U.S. Department of Transportation
Federal Aviation Administration

Eastern Service Center

1701 Columbia Avenue
College Park, Georgia 30337

June 18, 2020

Mr. William Galvin
Chair of the Massachusetts Historical Commission, State of Massachusetts
Massachusetts Historical Commission
220 Morrissey Blvd
Boston, MA 02125

Reference: Section 106 Consultation Initiation for the Proposed RNAV (GPS) RWL 4L Approach Procedure at Boston Logan International Airport

Dear Mr. Galvin,

The Federal Aviation Administration (FAA) is evaluating a new proposed Area Navigation (RNAV) Global Positioning System (GPS) instrument approach procedure at Boston Logan International Airport (BOS). This new procedure would allow for aircraft to land onto Runway 4L with GPS technological automation as well as allow for landing during low visibility conditions. These additional procedural capabilities would increase the safety and efficiency of the airspace around BOS. Publication of the proposed procedure would constitute an undertaking under Section 106 of the National Historic Preservation Act (NHPA). Therefore, the purpose of this letter is to initiate consultation under Section 106 and the ACHP's implementing regulations.[1] The FAA intends to satisfy Section 106's public involvement requirements in conjunction with the NEPA process.

1. Background Information.

Boston Logan International Airport (the Airport) is a large commercial service airport in Massachusetts, with approximately 340,000 takeoffs and landings in 2019. It is the primary passenger airport for southern New England as well as the region's busiest passenger service airport. Of the twelve runways available at the Airport, Runway 4L is the only runway that typically handles airline arrivals but does not have an Instrument Approach Procedure (IAP) available to assist landings. An IAP is a series of predetermined maneuvers for the orderly transfer of an aircraft under Instrument Flight Rules (IFR) from the beginning of the initial approach to a landing or to a point from which a landing may be made visually. IFR are rules and regulations established by the Federal Aviation Administration to govern flight under conditions in which flight by outside visual reference is not safe. When such conditions are present, these are known as Instrument Meteorological Conditions (IMC). IFR flight depends upon flying by reference to instruments in

[1] https://www.achp.gov/protecting-historic-properties, https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/guidance/media/section-106-handbook.pdf

the flight deck, and navigation is accomplished by reference to electronic signals.

Currently, while operating in Visual Meteorological Conditions (VMC), aircraft approaching Runway 4L to land are expected to maintain visual separation from other traffic at all times. As these aircraft presently lack vertical and lateral guidance to the runway, pilots must "hand-fly" the aircraft when arriving to Runway 4L, leading to additional cockpit workload during a critical phase of flight. Additionally, the runway is not available during periods of IMC, so operational flexibility is significantly limited during these times. During periods of significant delay, flights can often land much later than originally scheduled, potentially impacting neighbors during late-night hours. Cancellation of flights during periods of significant delay is not uncommon.

The FAA is proposing the implementation of a publicly available (published) RNAV IAP to Runway 4L. The proposed RNAV procedure will provide lateral and vertical guidance, enabling continuous descent to the runway and offering a more predictable, consistent, and stabilized approach path, thus improving safety. The proposed procedure will be used during IMC conditions and during VMC conditions when advised by local air traffic control.

The proposed RNAV (GPS) procedure will provide a stabilized approach with vertical and lateral guidance. This will reduce cockpit workload and allow aircraft to land at RWY 4L in IMC, which will in turn reduce delays at the Airport and upstream through the NAS. The procedure will also allow for greater controller flexibility during VMC conditions. The proposed procedure is designated as an RNAV (GPS) IAP, which requires that an aircraft flying the procedure remain within one nautical mile of the procedure centerline 95% of the total flight time.

The General Study Area (GSA) for the FAA's NEPA review is delineated for purposes of identifying potential environmental impacts. The GSA, as depicted in **Attachment A**, encompasses an area of approximately 1,173 square miles around BOS across Middlesex, Norfolk, Plymouth, and Suffolk counties. The GSA was constructed to encompass the geographic area where an aircraft flight path could be affected as a result of the proposed procedure.

2. FAA's Proposed Approach to Defining the Area of Potential Effects

As part of the consultation process required under Section 106, the FAA seeks your input on its proposed approach to identifying the Area of Potential Effects (APE) for the undertaking.

The Section 106 regulations define the APE as "the geographical area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if any such properties exist. The Area of Potential Effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."[2]

The Proposed Action will not cause any physical effects. However, pursuant to 36 CFR 800.5(a)(2)(v), the FAA will also consider the potential for the undertaking to introduce visual, atmospheric, or audible elements that could diminish the integrity of a historic property's significant historic features. The FAA will

[2] 36 CFR § 800.16(d), https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf

make this assessment by comparing the expected flight tracks of aircraft flying the BOS 4L RNAV procedure to radar tracks of current arrivals at BOS. Based on this comparison, the FAA will determine whether there will new areas overflown by the Proposed Action, and specifically whether the undertaking has the potential to introduce new visual, atmospheric or audible elements. Any areas that will be introduced to new visual, atmospheric, or audible elements will be considered part of the APE.

The FAA will also consider the potential for the undertaking to have noise effects that could alter the character or use of historic properties. The FAA is in the process of conducting a noise analysis to determine how this undertaking would affect current aircraft noise exposure levels. If the noise analysis indicates there will be any areas that will be subject to a reportable or significant noise increase, as defined in FAA Order 1050.1F, those areas will be considered part of the APE. The FAA invites the SHPO to provide feedback on this approach to determining the APE and assessing impact on historical properties.

3. Identification of Interested Parties

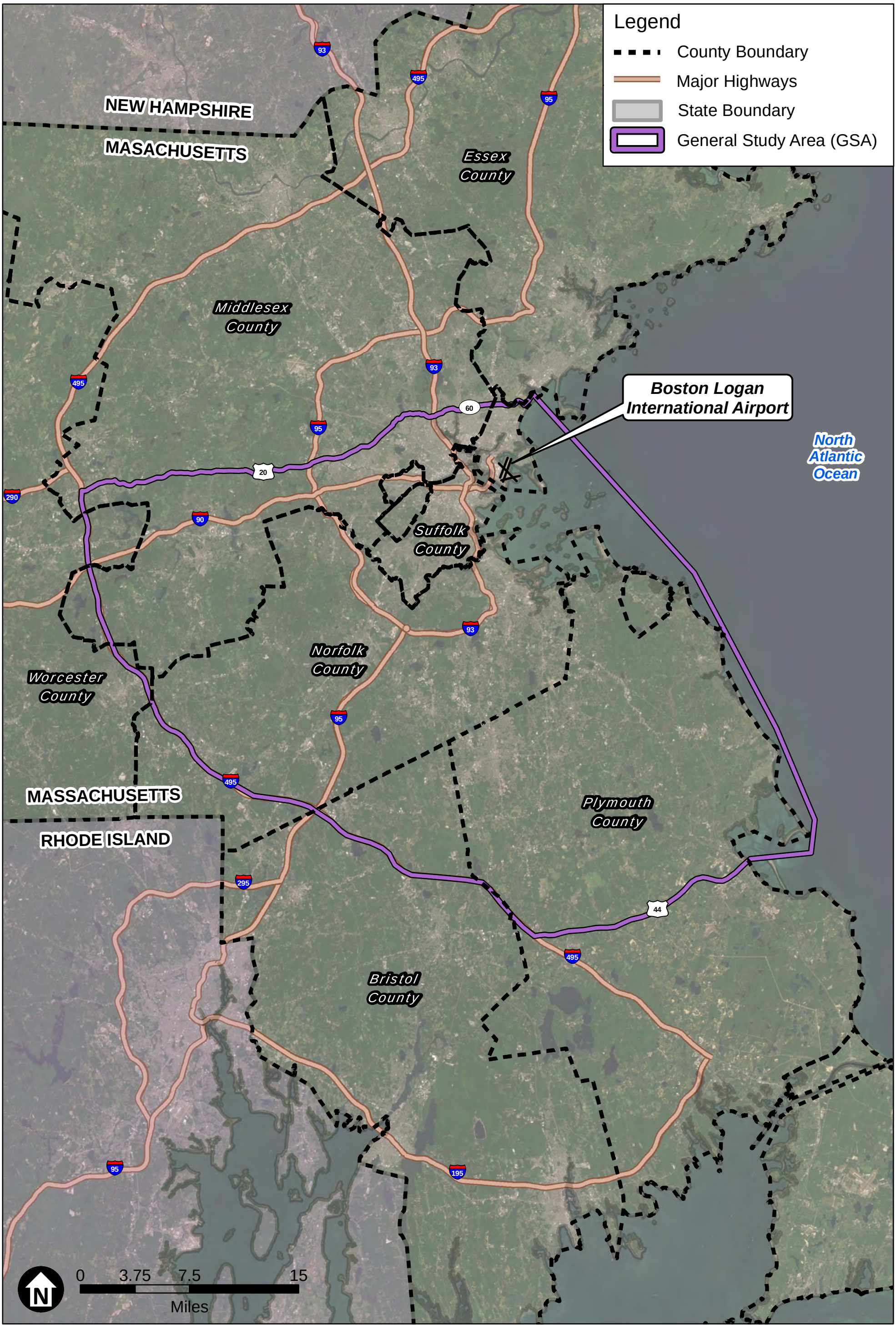
Once the FAA delineates the APE and identifies the resources within that APE, the FAA will invite local governments with jurisdiction over those resources to participate in consultation. Consistent with this effort and to ensure that all interested parties are reached during the outbreak of COVID-19, the FAA requests your assistance to identify other interested parties that should be invited to participate in consultation. An invitation of consultation does not mean that any resources will be necessarily identified as affected or impacted by the proposed procedure.

We look forward to hearing back from you and consulting with you on our approach to comply with Section 106 of the NHPA and in the identification of interested parties. If you have any initial comments or questions on this undertaking, please contact Veronda Johnson at (404)-305-5598, or at veronda.johnson@faa.gov.

Sincerely,

Veronda Johnson

Veronda Johnson
Environmental Protection Specialist
Operations Support Group
Eastern Service Center



SOURCE: Esri; Prepared by Jacobsen Daniels, 2020

Boston Logan RNAV (GPS) RWY 4L EA

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ESA

Attachment A
BOS EA General Study Area