



**COMMISSION
AGENDA MEMORANDUM**

Item No. 10c

ACTION ITEM

Date of Meeting April 13, 2021

DATE: March 1, 2021

TO: Stephen P. Metruck, Executive Director

FROM: Laurel Dunphy, Director, Airport Operations
Eileen Francisco, Director, Aviation Facilities and Capital Programs
Dawn Hunter, Director, Aviation Commercial Management

SUBJECT: South Satellite Renovation and Renewal (CIP# C801203) Project Definition

Amount of this request: \$2,750,000

Total estimated project cost: \$1,000,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to develop the Project Definition Document to finalize the scope, schedule, budget, and project delivery method for the preferred South Satellite Renovation and Renewal project alternative at the Seattle-Tacoma International Airport. The amount being requested under this authorization is \$2,750,000. This project was included in the Aviation Plan of Finance with a target placeholder budget of \$1,000,000,000.

EXECUTIVE SUMMARY

The Aviation Division and the airlines at the Seattle-Tacoma International Airport (SEA) have long identified the need to renovate and upgrade the South Satellite facility to improve the level of service and to correct building code deficiencies. Previous planning efforts, conducted in 2017, were undertaken to identify alternatives for further development.

Due to the complexity of the project in terms of scope, budget, and schedule uncertainties, there is a need to further refine the elements of a preferred alternative through the development of a Project Definition Document (PDD). Additionally, the PDD will identify potential project risks before proceeding with the full design and implementation of the project, and will provide the appropriate information for the Commission to consider prior to authorization of design and construction.

Meeting Date: April 13, 2021

JUSTIFICATION

The South Satellite concourse was designed and built in the early 1970's, with an additional limited expansion to the west in the late 1980's. The building's program included Federal Inspection Services (FIS) for processing of international passengers within its' lowest two levels, which in recent years has been overwhelmed, leading to the development of the International Arrivals Facility. The South Satellite's current building program needs to change dramatically with the imminent opening of the International Arrivals Facility to modernize the building, efficiently reallocate space, and maximize revenue growth.

This 1970's era facility has had few upgrades to its building systems over the decades, leaving most of them at or beyond the end of their useful service. Replacement of this exhausted infrastructure provides an opportunity to update and upgrade systems with more energy efficient and environmentally sustainable alternatives. For over a decade, the South Satellite has also been serving far higher passenger loads than it was designed for, further taxing its building systems and structural elements. Public facing spaces do not meet current airline industry (IATA) passenger standards, and the facility infrastructure is nearing obsolescence.

This facility is long overdue for renovation. It is currently weight limited and has not been wholly upgraded since constructed to meet current seismic codes. Many of the building systems have been run to failure, are overstressed, or obsolete; or a combination thereof. The facility also currently lacks acceptable ADA accessibility, meditation and quiet room space, gender neutral restrooms, lactation suites, and adequate pet relief areas; all of which will be addressed in the PDD.

To meet this complete renovation challenge, careful, realistic, and deliberate planning must be carried out in the PDD. The PDD must provide a pathway to satisfy building code requirements and modernize the building's systems for greater comfort, operating efficiency, and reduced environmental impacts. The PDD must also reprogram the public facing spaces of the building. Construction will need to occur within the current building footprint while the facility remains open, most likely creating operational impacts. The PDD will provide the planning and phasing necessary to fully understand, prepare for, and mitigate those impacts. Due to the type and complexity of construction it is projected that the cost per square foot and construction schedule will be greater than the majority of projects we deliver.

The Port has made commitments over time to the foreign flag carriers and concessionaires that the South Satellite would ultimately be updated following IAF completion. The findings of previous South Satellite planning efforts are being used to inform the proposed PDD effort. Unlike the previous planning that considered a range of unconstrained alternatives, the PDD will be focused on developing one space and budget constrained alternative that provides a buildable solution, designed around a realistic budget number, that will lead directly into design and construction.

Meeting Date: April 13, 2021

Diversity in Contracting

The consulting firm exceeded the WMBE goal of 15% in their contract by 6% in their proposal for the development of this PDD, with a total 21% participation rate.

DETAILS

The South Satellite concourse at SEA is surrounded by Concourses A and B to the east and north, and the Delta Air Lines and Alaska Air Group maintenance facilities to the south. Its western boundary is Taxiway A. The facility has been in operation since the early 1970’s, with one expansion having occurred in the mid-1980’s. Further expansion is limited by numerous FAA building restriction boundaries. The current effort is organized around a \$1 billion target budget. The proposed Project Definition Document is focused on refining a preferred alternative that reflects the target budget. The PDD will address worn out building systems, structural inadequacies, building space reprogramming, certain customer experience inadequacies, and expansions to retail and airline club space.

Scope of Work

This PDD will identify building systems needing to be renewed, replaced, or updated to bring this facility into code compliance; reprogram the public facing areas within the South Satellite; maximize duty free, retail, dining and club commercial opportunities; identify types, size and locations of customer amenities to be included; address ADA deficiencies; provide a unified architectural theme and accommodate future art installations.

There will be extensive outreach to address the needs of the airlines, concessionaires, code compliance officials, and numerous Port departments. The PDD will develop a basis of design; a project scope, schedule, and budget; a risk matrix and preferred acquisition method to construct the project. The PDD effort will also consider construction phasing and staging within this active facility. It will also include high level total cost of ownership and energy use analysis to minimize future operating costs and environmental impacts. Renderings of the facility in its’ renewed and renovated form will also be produced. The scope is focused on addressing multiple user and operational demands, while maintaining the existing building footprint and a target budget of \$1 billion.

Schedule

Activity

Commission PDD authorization	2021 Quarter 2
PDD start	2021 Quarter 2
PDD effort complete	2021 Quarter 4
MII Approval	2022 Quarter 1
Commission design phase authorization	2022 Quarter 2

Meeting Date: April 13, 2021

Cost Breakdown

Cost breakdown based on \$1B target budget.

	This Request	Total Project
Design	\$2,750,000	\$96,700,000
Construction	0	903,300,000
Total	\$0	\$1,000,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

The PDD would be focused on implementing the third, preferred alternative described below.

Alternative 1 – Proceed straight to design

Cost Implications: \$96,700,000

Pros:

- (1) Design could begin immediately
- (2) Design would commence once a construction method is selected

Cons:

- (1) Project scope would be developed during an active design process, leading to potentially costly design revisions if anything is missed or overlooked very early in the planning process.
- (2) Much of the PDD process would need to be replicated within the design effort to answer basic project questions, such as project scope and contracting method; it would just happen on a more ad hoc basis.
- (3) Care would need to be taken to address the requirements of all users during design, or risk costly change orders or operational disruption later

This is not the recommended alternative.

Alternative 2 – Create bridging documents for a design/build effort

Cost Implications: \$32,000,000

Pros:

- (1) Would allow project design to proceed up to the 30% level
- (2) Usually allows for more deliberate consideration of project requirements before obtaining a design/build contractor

Cons:

- (1) Ties the project to a design/build method of construction
- (2) Usually leads to offering each of the design/build teams selected in the request for qualifications a design stipend to cover the design costs associated with their proposed designs, adding to design costs. However, if this option were chosen the Port could own those design proposals, if properly contracted

Meeting Date: April 13, 2021

- (3) Places more decisions in the design/build team’s sphere of influence, particularly construction phasing and staging. Would ultimately require careful consideration of liquidated damages to minimize operational disruptions

This is not the recommended alternative.

Alternative 3 – Develop a PDD that addresses current environmental, building code and IATA standards; includes reprogramming and reuse of space throughout the facility; expansion of retail, dining, club and passenger amenity areas; evaluates operational impacts during construction; completely renovates building systems and develops structural upgrades.

Cost Implications: \$2,750,000

Pros:

- (1) Engages all stakeholders in reprogramming space thru out the facility, maximizing retail, dining, club and passenger amenity opportunities.
- (2) Creates a roadmap to bring the facility into full compliance with current building codes, creating a safe, efficient, structurally sound facility that is more comfortable and less environmentally impactful.
- (3) Develops a plan to improve the interior spaces of the facility, discussing public art installations, providing a more engaging passenger experience, and readying the South Satellite for decades more service.

Cons:

- (1) The overall project target budget presents a challenge for stakeholders, designers and builders. Planning to this budget will require an extremely disciplined approach by all involved to be successful.
- (2) Design level of the PDD will be lower than the other alternatives, which might introduce greater design risk than the other alternatives.
- (3) Overall a slower and more methodical approach, balanced against the need to understand the entirety of the impacts to better prepare an operating facility.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

A previous SSAT planning effort, funded prior to 2018 under CIP# C800743, spent approximately \$3.2M. A precursor to the current PDD, carried out in 2019-2020, considered the facility’s structural deficiencies and cost \$403,000. It should be noted that these previous efforts have been expensed, and are not included in the capital budget. The work produced in the previous efforts form the baseline for the current proposed effort.

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$981,300,000	\$18,700,000	1,000,000,000

Meeting Date: April 13, 2021

AUTHORIZATION			
Previous authorizations	0	0	0
Current request for authorization	\$2,750,000	0	\$2,750,000
Total authorizations, including this request	\$2,750,000	0	\$2,750,000
Remaining amount to be authorized	\$978,550,000	\$18,700,000	\$997,250,000

Annual Budget Status and Source of Funds

This project was included in the 2021 plan of budget and finance under committed CIP# C801203 in the amount of \$1,000,000,000. This is the current project cost estimate. The initial \$2,750,000 requested is to proceed with the planning and development of the preferred alternative.

Financial Analysis and Summary

Project cost for analysis	\$1,000,000,000
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	The capital and operating costs will be allocated between airline and non-airline cost centers based on rentable square feet. There are opportunities to increase non-aeronautical revenues by repurposing much of the previous space devoted to international arrivals. The estimated impacts on airline costs and non-aeronautical business performance will be presented with the completed PDD.
IRR/NPV (if relevant)	For non-aeronautical portion of investment: TBD upon completion or PDD
CPE Impact	TBD upon completion of PDD.

Future Revenues and Expenses (Total cost of ownership)

Part of the PDD effort is to begin assessing what effect renovating and renewing the SSAT building and building systems will have on operating costs and total cost of ownership. This analysis has not yet been performed. This information will be shared with Commission during approval of the PDD effort.

ADDITIONAL BACKGROUND

Commission actions have been taken in recent years to address certain deficiencies in the SSAT facility. Carpet and casework upgrades occurred in 2015-2016. Project C800818 SSAT Column/Beam Structural Improvements addressed live and dead load issues in certain areas of the SSAT facility. This effort did not address all such issues, nor did it address lateral or wind loads. Project C800376 SSAT HVAC addressed certain immediate needs not being met with the existing HVAC system. The latter two efforts addressed immediate code related concerns, but not the larger systems related issues present in the SSAT.

Meeting Date: April 13, 2021

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

September 8, 2020 – The Commission authorized up to \$600,000 in change order funds to Contract MC-0319530 South Satellite Infrastructure Upgrade for repair, replacement and modifications to the heating hot water circulating pumps at the South Satellite (SSAT), Seattle-Tacoma International Airport.

February 28, 2017 – The Commission authorized \$4,300,000 to initiate programming and develop design alternatives for the South Satellite Renovations Project using Port staff and consultants, and advertise and execute a project-specific service agreement for Project Management Services for the South Satellite Renovations Project

January 17, 2017 – The Commission authorized \$1,300,000 for the design of the South Satellite Heating Ventilation and Air Conditioning (HVAC) Upgrade project.

November 8, 2016 – The Commission authorized design and construction for the South Satellite Structural Improvements project.

August 9, 2016 – The Commission approved the implementation of the 2017 – 2021 Long Range Plan that included the planning for renovation of the SSAT as a priority action in advancing this region as a leading tourism destination and business gateway.

March 14, 2016 – The Commission authorized award/execution of the major public works construction contract for Phase Two of the South Satellite Interior Renovations project.

November 24, 2015 – The Commission authorized construction of Phase Two of the South Satellite Interior Renovations project.

September 8, 2015 – The Commission discussed the IAF wrap-up and next steps including a commitment to add a SSAT Renovation project to the 5-year CIP.

August 11, 2015 – The Commission led a Special Meeting, Roundtable with Airline Representatives related to the International Arrivals Facility (IAF) and SSAT.

December 9, 2014 – The Commission authorized construction of Phase One of the South Satellite Interior Renovations project.

August 5, 2014 – The Commission authorized design funds for the South Satellite Interior Renovations project.