

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**  
**STAFF BRIEFING**

**Item No.** 7b  
**Date of Meeting** September 8, 2015

**DATE:** September 01, 2015  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** Elizabeth Leavitt, Director, Aviation Planning and Environmental  
**SUBJECT:** Sustainable Airport Master Plan (SAMP) Planning Update

**SYNOPSIS**

This briefing provides an update on SAMP planning. The Sustainable Airport Master Plan (SAMP) will provide a facilities plan to guide cohesive development both in the near- and long-term.

The April SAMP planning update to Commission included a preliminary evaluation of airfield capacity. The SAMP team is still in the initial stages of airfield simulation modeling and has now calibrated a model which will be used to assess the capacity of the existing airfield and potential future capacity with identified capital improvements. The model will be run under several scenarios involving various weather condition and aircraft flow patterns to provide a comprehensive understanding of the benefits of potential airfield improvements.

The team is also continuing to develop a plan for phased facility development driven by the need to expand gates. Central to the planning analysis is the question of one vs. two terminals. Cost/benefit and level of service considerations factored into the one vs. two terminal analysis cover criteria in every major functional area of the airport. Options for roadway redevelopment to provide terminal access, for example, are vastly different under a one vs. two terminal scenario and are driven by the need to satisfy very different requirements and present uniquely challenging design and construction issues.

**BACKGROUND**

In September 2012, the Port Commission approved scope and budget of \$6,000,000 for the creation of a Sustainable Airport Master Plan (SAMP). Since October of 2014, staff has briefed the Commission four times on SAMP planning progress, including: forecast results and challenges associated with planning to accommodate forecast activity; and preliminary options for terminal, landside and cargo development.

The master plan process provides an opportunity to take a comprehensive assessment of facilities capacity and forecasted demand over 5-, 10-, and 20-year timeframes. Airport master plans are typically prepared approximately every 10 years. The last formal master plan for Sea-Tac was developed in the mid-1990s and was focused primarily on the third runway.

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The primary objective of an airport master plan is to provide a roadmap for the phased redevelopment/expansion of facilities, maintaining a balance of capacity in all key functional areas. Overall airport system capacity is limited by functional areas with the least capacity. Terminal and landside facilities are generally balanced to the fixed capacity of the airfield. Through alternatives development and evaluation, the SAMP will culminate in a capital improvement program and plan of finance that will deliver cost-effective projects to remove capacity pinch points, increase efficiency and provide a high level of service to airport customers.

## **ATTACHMENTS TO THIS BRIEFING**

- PowerPoint presentation

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- April 28, 2015 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- March 24, 2015 - Commission Briefing: "Briefing on Sea-Tac Cargo as part of the Sustainable Airport Master Plan"
- January 27, 2015 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- October 7, 2014 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Forecast and Facilities Challenges"
- February 28, 2014 - Commission authorization to amend the existing Sustainable Airport Master Plan (SAMP) service agreement with Leigh Fisher Associates for IAF-related planning tasks for an increase of \$3,650,000 and a new total contract amount of \$9,650,000
- September 5, 2012 - Commission authorization for SAMP development and to advertise and execute a contract for consulting services for the SAMP, with a total estimated value of \$6 million
- August 14, 2012 - Commission deferred consideration of a request to approve funding for the Sustainable Airport Master Plan (SAMP)
- June 27, 2012 - Commission Briefing: "Terminal Development Challenges"