



## City of Long Beach

Working Together to Serve

## Memorandum

**Date:** August 1, 2016

**To:** Patrick H. West, City Manager *T.M.*

**From:** Juan López-Rios, Interim Director, Long Beach Airport *JLR*

**For:** Mayor and Members of the City Council

**Subject:** Long Beach Airport – Airfield Geometry Study Update

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This memorandum is intended to provide an update on the status of the Long Beach Airport (Airport) Airfield Geometry Study (Study) and the upcoming steps relative to implementation of the initial projects emerging from the Study.

In December 2002, the Federal Aviation Administration (FAA) issued its Runway Incursion Airport Assessment report, which identified the Airport as one of sixteen assessed airports which would benefit from safety enhancements to prevent runway incursions due to the complexity of their respective airfield layouts. In April 2007, a Commercial Aviation Safety Team report identified six factors at the Airport that contribute to the probability of runway incursions. These six factors included: airfield complexity; one taxiway leading to multiple runway thresholds; close proximity of multiple runway thresholds; more than two taxiways intersecting in one area; runways of less than 5,000 feet; and, joint use of runway/taxiway for both taxiing and takeoff/landing operations.

In response to these reports, the Airport initiated a number of improvements to enhance operational safety. These included informational and educational efforts to expand the understanding of safety related issues, improved communications between pilots and the Air Traffic Control Tower, and the installation of runway guard lights at several locations on the airfield. While helpful, these initial efforts did not serve to mitigate the six factors contributing to the probability of runway incursions. In order to better assess the configuration of the existing airfield and define specific actions for mitigation, a detailed study of the airfield geometry needed to be conducted.

On February 8, 2011, the City Council authorized the submission of applications to the FAA for Airport Improvement Program (AIP) grant funds to conduct an Airfield Geometry Study (Study) to evaluate the existing airfield layout of runways and taxiways and provide suggestions and alternatives for safety, the reduction of risk, and operational and financial benefits for the Airport. The grant funding for the Study was authorized by the FAA in September 2011.

On December 13, 2011, following a Request for Qualifications (RFQ) process, the City Council authorized the execution of an agreement with HNTB Corporation (HNTB) for planning and engineering consulting services for the Study. Completed in late 2014 and finalized in February 2015, the Study included extensive public outreach and engagement, including stakeholder and technical working group meetings with the FAA, various tenants and Airport users and the public, where appropriate. The Study provided a comprehensive evaluation of the airfield geometry, provided alternatives for the reduction of risk, reduction of excess infrastructure, and for the increase in financial benefits through lower operation and maintenance costs for the airfield.

On December 2, 2014, the results of the Study were presented to the City Council for consideration and approval of HNTB's recommended and preferred Alternative 3A of the Study. Alternative 3A provided for significant improvements to the safety and efficiency of aircraft operations at the Airport by reducing the airfield from five to three runways, thus reducing risks, increasing airfield efficiencies, lowering airfield maintenance costs, and providing for development opportunities for existing aviation uses. The removal of the two smallest runways eliminated two locations, or "hot spots," where three of the five runways crossed/intersected. Alternative 3A was recommended as the preferred alternative because it provided for the most significant reduction of risk.

Some of the main recommended modifications to the airfield of Alternative 3A included the following:

- Conversion of north-south Runways 16R/34L and 16L/34R into taxiways;
- Shortening of Runway 25L/7R;
- Construction of new taxiways and taxiway realignments;
- Reconfiguration of runway crossings;
- Removal of excess pavement;
- Construction of aircraft run-up areas; and
- Installation of runway guard lights.

The recommendations within Alternative 3A will need to be implemented incrementally over a 20-year period. The incremental approach requires the Airport to submit sequential updates to the Airport Layout Plan (ALP), the formal FAA-approved map of the airfield, as funding for the recommendations is identified over time. The City Council unanimously approved the submission of Alternative 3A to the FAA for its final review and approval.

In anticipation of the FAA's approval of Alternative 3A of the Study, on December 9, 2014, the City Council authorized the submission of applications to the FAA for AIP grant funds for funding of the Airfield Geometry Study – Phase II (Phase II) for the preparation of preliminary California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) documents, an update of the ALP and preparation of other official maps and documents required to be maintained by the Airport. The grant funding for Phase II was authorized by the FAA in September

2015. On October 20, 2015, following an RFQ process, the City Council authorized the execution of an agreement with HNTB for planning and engineering consulting services for Phase II of the Study. The update of the ALP will be submitted to the FAA in September 2016. FAA approval of the ALP is anticipated in December 2016.

In the summer of 2015, the FAA contacted the Airport Director to provide verbal confirmation of their support of Alternative 3A of the Study and to request the Airport's submission of FAA Form 7480-1 for the deactivation of Runways 16R/34L and 16L/34R as outlined in Alternative 3A. Form 7480-1 was submitted to the FAA on August 28, 2015, and approved by the FAA on March 15, 2016. On March 22, 2016, the FAA authorized the commencement of internal modification of its public information to show the Airport's airfield with only three runways. The FAA released its revised public information on July 21, 2016.

Moving forward, the Airport will continue to work with the FAA to identify funding for the recommendations in Alternative 3A. The first three projects identified are:

- Reconstruction and shortening of Runway 25L/7R;
- Conversion of Runway 16L/34R into Taxiway C; and
- Reconstruction of Taxiway F.

The FAA prioritizes AIP funding for projects that are "construction-ready," which is a project that has been designed, advertised, and bids have been opened. Projects seeking priority for calendar year 2017 must be construction-ready by May 2017. In order to meet this timeline, City Council approval will be requested in August 2016 for design-engineering and construction management services for these initial projects. The priority will be for the reconstruction and shortening of Runway 25L/7R. Subsequent City Council approval will be requested prior to December 2016 for submission and execution of applications for 2017 AIP funding. Award of 2017 AIP funding is anticipated in June/July 2017.

As noted above, implementation of the recommendations of Alternative 3A of the Airfield Geometry Study will occur over time as funding is available, subject to further City Council approval. These projects will help to enhance the safety of the airfield and its operations.

Please contact me at (562) 570-2605, should you have any questions.