

AGENDA REPORT

Resolution: Authorization to Apply for and Accept Federal Airport Improvement Program (AIP) Grant Funding, Approve Plans and Project Manual, Advertise and Solicit Bids, and Extend Bids for up to 180 Days to Construct the Runway 12-30 Rehabilitation Project, Oakland International Airport. **(Aviation)**

MEETING DATE: 1/26/2017

AMOUNT: Acceptance of AIP Grants Up to \$39,200,000

PARTIES INVOLVED: Federal Aviation Administration (FAA), Brisbane, CA

SUBMITTED BY: Chris Chan, Director of Engineering
Bryant L. Francis C.M., Director of Aviation

APPROVED BY: J. Christopher Lytle, Executive Director

ACTION TYPE: Resolution

EXECUTIVE SUMMARY

This Agenda Report seeks authorization for the Executive Director to apply for and accept Federal Fiscal Year (FFY) 2017 Airport Improvement Program (AIP) grant funding from the Federal Aviation Administration (FAA), and authorization for the Director of Engineering to (1) approve the Plans and a Project Manual, (2) advertise and solicit bids, and (3) extend bids for up to 180 days, for the construction of the Runway 12-30 rehabilitation project (Runway Project). Port staff has forwarded the design plans and project manual to the FAA for approval and anticipates that AIP grants will be awarded to pay for approximately 75-80% of the Runway Project. The remaining costs are anticipated to be paid for with Passenger Facility Charges (PFCs) and reimbursement by the airlines through their rates and charges over a 15-year period. Port staff anticipates receiving the AIP grants as two separate grant awards; the first for approximately \$5.0 million in March 2017 and the second for up to approximately \$34.2 million in June 2017. The Port will award the Runway 12-30 rehabilitation work in two stages contingent on receipt of the grant funding and subject to Board approval.

BACKGROUND

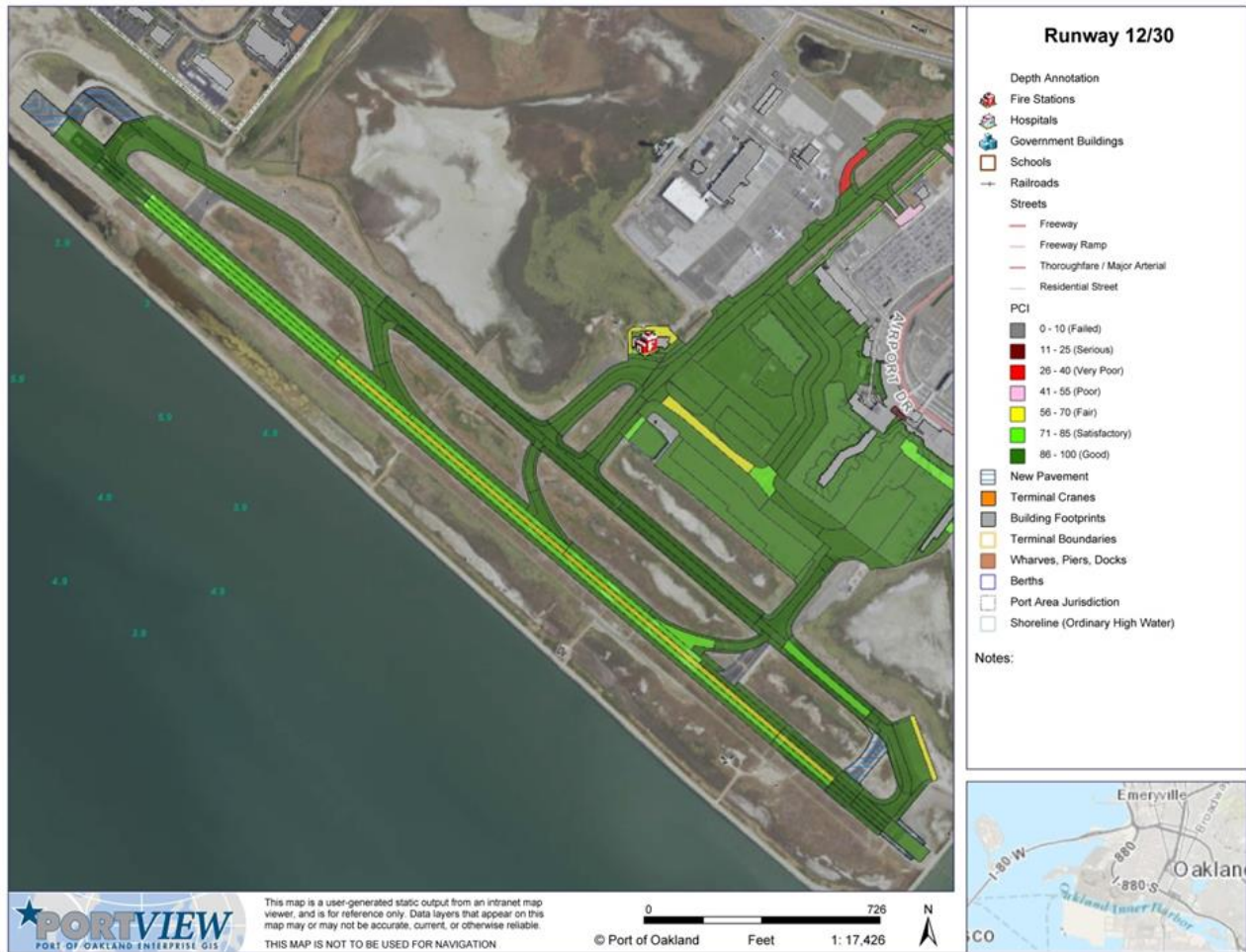
Runway 12-30 is the main commercial air carrier runway at Oakland International Airport (OAK), serving over 123,000 air carrier departure and arrival operations this past year. This runway is essential to the operations at OAK; it is used heavily by commercial carriers, cargo airlines (i.e., FedEx and UPS), and chartered aircraft. The runway has a high utilization

rate that requires constant monitoring and frequent maintenance to comply with aviation safety standards. The usage of this runway will increase as traffic grows and new carriers begin to serve OAK. Changes in the aircraft fleet to larger and heavier aircraft serving OAK will also place a heavier demand on the pavement at the runway. Runway 12-30 is in continuous operation, which limits access to the runway for maintenance. Maintenance of the runway is normally limited to a weekly 4 to 6-hour closure window that occurs on Monday mornings between midnight and 6:00 a.m. During those closures, all traffic must use the two parallel North Field runways (6,212 and 5,458 feet in length). Due to performance limitations and noise abatement procedures at the north field, these runways typically serve only smaller air cargo, corporate and general aviation operators,

The last pavement rehabilitation for Runway 12-30 was completed in 2001, with a design life of 15 years. The runway is now at the end of its service life and, as a result, will require removal of the existing surface pavement layer and construction of a new asphalt concrete overlay. The runway lighting system must also be rehabilitated. In order to facilitate the implementation of the Runway Project, Port staff have been conducting planning and pre-design analysis for over a year. The planning has included extensive coordination with key stakeholders including the airlines, cargo carriers and multiple business lines of the FAA in order to develop an implementation plan that safely accommodates construction while minimizing operational impacts. The project design includes converting a parallel taxiway to a temporary runway in order to close the runway to construct the pavement and lighting rehabilitation. Closing the runway will allow the paving to be constructed on a 24-hour/day schedule over a two-week period, which create the least impacts to operations and provides a superior and seamless pavement for the runway. Air traffic procedures changes have been developed and coordinated with the air carriers and FAA, and pilot procedures have been submitted for publication to accommodate the construction schedule. Final design of the improvements is complete and has been vetted through the FAA's Safety Management System.

At airports across the country, AIP grants are considered the fundamental and core funding source for runway rehabilitation projects. Port staff have coordinated with the FAA to maximize the funding to be programmed for OAK for the Runway Project. The requested AIP grant award for construction will consist of discretionary and entitlement funds. The majority of the construction funding will be discretionary and must be in place prior to the start of construction, as discretionary AIP funds can only reimburse the Port for construction costs incurred after the grant is received. As a result, construction of the Runway Project is contingent upon the timing of the AIP grant awards. The FAA policy is to award all AIP grants upon receipt of construction bids.

The Board has previously authorized a budget of \$7.775 million for planning and design efforts. AIP grants totaling \$5.984 million have been awarded to the Port to pay for these efforts. The design plans and project manual have been submitted to the FAA for their approval and Port staff anticipates that AIP grants will be awarded to pay for approximately 75-80% of the remaining Runway Project costs. Port staff anticipates receiving the AIP grants as two separate grant awards, the first for approximately \$5.0 million in March 2017 and the second for up to approximately \$34.2 million in June 2017.



ANALYSIS

A significant amount of work must be completed prior to closing Runway 12-30 and constructing the pavement and lighting rehabilitation. The initial phase of the rehabilitation project includes converting the parallel taxiway (Taxiway W) into a temporary runway to accommodate aircraft that are unable to use the North Field runways while Runway 12-30 is closed for the overlay construction. Included in the Taxiway W conversion to a temporary runway is the installation of threshold and guard lights, runway lighting base cans, runway distance remaining and guidance signs, and precision approach path indicators (PAPIs), pavement repairs, and pavement striping. Because the taxiway cannot be closed during normal airport operations, much of the conversion work will need to occur during regular Monday morning closures for maintenance, as described in the Background section. This approach is similar to the construction approach utilized leading up to the 2001 pavement rehabilitation work and is expected to take approximately four months to complete.

The Port is currently targeting the closure of Runway 12-30 for a two-week period in August or September 2017; the earliest practical date that this work can occur. While this schedule meets operational needs as well as reduces the risk of weather delays and difficulties during

the rainy season, this schedule is dependent upon the Port receiving AIP grants in March 2017 and June 2017 as currently planned. The schedule is also dependent on all administrative processes and approvals, being completed in an extremely efficient and expedited matter such as execution of contract between parties, providing notice to proceed, and confirming appropriate insurance is in place. The FAA has indicated that OAK's Runway Project is the San Francisco Airports District Office (ADO) highest priority, and is working with the Region and Headquarters to do everything they can to award the AIP grants to meet this schedule; however, no assurances can be provided by the FAA.

Given the anticipated two-step award of grant funding described above to meet the August/September 2017 runway construction schedule, Port staff have developed a two-staged contract approach to deliver the project. The project will be advertised and constructed as a single construction contract, but will be awarded in two stages. Stage I of construction consists of work to facilitate conversion of Taxiway W to the temporary runway and will be awarded upon receipt of the first AIP grant award. Stage I work is structured so that if there is a delay in receipt of the second grant, this work can remain in place and no resources will have been wasted. The remainder of the work, or Stage II, will be awarded following receipt of the second AIP grant award. Stage II of construction consists mainly of work to repair or replace runway light cans and overlay the asphalt concrete runway. If the grant awards are received in March 2017 and June 2017, as scheduled, and there are no administrative delays, the pavement and lighting rehabilitation will be constructed during September after which the temporary runway will be converted back to a taxiway. Grooving of the runway pavement and final striping will then be completed over a series of 19 Monday morning closures.

While no assurances can be given that the first grant will be received by the end of March 2017, Port staff anticipate that Stage I can be completed by Summer 2017 as any potential delay in receiving the grant is likely to be weeks, not months. However, if there is a delay in receiving the first grant award (or the second grant award by June 2017), there may not be sufficient time to complete both the Stage I and Stage II pavement and lighting rehabilitation work by the end of September 2017. Depending on when the grants are received, Port staff would assess the cost/benefits of: (1) constructing the whole project in 2017; (2) constructing Stage I in 2017 and delaying Stage II to 2018; or (3) delaying the whole project to 2018.

To account for the possibility that runway closure for Stage II is delayed until 2018, the contract bid will include bid items for both stages that will capture the differential costs associated with the potential schedule change. Stated, measurable and transparent price increases by the contractor will provide more certainty to the Port and the FAA about the project cost, mitigating delay risk. The overall price of the contract may also be higher due to the general uncertainty of timing, but this amount, if any, will be hard to fully know or quantify. Competitive bidding for this project will mitigate in part the risk of timing uncertainty.

If the Runway Project is delayed, Runway 12-30 pavement will continue to progressively deteriorate despite ongoing maintenance efforts such as crack sealing and light can collar repairs. This will increase the potential for unplanned closures and the need to perform emergency repairs of damaged light fixtures or pavement that may require more time than is

available during Monday morning closures. Maintenance costs will be passed directly on to the airlines. However, the negative impacts to the airport in the event of unplanned closures of the main air carrier runway that disrupt airline and air cargo carrier operations could be substantial. The alternative is for the Port is to include these costs in its airfield cost center. These costs would be passed on to the airlines and result in a significant increase in airline operating costs to serve OAK.

Provided below is a summary of the two-stages, timing and mitigations to delay in receipt of grant awards.

Project Stage / Milestone	Grant Award	Contract Award	Project Start	Construct	Funding Risk Mitigation
Stage I: Taxiway W Conversion	March 2017	April 2017	May 2017	July-August 2017	<ul style="list-style-type: none"> • First AIP grant offer must be received to issue Stage I notice to proceed (NTP); • Stage I work will be awarded after the grant is received, but the schedule adjusted to reflect the Stage II runway closure schedule (if delayed) as appropriate. • Will include bid item for cost if project is delayed to 2018.
Stage II: Runway 12-30 Rehabilitation	June 2017	-	July 2017	September 2017	<ul style="list-style-type: none"> • Second AIP grant offer must be received to issue Stage II NTP; • Will include bid item for cost if project is delayed to 2018.

Construction of this project, including non-stop paving of the runway during the two-week closure, will require significant construction management resources. The Port's construction management staff will be supplemented with a construction management consulting team to be selected following a Request for Qualifications/Proposals process. The Construction Management consultant team's budget will be included in the overall budget request needed to complete the project construction. As such, staff plans to return to the Board for subsequent approvals to:

- Authorize the necessary budget, following receipt of bids, required to complete the project construction;
- Approve selection of a Construction Management consultant team; and
- Award the project to the lowest responsive, responsible Bidder contingent on grant approval

BUDGET & STAFFING

The Runway Project is estimated to cost up to \$57 million based on the current design. To date the Board has authorized \$7.775 million for planning and design, and \$0.661million for FAA reimbursable costs and procurement of long lead time electrical equipment for a total of \$8.436 million. AIP grants totaling \$5.984 million have been awarded to pay for planning and design costs.

The project cost estimate of \$57 million is subject to change based on actual construction bids received. Budget authorization for the remaining project costs will be requested of the Board at a future date, based on the actual construction bids.

Port staff is applying for up to \$39.2 million in additional AIP grant funding to pay for the construction of the Runway Project, based on the current cost estimate. The Port intends to cover the local share of project costs with PFCs and Port cash. Of the local share \$5.8 million of PFCs was approved in PFC Application 17 and an additional \$5.2 million is included in the amendment to PFC 17 which is expected to be approved in February 2017. The remaining project cost, currently anticipated to be around \$0.8 million, will be funded with Port cash. Any cash-funded portion of the project would be reimbursed through airline rates and charges over the useful life of the improvements, estimated at 15 years.

A summary of the anticipated funding plan is shown in the table below.

Table 1 –Runway 12-30 Rehabilitation Project
Anticipated Sources of Funds
(000's)

Sources of Funds	Amount (\$)	Status
AIP #72 – Planning / Design #1	\$2,014	Awarded
AIP #75 – Design #2	\$3,970	Awarded
AIP (New) – Construction / Construction Management ^(a)	\$39,200	Pending
PFCs	\$11,000	\$5.8M approved, \$5.2M pending
Port Cash	\$816	Not applicable
Total	\$57,000	

(a) Includes contractor, Port labor, construction management, OCIP, MAPLA, and all other construction-related costs.

Port staff plans to submit an AIP grant application for the Runway 12-30 Rehabilitation construction and construction management in FFY 2017 based on received bids and will return to the Board to seek budget and other project authorizations.

There is no anticipated staffing impact associated with the requested project authorizations.

MARITIME AVIATION PROJECT LABOR AGREEMENT (MAPLA)

The provisions of the Port of Oakland Maritime and Aviation Project Labor Agreement (MAPLA) apply to the construction portion of this Agenda Report.

STRATEGIC PLAN

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Plan (<http://www.portoakland.com/pdf/about/strategicPlan2011-2015.pdf>)

Goal A: Create Sustainable Economic Growth for the Port and Beyond

- Goal A: Objective 1: Maximize the use of existing assets.

Goal B: Maintain and Aggressively Grow Core Businesses

- Goal B: Objective 1: Retain existing customers and tenants.

LIVING WAGE

Living wage requirements, in accordance with the Port's Rules and Regulations for the Implementation and Enforcement of the Port of Oakland Living Wage Requirements (the "Living Wage Regulations"), do not apply because the requested action is for a construction contract covered by prevailing wage rules and the prevailing rate of wage is higher than the wage required by the Living Wage Regulations.

ENVIRONMENTAL

CEQA Determination: The proposed project (repaving Runway 12-30 and temporarily using Taxiway W as a runway) was reviewed in accordance with the requirements of the California Environmental Quality Act (CEQA). Projects that restore or rehabilitate deteriorated or damaged structures, facilities, or mechanical equipment to meet current standards of public health and safety are exempt from the provisions of CEQA pursuant to CEQA Guidelines Sections 15301, Existing Facilities. The Port has determined that the proposed project meets this exemption and will not have a significant effect on the environment. Upon Board approval of this action, Port staff will file a Notice of Exemption with the Alameda County Clerk Office in accordance with CEQA Guidelines Section 15062.

Potential Impacts (Wetlands and Traffic): Port staff worked with FAA staff to design the temporary runway (Taxiway W) to avoid filling 6 acres of wetlands within the temporary Runway Safety Area (from flattening the shoulder and off-pavement grades). The Port conducted a Transportation Impact Assessment (Assessment) for construction traffic and truck trips on airport roadways (CH2MHill December 2016). The Assessment found that temporary traffic impacts are not significant; however, to address potential impacts two traffic control measures will be included in the Plans and Specifications.

SUSTAINABILITY (Energy Efficiency and Recycling/Reuse)

Port staff have evaluated opportunities for sustainable project development as described below.

Energy Efficiency (EE): Light-emitting diodes (LED) are now used in aviation lighting and have many advantages over incandescent light sources including lower energy consumption, and longer lifetimes. Port staff considered the use of LED runway and taxiway lighting, but because Southwest Airlines' navigation technology relies on the heat signature of incandescent lighting to guide aircraft during taxiing, rejected this potential EE measure.

Recycling/Reuse: Approximately 20,000 cubic yards of asphalt millings will be generated from the project. The Port typically stockpiles asphalt millings from pavement projects at the Materials Management Site for future use in construction projects. The Runway 12-30 project will immediately recycle the asphalt millings to initiate construction of stability berms adjacent to the South Field airport perimeter dike. This eliminates the need to haul materials to and from the MMS, saving money for both projects and avoiding associated air and traffic impacts.

GENERAL PLAN

Pursuant to Section 727 of the City of Oakland Charter, this project has been determined to conform to the policies for the transportation designation of the Oakland General Plan.

OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)/ PROFESSIONAL LIABILITY INSURANCE PROGRAM (PLIP)

As the construction project is a capital improvement project, the applicable Owner Controlled Insurance Program (OCIP) coverages and provisions apply to the construction phase.

OPTIONS

Following are options for the Board's consideration:

1. Approve the action as outlined in this agenda report. Doing so will enable the Runway Project to be issued for bid and subject to receipt of AIP grant awards, and allow for completion of the overlay in 2017. This is the recommended action.
2. Do not proceed with the actions requested in this Agenda Report. This is not recommended because the action is necessary to rehabilitate Runway 12-30, which is the primary runway for passenger airlines and air cargo carriers. Not proceeding with the project will require increased maintenance to keep the existing runway operational and result in increased impacts to airline and air carrier operations.

RECOMMENDATION

It is recommended that the Board authorize the Executive Director to apply for and accept AIP Federal grant funding and authorize the Director of Engineering to approve the Plans and

Project Manual, advertise and solicit bids, and extend bids for up to 180 days, to construct the Runway Project.