



**COMMISSION
AGENDA MEMORANDUM**

Item No. 9B

BRIEFING ITEM

Date of Meeting July 9, 2019

DATE: June 17, 2019

TO: Stephen P. Metruck, Executive Director

FROM: Jeffrey Brown, Director of Aviation Facilities and Capital Programs
Wayne Grotheer, Director Aviation Project Management

SUBJECT: Aviation Capital Project Planning and Preliminary Design - Briefing

Amount of future request: \$10,000,000

Total estimated project cost: TBD

EXECUTIVE SUMMARY

The purpose of this briefing is to provide an overview of the planning process and to articulate the need to conduct scope/project definition and preliminary design necessary to ensure the capital projects described in this briefing meets the project objectives. A future authorization request not to exceed \$10 million will be submitted to the Commission for project definition and preliminary design-at-risk on Sustainable Airport Master Plan (SAMP) Near-Term Projects. Separately, there will a future authorization request for contracting capacity to do project definition and preliminary design for SAMP roadway projects.

The future authorization request is scheduled for the next Commission meeting and is inclusive of funding for preliminary design of the five identified projects listed below in "Details" and potential additional projects anticipated to be identified through continued advanced planning. Authorization will also be sought at that time to enter into reimbursable agreements with the Federal Aviation Administration (FAA) in relation to relocation of the Runway 34R glideslope antenna as part of the Taxiway A/B Extension project.

Staff briefed the Aviation Committee on this subject June 14, 2019 and will continue to coordinate with the Aviation Committee and will provide written updates to the Commission on the progress of these projects to include additional projects added, as requested by the Commission.

The \$10 million is included in the 2019-2023 capital budget under the line item "SAMP Preliminary Planning/Design." The total for this five-year line item is \$300,000,000, which is included in the current Signatory Lease and Operating Agreement with the Airlines.

Meeting Date: July 9, 2019

JUSTIFICATION

Project definition and preliminary design of capital projects supports the following Century Agenda strategic goals and objectives:

- 1) Advance this region as a leading tourism destination and business gateway
 - a. Meet the region's air transportation needs at the Airport for the next 25 years and encourage the cost-effective expansion of domestic and international passenger and cargo service
- 2) Be the greenest and most energy efficient port in North America
 - a. Reduce air pollutants and carbon emissions

Timely and comprehensive information is critical at the preliminary design stage to provide decision makers and project teams information necessary to transition into design. While still considered conceptual in nature, this more detailed information is compiled in a Project Definition Document (PDD) and goes beyond the planning level to provide more certainty/confidence in: project definition; risks and opportunities; linkages to other projects and actions; and project schedule and cost estimate. Timely design for these early SAMP Near-Term Projects will ensure that the Port is prepared to initiate construction as soon as possible following completion of the environmental review and granting of required approvals.

DETAILS

The upcoming authorization request supports only the initial phase of project definition and preliminary design exclusively for projects included in the SAMP Near-Term Projects. Design of any project beyond preliminary design will require additional Commission approval. Project definition and preliminary design would progress at risk as work beyond preliminary design is contingent on the outcome of the environmental review process which is currently underway.

At this time, five projects have been identified as needing preliminary design over the next several months in order to complete these projects within the timeframe proposed. These five projects are included in the SAMP Near-Term Projects: 1) Westside Maintenance Campus, 2) Airport Rescue and Firefighting Facility (ARFF), 3) Roadway Improvements, 4) Taxiway A/B Extension, and 5) Main Terminal North GT Lot.

The Taxiway A/B Extension project requires relocation of the Runway 34R glideslope antenna which will enable a potential adjustment of the slope angle to three degrees or more. Increasing the slope angle enables higher aircraft elevation on approach and is supported by the communities represented on the Sea-Tac Stakeholder Advisory Round Table (StART). The glideslope antenna is an FAA navigational aid, and as such, relocation requires design and construction by the FAA with financial reimbursement by the Port. Commission authorization to enter into reimbursable agreements with the FAA will be included in the future authorization request.

Meeting Date: July 9, 2019

The five SAMP Near-Term Projects listed below were identified as needing preliminary design over the next several months and currently are, or have recently been, the subject of advanced planning. The future authorization request is inclusive of funding for project definition and preliminary design of the five identified projects and potential additional projects anticipated to be identified through continued advanced planning related to the SAMP Near-Term Projects. No capital funds authorized under this future funding request will be spent on project definition and preliminary design for projects that are not included in the SAMP Near-Term Projects. A brief description of why staff believes it is in the public interest to conduct preliminary design on the five projects is included below and a schedule of design and construction with project linkages is included in the attached PowerPoint presentation.

- Westside Maintenance Campus: The Port's Maintenance Facility was constructed in 1969 as a mail sortation facility. It is undersized for its current function, is in a state of disrepair, and is proposed to be relocated to clear the site for potential future hardstand construction identified in the SAMP Near-Term Projects.
- Airport Rescue & Firefighting Facility (ARFF): The ARFF was constructed in 1979. It is undersized for its current function, is in a state of disrepair, and is proposed to be relocated to clear the site for potential future gate construction identified in the SAMP Near-Term Projects.
- Roadway Improvements: The southbound lanes of the North Airport Expressway are proposed to be relocated to continue the congestion relief initiated with the Widen Arrivals Approach project and to clear the site for potential airfield expansion and gate construction identified in the SAMP Near-Term Projects.
- Taxiway A/B Extension: Extension of dual taxiways at the south end of the airfield will increase operational efficiency and reduce aircraft delay. The extension requires relocation of the Runway 34R glideslope antenna which would enable an adjustment of the slope angle to increase aircraft elevation on approach, as recommended by the StART Working Group.
- Main Terminal North GT Lot: The proposed multistory building could include functions such as airline/airport support space that could be relocated from the existing terminal to free up space for more critical passenger processing functions. A more detailed understanding of the building footprint and sublevels is also required to inform design of the adjacent Widen Arrivals Approach project which will require utility relocations through and adjacent to the site.

Meeting Date: July 9, 2019

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – No capital funds approved for project definition and preliminary design

Cost Implications: \$0

Pros:

- (1) No capital funds expended for this purpose in the short-term

Cons:

- (1) Detailed project information would not be available to the Commission to enable timely decisions regarding potential design authorization.
- (2) Delay in design would delay potential project implementation that could proceed if approvals are granted through the environmental review process.
- (3) Would require increased short-term capital investment in existing facilities.

This is not the recommended alternative.

Alternative 2 – Capital funds approved for project definition and preliminary design

Cost Implications: \$10,000,000

Pros:

- (1) Provides detailed project information to the Commission to enable timely decisions regarding potential design authorization.
- (2) Timely project design will enable potential project implementation that could proceed if approvals are granted through the environmental review process.

Cons:

- (1) Capital funds expended in the short-term
- (2) Capital funds would need to be expended if approvals are not granted through the environmental review process and projects are not implemented

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary

| | Capital | Expense | Total |
|--|--------------|---------|--------------|
| COST ESTIMATE | | | |
| Original estimate | TBD | \$0 | TBD |
| Cost increase | | | |
| Revised cost estimate | | | |
| Potential future scope/cost increase | TBD | | TBD |
| AUTHORIZATION | | | |
| Previous authorizations | \$0 | \$0 | \$0 |
| Current request for authorization | \$10,000,000 | \$0 | \$10,000,000 |
| Total authorizations, including this request | \$10,000,000 | \$0 | \$10,000,000 |
| Remaining amount to be authorized | TBD | | TBD |

Meeting Date: July 9, 2019

Annual Budget Status and Source of Funds

The \$10,000,000 capital funds request is included in the 2019-2023 capital budget under the line item “SAMP Preliminary Planning / Design”. Funding for 2019 and 2020 for this line item is \$2,000,000 and \$9,500,000 respectively. A single CIP in the capital budget comprises the entirety of the SAMP Near-Term Projects and to which the preliminary design costs would be allocated. (C801109) The funding source will be the Airport Development Fund. There is a risk that all or a portion of these funds could be expensed if any of the respective projects are not constructed.

ADDITIONAL BACKGROUND

Master planning takes a broad view of facilities in all key functional areas of the Airport and involves alternatives analysis for major plan elements at a macro level. The result is a plan for phased improvements required to satisfy demand forecast to a 20-year planning horizon. The established Long-Term Vision is documented conceptually on the Airport Layout Plan (ALP) and serves to guide near-term project development but is subject to further study and environmental review. Master planning also includes a more detailed study of projects required to satisfy near-term demand in areas such as phasing, project definition, and financial feasibility.

Planning for the Port’s Sustainable Airport Master Plan (SAMP) concluded in May 2018 when documentation was finalized, and Port staff briefed the Commission. The SAMP documentation serves as the official narrative to the ALP which was conditionally approved by the FAA in November of 2018. Final approval of the ALP is dependent on completion of the environmental review of the SAMP Near Term Projects`.

Advanced planning involves more detailed planning in focus areas of the SAMP Near-Term Projects as well as existing facilities. Advanced planning studies typically involve one or more of the following: site planning to allocate space and determine an optimal configuration of multiple facilities on a campus; analysis within individual projects to develop and evaluate alternative configurations of key elements of a single facility; and phasing plans for improvements within a campus or individual facility.

Port staff initiated advanced planning in early 2017 and have concluded several studies, including the Main Terminal Optimization Plan. Site planning for the Westside Maintenance Campus and the ARFF facility in the general aviation area are currently underway.

Capital funds are required once a project has been clearly identified through advanced planning - i.e. alternatives analysis and site planning have determined an optimal configuration of an individual facility. It is at this point that preliminary design is initiated and program development for the project begins.

Meeting Date: July 9, 2019

ATTACHMENTS TO THIS REQUEST

- (1) Project PowerPoint Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- February 26, 2019 – Commission Briefing: “Sustainable Airport Master Plan (SAMP) Near-Term Projects (NTP) Environmental Review Briefing – Scoping Report”
- May 8, 2018 – Commission Briefing: “Sustainable Airport Master Plan (SAMP) Planning and Environmental Update”
- February 27, 2018 – Commission Action: “Sustainable Airport Master Plan (SAMP) Request for Additional Funds”
- February 13, 2018 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- August 23, 2016 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- July 12, 2016 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- April 12, 2016 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- January 26, 2016 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- September 8, 2015 - Commission Briefing: "Sustainable Airport Master Plan (SAMP) Planning Update"
- 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 (SAMP)"
- 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"
- March 11, 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"