



CITY OF LONG BEACH

R-33

LONG BEACH AIRPORT

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December 2, 2014

HONORABLE MAYOR AND CITY COUNCIL
City of Long Beach
California

RECOMMENDATION:

Approve preferred Alternative 3A of the Airfield Geometry Study for the Long Beach Airport; and authorize the City Manager to finalize and submit the Airfield Geometry Study to the Federal Aviation Administration for review and approval. (District 5)

DISCUSSION

On February 8, 2011, the City Council authorized the City Manager to apply for Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grant funds to conduct an Airfield Geometry Study and Airport Strategic Plan (Study) to evaluate the existing airfield geometry and provide alternatives for safety, operational, and financial benefits, and the reduction of risk for the Long Beach Airport (Airport). The FAA provided that grant funding for the Study at the end of Fiscal Year 2011.

On December 13, 2011, the City Council authorized the City Manager to execute an agreement with HNTB Corporation (HNTB) in the amount of \$1,100,000 for planning and engineering consulting services for the Study. Since that time, Airport staff and HNTB have engaged in extensive public outreach, including stakeholder and technical working group meetings with various tenants and Airport users.

The Study prepared by HNTB provides a comprehensive evaluation of the airfield geometry, providing alternatives for the reduction of risk in response to the Commercial Aviation Safety Team (CAST) Report and analysis of the airfield design, which help to reduce excess infrastructure and increase financial benefits through lower operation and maintenance costs. The Study also analyzed a "no project" alternative. The Study included all necessary coordination with the FAA, user groups, tenants, and the public, where appropriate. Budgetary estimates for the design and construction of the most promising alternatives have been included (Attachment).

The "no project" alternative evaluated the impact of maintaining the current airfield geometry without addressing the conditions which necessitated the Study. The "no project" alternative was not recommended because it offered no safety, operational, financial or risk reduction benefit.

Alternative 1 retained all five existing runways, while attempting to address issues with FAA identified "hot spots" and conform to the latest FAA design standards. Alternative 1 was not recommended as retention of all existing runways will maintain the current complexity of the airfield and not provide reduction of risk.

Alternative 2 retained four runways in an attempt to preserve the western north-south runway, addressing safety and standards issues on the east side of the airfield. While Alternative 2 did provide significant improvement to the southeast focus area of the Study, it was not recommended because it did not address safety and standards issues within the northwest or southwest focus areas and did not provide sufficient reduction of risk.

Alternatives 3A and 3B include the closure of both north-south runways, reducing the airfield to three runways, addressing safety and standards issues in all three focus areas. The distinction between Alternatives 3A and 3B is the proposed length of the southern east-west runway. Alternative 3A shortens the runway to 3,898 feet, while Alternative 3B maintains the full length of 5,421 feet. Alternative 3A was recommended as the preferred alternative as it provides the most significant reduction of risk, and the most benefit to the Airport.

Preferred Alternative 3A includes geometric modifications to the airfield infrastructure and a Strategic Plan for reuse of affected portions of the airfield. Alternative 3A provides significant improvements to the safety and efficiency of aircraft operations at the Airport, reducing the airfield from five to three runways, and significantly increasing financial benefits to commercial and general aviation users without interrupting operations. Financial benefits include lower airfield maintenance costs, increased airfield efficiencies, reduction of risk, and development opportunities for existing aviation uses.

Alternative 3A converts the two north/south runways (16R/34L and 16L/34R) to taxiways without adversely impacting Airport capacity or increasing noise impacts to the community. Other recommendations within Alternative 3A include taxiway realignments, runway crossing reconfigurations, removal of excess pavement, construction of new taxiways, construction of aircraft run-up areas, and installation of runway guard lights. Alternative 3A addresses many of the FAA identified "hot spots" through the application of the latest FAA airport design guidance and a safety-based risk assessment of the existing airfield.

Alternative 3A will provide 99.3 percent wind coverage, significantly greater than the 95 percent FAA design requirement. Wind is the key factor influencing runway orientation and the number of runways required at an airport. Generally, the smaller the aircraft, the more it is affected by wind, particularly crosswind components.

If approved by the FAA, the recommendations within Alternative 3A will be implemented incrementally over a 20-year period. No physical modifications will be made to the airfield until environmental documentation in compliance with the California

Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) has been approved, and the Project has been approved by the City Council.

Preparation of CEQA and NEPA documents, along with an update to the Airport Layout Plan (ALP) and other official maps and documents required to be maintained by the Airport, will be necessary as the recommendations of the Study include physical modifications to the airfield. Upon FAA review and concurrence with the recommendations, a second planning grant will be awarded to fund preparation of all necessary environmental documents and update the ALP. The second AIP planning grant is anticipated to be awarded in mid-2015.

This matter was reviewed by Deputy City Attorney Richard F. Anthony on November 5, 2014 and by Budget Management Officer Victoria Bell on October 17, 2014.

TIMING CONSIDERATIONS

City Council action is requested on December 2, 2014, to allow for timely submittal of the Study to the FAA for review and approval of these important analyses and to proceed with next steps, including preparation of environmental documents and ALP update.

FISCAL IMPACT

Overall project costs for the Study, including staff time and indirect costs, remain at an estimated \$1,171,910 as stated in the December 13, 2011 City Council authorization. The cost is budgeted in the Airport Fund (EF 320) in the Airport Department (AP). Separate future recommendations will be submitted to the City Council for acceptance and appropriation of the second planning grant, modification of the HNTB agreement to prepare the environmental documents and modify the ALP, future design contracts on an as-needed basis, as well as award of construction contracts for future capital improvements resulting from the Study.

The capital improvements resulting from the Study will be constructed over a period of approximately 20 years. The cost of the capital improvements is estimated at \$120 million, funded by federal AIP grants. The required match of Airport funds for this amount is estimated at \$11 million, which will be funded through the Passenger Facility Charge (PFC) program. Following approval of the Study and subsequent ALP update, future AIP and PFC applications will be submitted to the FAA.

It is anticipated that the capital improvement projects will have a positive impact on the local job market, creating an estimated 1,000 to 1,200 full-time equivalent (FTE) jobs during design and construction.

HONORABLE MAYOR AND CITY COUNCIL

December 2, 2014

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SUGGESTED ACTION:

Approve recommendation.

Respectfully submitted,



REGINALD I. HARRISON
ACTING DIRECTOR, LONG BEACH AIRPORT

RH:JS:km
S:\CLetters\Airfield Geometry Study to FAA.rev10.docx

Attachment

APPROVED:



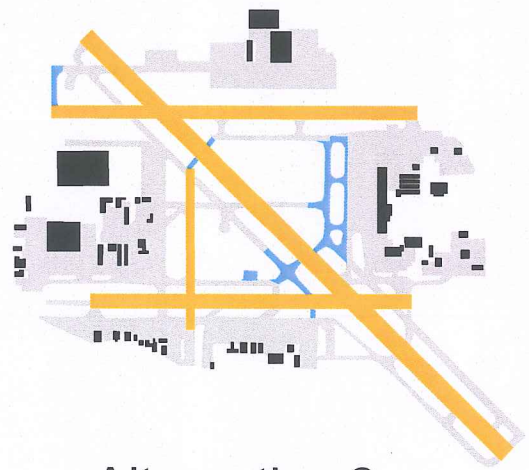
PATRICK H. WEST
CITY MANAGER



Existing Condition



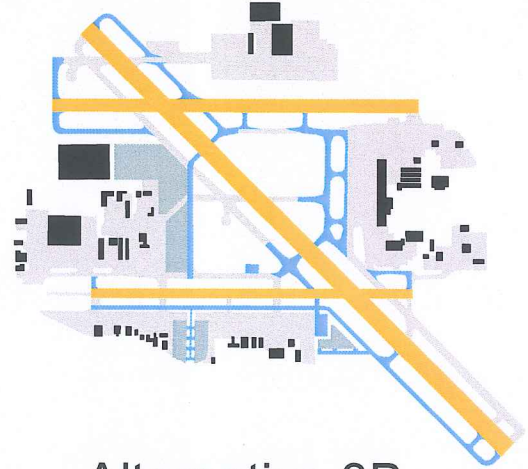
Alternative 1



Alternative 2



Alternative 3A



Alternative 3B