PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA STAFF BRIEFING

Item No. 7b

Date of Meeting January 14, 2014

DATE: January 8, 2014

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Ehl, Director Airport Operations

Elizabeth Leavitt, Director Aviation Planning & Environmental

Wayne Grotheer, Director Aviation Project Management

SUBJECT: North Satellite Terminal Expansion

NorthSTAR Program – Seattle-Tacoma International Airport

SYNOPSIS

The goals and objectives of the North Sea-Tac Airport Terminal Renovation Program (NorthSTAR) include consolidating Alaska Air Group (AAG) operations within Concourse C, Concourse D, the North Satellite and the renovated north end terminal facilities of the Main Terminal. The renovation also includes the three Satellite Transit System (STS) stations at these locations. NorthSTAR is a collaborative effort between the Port and AAG, which intends to create and promote a user-friendly airport by achieving AAG's vision of enhancing the passenger "curb-to-seat" experience through the integration of facility renovations, improvements, and airline services. This program's scope was initially defined by a conceptual study prepared by AAG and its consultant. The Port and AAG have been refining the scope of this study and incorporating recent activity projections in an effort to assure NorthSTAR meets both the Port's and AAG's long-term facility enhancement and capacity needs.

An analysis of the projected increases in Sea-Tac Airport's activity has led to the collaborative recommendation to expand the North Satellite and increase North Satellite gate capacity to 20 gates.

BACKGROUND

The 15% conceptual design of the North Satellite Renovation began in January 2013 and resulted in the development of 16 initial concept options for renovating the North Satellite that included adding three additional gates. These concepts were evaluated based on an assessment of how well each option met the functional and operational requirements for holdrooms, concessions, amenities, circulation, and terminal layout efficiency. Options that did not adequately respond to these requirements were eliminated, and the team continued work on four original options. These new expansion options were added as a result of concerns that the amount of area needed for holdrooms, concessions and amenities could not be met or balanced within the dimensional

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limitations of the existing building envelope or on one floor level. In October 2013, these four options were presented, reviewed and evaluated by both the Port and AAG staff. Of these, two options were recommended, presented, and both the executive level Port and AAG Steering Committees concurred with staff's recommendations independently. These two recommended options included: 1) A concept within the original building envelope, and 2) A concept that expanded the existing building area or footprint.

Concurrent to the development of these two recommended design concepts for the North Satellite, Port staff recognized a need to update the airport-wide gate demand analysis. This was based on changes in domestic and international gate demand and as a result of a request by AAG in May 2013 for an additional five gates on Concourse D beyond its five existing gates at Concourse D, and the proposed addition of three gate positions at the North Satellite. This analysis was needed to objectively assure that a prudent approach be taken to justify the need for terminal development based on an airport-wide assessment of near-term and long-term need, and not just the growth of a single airline.

The study evaluated whether a facility expansion to support additional aircraft gates is warranted, or in lieu of expanded facilities, whether a potential gate shortage could be managed operationally. The study determined where additional gates were needed and how the gates could be best accommodated. The study incorporated not only anticipated growth in airport activity (domestic and international), but also the concurrent operational impacts on gate availability due to:

- AAG's sole tenancy of the North Satellite and request for an additional five mainline gate positions beyond those originally planned as part of NorthSTAR.
- Additional gates needed to accommodate American Airlines/US Airways, Southwest/Air Tran, and United/Continental mergers on contiguous gate locations (Note: While mergers may consolidate the total number of daily flights, additional gates may be needed to accommodate coincident flight schedules and differing aircraft types wide vs. narrow body during peak times in contiguous gate locations).
- Large scale concurrent construction projects of the NorthSTAR and International Arrivals Facility (IAF) Programs that will temporarily close gates on concourse A, the South Satellite, and the North Satellite in years 2015 through 2018.

On October 3, 2013, Port staff presented the Airport-wide Gating Analysis to AAG and Aviation Division leadership. The analysis found that:

- There are significant challenges posed by near-term dynamic gate demand and construction impacts over the next five to seven years.
- Additional capacity could not be created through operational measures.
- An additional five gates beyond the three gates included in the NorthSTAR program
 are needed to satisfy both the near-term constraints on gate availability and
 anticipated gate demand.

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- The North Satellite is the most viable location to add terminal area for additional gates without impacting other airport facilities.
- A North Satellite expansion not only meets AAG operational needs with a total of 20 North Satellite gates, but also provides a capacity buffer between the NorthSTAR Program and the contemplated future North Satellite expansion for 30 gates in the current airport master plan.
- A larger facility more directly contributes to AAG's vision of a "frictionless" passenger experience and better meets its vision of an improved "curb-to-seat" level of service.

On October 17, 2013, AAG executive leadership provided written concurrence to renovate and expand the North Satellite to accommodate 20 aircraft gate positions, based on the findings of the Airport-wide Gating Analysis and the recommended options for renovating the North Satellite. In January 2014, staff will be submitting a Majority-In-Interest ballot seeking Airline approval of the expansion of the North Satellite. After the votes are received staff will return to the Commission to request authorization of additional design funds.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Do Nothing (Original Scope): Even though the North Satellite would be renovated per the original project scope, not expanding (do nothing) would result in increased operational costs and potential delays due to limited peak-time gate availability. AAG would not be able to consolidate its operations within Concourses C, D, and the North Satellite and other airlines would be required to operate in non-contiguous terminal areas. This option would constrain airline growth airport-wide and result in a deteriorated level of service.

Expand Elsewhere: Provide additional gate capacity at Concourses A, B, C, D or at the South Satellite. Expansion to the South Satellite or Concourse A would require costly relocations of existing cargo and aircraft maintenance facilities (a sunk cost and more expensive than expansion of the North Satellite). Concourses B, C, and D cannot be expanded due to site and operational constraints and costly impacts to adjacent terminal areas and roadways.

North Satellite Expansion (Recommended Option): Add up to nine additional 26-foot structural bays to the northwest end of the existing North Satellite to accommodate the addition of up to eight additional gates that would provide Alaska Airlines capacity to meet long-term demand and remain operationally consolidated through 2025. This expansion is within the current Airport master plan and can be done without significant impacts to adjacent concourse operations. This expansion will also accommodate a future expansion of the North Satellite to a 30-gate capacity as identified in the master plan.

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FINANCIAL IMPLICATIONS

An expansion of the North Satellite will increase the North Satellite Renovation Project cost estimate by approximately \$175,401,600. The previous scope included the addition of three new passenger loading bridges, transfer of biometric access control doors, two elevator and eight escalators, a new NSDF freight elevator and grease interceptor for a total estimated cost of \$213,946,357 inclusive of \$5,800,000 expense for Regulated Material Management (RMM). The Rough Order of Magnitude estimated cost to expand the North Satellite for a total of 20 gates (eight new gate positions) is \$389,348,000. These estimates are compared and detailed in the following table:

Project Breakdown	Previous Budget	Expansion Budget	Total Project
Construction	\$155,036,936	\$135,775,064	\$290,812,000
Design & Const. Support	\$18,620,000	\$9,562,000	\$28,182,000
Project Management	\$3,531,020	\$9,150,880	\$12,681,900
Permitting	\$3,100,000	\$126,000	\$3,226,000
RMM - Expense	\$5,800,000	\$0	\$5,800,000
Port Soft Costs	\$9,951,401	\$19,014,099	\$28,965,500
Undefined Cost - TBD	\$17,907,000	\$1,773,600	\$19,680,600
Total	\$213,946,357	\$175,401,643	\$389,348,000

Budget/Authorization Summary	Capital	Expense	Total Project
Previous Budget	\$194,100,000	\$5,000,000	\$216,546,306
Budget Transfers	\$11,352,357	\$800,000	\$12,152,357
Added Project Budget	\$2,694,000	\$0	\$2,694,000
Current Budget Increase	\$175,401,643	\$0	\$175,401,643
Revised Project Budget (Cap. & Exp.)	\$383,548,000	\$5,800,000	\$389,348,000
Previous Authorizations	\$32,933,556	\$200,000	\$33,133,556
Current Request for Authorizations	\$20,717,800	\$0	\$20,717,800
Total Authorizations - Incl. This Request	\$53,651,356	\$200,000	\$53,851,356
Remaining Budget to be Authorized	\$327,202,644	\$5,600,000	\$335,496,644

Port staff intend to seek Commission concurrence on the increased scope and authorization for the increased budget associated with the recommended expansion at the January 28, 2014, Commission meeting. In addition to the expansion, the Port and AAG are evaluating a number of stakeholder-proposed scope additions to the North Satellite Expansion. These scope additions have not yet been fully evaluated or estimated, nor have they been jointly agreed upon by the Port and AAG. They will be evaluated individually and proposed for inclusion only after justification through a cost benefit analysis based on operational need.

The Port and AAG are working to evaluate and make recommendations on these additions in order to finalize the expansion scope. Both the current and North Satellite Expansion cost estimates are based on the conceptual design work completed to date and will require refinement as the North Satellite Renovation design moves forward.

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ATTACHMENTS TO THIS BRIEFING

• Attachment A: Renovation and Expansion PowerPoint

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- 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 North Satellite Refurbish Baggage System Project; and (2) authorize the use of Port crews.
- June 25, 2013 –NorthSTAR Program status update.
- 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 North Satellite Renovation and NSTS Lobbies project.
- June 26, 2012 The Commission received a briefing on the status of the Airline Realignment Program and budget restructuring in association with the NorthSTAR Program.
- April 10, 2012 Authorizations for the North Sea-Tac Airport Renovations program
 for: 1) preliminary project funding; 2) execution of consulting contracts for
 design/construction support services and project management services; and 3) use of
 Port crews and consultants to conduct regulated materials management surveys and
 field support services for preliminary project planning tasks.