construction. The formal majority-in-interest (MII) project approval for \$531 million occurred on March 31, 2016. The Commission was previously informed of additional scope for twelve (12) items added to the project at the completion of 30% design. As previously conveyed to the Commission through quarterly updates, staff had the objective of absorbing these changes into the existing budget. This objective of adding scope without increasing budget has been determined unachievable and further scope has been added at 60% design. Though value engineering efforts continue, there are insufficient reductions to achieve the original project budget.

Scope Additions at 30% Design (October 2014)

- | | |
|---|----------|
| • Relocation of STS Switchgear/Smoke Evac ductwork | \$5.3 M |
| • Temporary facilities for Gate Operations (PLB Relo) | \$11.9 M |
| • Additional eGSE parking/charging stations | \$2.5 M |
| • Connect AAG MDF to Emergency Power | \$0.1 M |
| • Taxiway Lighting / Panel Replacement | \$3.2 M |
| • Chilled Water Service Backbone Increase | \$2.1 M |
| • Site/Civil Regrade & Panel Replacement | \$8.0 M |
| • Potable Water Cabinets | \$0.3 M |

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• LEED Certification	\$0.5 M
• Rainwater Collection	\$0.3 M
• HVAC Heat Recovery Pump System	\$1.0 M
• Natural Gas	\$0.2 M
Subtotal 30% Scope Additions	<u>\$35.4 M</u>

Scope Additions at 60% Design (September 2015)

• Reroute Roof Drainage to Storm Sewer	\$1.8 M
• SafeDock / Ramp, Gate, Baggage & Flight Information Displays	\$6.5 M
• Port Purchase of Passenger Loading Bridges	\$21.0 M
• Port Purchase of Holdroom Seating & Casework	\$4.7 M
• Additional Regulated Material Abatement	\$6.0 M
Subtotal 60% Scope Additions	<u>\$40.0 M</u>

Cost Estimate Changes

Estimate Adjustments due to design development	\$19.4 M
Added Bid/Market Risks	\$14.6 M
Phase II Construction Sequencing / Gate Availability Risks	<u>\$11.8 M</u>
Subtotal Cost Estimate Changes	<u>\$45.8 M</u>

The project team has been finalizing scope elements and is recommending the budget be increased as we have completed our evaluation of bid results for the preliminary work. We have validated actual market conditions and subcontractor pricing. Labor and subcontractor shortages have escalated and continue to escalate as our regional economy is growing.

Staff is working closely with Alaska Air Group (AAG) to mitigate construction impacts and maintain the highest level of customer experience during the project. More detail is needed to develop a final preferred plan, and staff anticipates the possible need to return in 2017 for additional budget and scope increase based on the final construction sequencing plan. Staff currently forecasts the estimated cost of the project to range between \$530,000,000 and \$550,000,000 as of the date of this memo and will update the Commission in quarterly briefings as we continue to track market conditions and the design progresses further toward completion.

The Port may directly procure equipment such as jet bridges, holdroom seating, casework or other elements identified by staff or as recommended by the Port's Procurement Excellence initiative, provided the equipment can be delivered within the project's required schedule.

Port staff is requesting an increase in project authorization of \$11 million total for continued design, project support and program/project management services. Port staff is requesting authority to amend the Project Management contract with Jacobs Project Management Company and the design contract for AECOM (formerly URS) to authorize individual elements of the scope identified above, all within the increased budget. The AECOM design contract and Jacobs Project Management contract will require an amendment that exceeds 50% value of the original contract. This action will also cover the expenses of the delays experienced in completing the design. This would bring the total authorization for the North

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Satellite Renovation project (CIP# C800556) to \$163,718,800 and the NorthSTAR Program (CIP# C800544) to \$9,350,000.

On March 24, 2015, the Commission previously authorized the use of Port Crews for preliminary construction work. This request is for continuation of the use of Port crew labor and small works contractors to perform work and construction management services for the full duration of the project.

This project is being coordinated with the Sustainable Airport Master Plan (SAMP) and will not be adversely affected by future development recommendations of SAMP.

BACKGROUND

In August 2014, the Commission approved a NSAT project budget of \$405,532,944 and authorized increasing the project scope to expand the building by five additional aircraft gates to a total of twenty gates, and the use of a General Contractor/Construction Manager contractor for NSAT construction. In March 2015, the Commission approved the current budget of \$421,682,944 with the addition of \$14,400,000 for expansion of the baggage handling system within the expanded portion of the building and transfer of \$1,750,000 for the previously authorized Satellite Transit System tunnel leak repair project (CIP C800609). Commission also authorized use of \$4,900,000 of the NSAT budget in March 2015 for preparatory work for construction offices, relocating loading bridges, a dynamic display system for the north loop of the satellite train system, and reimbursement to Puget Sound Energy for a natural gas connection to the satellite.

At the completion of the 30% design phase in October 2014, twelve (12) additional scope items were added to the project for further refinement and evaluation during 60% design and the revised 60% project budget was estimated at \$501.2 million. The possibility existed that added costs might be covered within the design allowance or other project contingencies of the estimate during 60% development. The potential impact of these scope additions on the budget has been continually identified as a risk in the Q4 2014 and Q1 2015 NorthSTAR Quarterly Updates to the Commission. With the completion of the 60% design and the incorporation of scope items requested by both Alaska Air Group and Port of Seattle Aviation Operations, the current project cost estimate would increase the budget by \$121.2 million or 28.7%. This revised estimate has been reconciled by the Port with the designer's and the General Contractor/Construction Manager's independent estimates. The result has been a more accurate, but higher estimated cost to accomplish the project.

In accordance with the Letter of Understanding between the Port and Alaska Airlines Group (AAG) dated April 5, 2012, the Port will seek AAG's concurrence for various project elements, in particular, for construction phasing and the project budget. The Port continues to collaborate with AAG to optimize the construction phasing and the revised project budget and is working to obtain AAG's concurrence on both aspects prior to this action.

PROJECT JUSTIFICATION AND DETAILS

In order to minimize delays to the overall project schedule staff is recommending the design and construction packages continue to move forward.

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This authorization forecasts additional scope requested by the port and AAG. This scope is in addition to the \$101.6 million previously authorized on December 8, 2015. The additional scope changes risk is identified in more detail in the table above.

Project Objectives

- Extend the length of NSAT by approximately two hundred forty feet to improve customer service and accommodate additional aircraft and passengers.
- Seismically strengthen NSAT and expand the existing infrastructure.
- Balance and integrate NSAT functional areas and requirements (concessions, holdrooms, amenities, airline operations and airline services) through a renovation and expansion of the NSAT's terminal area to achieve acceptable levels of service.
- Align near term and forecasted airport-wide gate use and capacity by providing 20 contact gates at NSAT.
- Optimize gate door contact points, loading bridges and aircraft parking positions, including fuel hydrants and other support utilities.
- Meet or exceed current sustainability goals of the Century Agenda. This project is pursuing LEED certification.
- Create a "frictionless" and stress-free passenger experience within NSAT.
- Create an exciting and attractive facility integrating hold-rooms, diverse amenities and numerous concessions.
- Maintain and promote a Northwest sense of place through the design of architecture and connected technologies.

Scope of Work

This request includes the following elements associated with the requested authorizations:

- Additional project management and design services for Jacobs and AECOM (formerly URS) to continue project management support for the duration of the project and complete the design.

Ongoing key elements associated with the overall NSAT renovation and expansion are:

- Renovation of concourse level finishes, structure, and amenities
- Expansion of the NSAT STS, baggage and concourse levels by up to nine structural bays
- Addition of five new NSAT aircraft gates with passenger loading bridges. (for a total of 20)
- Seismic reinforcement
- Addition of an Alaska Airlines premium traveler lounge (Alaska Board Room)
- NSAT Satellite Transit System lobby enhancements construction (including the NSAT, Concourse C and Main Terminal north stations)
- Expansion, renewal and replacement of mechanical, electrical, plumbing, vertical transportation, and communication systems
- Aircraft taxi lane changes around the NSAT

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- Significant sustainability features and components such as rainwater capture for flushing of toilets.
- Design development of the north end ramp level to integrate baggage operations with other ramp and building requirements.

Schedule

The schedule of the design of the project has been delayed as reported in quarterly briefings and the previous Commission Authorization on December 8, 2015. Additional scope growth, obtaining the recent positive MII vote from the airlines reflecting new budget, phasing and sequencing development, re-bidding the preliminary work package 1, and continuing to work to AAG concurrence all contribute to the schedule as reflected below:

Preliminary Work Package Design Completion	2 nd Quarter 2016
Preliminary Work Package Construction Start	2 nd Quarter 2016
Preliminary Work Package Construction Complete	4 th Quarter 2017
Base Building 90% Design Complete	3 rd Quarter 2016
Base Building 100% Design Complete	4 th Quarter 2016
Base Building Construction Start	4 th Quarter 2017
Base Building Construction Complete	2 nd Quarter 2021

FINANCIAL IMPLICATIONS

NorthSTAR Program (C800544)

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$13,000,000	\$0	\$13,000,000
Previous budget increase	\$6,514,150	\$0	\$6,514,150
Proposed budget increase	\$0	\$0	\$0
Revised budget	\$19,514,150	\$0	\$19,514,150
Previous Authorizations	\$4,350,000	\$0	\$4,350,000
Current request for authorization	\$5,000,000	\$0	\$5,000,000
Total Authorizations, including this request	\$9,350,000	\$0	\$9,350,000
Remaining budget to be authorized	\$10,164,150	\$0	\$10,164,150
Total Estimated Project Cost	\$19,514,150	\$0	\$19,514,150

North Satellite Renovation (C800556)

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$194,300,000	\$5,000,000	\$199,300,000
Previous budget increase	\$221,582,944	\$800,000	\$222,382,944
Proposed budget increase	\$115,219,098	\$6,000,000	\$121,219,098
Revised budget	\$531,102,042	\$11,800,000	\$542,902,042
Previous Authorizations	\$157,718,800	\$3,500,000	\$161,218,800
Current request for authorization	\$6,000,000	\$0	\$6,000,000
Total Authorizations, including this request	\$163,718,800	\$3,500,000	\$167,218,800

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Remaining budget to be authorized	\$367,383,242	\$8,300,000	\$375,683,242
Total Estimated Project Cost	\$531,102,042	\$11,800,000	\$542,902,042

Note: The estimated cost of the project is currently forecasted at \$530-550 million. The final estimated project cost will be determined after the Port and Contractor negotiate the final Maximum Allowable Construction Cost (MACC) based on actual bid results.

NorthSTAR Program (C800544)

Project Cost Breakdown

	Authorization This Request	Authorization Total	Project Budget Total
Construction Phase			\$0
RMM/ERL			\$0
Design Phase	\$5,000,000	\$9,350,000	\$19,514,150
State & Local Taxes (estimated)			\$0
Total	\$5,000,000	\$9,350,000	\$19,514,150

North Satellite Renovation (C800556)

Project Cost Breakdown

	Authorization This Request	Authorization Total	Project Budget Total
Construction Phase		\$102,875,000	\$429,326,179
RMM/ERL		\$3,500,000	\$11,800,000
Design Phase	\$6,000,000	\$52,603,800	\$63,821,863
State & Local Taxes (estimated)		\$8,240,000	\$37,954,000
Total	\$6,000,000	\$167,218,800	\$542,902,042

In accordance with RCW 53.19, the Commission is notified that this amendment exceeds 50% value of the original contracts with URS (AECOM) and Jacobs and this memorandum will be made available for public inspection.

Budget Status and Source of Funds

This project is included in the 2016 – 2020 capital budget and plan of finance with a budget of \$415.8 million. The possible budget increase, if approved, would be transferred from the Aeronautical Allowance CIP (C800404) resulting in no net change to the Aviation Division capital program. The project will be funded with a combination of Airport Development Fund, revenue bonds and Passenger Facility Charge revenues (PFCs).

The terms under which AAG will participate in the Port's NorthSTAR Program costs have been established via an April 5, 2012, Letter of Understanding between the Port and AAG. The formal majority-in-interest (MII) project approval for \$531 million occurred on March 31, 2016 as outlined in the Signatory Lease and Operating Agreement (SLOA). This requested authorization is within the current MII approved amount.

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Financial Analysis and Summary

CIP Category	Renewal and Replacement
Project Type	Terminal Infrastructure
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$542M
Business Unit (BU)	Terminal
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	\$1.32 by 2021. The actual CPE impact for this project could be lower depending on the amount of PFCs applied to construction costs and on revenue bond debt service.

Lifecycle Cost and Savings

An adequate estimate of staff hours and materials expense to operate the expanded and renovated NSAT building is still in development as the project elements are being refined and specifically defined regarding product, materials, and equipment. However, staff will provide an accurate estimate as design progresses. It is already understood that the additional expansion area will incur additional maintenance expense. A key objective of the project is installing sustainable materials and to maximize the maintainability of the new equipment. The complete renovation/replacement of the mechanical, electrical, baggage and other major systems provides an opportunity to achieve life cycle cost efficiencies and savings.

STRATEGIES AND OBJECTIVES

This project supports the Port's Century Agenda objective of meeting the region's air transportation needs at Sea-Tac Airport for the next 25 years. This project also supports the Aviation Division's strategy of anticipating and meeting the needs of our tenants, passengers, and the region's economy.

The NSAT expansion is also in alignment with Airport master plan development objectives that identify the NSAT as the most logical location for near-term expansion of Airport capacity.

TRIPLE BOTTOM LINE

Economic Development

This project will increase the long-term ability of the Airport to serve the airlines and AAG's future growth. With the airport facing record growth, this project cost effectively adds new gates to benefit the airport-wide gate shortfall. It also meets AAG's growth needs by expanding the satellite and renovating the existing building with entirely new systems.

Environmental Responsibility

The North Satellite renovation project allows the Port unique opportunities to incorporate sustainable features into the design and construction of the facility. The project scope has been developed to meet the project objectives, the Port Century Agenda goals, and the Airport's Environmental Strategy. Port

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staff has engaged AAG in developing the environmental aspects and process. Each scope item has been evaluated individually based upon the total cost of ownership for the expected life of the facility. The specific scope features include:

- Energy conservation for building infrastructure.
- Water conservation for the facility including rainwater harvesting for use in the building.
- Construction and operations waste minimization.
- Incorporation of new technology.
- Exceed current building codes.

This project is pursuing Leadership in Energy and Environmental Design (LEED) Certification and will continue to evaluate other environmental initiatives as the design progresses.

Community Benefits

Project managers are coordinating with the Economic Development Division's Small Business Team to maximize small business participation opportunities including, but not limited to, Small Contractors and Suppliers (SCS) and minority and woman business enterprise (M/WBE) participation in accordance with Small Business Resolution No. 3618. The Port contract with HP required the establishment of a Small Business utilization goal, which includes SCS and M/WBE participation.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternate 1 - Redesign NSAT project to existing budget.

Cost Implications: This alternative would cause a redesign delay estimated at 12 months and \$15 - \$20 million.

PROS:

- Maintain existing budget as close as possible.

CONS:

- Requires significant elimination or reduction of core project scope items.
- Will not achieve all project objectives/quality/passenger experience goals, operational and business goals, or LEED Certification.
- Total scope reduction may still not result in budget savings needed to maintain budget.

Alternative 2 - Defer project budget and Preliminary Work Package commencement until after MACC negotiations are complete in 2017.

Cost Implications: Additional costs for including project scope plus escalation and delay costs would exceed Alternative 1 or Alternative 3.

PROS:

- Provides time for AAG concurrence if not already obtained.

CONS:

- Additional costs may be even higher due to market conditions and change orders required after the MACC is complete.

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Alternative 3 - Current Schedule: Proceed with current expansion/design project scope and phasing.
This is the recommended alternative.

Cost Implications: Project current cost estimate exceeds approved \$421 million budget and is forecasted to range between \$530,000,000 and \$550,000,000.

PROS:

- Maintains Port's programmatic objectives including addition of necessary gates, improved NSAT customer services and operations, increased non-airline revenues, etc.
- Achieves Port functional and design objectives.
- Savings will be achieved by value engineering.

CONS:

- Working on obtaining AAG concurrence but proceeding without AAG could risk damage to airline/airport relationships.

ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- April 26, 2016 – NorthSTAR Program status update
- February 9, 2016 – NorthSTAR Program status update
- December 8, 2015 - Project authorization, and execute contract amendments and change orders to Hensel Phelps General Contractor/Construction Management (GC/CM) in the amount of \$98.1 million and execute a contract for project specific construction audit services.
- November 24, 2015 – NorthSTAR Program status update and NSAT budget briefing
- July 14, 2015 – NorthSTAR Program status update
- April 28, 2015 – NorthSTAR Program status update
- March 28, 2015 – The Commission authorized three NSAT related items:
 - Expand the baggage handling system increasing the project scope for \$14,400,000 and authorizing \$1,954,000 to complete the design.
 - Entering into a developer agreement with Puget Sound Energy and authorizing \$200,000 in reimbursement for the design and construction of underground gas infrastructure.
 - Authorized \$5,300,000 to
 - Prepare four locations to accommodate temporary passenger loading bridges, to construct temporary construction offices.
 - To complete construction of a Satellite Transit System (STS) North loop Dynamic Display system.
 - \$600,000 in expense funds for regulated materials management for AAG's tenant improvement project.
 - Approval to use Port crew labor and small works contractors to complete early project work.
- January 27, 2015 – NorthSTAR Program Status Update

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- January 6, 2015 – The Commission authorized (1) \$5,000,000 preconstruction services; (2) execution of a General Contractor/Construction Manager contract for preconstruction services; and (3) transfer of scope, \$1,750,000 budget and authorization for STS station roof replacement to the North Satellite Renovation and Expansion project.
- October 28, 2014 – NorthSTAR Program Status Update
- August 5, 2014 – Commission authorized an estimated \$191,323,143 to expand the NSAT by 8 additional gates, an additional \$15,717,800 for design completion, and use of the General Contractor/Construction Manager alternative public works contracting procedure for NSAT expansion construction procurement.
- July 22, 2014 - NSAT Expansion Briefing.
- April 16, 2014 – Seattle-Tacoma International Airport Capital Program – Briefing.
- January 14, 2014 – NorthSTAR Program status update and initial NSAT Expansion briefing.
- September 24, 2013 – NorthSTAR Program status update.
- September 24, 2013 – The Commission authorized staff to: (1) advertise, award, and execute a major public works contract for the construction of the NSAT Refurbish Baggage System Project; and (2) authorize the use of Port crews.
- June 25, 2013 –NorthSTAR Program status update.
- 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.
- 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.
- 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.
- June 26, 2012 - The Port Commission was briefed on the NorthSTAR program by Wayne Grotheer, Director Aviation Project Management Group.
- 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.