DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINSTRATION

FINDING OF NO SIGNIFICANT IMPACT
RECORD OF DECISION

Terminal E Modernization Project
Boston - Logan International Airport, Boston, Massachusetts

Proposed Action

The Massachusetts Port Authority (Massport) is the sponsor of the Terminal E Modernization Project (the Project) at Boston-Logan International Airport. The purpose of the Project is to modernize international Terminal E, entirely within the Airport footprint, to efficiently accommodate current and projected international operations and passengers, and to meet regional economic goals, while minimizing community and environmental impacts.

Terminal E consistently serves higher passenger volumes than the facility was designed to serve over four decades ago. When the terminal first opened in 1974, Logan Airport served 1.4 million international passengers a year through 12 gates. In the mid-1990s, Massport received approvals to add three new gates as part of the International Gateway/West Concourse project that expanded and updated terminal passenger handling and U.S. Customs and Border Protection facilities. Massport completed the terminal roadway, curb enhancements, and select terminal additions. After September 11, 2001, it put the expansion on hold and did not construct the three new gates. In 2015, the Airport served 5.5 million international passengers at Terminal E through the same 12 gates, causing delays on the airside ramp serving the terminal, delays in passenger processing, and overcrowding passenger holdrooms. This historic growth has occurred without significant airfield or terminal improvements, and will continue independent of facility improvements. International passenger activity is projected to reach eight million passengers in 2030 or sooner.

The modernization of Terminal E will:

- Construct seven new aircraft contact gates. These include the three gates originally approved in 1995, but never constructed, and four additional gates.
- Construct additional passenger holdrooms, concourse circulation, concessions, passenger processing (including Customs and Border Protection facilities), and expanded bag screening facilities;
- Configure the new Terminal area to provide noise buffering for adjacent neighborhoods;
- Modify airside ramp and apron areas and taxilanes to accommodate the new gates, terminal improvements, and supporting facilities;
- Reconfigure adjacent landside roadways, parking, and curbs to accommodate the modernized terminal configuration;
- Provide a direct pedestrian connection between Terminal E and the Massachusetts Bay Transportation Authority (MBTA) Blue Line Airport Station; and
- Incorporate sustainability measures.

The new areas of the terminal would extend from the western end of existing Terminal E and will be four stories in height, and approximately 560,000 sf in total area. Within the terminal, space would be provided for amenities to support future passenger volumes, including additional ticket counters, new hold rooms, the potential for a satellite Customs and Border Protection facility, baggage carousels, restrooms, etc..

Additions to the terminal will be phased with four gates and associated facilities to be constructed by 2022 and the remaining gates and terminal areas to be completed by 2028.

The new terminal configuration would require relocation of some facilities and operations on the airside and landside that are currently occupying the space the new terminal would be built upon. Aircraft parking areas and ground service equipment storage would be shifted to maximize the space available on the existing paved areas of the apron and ramp. The relocated activities and associated changes in ground transportation operations are included in the analysis of environmental effects.

The revisions to the Airport Layout Plan require FAA approval. Massport and FAA prepared an Environmental Assessment/Environmental Impact Report (EA/EIR) to assess the Proposed Action under the Massachusetts Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA), respectively. The Proposed Action will require a Construction General Permit under the National Pollutant Discharge Elimination System. See EA/EIR Table 7.1, for Anticpated Permits and Approvals.

Alternatives Considered

Logan Airport has the local market demand, critical mass of airline service, and the necessary terminal and airfield facilities to support a broad international origin and destination service which cannot be replicated at smaller airports. Accordingly, the EA/EIR includes an evaluation of on-airport project alternatives according to their ability to meet the Project purpose and need, as well as considerations such as space requirements, layout efficiency, efficiency of airfield operations, and ability to buffer noise, efficiency of traffic operations and cost. All alternatives evaluated would be located on previously developed land within the Airport boundary and are expected to have very similar beneficial environmental effects. The Project reuses space already in aviation use without expansion of the airport footprint or a change in land use.

Early design concepts evaluated different configurations of the new terminal area, and North Cargo Apron area. All build alternatives considered would add the required seven new gates. The key differences among the terminal configuration alternatives relate to efficiency of interior operations, frontage on the adjacent roadway to provide curbside access to the terminal for passengers, disruption to existing terminal and apron operations, and cost. With the exception of ability to buffer ground noise from ground operations, there is very little difference among the alternatives from an environmental perspective.

Massport selected Terminal D and Roadway Option 2 as the preferred alternative. The FAA also identifies this as the environmentally preferred alternative under NEPA.

Public Comment

Approximately 190 public comments were received on the draft EA/EIR. Approximately 75 public comments were received on the Final EA/EIR, which included a **draft** FAA Record of Decision The vast majority of comments either pertained to the belief that increased aircraft traffic could result from the Terminal E improvements, or how certain approach/departure paths were resulting in noise impacts.

Experience has shown there is little correlation between airport terminal improvements and the number of flights serving an airport. There is even less correlation between terminal improvements and how/where aircraft fly. The Terminal E improvements should not enable or induce growth at this airport. The facts demonstrate that international service demand at Boston-Logan Airport is driven by economic, regional and market factors, not by airport facility improvements. Therefore, the forseeable environmental impacts should be localized and easily mitigated.

The issue of noise caused by aircraft overflights is, understandably, one of great concern to area residents. The FAA, working in concert with Massport and an active citizen advisory committee, has participated in a comprehensive noise study since 2003. The details of the study can be found on line at www.bostonoverflightnoisestudy.com. The study has been organized in three phases. A number of noise mitigation measures were implemented as part of phase 1, after an environmental review was completed in 2007. That document can be found at www.bostonoverflightnoise.com/phase1.aspx. Additional noise mitigation measures were studied in phase 2, and tests conducted in phase 3. Phase 3 also included environmental review of RNAV procedures to various runways. These environmental documents can be found at www.bostonoverflight noise.com/phase3_documents.aspx.

There has been much public scrutiny of proposed RNAV routes being implemented nationwide. We understand the concerns expressed by residents in densely-populated areas around metropolitan airports. Changes to air traffic, even when minor, can be objectionable to those living under flight paths. Based on the substantial work that has been done on this issue at Boston-Logan Airport, with considerable public review, the various changes that have been implemented will result in a small, cumulative noise benefit to area residents. These procedures are unrelated to, and are unaffected by, the modifications to Terminal E now under consideration.

The FAA undertook two efforts in 2016 relating to RNAV procedures at Boston-Logan Airport. First, as a result of community concerns, the FAA decided in July to conduct an Environmental Assessment, rather than a legislative CATEX, for two proposed RNAV approaches to Runway 4L. This will provide an additional opportunity for analysis and public input into the development of these procedures. Second, the FAA and Massport signed a Memoruandum of Understanding in September. This MOU seeks "reductions to overflight noise impacts of aircraft operations at Boston Logan International Airport (BOS) that result from the FAA's implementation of NExGen precision-based navigation (PBN) procedures including RNAV." This effort will include "incorporation of community outreach and feedback and consideration of further potential refinement of procedural changes or amendments based on such feedback."

The FAA will continue to work with Massport and local communities to find ways to improve the noise environment around Boston-Logan Airport. In doing so, we will continue to conduct the necessary environmental reviews required by law. The RNAV environmental documents are typically published in a variety of locations, including the Boston overflight noise website mentioned previously, as well as: www.faa.gov/air_traffic/environmental_issues/ared_documentation/ We invite continued public participation in this ongoing effort, and local residents should contact their advisory committee representatives to determine how best to channel this involvement.

On November 10, 2016, the Massachusetts Secretary of Energy and Environmental Affairs determinted that the Final EA/EIR "adequately and properly complies with the Massachusetts Environmental Policy Act."

Assessment and Mitigation

EA/EIR Chapter 5, Environmental Consequences and Chapter 6, Mitigation evaluate the environmental consequences and mitigation measures of the Terminal E Modernization Project. Together with the proposed mitigation, all adverse impacts to resource categories are anticipated to be less than significant based on the significance thresholds defined in FAA Order 1050.1F. The Project will, moreover, provide significant environmental benefits. Project elements designed to provide environmental benefits or to minimize adverse impacts are described below.

- Terminal improvements will be sited, designed and constructed to serve as a noise barrier to the adjacent East Boston neighborhoods and Memorial Stadium Park to the southwest of the North

Cargo apron. The new structures will have a minimum height of 45 feet above ground level. Noise levels associated with aircraft single events will decrease up to 17dB in Jeffries Point neighborhood. Any areas of predicted noise increases are negligible.

- Massport will report annually, in writing, to the FAA on the implementation and phasing of this project until its completion. This concise reporting will describe how each phase of the project compares to that which was described in the EA/EIR. It will also describe any unanticipated noise impacts on adjacent residential areas. As the project is implemented, the FAA will determine if any subsequent changes to the project or its phasing could trigger additional analysis and/or a Re-Evaluation under NEPA.
- Seven new gates equipped with 400 Hz power and pre-conditioned air will allow aircraft to plug-in at a gate rather than be serviced remotely as would occur without the project. This will reduce the need for on-board engine operation, thereby reducing aircraft air emissions, greenhouse gas emissions, and energy consumption. New gates will increase ramp efficiency by reducing ramp movements and minimize busing passengers between the terminal and remote aircraft parking locations (hardstands). CO, NO_x, SO_x emissions will decrease compared to the No-Action Alternative.
- Upon project completion, improved HOV access to the Airport will be supported via a direct pedestrian connection to the MBTA Blue Line Airport Station. Roadway and curb improvements will improve vehicle flow and HOV access (full build only).
- Passenger processing and experience will improve through building additions and new amenities.

The Project will be built to Leadership in Energy and Environmental Design (LEED®) and Massachusetts LEED Plus standards, to achieve LEED Silver, or higher certification. Additional sustainable design opportunities will be addressed as the Project progresses into design development. These design commitments will be incorporated into construction, especially as they relate to the proper specification of sustainable materials and construction practices. The project has been designed to comply with the resiliency goals set by Massport guidelines, including siting of critical infrastructure outside of future flood hazard areas.

All other impacts discussed in the EA/EIR are minor construction related impacts that are temporary in nature, including noise, air and construction related traffic. Massport commits to follow appropriate construction best management practices to minimize minor temporary construction related impacts.

Finding of No Significant Impact

I have carefully and thoroughly considered the facts contained in the EA. Based on that information, I find the proposed Federal action is consistent with the existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed federal action will not significantly affect the quality of the human environmental or include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

APPROVED:

R Doucette

Richard Doucette,
Environmental Program Manager, FAA New England Region

11/10/16

Date

Decision and Order

The FAA has determined, based upon the EA/EIR, that the proposed action qualifies for a Finding of No Significant Impact. The FAA must now decide whether to approve or disapprove the revision of the Airport Layout Plan (ALP) to depict the proposed action. Massport is required to maintain an updated, FAA-approved ALP as a condition of its obligations under federal grant assurances upon acceptance of grants from the FAA. Approval to revise the ALP would signify that applicable federal requirements relating to airport development and planning have been met and would permit Massport, as the airport sponsor, to proceed with the project. Massport may also request future funding from the FAA to implement this project. Not approving this agency action would prevent Massport from proceeding with implementation of the proposed project.

I have carefully considered the FAA's goals and objectives in relation to the proposed project. Under the authority delegated to me by the Administrator of the FAA, I find that the project in this Record of Decision (ROD) is reasonably supported. I therefore direct that the action be taken to carry out the approval of the ALP to depict the alternative selected in this ROD.

APPROVED:

Mary T. Walsh,
Airports Division Manager, FAA New England Region

11/14/16
Date

Right of Appeal:
This decision and order is issued and these actions are taken pursuant to 49 U.S.C. Sections 40101 *et seq.*, Parts A and B, and constitute final orders of the Administrator that are subject to reivew by the appropriate Court of Appeals of the United States in accordance with the provisions of 49 U.S.C. Section 46110.