



**Boston Logan International Airport  
Runway 33L Area Navigation (RNAV) Standard  
Instrument Departure (SID)  
Environmental Assessment**

**FINAL**

**May 2013**

**Prepared for:**

**Federal Aviation Administration**

**Prepared by:**

**HNTB**

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## **Federal Aviation Administration**

### **Finding of No Significant Impact (FONSI) & Record of Decision (ROD)**

### **For the Implementation of an Area Navigation (RNAV) Standard Instrument Departure (SID) for Runway 33L at Boston-Logan International Airport**

**May 2013**

#### **I. INTRODUCTION**

This document serves as the Federal Aviation Administration's (FAA) Finding of No Significant Impact and Record of Decision (FONSI/ROD) and provides final agency determinations and approval for the proposed action, namely the implementation of an Area Navigation (RNAV) Standard Instrument Departure (SID) procedure for Runway 33 Left (L) at Boston-Logan International Airport. This FONSI/ROD is based on the information and analysis contained in the Final Environmental Assessment (Final EA) dated May 2013 attached hereto.

Furthermore, this FONSI/ROD:

- Completes the FAA's required environmental review and decision-making process. It is prepared and issued to announce and document a Federal action and decision in compliance with the National Environmental Policy Act of 1969 (NEPA) [42 U.S.C. Section 4321, et seq.], the implementing regulations of the Council on Environmental Quality (CEQ) [40 CFR Parts 1500-1508] and FAA directives [Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures* (March 20, 2006)]. This FONSI/ROD is also used by the FAA to demonstrate and document its compliance with all applicable

environmental laws and requirements, including interagency and intergovernmental coordination and consultation, public involvement and documentation requirements;

- Provides the final Federal determination and approval based on environmental analysis and findings in the attached Final EA. The FAA's decision is based on the information and analysis contained in the Final EA and all other applicable documents which were available and considered, and which constitute the administrative record; and
- Approves a Federal action to implement the proposed RNAV procedure. Implementation of the Proposed Action will not result in airport-related development.

In reaching its determination, FAA has given consideration to 49 U.S.C. 40101(d)(4), which governs FAA's responsibility to carry out its mission while considering safety and the public interest when controlling the use of navigable airspace and regulating civil and military operations in that airspace in the interest of safety and efficiency of both of these operations. Additionally, consideration has been given to 49 U.S.C. 40103(b)(2) which authorizes and directs the FAA Administrator to prescribe air traffic rules and regulations governing the flight of aircraft, for the navigation, protection, and identification of aircraft, and the protection of persons and property on the ground, and for the efficient utilization of the navigable airspace, including rules as to safe altitudes of flight and rules for the prevention of collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects.

Furthermore, the FAA has given careful consideration to: the aviation safety and operational objectives of the project in light of the various aeronautical factors and judgments presented; the need to enhance efficiency of the national air transportation system; and the potential environmental impacts of the project.

## **II. PROPOSED ACTION**

The Proposed Action evaluated in the attached Final EA is the implementation of a new RNAV SID procedure from Runway 33L at Boston-Logan International Airport (BOS or Logan Airport). The Proposed Action (an RNAV SID from Runway 33L) will instruct jet aircraft to takeoff from Runway 33L, climb on a heading of 331 degrees to at or above 520', (aircraft will remain on a 331-degree heading and will continue to climb to published altitudes or as assigned by ATC), then intercept a 314-degree course to the TEKKE waypoint (TEKKE waypoint is 5.88 NM from the BOS very high frequency (VHF) Omni-directional Range (VOR) and 4.25 NM from the end of the runway). Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS).

The RNAV SID overlays as closely as possible (given existing RNAV design criteria) the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKE, then transitions to join the RNAV routes from the other BOS runways. The LOGAN SIX is presently in use and will remain in use for non-RNAV capable jet aircraft and turboprop aircraft. Jet aircraft that depart Runway 33L on the LOGAN SIX climb via a 331 degree heading until reaching a point two nautical miles (NM) from the BOS VOR/Distant Measuring Equipment (DME), then turn to a heading of 316 degrees. After reaching 3,000 feet or 5NM from the BOS VOR/DME, air traffic control provides instructions (via radar vector) to the pilot. Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS,

BLZZR and REVSS). Turboprop aircraft departing Runway 33L fly an assigned heading upon departure and remain at a lower altitude, following air traffic control instructions

**Figures 1-8, 2-1, and 2-2** in the Final EA depict the Proposed Action RNAV SID design and conventional departure flight tracks representing the LOGAN SIX departure procedure.

### **III. PURPOSE AND NEED FOR THE PROPOSED ACTION**

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. The purpose of the Proposed Action is to increase the efficiency of air traffic control procedures at BOS and in the Boston Terminal Radar Control (TRACON) facility's adjoining/overlying airspace by using Next Generation Air Transportation System (NextGen) technology.

As stated in Section 1.3.1 of the attached Final EA, NextGen is the FAA's plan to modernize the National Airspace System (NAS) through 2025. Through NextGen, the FAA is addressing the impact of air traffic growth by increasing NAS capacity and efficiency while simultaneously improving safety, reducing environmental impacts, and increasing user access to the NAS. Part of FAA's effort to achieve NextGen goals is to implement new Performance-Based Navigation (PBN) procedures such as RNAV, at airports across the country including Logan Airport. In basic terms, NextGen represents an evolution from an air traffic control system that is primarily ground-based to an air traffic management system that is satellite-based.

Currently, Runway 33L is the only major runway at Logan Airport that does not have an RNAV SID. Establishing an RNAV SID will provide the pilots and controllers with a predictable procedure that will automatically guide the aircraft to the previously established exit fixes that currently transition aircraft departing Runways 4R, 9, 15R, 22 L/R and 27 from Boston TRACON's airspace up to 14,000' Mean Sea Level (MSL) to the adjoining overlying airspace controlled by the Boston Air Route Traffic Control Center (Boston Center).

This procedure will simplify BOS departure procedures by allowing aircraft to depart any runway on the same departure procedure. It will enhance safety by eliminating the potential for flight deck confusion and subsequent radio frequency congestion, experienced between air traffic controllers and pilots as a result of changing departure procedures depending on the runway in use.

### **IV. ALTERNATIVES**

A potential alternative is one that might accomplish the Purpose and Need for the Proposed Action. In addition, FAA Order 1050.1E, Chapter 4, Section 405(d) states that there "is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA must consider the proposed action and a discussion of the consequences of taking no action and may limit the range of alternatives to action and no-action when there are no unresolved conflicts concerning alternative uses of available resources."



In order to merit further consideration, it is necessary that an alternative provide PBN technology from Runway 33L at Logan Airport for reasons as described in the Purpose and Need chapter. Alternatives that involve other modes of transportation, use of other airports, or changes in airport use may have the potential to decrease air travel or shift traffic to other airports, but these alternatives do not meet the project's Purpose and Need for the Proposed Action. Likewise, improvements in air traffic control technology may provide overall benefits to the operating environment, but would not meet the Purpose and Need of providing an RNAV SID for Runway 33L departures.

In this case, the FAA determined that the No Action and Proposed Action Alternatives represented a reasonable range of alternatives to be evaluated in the EA. FAA based this on experience learned in the Boston Logan Airport Noise Study (BLANS). Starting in 2008, FAA had previously evaluated four other RNAV SID designs for Runway 33L in the BLANS with the Logan Airport Community Advisory Committee (CAC) and the Massachusetts Port Authority (Massport). Ultimately, all of the four "measures" were dismissed in the BLANS process, because they were not operationally feasible or did not provide noise reduction per the purpose of the BLANS. Based on the outcome of the previous designs, FAA determined an overlay up to the first turn point at TEKKE, with transitions to join the RNAV routes from the other BOS runways would be operationally feasible and possibly provide a greater noise reduction when compared to other measures studied in the BLANS. Although preliminary noise analysis on the Proposed Action still showed populations being added to the 65 Day-Night Average Sound Level (DNL), overall noise increases were less than those measures modeled in the BLANS and would minimize impacts to new populations/communities.

During the preparation of the Draft EA, the final noise modeling results using 2010 U.S. Census data showed no populations were being added to the 65 DNL and 67,846 fewer people would be exposed to noise levels above 45 DNL. In addition, there were no significant or reportable noise increases, per FAA Order 1050.1E as further described in the Section VI of this FONSI/ROD. The minimal nature of the impact and overall reduction in noise further substantiated that the No Action and Proposed Action represented a reasonable range of alternatives commensurate with the nature of the proposed action as stated in FAA Order 1050.1E, 405d.

Following a detailed environmental analysis and coordination with the public and agencies (see Chapters 4 and 5 of the attached Final EA), the FAA selected the Proposed Action be carried forward for implementation. The Proposed Action overlays as closely as possible (given existing RNAV design criteria), the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKE, then transitions to join the RNAV routes from the other Logan runways.

## **V. AFFECTED ENVIRONMENT**

### **Study Area**

A study area is defined as the geographic area potentially environmentally impacted by a proposed action. According to FAA Order 1050.1E, the altitude ceiling for environmental

consideration regarding airspace actions is 10,000' AGL. The Study Area encompasses roughly a 20 nautical mile (NM) radius around Logan Airport, generally corresponding to BOS Class B airspace and including an altitude up to 14,000' mean sea level (MSL). The 1,500 square mile Study Area and altitude ceiling is consistent with the study area used for the ongoing BLANS as shown in **Figure 1-2** in the attached Final EA. The same noise modeling protocol used in the BLANS was used in this assessment to allow for consistent evaluation of noise impacts including cumulative impacts resulting from procedural changes from both projects.

## **VI. ENVIRONMENTAL CONSEQUENCES**

The potential environmental impacts from the Proposed Action were evaluated in the attached Final EA for each of the following impact categories. No significant impacts to the quality of the human or natural environment were identified for any of the categories. Therefore, no Environmental Impact Statement is required to be, or has been, prepared.

### **Noise**

There is no change to the number of aircraft operations or types of operations, nor does overall runway use change. The noise analysis therefore reflects changes in noise exposure only due to the implementation of an RNAV SID from Runway 33L (the Proposed Action), as compared to the No Action Alternative.

A comparison of the 2015 No Action and 2015 Proposed Action Alternatives noise exposure for populated centroids indicates there are no significant impacts (increases of 1.5 decibels (dB) in areas that would experience DNL noise levels of 65 or above). Although not required to be evaluated (when no significant impact is found), the Proposed Action does not result in increases of 3 DNL in population centroids between 60 and 65 DNL. In addition, the Proposed Action does not result in increases of 5 DNL for population centroids between 45 and 60 DNL. **Figure 4-3** and **Figure 4-4** in the attached Final EA depict noise exposure greater than 45 DNL at population centroids due to the implementation of the Proposed Action. In addition, as shown in **Table 4-6** in the attached Final EA, 67,846 fewer people will be exposed to noise above 45 DNL with the Proposed Action.

Thus, the Proposed Action will not cause significant noise impacts as the change in noise exposure does not exceed the threshold of significance. Accordingly, no mitigation is warranted per 1050.1E, Appendix A, paragraph 14.4c.

### **Compatible Land Use**

Because the Proposed Action does not result in significant noise impacts, it can be concluded that there will be no significant impacts to compatible land use. Additionally, existing non-compatible land uses currently exposed to noise levels greater than or equal to 65 DNL will not experience significant increases in noise levels as a result of the Proposed Action and no additional populations will be added to the 65 DNL.

**Socioeconomic Impacts and Environmental Justice**

The Proposed Action will not involve any construction of physical facilities or change in noise exposure levels in excess of the applicable thresholds of significance. There would be no acquisition of real estate, no relocation of residents or community businesses, no disruption to local traffic patterns, no loss in community tax base, and no changes to the fabric of the community. Accordingly, there would be no socioeconomic impacts.

Because there are no significant impacts as a result of the Proposed Action, there are no adverse human health or environmental effects associated with the Proposed Action (including the noise, air quality, or cultural resource categories), which would exceed applicable thresholds of significance. As such, no persons of low income or minority populations would be affected at a disproportionately higher level than would other population segments. Accordingly, there would be no significant environmental justice impacts.

**Children's Environmental Health and Safety Risks**

There are no impacts associated with the Proposed Action (including the noise, air quality, or cultural resource categories) which would exceed applicable thresholds of significance. The Proposed Action would not affect products or substances that a child is likely to come into contact with, ingest, use, or be exposed to, and would not result in environmental health and safety risks that could disproportionately affect children. Accordingly, there would be no significant impacts related to children's environmental health and safety risks.

**Historical, Architectural, Archaeological, and Cultural Resources**

The Proposed Action involves air traffic control routing changes for airborne aircraft only and does not involve any ground-based impacts. Therefore, there would be no direct impacts on properties listed on or eligible to be listed on the National Register of Historic Places (NRHP). The Proposed Action Area of Potential Effect (APE), which is the same as the NEPA Study Area, encompasses approximately 1,500 square miles. Changes in noise exposure were calculated at over 84,000 grid points in the study area including 2,176 properties listed in the NRHP. None of the properties listed in the NRHP would experience a 1.5 DNL increase in areas of noise exposure of 65 DNL. In addition, none of the properties in the NRHP that may include a quiet setting as a generally recognized feature or attribute of the resource's significance would experience reportable increases of 3 DNL in population centroids between 60 and 65 DNL or 5 DNL for population centroids between 45 and 60 DNL. Because there were also no significant or reportable increases at any of the 84,000 plus grid points calculated for noise within the study area, there would be no significant impacts to properties that are eligible for listing in the NRHP.

According to FAA Order 1050.1E, Appendix A, the visual sight of aircraft, aircraft contrails, or aircraft lights at night, particularly at a distance that is not normally intrusive, should not be assumed to constitute an adverse impact, per Order 1050.1E, Change 1, Appendix A, Paragraph 12.2b. FAA designed the RNAV SID as close to an overlay as possible of the jet tracks that currently depart Runway 33L and therefore these areas currently experience

overflights from Runway 33L. Consequently, the Proposed Action would not result in significant visual impacts.

Thus, there will be no adverse effects to historic properties resulting from implementation of the Preferred Alternative. Appendix B in the attached Final EA includes the Massachusetts State Historic Preservation Officer's written concurrence with both the definition of the APE and the finding of no adverse effect, in accordance with the Section 106 of the National Historic Preservation Act.

#### **Department of Transportation Act Section 4(f), and Land and Water Conservation Fund Act Section 6(f)**

Noise exposure was calculated for over 22,000 points representing Section 4(f) resources. In addition, noise levels were calculated for grid points at equal intervals throughout the larger Section 4(f) properties. Grid spacing was 1,000 feet for potential Section 4(f) resources with a size of 100 acres or more. For those less than 100 acres, (i.e. smaller parks and monuments), noise exposure was calculated as a single point located in the center of the park. While a 1.5 DNL increase within the 65 DNL may result in a constructive use to all types of 4(f) properties, reportable impacts (increases of 3.0 DNL between the 60 and 65 DNL or 5.0 DNL between the 45 and 60 DNL) are intended to address those section 4(f) properties with a quiet setting as an attribute. No Section 4(f) resources located in areas of noise exposure of 65 DNL or higher would experience a 1.5 dB DNL increase in noise, according to the criteria of significance and no reportable increases would occur under the Proposed Action. Therefore, the FAA determined that the Proposed Action would not cause any constructive use of any 4(f) or 6(f) resource. See Section 4.3 in the attached Final EA.

#### **Federally Threatened and Endangered Species and Migratory Birds**

The Proposed Action involves ATC routing changes for airborne aircraft only and does not involve any ground-based impacts. Thus, it will not destroy or modify critical habitat for any species.

There are two threatened or endangered avian species known to or believed to exist in the Study Area. The Piping Plover is designated a federally threatened species, and the Roseate Tern is a federally endangered species. The Proposed Action will not introduce aircraft to new areas; aircraft depart Runway 33L in the same general direction currently. Therefore, the Proposed Action is not expected to impact any threatened or endangered species. The U.S. Fish and Wildlife Service concurred with FAA's determination per letter dated February 19, 2013.

Migratory birds do not generally fly at altitudes greater than 10,000 feet and the majority (92 percent) of the bird strikes to commercial aircraft occur at or below 3,500 feet AGL and occur during the approach and landing roll.

Any changes to flight paths/patterns due to the Proposed Action Alternative would occur above 3,500 feet AGL, at a higher altitude than where the majority of bird strikes occur. Additionally, the Proposed Action will not change the arrival and departure flows at Logan Airport so the

approaches and departures are not expected to differ from those today. Therefore, based on the available information from the FAA National Wildlife Strike Database, it is concluded that the impacts to migratory bird patterns resulting from the Proposed Action would be minimal.

### **Air Quality**

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for ambient (i.e., outdoor) concentrations of a number of “criteria pollutants”. On July 30, 2007, the FAA issued a list of actions “presumed to conform” under General Conformity [72 Fed.Reg. 41565 (July 30, 2007)]. In the aforementioned notice, the FAA summarized documentation and analysis which demonstrated that certain actions will not exceed the applicable *de minimis* emissions levels for nonattainment and maintenance areas as specified under 40 CFR 93.153(b). The FAA includes air traffic control activities and adopting approach, departure and enroute procedures for air operations in their list of “presumed to conform” actions thereby indicating that these types of actions will not exceed *de minimis* emissions levels.

The Proposed Action includes minimal changes in routes above the mixing height (generally 3,000’ AGL) that are needed to enhance safety and increase the efficient use of airspace by reducing congestion, balancing controller workload and improving coordination between controllers handling existing air traffic. The FAA’s “presumed to conform” list is therefore applicable to the Proposed Action. Since the Proposed Action is presumed to conform and would have a negligible effect on vehicle traffic no further analysis is required.

### **Climate**

Although there are no federal standards for aviation-related Green House Gases (GHG) emissions, it is well-established that GHG emissions can affect climate. The CEQ has indicated that climate should be considered in NEPA analyses. As noted by CEQ, however, “it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand.”

GHG emissions are commensurate with fuel consumption. Because the Proposed Action is generally an overlay of the existing Runway 33L SID procedure, implementation of the Proposed Action is not anticipated to increase fuel consumption and consequently, Carbon Dioxide (CO<sub>2</sub>) emissions. It is possible that, because the use of RNAV procedures increase the reliance on on-board avionics to control the speed, thrust, and flap settings of an aircraft, fuel consumption could be reduced, thereby causing a net reduction in CO<sub>2</sub> emissions.

### **Natural Resources and Energy Supply**

The Proposed Action would not require the need for unusual natural resources and materials, or those in short supply. The Proposed Action would not increase the number of aircraft operations or runway use compared to the No Action Alternative, nor does implementation of the RNAV SID increase the overall flying distance for Runway 33L departures. Therefore the Proposed Action would have minimal impact to natural resources and energy supply and no further analysis is required.

**Light Emissions and Visual Impacts**

Lighting associated with the Proposed Action should be evaluated to identify if it would create an annoyance among people in the vicinity or interfere with their normal activities. However, lighting associated with NAVAIDS and air traffic typically represent relatively low levels of light intensity, light emissions impacts are unlikely to have an adverse impact on human activity or the use or characteristics of the Section 4(f) properties. No change from the No Action Alternative would be expected to occur; therefore no further analysis is required.

Federal guidance does not identify thresholds of significance for visual impacts. Because the Proposed Action does not represent a change in the location of aircraft departing from Runway 33L, no significant visual impact would occur.

**Cumulative Impacts**

The Proposed Action, when added to other past, present or reasonably foreseeable future actions is not expected to cause significant impacts. As previously stated, the Proposed Action does not result in ground-based construction, increase the numbers of departures to Runway 33L or add operations to the airport. Because it is as close to an overlay of existing conditions as possible, it does not increase noise to underlying areas by significant or reportable levels based on FAA criteria. Overall, the Proposed Action reduces the number of people exposed to noise levels above 45 DNL and has a positive cumulative noise impact. This positive impact adds to the noise abatement procedures that were implemented as part of Phase 1 of the BLANS from 2008 to 2010. In addition, the next phase of the BLANS will evaluate potential changes in runway use with a goal to further reduce noise within the Study Area. Also, noise modeling confirmed that there were no cumulative significant or reportable impacts to incorporate the WYLYY ONE Runway 27 RNAV SID into the existing RNAV SIDs at BOS. In addition, no airport capital improvement projects (CIP) that would be anticipated to cause an environmental impact related to the Proposed Action (i.e. an action, such as an airspace redesign, opening of a new runway, runway extension, etc.) are anticipated to occur within the CIP five year planning horizon.

**Inapplicable Impact Categories**

Implementation of the Proposed Action involves aircraft route changes, and does not involve any physical construction activities. As such, many of the resource impact categories listed and described in FAA Order 1050.1E, Chapter 4, Paragraph 403, Impact Categories, and Appendix A, Analysis of Environmental Impact Categories, would not be affected. A brief description of the categories and the rationale for dismissing the impact category is provided in Chapter 3, Section 3.2 of the attached Final EA. The impact categories excluded from analysis of the Proposed Action's potential effects to the environment include Coastal Resources, Construction Impacts, Farmlands, Floodplains, Hazardous Materials, Pollution Prevention, Solid Waste, Water Quality, Wetlands, and Wild and Scenic Rivers. Due to the nature and location of the Proposed Action, it is the FAA's determination that the Proposed Action would not have any significant effect on the above-noted impact categories.

**Other Considerations**

The Proposed Action involves air traffic control routing changes for airborne aircraft only. The United States Government has exclusive sovereignty of airspace in the United States. 49 U.S.C. §40103(a). Congress has provided extensive and plenary authority to the FAA concerning the efficient use and management of the navigable airspace, air traffic control, air navigation facilities, and the safety of aircraft and persons and property on the ground. 49 U.S.C. Section 40103(b)(1) & (2). Therefore, any applicable community planning initiatives may be preempted by Federal law. To the extent applicable, and as there are no significant impacts under noise or compatible land use, the Proposed Action is consistent with the plans, goals and policies for the area and with the applicable regulations and policies of Federal, State and local agencies.

**Mitigation**

Thresholds of significance for any environmental impact category will not be exceeded due to the Proposed Action, therefore, no mitigation is being proposed as part of this project.

**VII. PUBLIC INVOLVEMENT**

Public participation occurred throughout the duration of the project. Starting in October 2012 FAA held three teleconferences/meetings with the CAC and Massport. CAC had previously requested that FAA coordinate with them regarding an RNAV procedure for Runway 33L after the FAA had rejected CAC's recommended measure in the BLANS. The purpose of the teleconferences/meetings was to advise Massport and CAC of FAA's Proposed Action and to receive feedback regarding the draft scope of work, the proposed RNAV design and methods of public consultation. CAC provided input on graphics, public involvement and requested that noise exposure population numbers be reported in the Draft EA by community. In addition, coordination and input from the aviation industry occurred during the PBN development and design process of the Proposed Action.

On January 14, 2013 the Draft EA was published and notice of its availability was provided via Public Notice published in the Boston Globe, Boston Herald, and MetroWest Daily News. The public notice included the project website address as well as the libraries in which the document could be reviewed and a comment period end date of February 15, 2013. The project website ([www.BostonRNAVEA.com](http://www.BostonRNAVEA.com)) provided interested parties the opportunity to review the Draft EA, information about the public comment period, and supplemental information (e.g. an overview of the NAS and a summary of noise and its effects on people). The website also provided information related to the ongoing BLANS project.

On January 24, 2013, FAA presented the findings of the Draft EA to interested members of the CAC to allow CAC members an opportunity to ask FAA questions to facilitate more informed comment on the Draft EA. In late January, FAA started to receive numerous comments from the general public on the Draft EA. At the request of state and federal representatives, Massport, with FAA support, presented information related to the Proposed Action to a group of elected officials and staff at the Massachusetts State House on February 5, 2013. Approximately 23 state, federal and local representatives attended. On February 7, 2013, Massport attended the

Town of Milton Board of Selectmen meeting in response to their request. The presentation given by Massport was similar to that given on February 5, but also included additional information related to aircraft overflights over Milton. Due to a high level of interest from public and elected officials, (including specific requests to extend the comment period), FAA extended the comment period to March 15, 2013. During the comment period, FAA received 384 comments, including a petition with over 1,000 signatures, submitted both via postal mail and electronically to the FAA's environmental specialist. Details of the comments received and FAA responses to those comments are contained in Chapter 5 and Appendix B of the attached Final EA.

## **VIII. THE AGENCY'S FINDINGS**

### **A. Environmental Findings:**

The environmental findings are based upon a careful review of the attached Final EA, comments on the Draft EA, the supporting administrative record and appropriate supporting information.

1. **The FAA has given the Proposed Action the independent and objective evaluation required by the Council on Environmental Quality (40 CFR Section 1506.5).** This environmental analysis was prepared by a contractor on behalf of the FAA. The FAA's environmental process included the rigorous exploration and objective evaluation of reasonable alternatives and probable environmental consequences, and regulatory agency consultations, and public involvement. FAA furnished guidance and participated in the preparation of the EA by providing input, advice, and expertise throughout the planning and technical analysis, along with administrative direction and legal review of the EA. FAA has independently evaluated the EA, and takes responsibility for its scope and content.
2. **The Proposed Action does not result in a significant noise impact over noise sensitive areas.** There are no noise sensitive areas exposed to DNL 65 or higher that experience a 1.5 DNL increase.
3. **The Proposed Action does not include a direct or constructive use of any resources protected under Sections 4(f) and 6(f) of the DOT Act.** No physical development or land acquisition is associated with the Proposed Action, thus there is no potential for direct use of any Section 4(f) or 6(f) resource. No Section 4(f) resources located in areas of noise exposure of 65 DNL or higher would experience a 1.5 dB DNL increase in noise, according to the criteria of significance and no reportable increases would occur that could affect areas for which a quiet setting is a recognized feature of the property. Therefore, the FAA determined that the Proposed Action would not cause any constructive use of any 4(f) or 6(f) resource.
4. **The Proposed Action does not affect any Historical, Architectural, Archaeological or Cultural Resources.** None of the properties listed in the



NRHP would experience a 1.5 DNL increase in areas of noise exposure of 65 DNL. In addition, none of the properties in the NRHP that may include a quiet setting as a generally recognized feature or attribute of the resource's significance would experience reportable increases of 3 DNL in population centroids between 60 and 65 DNL or 5 DNL for population centroids between 45 and 60 DNL. Therefore the FAA determined that there is no effect on any Historical, Architectural, Archaeological or Cultural Resources. In addition, the Massachusetts State Historic Preservation Officer has concurred with this determination.

5. **The Proposed Action Alternative does not have a significant impact on Air Quality.** The Proposed Action is listed as presumed to conform, under General Conformity [FR 41565]. Therefore the Proposed Action has already been demonstrated to have *de minimis* emission levels under 40 CFR 93.153(b).
6. **All practicable means to avoid or minimize environmental harm from the Proposed Action have been adopted.** PBN design considerations for an RNAV SID for Runway 33L took place over several years, starting with the BLANS. FAA had detailed knowledge of the CAC's desires to try and reduce noise where possible within the Study Area. Although the final design for the Proposed Action was independent of the BLANS with an operational purpose instead of a noise reduction purpose, FAA was able to meet its operational purpose and provide overall noise reduction within the Study Area at the same time. Since there are no significant impacts, mitigation is not required.

#### **B. Findings Pursuant to the Purpose and Need:**

In establishing the Proposed Action, the Boston TRACON and Boston Center airspace would be managed more efficiently, adequately accommodating today's level of air traffic and positioning the Boston complex airspace to better accommodate future levels of air traffic.

Based on the Final EA prepared for the proposed action, this FONSI/ROD is issued. Both the Final EA and the FONSI/ROD are hereby incorporated into this decision.

#### **IX. DECISIONS AND ORDERS**

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action, namely the implementation of an RNAV SID for Runway 33L at Logan Airport, is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and is not a major federal action significantly affecting the quality of the human environment or otherwise, including any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

I, the undersigned, have reviewed the attached Final EA including the evaluation of the purpose and need that this Proposed Action would serve, the alternative means of achieving the purpose and need, and the environmental impacts associated with these alternatives. I find the Proposed

Action described in the Final EA is reasonably supported and issuance of a finding of no significance is appropriate. Therefore, an environmental impact statement will not be prepared.

I have carefully considered the FAA's statutory mandate under 49 U.S.C. §40103 to ensure the safe and efficient use of the national airspace system as well as the other aeronautical goals and objectives discussed in the Final EA.

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve and direct that actions be taken which will enable implementation of the Proposed Action. This consists of the development of an RNAV SID for Runway 33L at Boston-Logan Airport, to establish and maintain safe and efficient handling and movement of traffic into and out of the Boston TRACON and Boston Center Airspace.

Approved: William A. Quinn for 6/04/2013  
Elizabeth L. Ray Date  
Vice President, Mission Support Services

#### RIGHT OF APPEAL

**This FONSI/ROD constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.**

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## **APPENDICES**

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Appendix A: Noise Modeling Technical Report

Appendix B: Agency Consultation and Public Comment



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# **CHAPTER 1: PROJECT BACKGROUND AND PURPOSE AND NEED FOR THE PROPOSED ACTION**

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# Chapter One:

## PROJECT BACKGROUND AND PURPOSE AND NEED FOR THE PROPOSED ACTION

---

### 1.1 Introduction

The Federal Aviation Administration (FAA) has prepared this Final Environmental Assessment (EA) to identify the potential environmental effects associated with an FAA Proposed Action to implement a new air traffic control Area Navigation (RNAV) departure procedure on Runway 33 Left (33L) at Boston-Logan International Airport (Logan Airport or BOS). A procedure is a predefined set of guidance instructions that define a route for a pilot to follow.

Federal actions, such as the Proposed Action RNAV departure procedure, with the potential to cause environmental impacts must be examined to comply with the National Environmental Policy Act of 1969 (NEPA) and other pertinent laws. Guidance for considering environmental impacts is found in FAA Order 1050.1E, *“Environmental Impacts: Policies and Procedures”* and in the Council on Environmental Quality (CEQ) regulations for implementing NEPA.<sup>1</sup>

This Final EA has been prepared in accordance with FAA Order 1050.1E, which requires an EA for new instrument departure procedures which routinely route aircraft over noise sensitive areas at less than 3,000' above ground level (AGL).<sup>2</sup>

Although the FAA considered categorically excluding this procedure from the preparation of an EA per FAA Order 1050.1E, as it was designed to overlay conventional (i.e. existing) flight tracks, it chose not to because the procedure is not an exact overlay of conventional flight tracks due to RNAV design criteria. Also, preliminary noise analysis of the RNAV standard instrument departure (SID) procedure on Runway 33L conducted prior to the Draft EA resulted in 145 people being added to the 65 Day-Night Average Sound Level (DNL) noise contour. The results of this preliminary analysis indicated the possibility that the population exposed to higher noise levels could increase with an updated EA noise analysis, and could have the potential to be highly controversial on environmental grounds. As a result, the FAA determined an EA would be appropriate to investigate this in more detail.

In addition, because preliminary noise analysis results for the Proposed Action indicated that environmental impacts would not likely be significant and an EA analysis should be commensurate with the level of impact, this EA is being prepared under the principles of a “Focused EA”.<sup>3</sup> A Focused EA addresses only the applicable impact categories from those listed in Appendix A of FAA Order 1050.1E and simplifies what

could otherwise be an unnecessarily complicated process and lengthy document. This Final EA was prepared following public coordination and comments received on the Draft EA published on January 14<sup>th</sup>, 2013.

The format of this EA is as follows: **Chapter One** provides information on the project background, provides a summary of previous RNAV SID procedure designs and describes the purpose and need for the Proposed Action. **Chapter Two** presents the alternatives for the Proposed Action. **Chapters Three** and **Four** provide full disclosure of existing conditions and potential environmental impacts, respectively, associated with implementation of the Proposed Action. **Chapter Five** provides a summary of public and agency involvement and **Chapter Six** lists the EA preparers. **Appendix A** provides a summary of operational data used to model the 2009 and 2015 operating environment, and **Appendix B** provides information pertaining to agency consultation and public comment as part of the EA process.

## **1.2 Study Area**

A study area is defined as the geographic area potentially environmentally impacted by a proposed action. According to FAA Order 1050.1E, the altitude ceiling for environmental consideration regarding airspace actions is 10,000' AGL.<sup>4</sup> The Study Area encompasses roughly a 20 nautical mile (NM) radius around Logan Airport, generally corresponding to BOS Class B airspace and including an altitude up to 14,000' mean sea level (MSL). The 1,500 square mile Study Area and altitude ceiling is consistent with the study area used for the on-going noise study at Logan Airport described in more detail below.

**Figure 1-1** depicts the layout of Logan Airport, including runways. **Figure 1-2** illustrates the Study Area for this project.

## **1.3 Background**

The Federal Aviation Act of 1958 delegates to the FAA responsibility for managing the use of the navigable airspace and regulating civil and military aircraft operations in that airspace in the interest of maintaining both the safety and efficiency of operations.

Since 2002, the FAA has been involved in a comprehensive noise abatement study at Logan Airport in collaboration with the Massachusetts Port Authority (Massport) and the Logan Airport Community Advisory Committee (CAC).<sup>5</sup> The noise study is the result of a mitigation requirement contained in an FAA Record of Decision (ROD) dated August 2002. The ROD was the result of an FAA Environmental Impact Statement (EIS) that evaluated the environmental impacts associated with proposed airside improvements at Logan Airport, which included the new Runway 14/32.<sup>6</sup>

The noise study is being conducted in phases. The first phase was called the Boston Overflight Noise Study (BONS). It was renamed the Boston Logan Airport Noise Study (BLANS) when Phase 2 began in 2007 and consideration of ground noise mitigation was incorporated. At the end of Phase 1, the FAA began implementation of seven noise abatement arrival and departure procedures recommended by the CAC after detailed noise and operational analyses were completed. These procedures are described in a Categorical Exclusion/ROD dated October 16<sup>th</sup>, 2007. As of November 18<sup>th</sup>, 2010, all of the noise abatement procedures were implemented at Logan Airport, which includes arrival







# Boston Logan International Airport



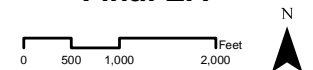
**Figure 1-1**  
**Boston Logan International**  
**Airport Layout and**  
**Runway Configuration**

## LEGEND

-  Airport Boundary
-  Major Highway
-  Major Road
-  BOS VOR/DME



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**



Source: 2008 Aerial Photography, Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



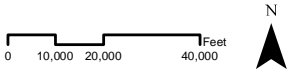
**Figure 1-2**  
**Study Area**

**LEGEND**

- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway



**Boston Logan  
International Airport  
Runway 33L RNAV SID  
Final EA**



procedures to Runways 27, 22, 33L, and departure procedures for Runways 4R, 9, 15R and 22L/R.

The evaluation of a departure procedure for Runway 33L was reserved for Phase 2, along with other potential procedures. FAA, Massport and the CAC analyzed several procedure designs for Runway 33L, but they were either not operationally feasible or did not reduce noise consistent with the goals and objectives of the BLANS. This chapter includes a brief summary of the various measures evaluated in the BLANS, the reasons they were eliminated in that study and how, in part, those measures helped determine FAA's Proposed Action for this EA. Additional information pertaining to each of the measures is available through the BLANS Levels 1, 2, and 3 Screening Analysis reports, available at [www.bostonoverflightnoisestudy.com](http://www.bostonoverflightnoisestudy.com).

In April 2012, the CAC formally recommended that FAA implement a BLANS RNAV departure procedure for Runway 33L. In a letter to the CAC dated August 3<sup>rd</sup>, 2012, the FAA declined to implement the requested procedure under the umbrella of the BLANS, stating it was inconsistent with the BLANS goals and objectives. The RNAV departure procedure the CAC recommended resulted in over 20,000 people with reportable noise increases using FAA criteria and over 12,000 people would have been added to noise levels above 55 DNL based on CAC criteria. BLANS goals and objectives required a reduction in the number of people exposed to increases in noise levels. However, the FAA stated its intent to establish an RNAV SID procedure for Runway 33L in the near future, consistent

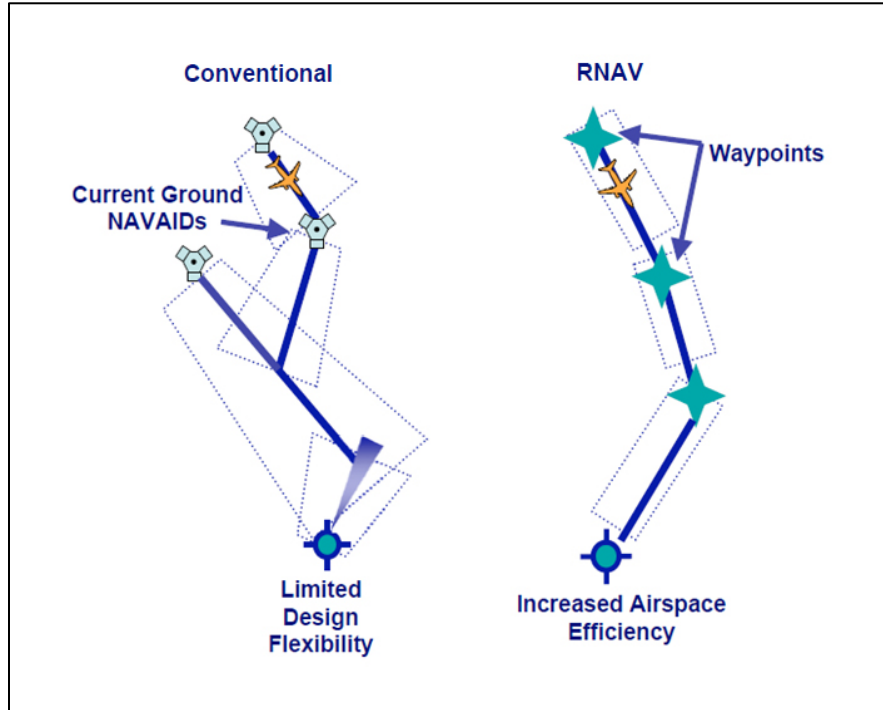
with FAA's Next Generation Air Transportation System (NextGen) goals. Detailed information is contained in the BLANS Level 3 Report.

### **1.3.1 Next Generation Air Transportation System (NextGen)**

NextGen is the FAA's plan to modernize the National Airspace System (NAS) through 2025. Through NextGen, the FAA is addressing the impact of air traffic growth by increasing NAS capacity and efficiency while simultaneously improving safety, reducing environmental impacts, and increasing user access to the NAS. Part of FAA's effort to achieve NextGen goals is to implement new Performance-Based Navigation (PBN) procedures such as RNAV, at airports across the country including Logan Airport. In basic terms, NextGen represents an evolution from an air traffic control system that is primarily ground-based to an air traffic management system that is satellite-based. **Figure 1-3** presents a comparison of the flight trajectory of an aircraft flying a conventional and RNAV procedure.

An RNAV procedure enables aircraft to fly on any desired flight path within the coverage of ground or space based navigation aids, or within the limits of the capability of aircraft self-contained systems, or a combination of both capabilities. RNAV procedures facilitate more efficient design of airspace and procedures which collectively result in improved safety, access, capacity, predictability, operational efficiency and environmental benefits.





**Figure 1-3. Conventional versus RNAV Routes**

RNAV procedures are designed in accordance with FAA national design criteria using a software program called Terminal Area Route Generation Evaluation Traffic Simulator (TARGETS). Procedures consist of waypoints in space defined by latitude and longitude. Waypoints are connected by various types of flight path legs, which together form a procedure that defines a route for a pilot to follow.

The implementation of RNAV procedures is usually initiated by FAA air traffic control facility teams for operational reasons. Input is received from the airline industry with oversight and review and approval of final designs from various other FAA offices. Aircraft must be equipped and the crew properly trained to be able to take advantage of an RNAV procedure. At Logan Airport, it is estimated that over 80% of the overall forecast fleet in 2015 will be equipped and able to fly RNAV procedures.

Although the purpose of BONS was to implement procedures that reduced noise (not limited to use of RNAV procedures), RNAV procedures developed by the FAA were found to more accurately accomplish this. Currently, RNAV SID noise abatement departure procedures for jets are in use for Runways 4R, 9, 15R, 22L/R and 27. The only major runway at Logan Airport that does not have an RNAV SID is Runway 33L.

Previous versions of the RNAV SID procedures from Runway 33L did not reduce noise consistent with the overall purpose and goals of the BLANS and could not be implemented under the umbrella of the BLANS. As a result, the FAA is now pursuing an RNAV SID for Runway 33L for operational purposes independent of the BLANS Phase 2.<sup>7</sup>



### **1.3.2 History of BLANS RNAV SIDs Considered for Runway 33L**

Several iterations of an RNAV SID for Runway 33L were considered in the BLANS, designated as different versions of Measure F-HH. Each was evaluated on the basis of safety, controller workload, delay, efficiency and flexibility changes, and capacity. Ultimately, each was eliminated because the measure resulted in a significant compromise on FAA goals and mission based on these criteria, or they were inconsistent with BLANS goals and objectives. The following sections summarize this evolutionary process; however, these measures are not considered alternatives under NEPA for the current Proposed Action.

In general, each iteration of the RNAV SID procedure differed based on the distance the aircraft would fly runway heading prior to turning to the northwest (within 2 NM of the runway end) and where the aircraft would begin to turn towards the “exit fix” within the A90 airspace (in varying locations in Medford). Some of these differences resulted from changes in RNAV design criteria, which guide various criteria such as an aircraft turning radius or climb gradient and ensures that various aircraft types can fly a specific procedure.

#### **1.3.2.1 BLANS Measure F-HH(v1) (2008 - 2009)**

BLANS Measure F-HH(v1) instructed turbojet aircraft departing Runway 33L to a course that would route the aircraft over the Wellington Station until reaching a point seven NM beyond the fly over end of the runway or to an altitude of 5,000’ MSL before turning to enroute or intermediate courses. Measure F-HH(v1) is depicted in **Figure 1-4**. The figure (and all subsequent

figures in this section) includes a sample of 2012 jet and turboprop aircraft departures from Runway 33L for comparison with the procedure design, provided via TARGETS.

The FAA noted significant safety concerns associated with maintaining adequate separation between Runway 33L departing aircraft and arriving aircraft to Logan Airport, as well as conflicting operations between Logan Airport and nearby airports, including Hanscom-Bedford Airport (BED). As a result of this and other considerations, this measure was not further evaluated as part of the BLANS.

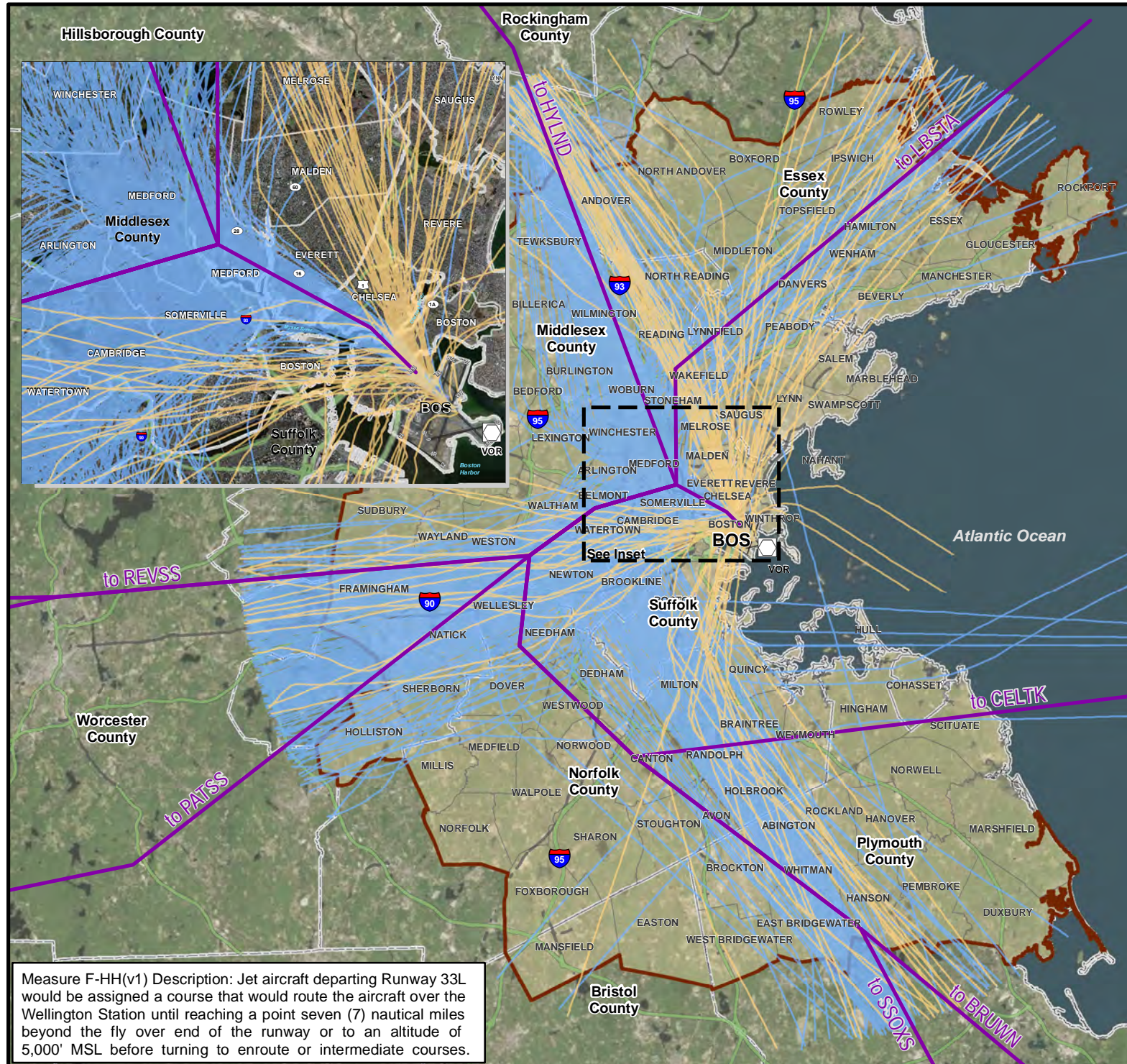
#### **1.3.2.2 BLANS Measure F-HH(v2) (2010)**

The FAA proposed modifications to Measure F-HH(v1). Measure F-HH(v2) would establish an RNAV departure route from Runway 33L that would follow compatible land use to the maximum extent practical (e.g. Mystic River and industrial areas toward Wellington Station) up to the BOS very high frequency (VHF) Omni-directional Range (VOR) 5 Distance Measuring Equipment (DME), or at an altitude of 5,000’. Measure F-HH(v2) is shown in **Figure 1-5**. Under the BLANS, the CAC concurred with evaluating F-HH(v2) proposed by the FAA in lieu of Measure F-HH(v1).

The FAA identified that the measure would require a steeper (or non-standard) climb gradient to be feasible, which would require additional runway takeoff length. Because adequate runway length on Runway 33L was not available, aircraft would be required to either reduce overall aircraft weight or use Runway 4R/22L. As a result, this measure was not further evaluated as part of the BLANS.



# Boston Logan International Airport



**Figure 1-4**  
Runway 33L RNAV SID  
Procedure BLANS  
Measure F-HH(v1)

## LEGEND

- Runway 33L RNAV SID Procedure BLANS Measure F-HH(v1) (Procedure Tracks)
- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway



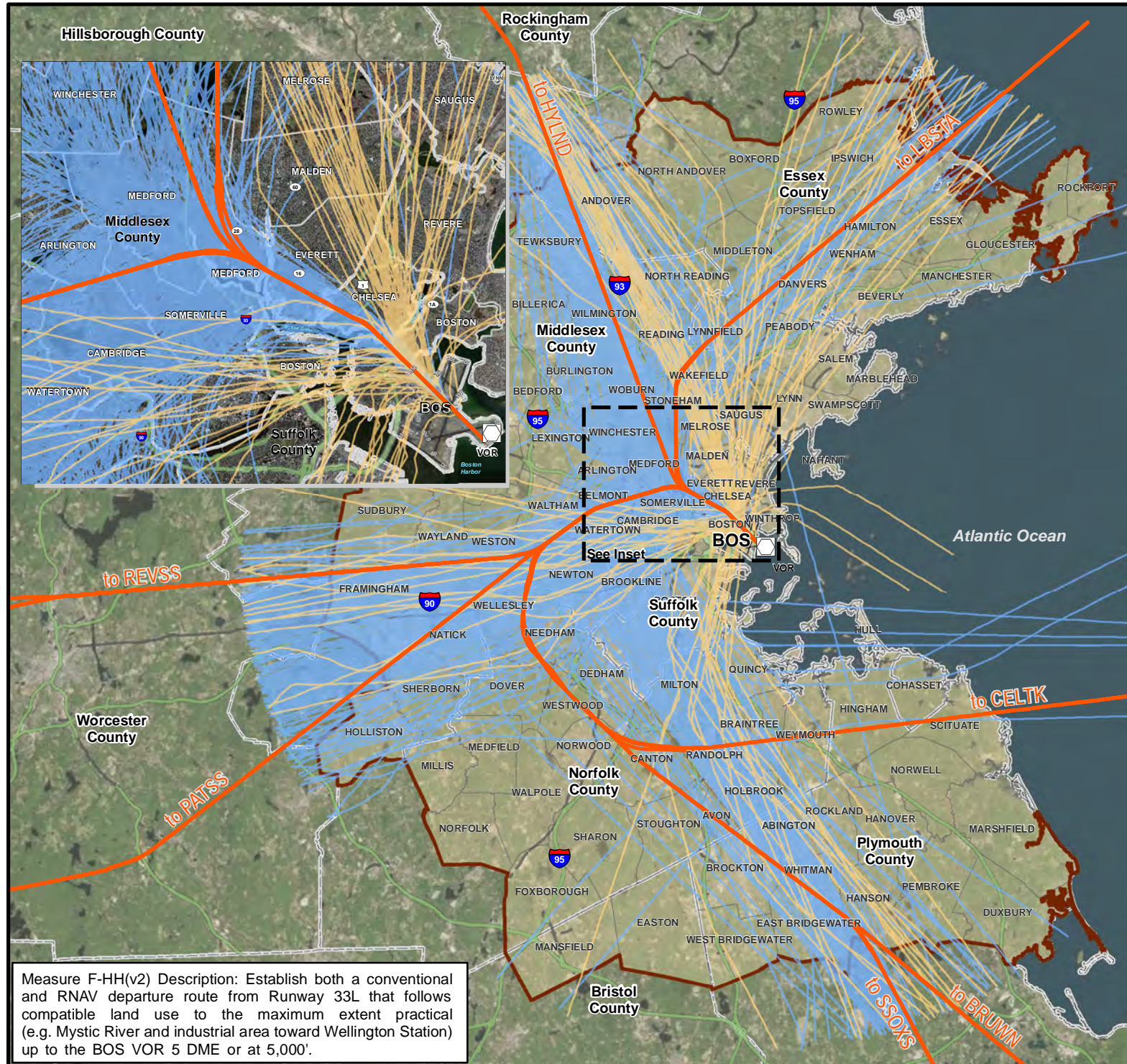
## Boston Logan International Airport Runway 33L RNAV SID Final EA

0 1.75 3.5 7 Nautical Miles

Source:  
Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 1-5**  
Runway 33L RNAV SID  
Procedure BLANS  
Measure F-HH(v2)

## LEGEND

- Runway 33L RNAV SID Procedure BLANS Measure F-HH(v2)
- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway



## Boston Logan International Airport Runway 33L RNAV SID Final EA

Source: Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI



### **1.3.2.3 BLANS Measure F-HH(v3) (2011)**

Following the dismissal of Measure F-HH(v2), the CAC and FAA developed a revised proposal, addressing the climb gradient and maximizing the overflight of compatible land use corridors. The same heading parameters from Runway 33L that were applied for Measure F-HH(v2) were also applied to Measure F-HH(v3) as well as the general location/distance where the transition to departure fix turns would take place. Measure F-HH(v3) would establish an RNAV SID procedure from Runway 33L that turned to the northwest at a location that avoided Admiral's Hill in Chelsea, then followed compatible land use northwest from Admiral's Hill, and followed compatible land use to the maximum extent practical up to the BOS VOR 5 DME or at a point the aircraft reached an altitude of 5,000'. Measure F-HH(v3) is shown in **Figure 1-6**.

Measure F-HH(v3) was evaluated for noise impacts under the BLANS Level 3 process. The analysis of aircraft noise impacts included multiple criteria. Criteria which guided FAA decision making was related to the overall change in the DNL metric at various thresholds, consistent with the methodology used in this EA. CAC criteria included changes in DNL at lower thresholds than those required to be used by the FAA. Noise analysis in the BLANS was based on Census data published in 2000. The baseline 2015 65 DNL noise contour included 2,343 persons. With the implementation of Measure F-HH(v3), an additional 145 persons would be exposed to noise levels above 65 DNL. Further, over 30,000 persons would experience an increase of at least 5 DNL and would be newly exposed to noise levels above 45 DNL, while 16,045 persons would

experience a 5 DNL decrease in noise, a net increase of 14,325 persons.

Due to the level of noise impacts, the CAC opted to request further revisions to the procedure. This measure was ultimately rejected by the CAC in favor of Measure F-HH(v4).

### **1.3.2.4 BLANS Measure F-HH(v4) (2012)**

The CAC requested that a revised RNAV SID procedure fly runway heading to a point identical to that in the Measure F-HH(v3) design, then turn to the northwest towards a waypoint located more to the southwest. Measure F-HH(v4) is shown in **Figure 1-7**.

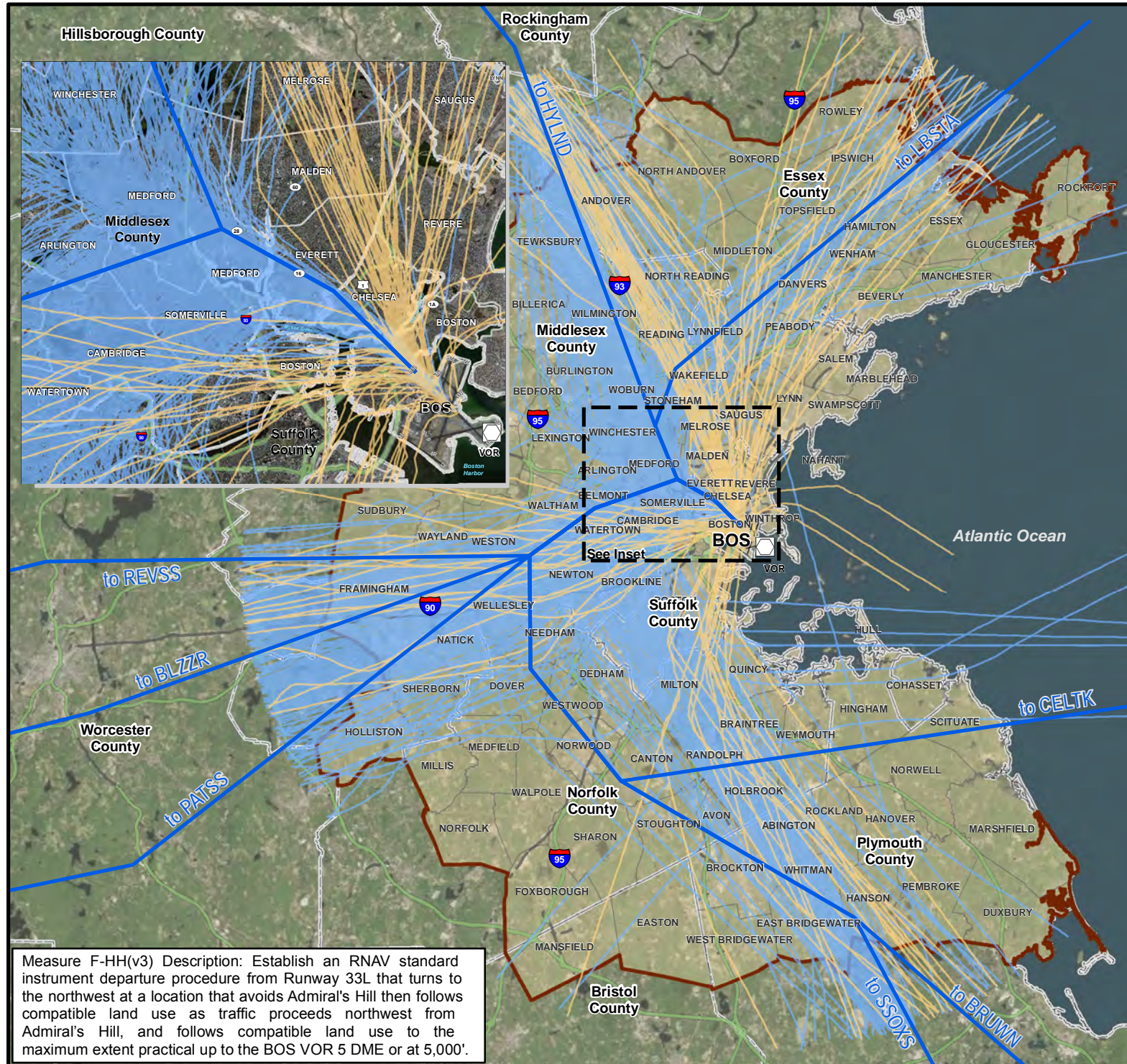
Measure F-HH(v4) was evaluated for its cumulative noise impacts. Like Measure F-HH(v3), an additional 145 persons would be exposed to noise levels above 65 DNL under Measure F-HH(v4). Further, nearly 31,000 persons would experience an increase of at least 5 DNL and would be newly exposed to noise levels above 45 DNL, while 8,461 persons would experience a 5 DNL decrease in noise, a net increase of 22,497 persons.

The CAC voted to implement Measure F-HH(v4) based on their understanding that the FAA was under direction to establish an RNAV SID from Runway 33L. The CAC determined Measure F-HH(v4) was preferable compared to the baseline or Measure F-HH(v3). However, the FAA rejected implementation of the measure because it was inconsistent with the overall purpose and goals of the BLANS. The FAA stated its plan to establish an RNAV SID procedure for Runway 33L in the near future as part of FAA's NextGen program.<sup>8</sup>

Although the BLANS measures were evaluated under a separate study with noise



# Boston Logan International Airport



**Figure 1-6**  
Runway 33L RNAV SID  
Procedure BLANS  
Measure F-HH(v3)

## LEGEND

- Runway 33L RNAV SID Procedure BLANS Measure F-HH(v3)
- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway



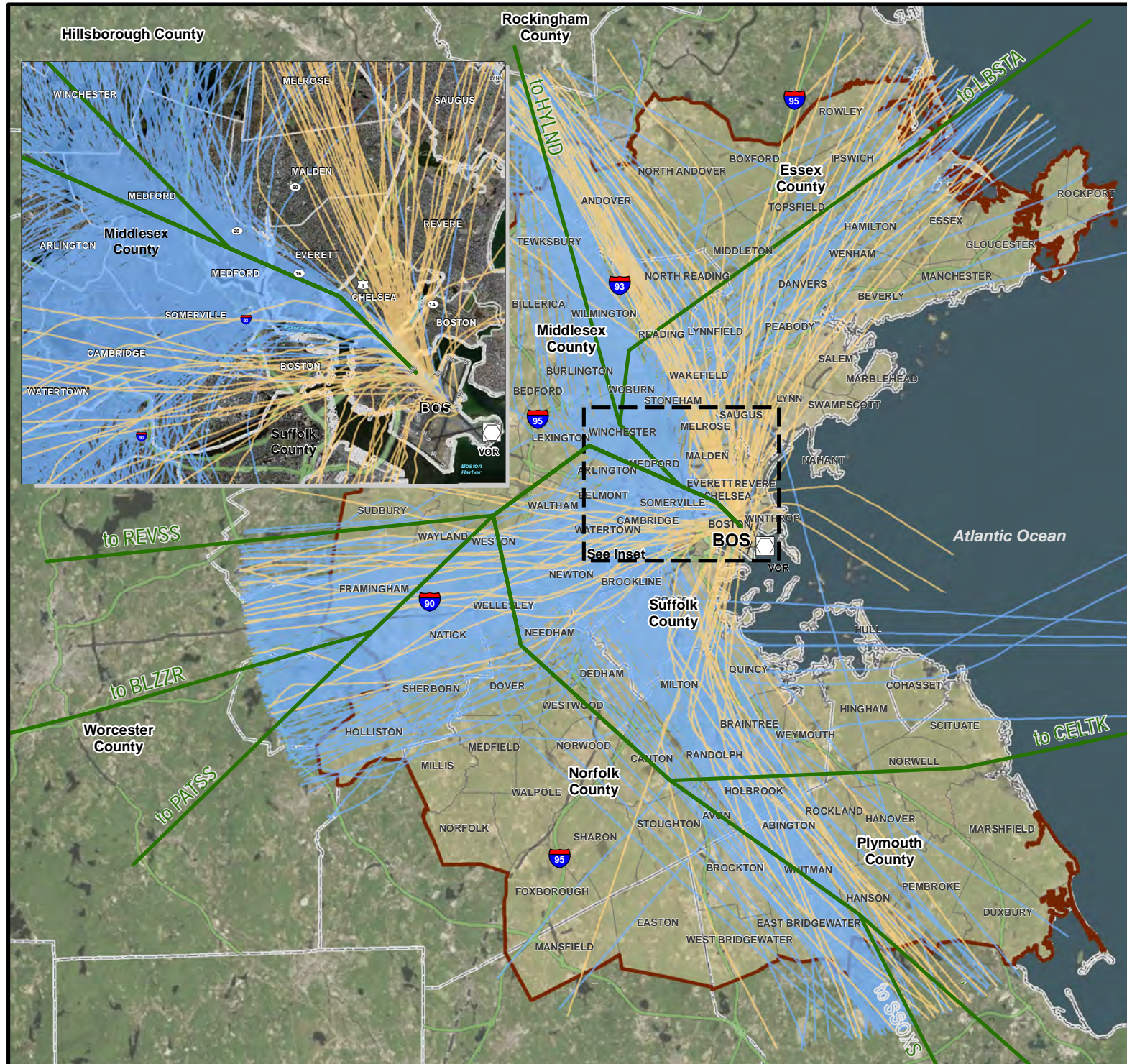
## Boston Logan International Airport Runway 33L RNAV SID Final EA

0 1.75 3.5 7 Nautical Miles

Source:  
Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 1-7**  
**Runway 33L RNAV SID**  
**Procedure BLANS**  
**Measure F-HH(v4)**

## LEGEND

- Runway 33L RNAV SID Procedure BLANS Measure F-HH(v4)
- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway



## Boston Logan International Airport Runway 33L RNAV SID Final EA

0 1.75 3.5 7 Nautical Miles

Source:  
Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI



abatement goals instead of operational goals, the FAA considered the information learned from the various design iterations described above and CAC's interest in minimizing noise to the underlying communities. As a result, the FAA determined that overlaying the existing LOGAN SIX conventional procedure for jet aircraft as closely as RNAV design criteria allows would address FAA's operational needs. In addition, based on preliminary noise modeling using 2000 census data, this procedure would address the CAC's noise concerns as well.

#### **1.4 Proposed Action**

The Proposed Action evaluated in this EA is the implementation of a new RNAV SID procedure from Runway 33L at Logan Airport. The RNAV procedure would be used by RNAV-capable jet aircraft.

The Proposed Action (an RNAV SID from Runway 33L) will instruct jet aircraft to takeoff from Runway 33L, climb on a heading of 331 degrees to at or above 520', (aircraft will remain on a 331-degree heading and will continue to climb to published altitudes or as assigned by ATC), then intercept a 314-degree course to the TEKKE waypoint (TEKKE waypoint is 5.88 NM from the BOS VOR and 4.25 NM from the end of the runway). Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS).

The exit fixes are positioned at the edges of Boston Approach Control (TRACON) airspace to accommodate existing routings out of the Boston area. They also represent the name of the RNAV SID procedures, regardless of the departing runway. For example, if an aircraft is departing Runway 4R, 9, 15R or 22L/R heading northeast, the

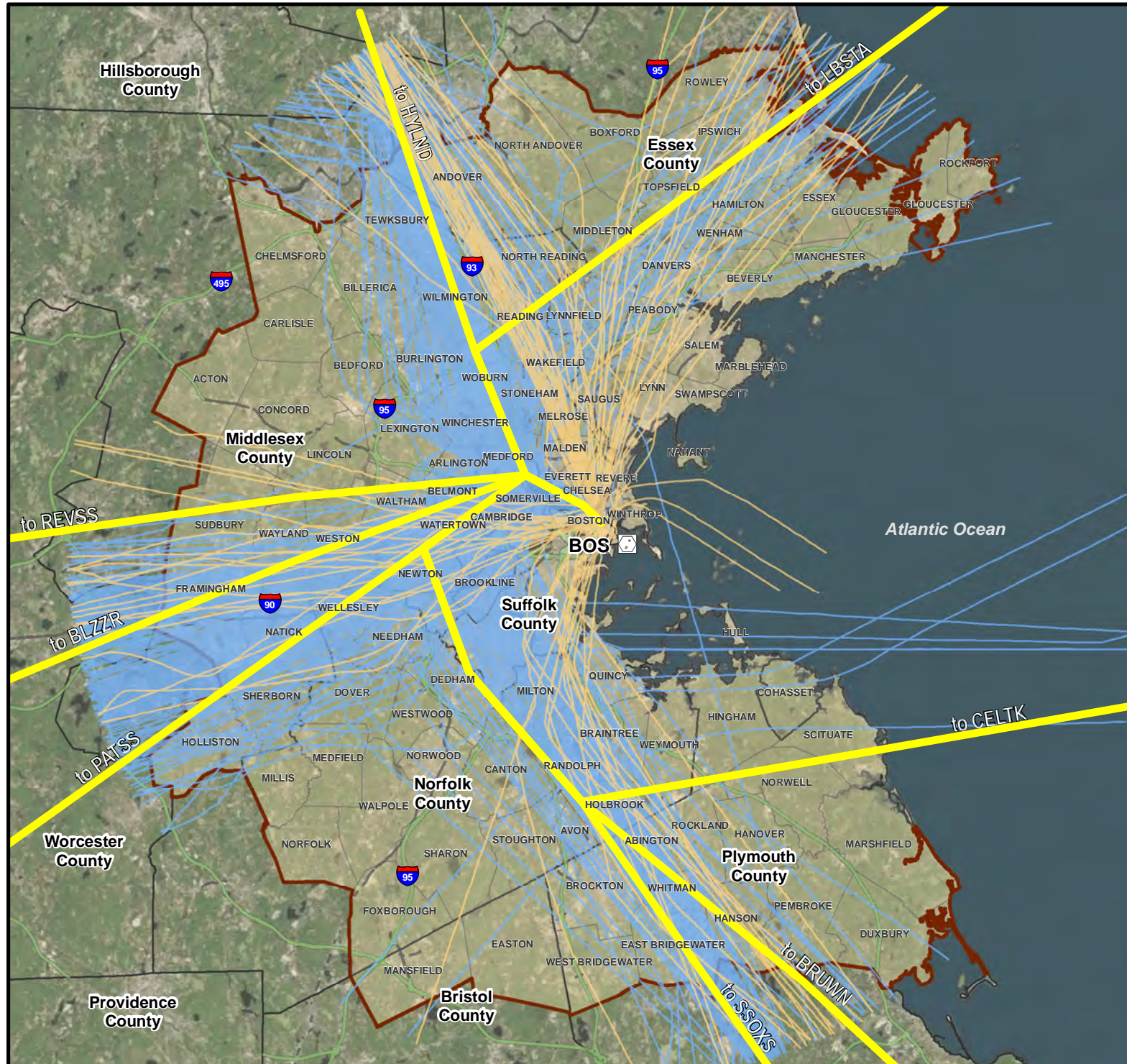
pilot will request the LBSTA RNAV SID procedure. Implementation of an RNAV SID for Runway 33L means modifying the existing RNAV SIDs (HYLND, LBSTA, CELTK, BRUWN, SSOXS, PATSS, BLZZR and REVSS) to include Runway 33L as described above.

The Proposed Action will overlay as closely as possible (given existing RNAV design criteria) the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKE, then transitions to join the RNAV routes from the other BOS runways. The RNAV design criteria which requires that no turns commence before one mile off the departure end of the runway is the only slight variation from the design of the LOGAN SIX, which allows aircraft to begin to turn at approximately 1/2 mile from the runway end. The Runway 33L RNAV SID is designed to remain within the historical jet tracks that depart Runway 33L.

The LOGAN SIX is presently in use and will remain in use for non-RNAV capable jet aircraft and turboprop aircraft. Jet aircraft that depart Runway 33L on the LOGAN SIX, climb via a 331-degree heading until reaching a point 2 NM from the BOS VOR/DME, then turn to a heading of 316 degrees. After reaching 3,000' or 5 NM from the BOS VOR/DME, ATC provides instructions (via radar vector) to the pilot. Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS). Turboprop aircraft departing Runway 33L fly an assigned heading upon departure and remain at a lower altitude, following ATC instructions.

**Figure 1-8** depicts the Proposed Action RNAV SID design and conventional

# Boston Logan International Airport



**Figure 1-8  
Proposed Action  
Alternative -  
Runway 33L  
RNAV SID Procedure**

## LEGEND

- Runway 33L RNAV SID Procedure
- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway

Note: Procedure applies to RNAV-capable Jet aircraft.  
Turboprop and non-RNAV capable aircraft use LOGAN SIX Conventional SID.



**Boston Logan  
International Airport  
Runway 33L RNAV SID  
Final EA**

Source: Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI





departure flight tracks representing the LOGAN SIX departure procedure.

The Runway 33L RNAV SID does not require new airport infrastructure, increase airport operations or change runway use.

#### **1.4.1 Visual Comparison of BLANS Measures and Proposed Action**

**Figure 1-9** provides a visual comparison of the previous BLANS measures and Proposed Action Alternative. The BLANS measures assumed a 6 NM corridor after the initial turn point (i.e. TEKKE). FAA could not commit to a specific route at these higher altitudes until after the RNAV design had been evaluated for separation issues with other traffic as part of the 18-step RNAV process. This is documented in the BLANS Level 3 Report. The No Action and the Proposed Action Alternatives are carried forward for additional environmental review. See Chapter 4, *Environmental Consequences* for details on environmental considerations.

### **1.5 Purpose and Need**

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. The purpose of the Proposed Action is to increase the efficiency of ATC procedures at Logan Airport and in Boston TRACON's adjoining/ overlying airspace by using NextGen technology – defined procedures instead of less efficient ground-based and/or radar vector procedures.

As previously stated, RNAV procedures facilitate more efficient design of airspace and procedures which collectively result in improved safety, access, capacity, predictability, operational efficiency, reduced pilot and controller voice communications and environmental

benefits, including reduced carbon dioxide emissions, reduced fuel use, and improved ability to address noise.

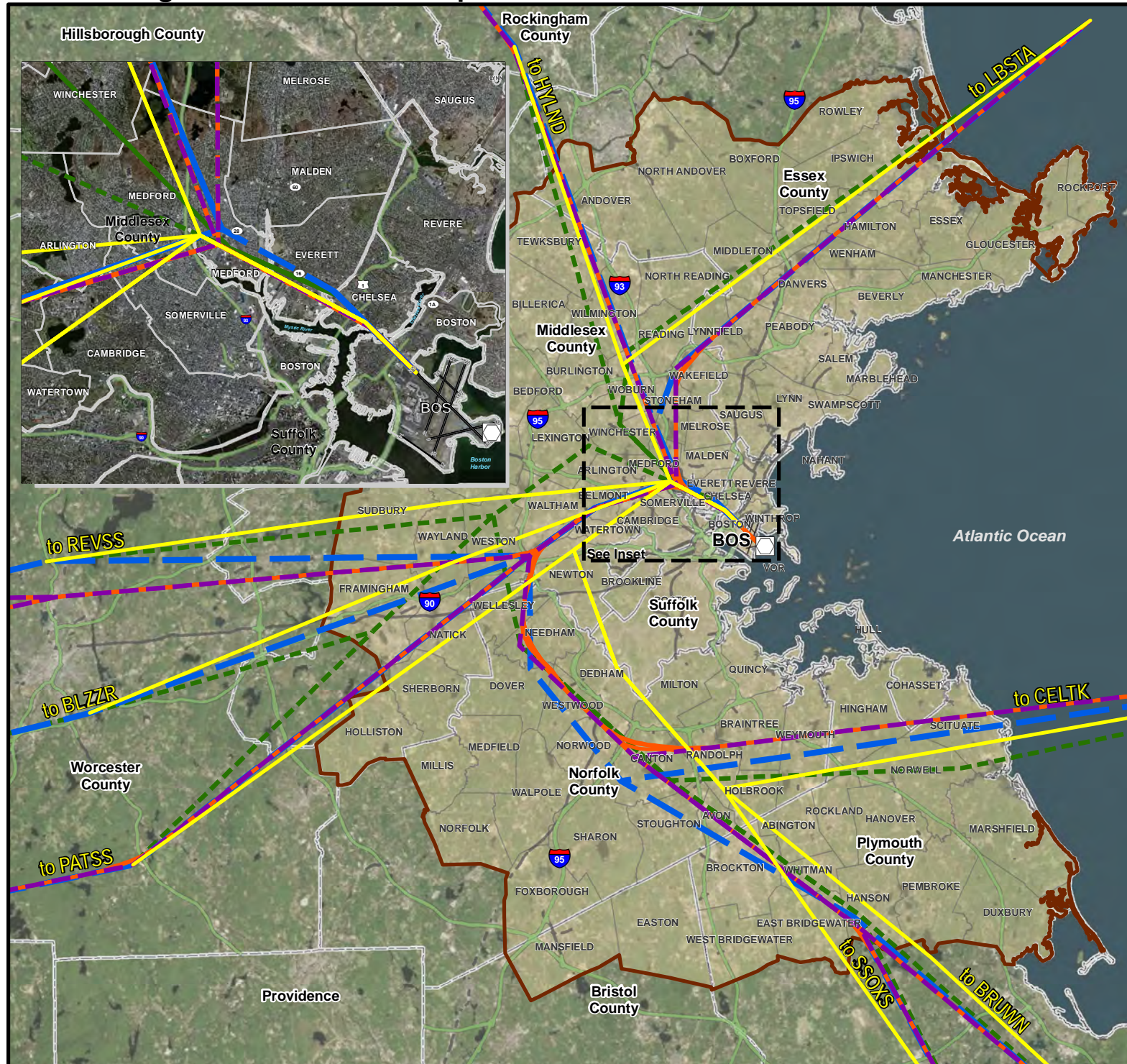
Currently, Runway 33L is the only major runway at Logan Airport that does not have an RNAV SID. Establishing an RNAV SID will provide the pilots and controllers with a predictable procedure that will automatically guide the aircraft to the previously established exit fixes that transition aircraft departing Runways 4R, 9, 15R, 22 L/R and 27 from Boston TRACON's airspace (up to 14,000' MSL) to the adjoining overlying airspace controlled by the Boston Air Route Traffic Control Center (Boston Center).

This procedure will simplify Logan Airport departure procedures by allowing aircraft to depart any runway on the same departure procedure. It will enhance safety by eliminating the potential for flight deck confusion and subsequent radio frequency congestion, experienced between air traffic controllers and pilots as a result of changing departure procedures depending on the runway in use.

### **1.6 Implementation**

The FAA originally anticipated implementing the Proposed Action on March 7<sup>th</sup>, 2013, with the update of the other BOS RNAV SIDs. This assumed a completed EA process. Due to a 30-day extension of the comment period for the Draft EA and the need to address numerous public comments, the Runway 33L RNAV SID was not implemented on March 7<sup>th</sup>, 2013. Implementation of the Proposed Action will be preceded by controllers from both Boston Tower and Boston TRACON undergoing training on the new procedure. Additionally, the existing Boston Tower and Boston

# Boston Logan International Airport



**Figure 1-9**  
Runway 33L RNAV SID  
Procedure BLANS  
Measure F-HH Comparison

## LEGEND

- Measure F-HH(v1)
- Measure F-HH(v2)
- Measure F-HH(v3)
- Measure F-HH(v4)
- Runway 33L RNAV SID Procedure
- Proposed Action (Procedure Tracks)
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road



## Boston Logan International Airport Runway 33L RNAV SID Final EA

0 1.75 3.5 7 Nautical Miles



Source:  
RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI

**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

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TRACON Letter of Agreement will be amended to reflect the new procedure. Letters of Agreement typically delegate airspace and responsibilities, specify ATC procedures, and standardize operating methods. It is anticipated that once implemented and published, the Proposed Action (Runway 33L RNAV SID) will be in use as the primary procedure for Boston turbojet departures from that runway. Like the existing RNAV SIDs off Runways 4R, 9, 15R, 22L/R and 27, the Proposed Action would be used to the maximum extent possible unless safety, separation standards or operational requirements dictate otherwise. The LOGAN SIX departure will still be available for aircraft unable to fly the primary procedure, and turboprop aircraft.



**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

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## Endnotes

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- <sup>1</sup> Council on Environmental Quality, Executive Office of the President, *Regulations for Implementing the Procedural Provisions of The National Environmental Policy Act*, 40 CFR Parts 1500-1508, November 29, 1978.  
([http://ceq.hss.doe.gov/ceq\\_regulations/Council\\_on\\_Environmental\\_Quality\\_Regulations.pdf](http://ceq.hss.doe.gov/ceq_regulations/Council_on_Environmental_Quality_Regulations.pdf)).
- <sup>2</sup> Federal Aviation Administration, *Environmental Impacts: Policies and Procedures*, FAA Order 1050.1E, Change One. Chapter 4, §401m, March, 2006.  
([http://www.faa.gov/documentLibrary/media/order/energy\\_orders/1050-1E.pdf](http://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf)).
- <sup>3</sup> Federal Aviation Administration, FAA Order 1050.1E, Change 1 Guidance Memo #2: *Guidance on Preparing Focused, Concise and Timely Environmental Assessments*, January 2011  
([http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/enviro\\_n\\_policy\\_guidance/guidance/media/Guidance%20Memorandum%20on%20Preparing%20Focused%20Concise%20and%20Timely%20Environmental%20Assessments%20\(EAs\).pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_n_policy_guidance/guidance/media/Guidance%20Memorandum%20on%20Preparing%20Focused%20Concise%20and%20Timely%20Environmental%20Assessments%20(EAs).pdf)) and FAA Order 1050.1E, par 404c  
([http://www.faa.gov/documentLibrary/media/order/energy\\_orders/1050-1E.pdf](http://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf)).
- <sup>4</sup> FAA Order JO 7400.2J recommends considering proposed changes between 10,000' and 18,000' AGL when the proposed changes are over a National Park or Wildlife Refuge. No changes are proposed to occur over a National Park or Wildlife Refuge. See  
<http://www.faa.gov/documentLibrary/media/Order/AIR.pdf>.
- <sup>5</sup> For background and current status on this study refer to [www.bostonoverflightnoisestudy.com](http://www.bostonoverflightnoisestudy.com).
- <sup>6</sup> Department of Transportation, Federal Aviation Administration, New England Region, Record of Decision, *Airside Improvements Planning Project, Logan International Airport, Boston, Massachusetts*, August 2, 2002. ([http://www.faa.gov/airports/environmental/records\\_decision/media/rod\\_boston.pdf](http://www.faa.gov/airports/environmental/records_decision/media/rod_boston.pdf)).
- <sup>7</sup> Although Runway 27 has an RNAV procedure in place (WYLYY ONE), it has been tied into the existing RNAV procedures. This action is separate and independent of the Runway 33L RNAV SID and is categorically excluded from the preparation of an EA or EIS.
- <sup>8</sup> Federal Aviation Administration, *Boston Logan Airport Noise Study Final Level 3 Screening Analysis*, December 2012.  
(<http://www.bostonoverflightnoisestudy.com/docs/BLANS%20Phase%202%20Level%203%20Screening%20Final%20Report%20121213.pdf>).

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## **CHAPTER 2: ALTERNATIVES**

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## Chapter Two: ALTERNATIVES

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The analysis of alternatives is key to the NEPA process. Federal guidelines require only a brief discussion of alternatives that provides sufficient information for the FAA to choose an option that meets the need for the proposal and demonstrates reasoned decision-making.

FAA Order 1050.1E, Chapter 4, Section 405(d) states that there “is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA must consider the proposed action and a discussion of the consequences of taking no action and may limit the range of alternatives to action and no-action when there are no unresolved conflicts concerning alternative uses of available resources.”<sup>1</sup> Further, FAA Order 1050.1E, Chapter 4 states that other reasonable alternatives are to be considered in preparing an EA to the degree commensurate with the nature of the proposed action and agency experience with the environmental issues involved.

### 2.1 Identification of Potential Alternatives

A potential alternative is one that might accomplish the Purpose and Need for the Proposed Action. In order to merit further consideration, it is necessary that an alternative provide PBN technology from Runway 33L at Logan Airport for reasons as described in the Purpose and Need chapter. Alternatives that involve other modes of transportation, use of other airports, or

changes in airport use may have the potential to decrease air travel or shift traffic to other airports, but these alternatives do not meet the project’s Purpose and Need for the Proposed Action. Likewise, improvements in ATC technology may provide overall benefits to the operating environment, but would not meet the Purpose and Need to increase the efficiency of air traffic control procedures at BOS and in the Boston TRACON using NextGen.

In this case the FAA has determined that the No Action and Proposed Action Alternatives represent a reasonable range of alternatives to be evaluated in this EA. The Proposed Action Alternative is as close to an overlay as possible to the existing LOGAN SIX procedure and preliminary noise analysis from the BLANS indicated impacts would likely not be significant. Per FAA Order 1050.1E, these alternatives represent the range of alternatives commensurate with the nature of the Proposed Action from FAA’s experience (through BLANS).

The FAA recognizes, however, that both the CAC and general public have an interest in how the Proposed Action Alternative may compare to noise abatement measures that were evaluated in the BLANS for Runway 33L, as was outlined in Chapter 1. In addition, the FAA has considered information learned in the BLANS and the BLANS goals when designing a Runway 33L RNAV SID for operational purposes.

### **2.1.1 FAA Proposed Action**

The Proposed Action (an RNAV SID from Runway 33L) will instruct jet aircraft to takeoff from Runway 33L, climb on a heading of 331 degrees to at or above 520', (aircraft will remain on a 331-degree heading and will continue to climb to published altitudes or as assigned by ATC), then intercept a 314-degree course to the TEKKE waypoint (TEKKE waypoint is 5.88 NM from the BOS VOR and 4.25 NM from the end of the runway). Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS).

Turboprop aircraft and jet aircraft that are not RNAV capable would continue to fly via the LOGAN SIX conventional SID (although the procedure is flown differently by turboprop and jet aircraft). While the Proposed Action is anticipated to be used by jet aircraft currently, some high performance propeller aircraft, such as the Bombardier Q400, may be able to use the RNAV SID in the future as well. The procedure is designated as RNAV 1, which requires a total system error of no more than 1 NM (between the centerline and boundary of 1 NM) for 95% of the total flight time. The Proposed Action Alternative is shown in **Figures 2-1** and **2-2**, including a depiction of the flight track corridor.

## **2.2 Alternatives Carried Forward for Detailed Evaluation**

This section provides descriptions of the alternatives for analysis in the EA, which includes the No Action and Proposed Action Alternatives.

### **2.2.1 Maintain Existing Departure Route (LOGAN SIX Departure Procedure) (No Action Alternative)**

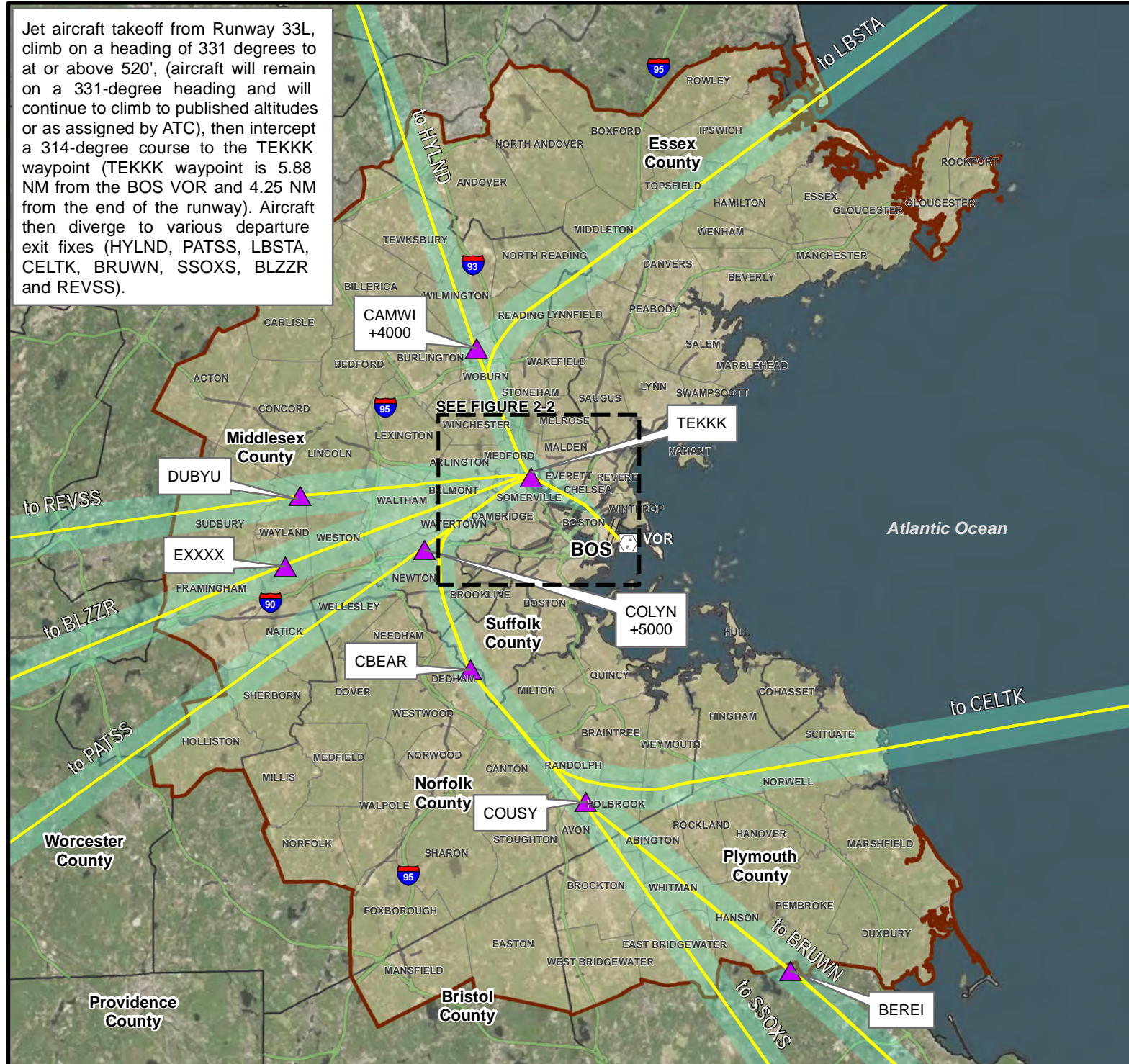
The No Action Alternative would maintain the Runway 33L departure procedure (LOGAN SIX) for both jet and turboprop aircraft, as is currently flown. Jet aircraft that depart Runway 33L on the LOGAN SIX, climb via a 331-degree heading until reaching a point 2 NM from the BOS VOR/DME, then turn to a heading of 316 degrees. After reaching 3,000' or 5 NM from the BOS VOR/DME, ATC provides instructions (via radar vector) to the pilot. Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS). Turboprop aircraft departing Runway 33L fly an assigned heading upon departure and remain at a lower altitude, following ATC instructions. Jet aircraft would initially maintain an altitude of 5,000' or lower as assigned by ATC. Turboprop aircraft would depart and climb on an ATC assigned heading. The No Action Alternative and a sample of jet and turboprop flight tracks are shown in **Figures 2-3** and **2-4**.

Under the No Action Alternative, RNAV capable aircraft would not be able to take advantage of RNAV technologies; thereby reducing the overall efficiency of aircraft operations at Logan Airport and within A90 airspace. Although it does not meet the purpose and need, the No Action Alternative is carried forward for further environmental analysis in accordance with CEQ regulations implementing NEPA.



# Boston Logan International Airport

Jet aircraft takeoff from Runway 33L, climb on a heading of 331 degrees to at or above 520', (aircraft will remain on a 331-degree heading and will continue to climb to published altitudes or as assigned by ATC), then intercept a 314-degree course to the TEKKE waypoint (TEKKE waypoint is 5.88 NM from the BOS VOR and 4.25 NM from the end of the runway). Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS).



**Figure 2-1**  
**Proposed Action**  
**Alternative -**  
**Runway 33L**  
**RNAV SID Procedure -**  
**Study Area**

## LEGEND

- Runway 33L RNAV SID Noise Model Departure Flight Tracks
- 95% Flight Corridor
- ▲ Waypoint
- Study Area
- Community within Study Area
- County Boundary
- BOS VOR/DME
- Interstate
- Highway

Note: Procedure applies to RNAV-capable Jet aircraft. Turboprop and non-RNAV capable aircraft use LOGAN SIX Conventional SID.



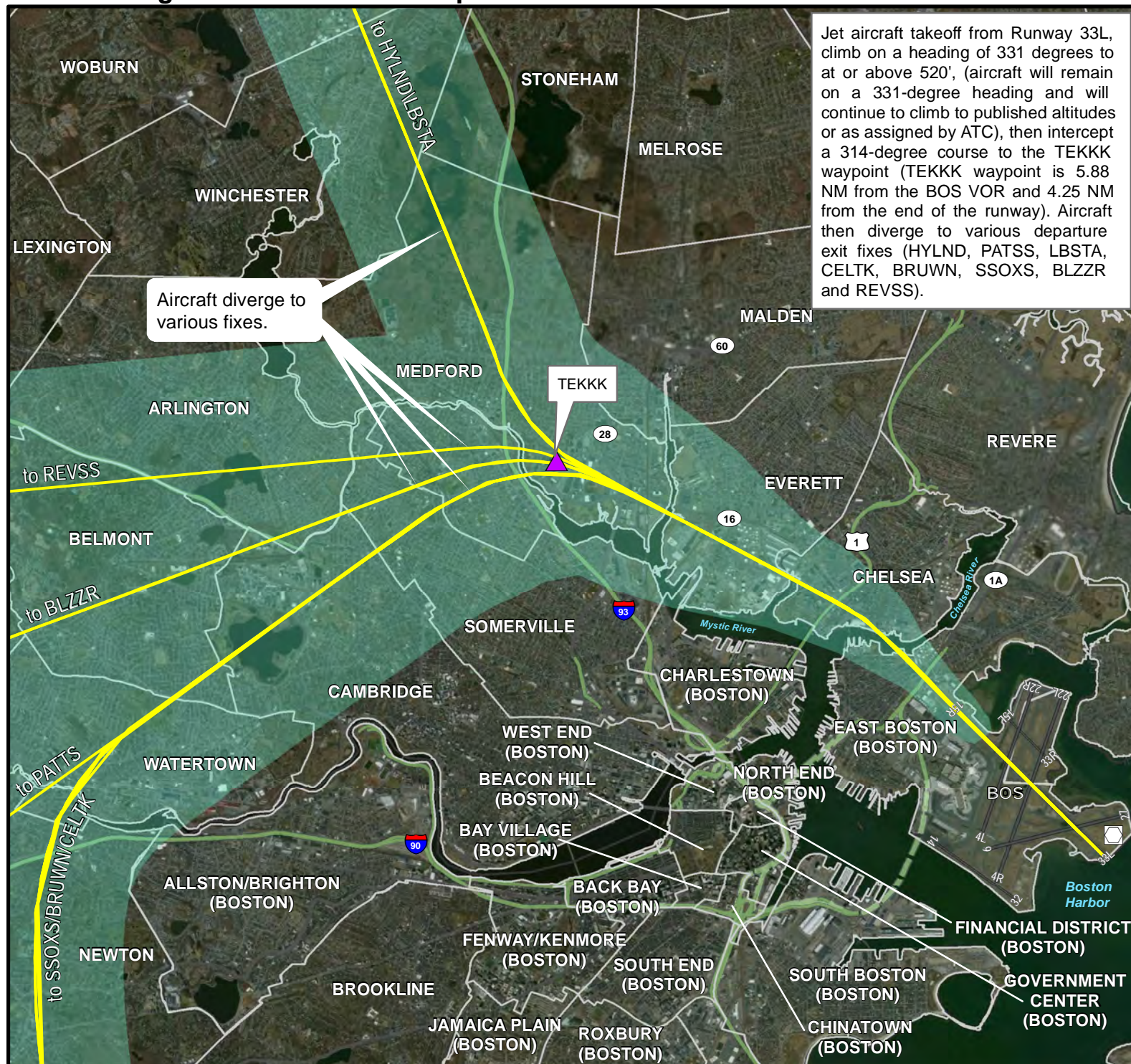
**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

0 1 2 4 Nautical Miles

Source: RNAV: TARGETS (FAA PBN Integration Office)  
Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 2-2**  
**Proposed Action**  
**Alternative -**  
**Runway 33L**  
**RNAV SID Procedure -**  
**Logan Airport Vicinity**

## LEGEND

- Runway 33L RNAV SID Noise Model Departure Flight Tracks
- 95% Flight Corridor
- BOS VOR/DME
- Town/Neighborhood Boundary
- ▲ Waypoint

Note: Procedure applies to RNAV-capable Jet aircraft. Turboprop and non-RNAV capable aircraft use LOGAN SIX Conventional SID.



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

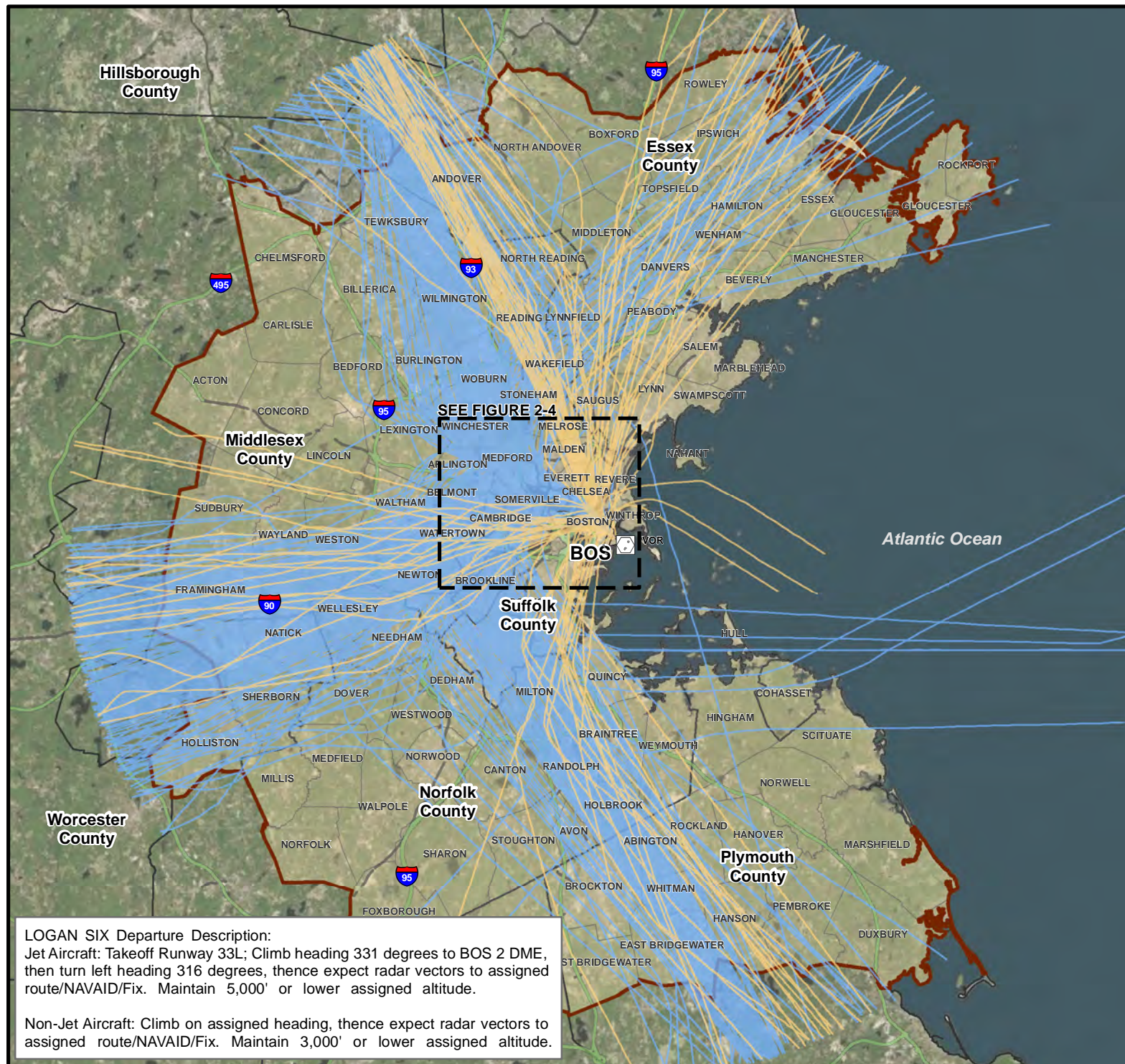
0 0.2 0.4 0.8 Nautical Miles



Source: RNAV: TARGETS (FAA PBN Integration Office)  
 Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 2-3**  
**No Action Alternative -**  
**LOGAN SIX Departure**  
**Procedure - Study Area**

## LEGEND

- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Interstate
- Highway

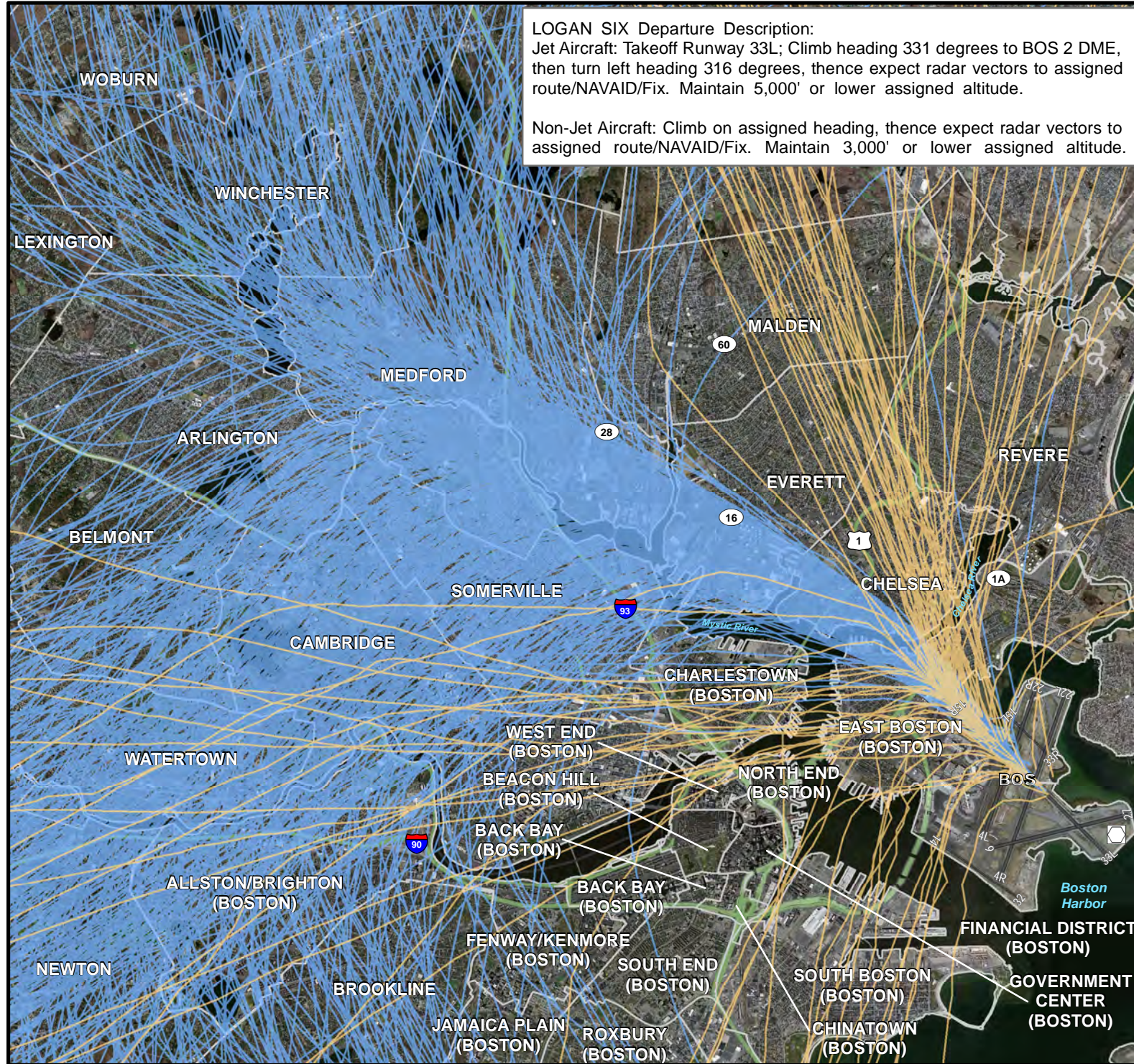


## Boston Logan International Airport Runway 33L RNAV SID Final EA

Source: 0 1 2 4 Nautical Miles  
 Radar Data Source: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
 Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 2-4**  
**Runway 33L LOGAN SIX**  
**Departure Procedure -**  
**No Action Alternative -**  
**Logan Airport Vicinity**

## LEGEND

- Existing (LOGAN SIX) Runway 33L Prop Departures
- Existing (LOGAN SIX) Runway 33L Jet Departures
- BOS VOR/DME
- Community within Study Area
- County Boundary
- Interstate
- Highway



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

0 0.2 0.4 0.8 Nautical Miles



Source:  
 Radar Data Source: FAA PDARS (3/26/12,  
 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
 Office of Geographic Information (MassGIS), ESRI

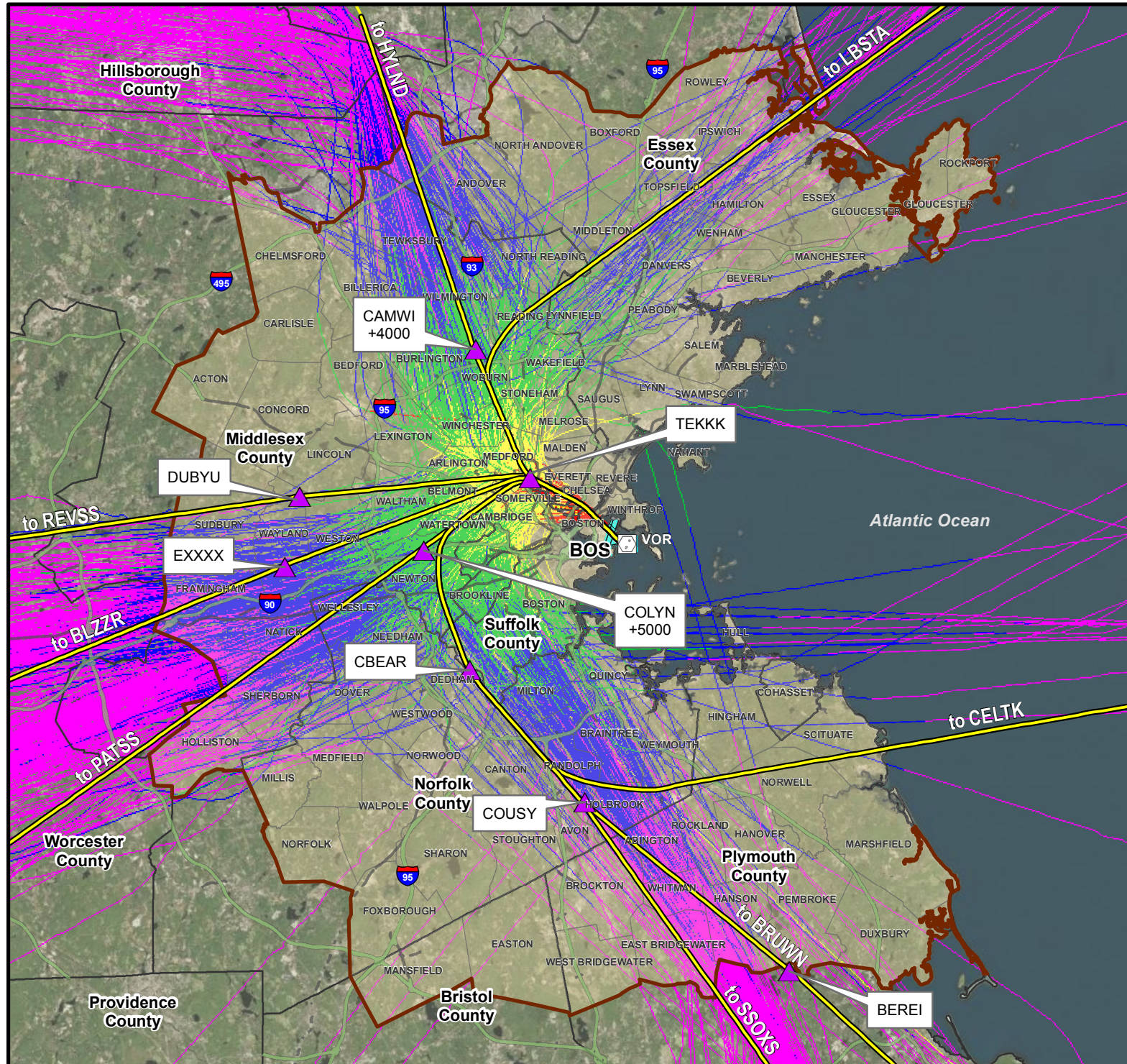


### **2.2.2 FAA Proposed Action**

As described in Section 2.1.1, the FAA developed an RNAV SID procedure. **Figure 2-5** depicts a sample of jet aircraft, color-coded by altitude flying the LOGAN SIX departure, compared with the Proposed Action. The figure identifies the minimum altitudes at those waypoints which have an altitude specification under the Proposed Action. Generally, on average, altitudes would be similar or higher under the Proposed Action.

This alternative, which was technically evaluated to meet RNAV performance criteria and preliminarily evaluated for noise impacts, is carried forward for further environmental analysis.

# Boston Logan International Airport



**Figure 2-5**  
**Runway 33L LOGAN SIX**  
**Jet Departures Compared**  
**with Proposed Action**

## LEGEND

- Runway 33L RNAV SID Noise Model Departure Flight Tracks
- Waypoint
- Study Area
- Community within Study Area
- County Boundary
- BOS VOR/DME
- Interstate
- Highway

## Existing (LOGAN SIX) Runway 33L Jet Departures

- 0 - 3,000 ft AGL
- 3,001 - 6,000 ft AGL
- 6,001 - 10,000 ft AGL
- 10,000 - 14,000 ft AGL
- 14,001+ ft AGL

Note: Procedure applies to RNAV-capable Jet aircraft. Turboprop and non-RNAV capable aircraft use LOGAN SIX Conventional SID.



## Boston Logan International Airport Runway 33L RNAV SID Final EA

Source:  
 Radar Data: FAA PDARS (3/26/12, 3/30/12, 4/27/12, 4/30/12, 12/11/12, 12/12/12)  
 RNAV: TARGETS (FAA PBN Integration Office)  
 Office of Geographic Information (MassGIS), ESRI

**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

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**Endnotes**

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- <sup>1</sup> Federal Aviation Administration, FAA Order 1050.1E, CHG 1, Ch. 4, Sec. 405(d), pg. 4-10, March 2006, ([http://www.faa.gov/documentLibrary/media/order/energy\\_orders/1050-1E.pdf](http://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf)).

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## **CHAPTER 3: AFFECTED ENVIRONMENT**



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## Chapter Three:

# AFFECTED ENVIRONMENT

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The purpose of this chapter is to succinctly describe existing environmental conditions of the potentially affected geographic area for the Proposed Action. Section 3.1 provides the characteristics of the surrounding area to familiarize the reader with the airport facilities and existing airspace, geography, land use and general environmental conditions. Section 3.2 briefly discusses those resource categories not anticipated to be impacted. Section 3.3 provides the baseline conditions for the natural and social environment to be evaluated for potential impacts due to the Proposed Action Alternative.

### 3.1 Study Area Setting and General Conditions

#### 3.1.1 Setting and Location

The Study Area, as described in Chapter 1, encompasses approximately 1,500 square miles and includes all or part of six counties in the Commonwealth of Massachusetts, including Bristol, Essex, Middlesex, Norfolk, Plymouth, and Suffolk. There are 12 airports and 64 heliports within the Study Area, as illustrated in **Figure 3-1**.

#### 3.1.2 Logan Airport

This EA focuses on Logan Airport, which is located in the East Boston neighborhood of Boston, in Suffolk County, Massachusetts, one mile east of downtown Boston. Massport owns and operates Logan Airport under the management of the Department

of Aviation. In 2012, approximately 359,633 annual aircraft operations were conducted at Logan Airport.<sup>1</sup> Thirty-two major scheduled airlines, including legacy carriers and regional affiliates, operate out of the Airport.<sup>2</sup> Six runways are located on the airfield. Runway 14/32 is oriented to the northwest/southeast and is 5,000' in length. Runway 15R/33L is 10,083' in length, and Runway 15L/33R is 2,557' long. Oriented to the northeast/southwest, Runway 4L/22R is 7,861' long and Runway 4R/22L is 10,005' long. Runway 9/27 is 7,000' in length and is oriented in an east/west configuration. Figure 1-1 depicts the runways in operation at Logan Airport.

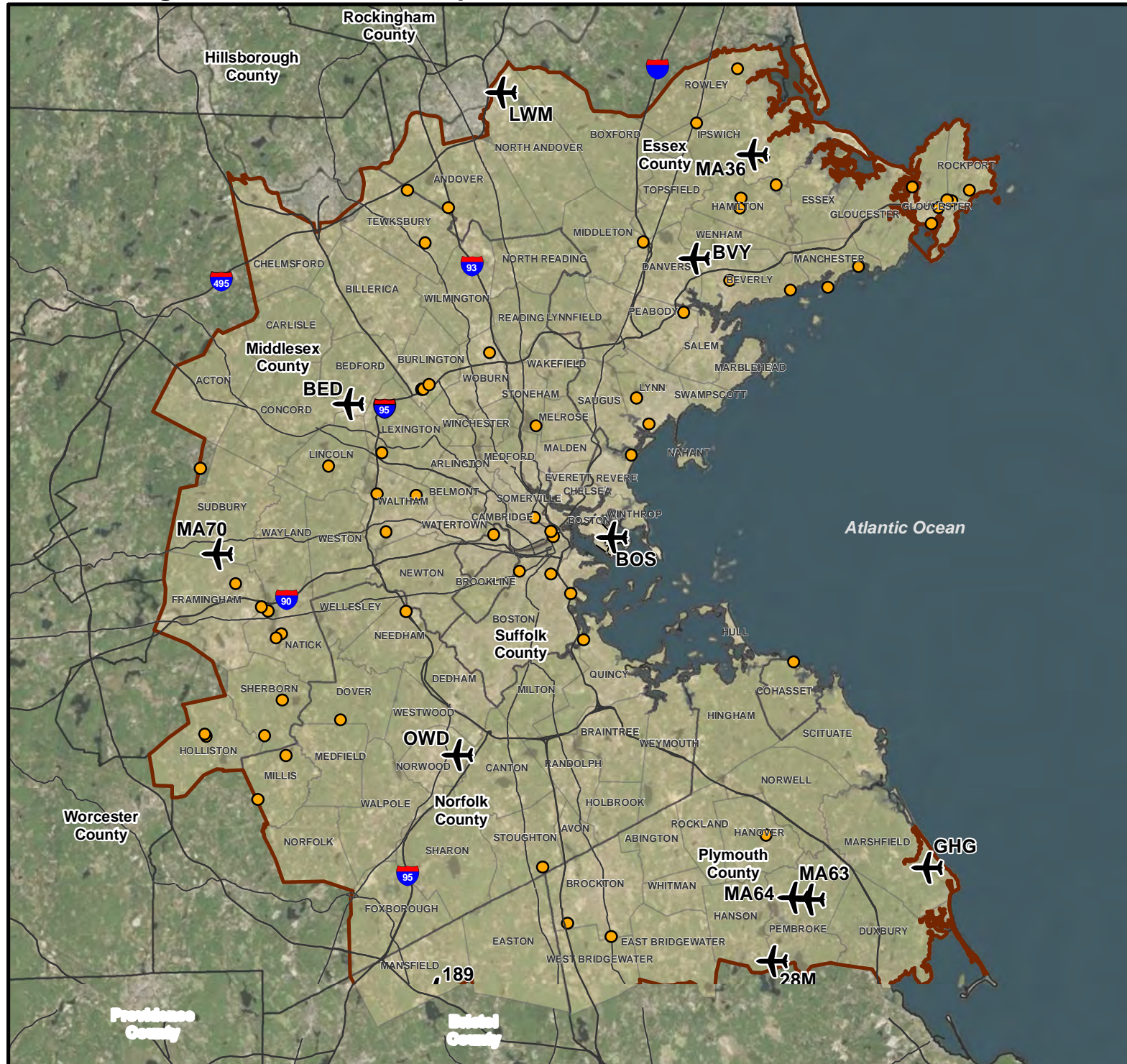
#### 3.1.3 Land Use

This section describes the existing land use within the Study Area. Information on existing land use was obtained from MassGIS.

Like most urban metropolitan areas, the Study Area is characterized by dense development near larger cities (including Boston), and lower density uses further from the urban core. As shown by the generalized land use depicted in **Figure 3-2**, the predominant land uses within the Study Area are residential and open space, with pockets of commercial and industrial uses.

**Figure 3-3** depicts land use in the vicinity of Logan Airport. Predominant land uses in the vicinity of the Airport include open water, residential, commercial, and industrial. The

# Boston Logan International Airport



**Figure 3-1**  
**Airports in the Study Area**

## LEGEND

- Airport
- Heliport
- Study Area
- Community within Study Area
- County Boundary
- Interstate / Highway



**Boston Logan  
International Airport  
Runway 33L RNAV SID  
Final EA**

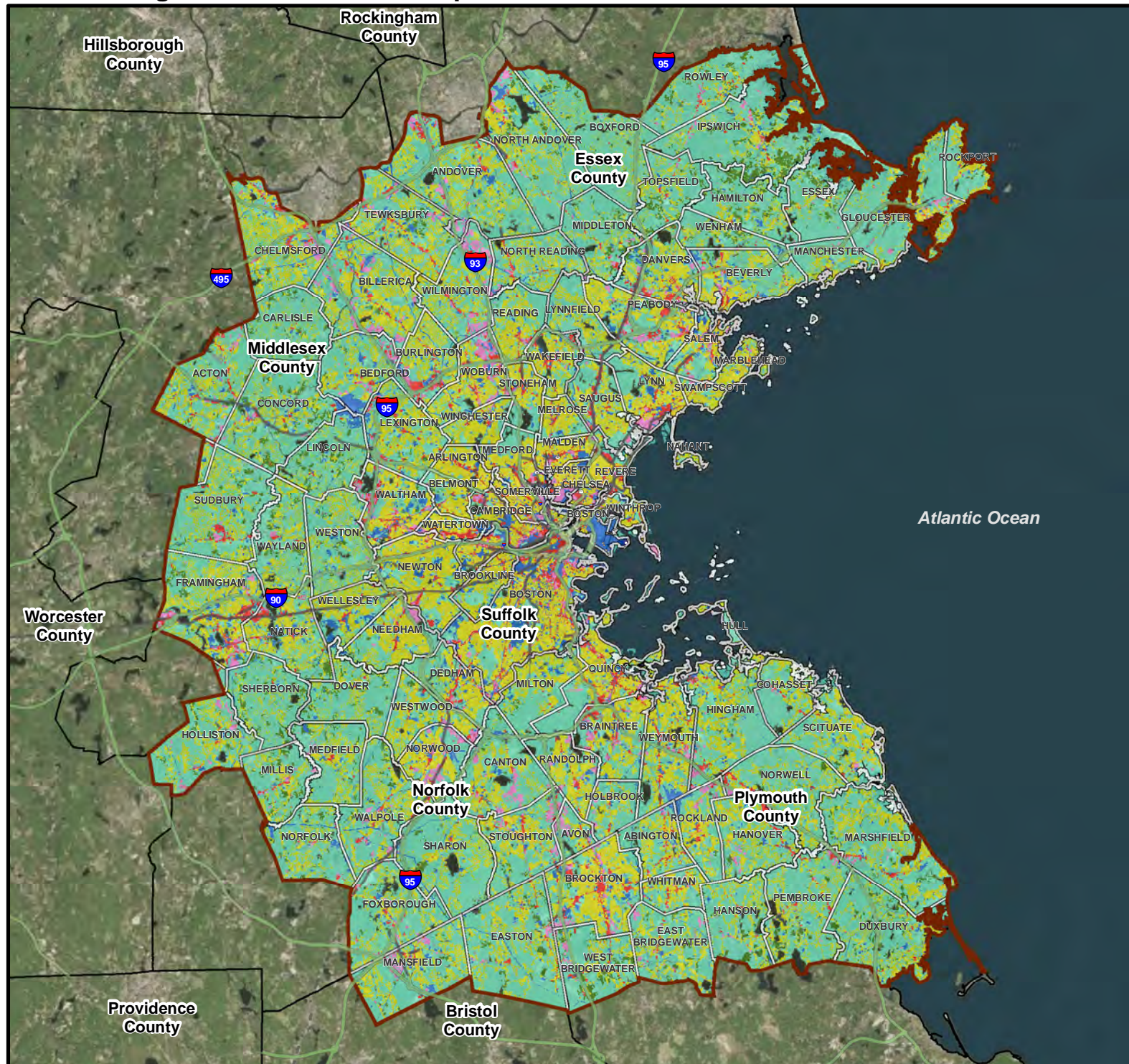
0 1 2 4 Nautical Miles



Source: Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 3-2  
Generalized Existing  
Land Use within  
Study Area**

## LEGEND

- Residential
- Agricultural
- Exempt/Parks/Open Space (Undeveloped)
- Commercial
- Industrial
- Public/Institutional
- General Mixed Use
- Town Boundary
- Study Area



**Boston Logan  
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Runway 33L RNAV SID  
Final EA**

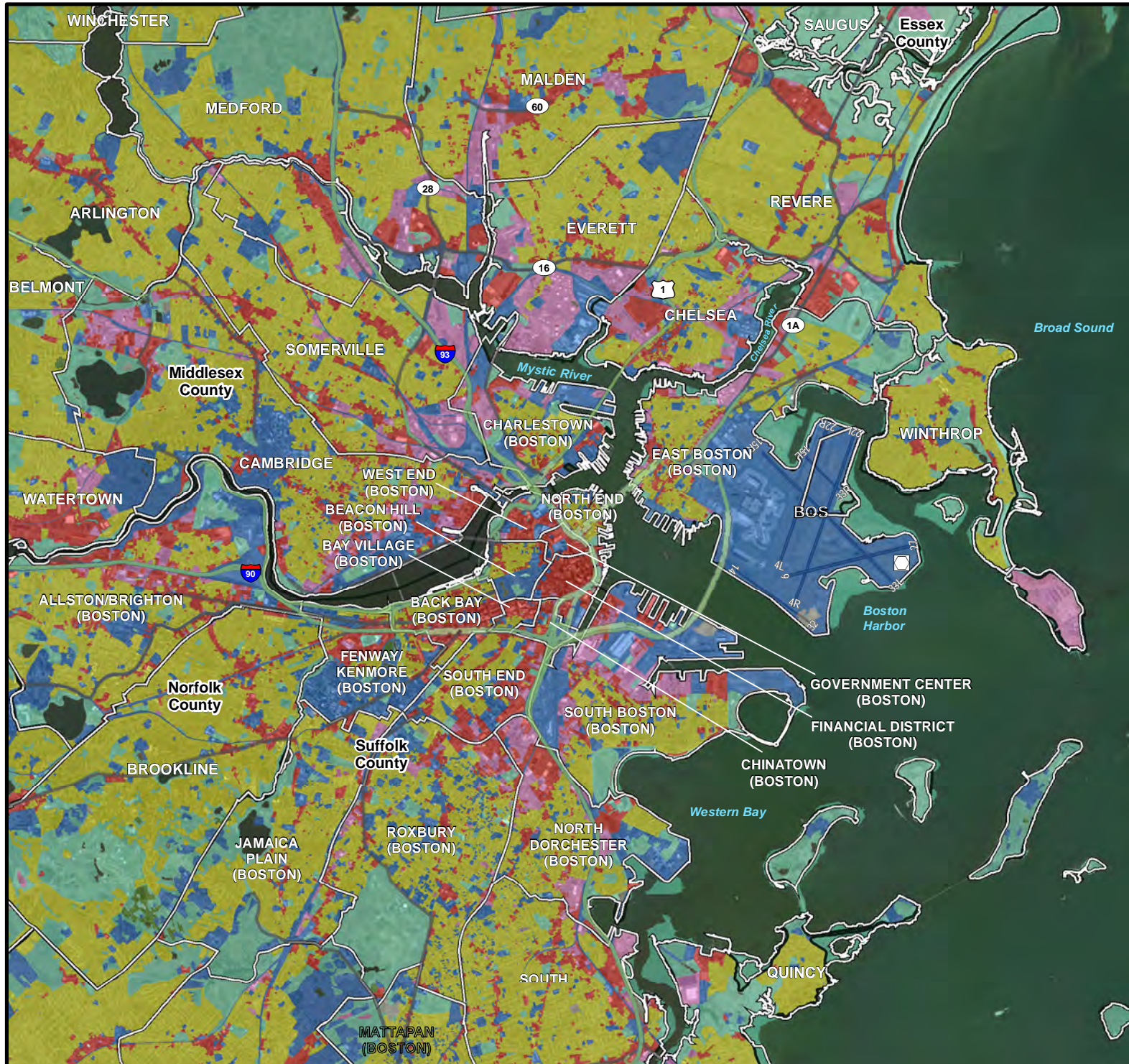
0 1.25 2.5 5 Nautical Miles



Source: 2008 Aerial Photograph, Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 3-3**  
**Generalized Existing**  
**Land Use -**  
**Logan Airport Vicinity**

## LEGEND

- Residential
- Agricultural
- Exempt/Parks/Open Space
- Commercial
- Industrial
- Public/Institutional
- General Mixed Use
- Town Boundary
- BOS VOR/DME
- County Boundary
- Major Highway
- Major Road



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0 0.2 0.4 0.8 Nautical Miles



Source: 2008 Aerial Photography, Office of Geographic Information (MassGIS), ESRI

Airport lies on a peninsula, which is surrounded by several bodies of water—the Mystic River, Boston Harbor, Western Bay and Broad Sound. The City of Winthrop lies to the east of Logan Airport and is comprised of primarily residential development, with some parks and open space. The City of Boston borders the Airport to the north, west and south, with the closest portions of the City having a mix of residential, commercial and industrial development. Across the Mystic River from the Airport to the west is downtown Boston, which contains high density commercial development.

### **3.2 Non-Issue Impact Categories**

Categories not anticipated to be impacted by the Proposed Action are not required to be discussed. Neither the No Action nor the Proposed Action Alternatives would affect the following impact categories in FAA Order 1050.1E: coastal resources, construction impacts, farmland, floodplains, hazardous materials, pollution prevention and solid waste, water quality, wetlands, and wild and scenic rivers. As a result, no further analysis is required.

### **3.3 Potentially Affected Environmental Resource Categories**

Only the FAA Order 1050.1E environmental resources that are potentially affected by the Proposed Action are discussed in this section. These include the following:

- Noise and Land Use;
- Department of Transportation Section 4(f) and 6(f) Resources;
- Historic, Architectural, Archaeological, and Cultural Resources;
- Air Quality;
- Climate; and
- Federally Threatened and Endangered Species and Migratory Birds.

Additionally, natural resources and energy supply, socio-economic impacts, environmental justice and children's health and safety risk, and light emissions and visual impacts will be briefly described in Chapter Four, *Environmental Consequences*. These impact categories have minimal potential for impact but cannot be completely dismissed.

#### **3.3.1 Noise**

Aircraft noise is often the most noticeable environmental effect associated with the implementation of new or revised air traffic control procedures. This section includes a brief overview of the noise analysis methodology used for this EA as well as a discussion of the existing aircraft noise exposure levels in the Study Area.

##### **3.3.1.1 Noise Modeling Methodology**

The FAA has developed specific guidance and requirements for the assessment of aircraft noise in order to comply with NEPA. This guidance, specified in FAA Order 1050.1E, requires that aircraft noise be analyzed in terms of the DNL metric. To this end, DNL noise levels are calculated for the average annual daily operations for the year of interest. The noise analysis is conducted for the entire Study Area up to an altitude of 14,000' MSL. Noise modeling was



conducted for 2009 (base year); forecast conditions for the No Action and Proposed Action Alternatives in 2015 are described in Chapter 4, *Environmental Consequences*. Noise modeling incorporates the analysis performed under the BLANS, and use of the BLANS methodology and input data was reviewed and approved by the FAA Office of Energy and Environment (AEE). This method provides consistency between both studies, which is believed to be critical during the public coordination process, and facilitates a noise analysis that requires only minor adjustments to the baseline model (use of the U.S. Census 2010 population data).

#### Noise Metric

The DNL metric is the sound level from aircraft operations for a 24-hour period, which includes all of the time-varying aircraft sound energy within the period. Since there is a greater annoyance caused by noise events at night, a 10 decibel (dB) weighting is added to DNL for night-time noise events (those that occur between 10:00 p.m. and 6:59 a.m.). The weighting, in essence, equates one night-time flight to 10 daytime flights, and helps to account for the annoyance of noise during time periods when people are trying to sleep and ambient noise levels are lower. FAA guidelines provide land uses that are considered compatible or incompatible with various DNL sound levels.<sup>3</sup> Guidelines for aircraft noise and land use compatibility established under 14 CFR Part 150, for purposes of Part 150, indicates that all land uses are considered to be compatible with noise levels less than 65 DNL; however, land use compatibility is a local determination.

DNL is the best measure of significant impact on the quality of the human environment, is the only noise metric with a substantial body of scientific data on the reaction of people to noise, and has been systematically related to Federal compatible land use guidelines. Federal interagency committees such as the Federal Interagency Committee on Urban Noise (FICUN) and the Federal Interagency Committee on Noise (FICON) which include the EPA, FAA, Department of Defense, Department of Housing and Urban Development (HUD), and Veterans Administration, found DNL to be the best metric for land use planning.

#### Noise Model

The Integrated Noise Model (INM) is the FAA's approved model for assessing noise at civilian airports. The INM has been used for environmental review of aviation noise impacts since 1978 and is used for 14 CFR Part 150 studies and NEPA EA's and EIS's. Coordination with the FAA AEE was undertaken regarding the required noise model used in this EA. The INM is an average-value model which is designed to estimate the long term average changes in operating conditions.

Detailed information on aircraft operations at Logan Airport is included in the INM, including specific fleet mix information (aircraft type, arrival and departure times, trip distance), runway use, flight track location/usage, and weather conditions (e.g., temperature and humidity). Noise exposure from aircraft operations was calculated at more than 84,000 locations throughout the Study Area. The locations consist of population centroids (i.e., the center of a 2010 Census block) and noise

sensitive locations such as historic sites, schools and parks.

Census blocks are the smallest geographic unit for which the U.S. Census Bureau tabulates data. Census blocks are generally bounded by streets, legal boundaries and other features. The number of people exposed to noise is estimated as the number residing in the census block. For this analysis, the Census block counts represent the maximum potential population within the Census block that could be exposed to the modeled DNL levels, including family and non-family households, but excluding those residing in group quarters (often representing transient or temporary residential arrangements).<sup>5</sup> The actual number of people impacted can be less than the total population represented by a single Census block because noise levels will vary throughout the census block. A total of 59,873 census blocks (754 Census tracts) in the Study Area were analyzed.

#### 3.3.1.2 Operational Input

This EA takes advantage of the extensive analysis previously and currently being undertaken in the BLANS process, including the use of INM input data developed under previous and ongoing studies at Logan Airport and the use of INM version 7.0a.

Operational inputs to the noise model include the number of operations on an average annual day, the type and frequency of aircraft operations, runway locations and use, flight track locations and use, and the time of day of operations (daytime or nighttime). Appendix A, *Noise Modeling Technical Report* provides additional details regarding noise model input data. The existing condition noise analysis reflects

operations and operating conditions in 2009, and is intended to provide a frame of reference when considering the future condition noise analyses presented in Chapter Four, *Environmental Consequences*.

Operational data, including the number of arrivals and departures and the aircraft fleet mix, reflects data provided via Massport's AirScene Noise and Operations Monitoring System (NOMS) radar data and Massport's Draft 2009 Environmental Data Report (EDR). In 2009, 345,228 annual operations (approximately 946 average annual day operations) occurred. Logan Airport operates with multiple runway operating configurations, whose use vary based on the predominate wind and weather patterns. The configurations that use Runways 4L/R for arrivals and departures tend to be the most heavily utilized. Runway 33L accounted for approximately 17% of all aircraft departures.

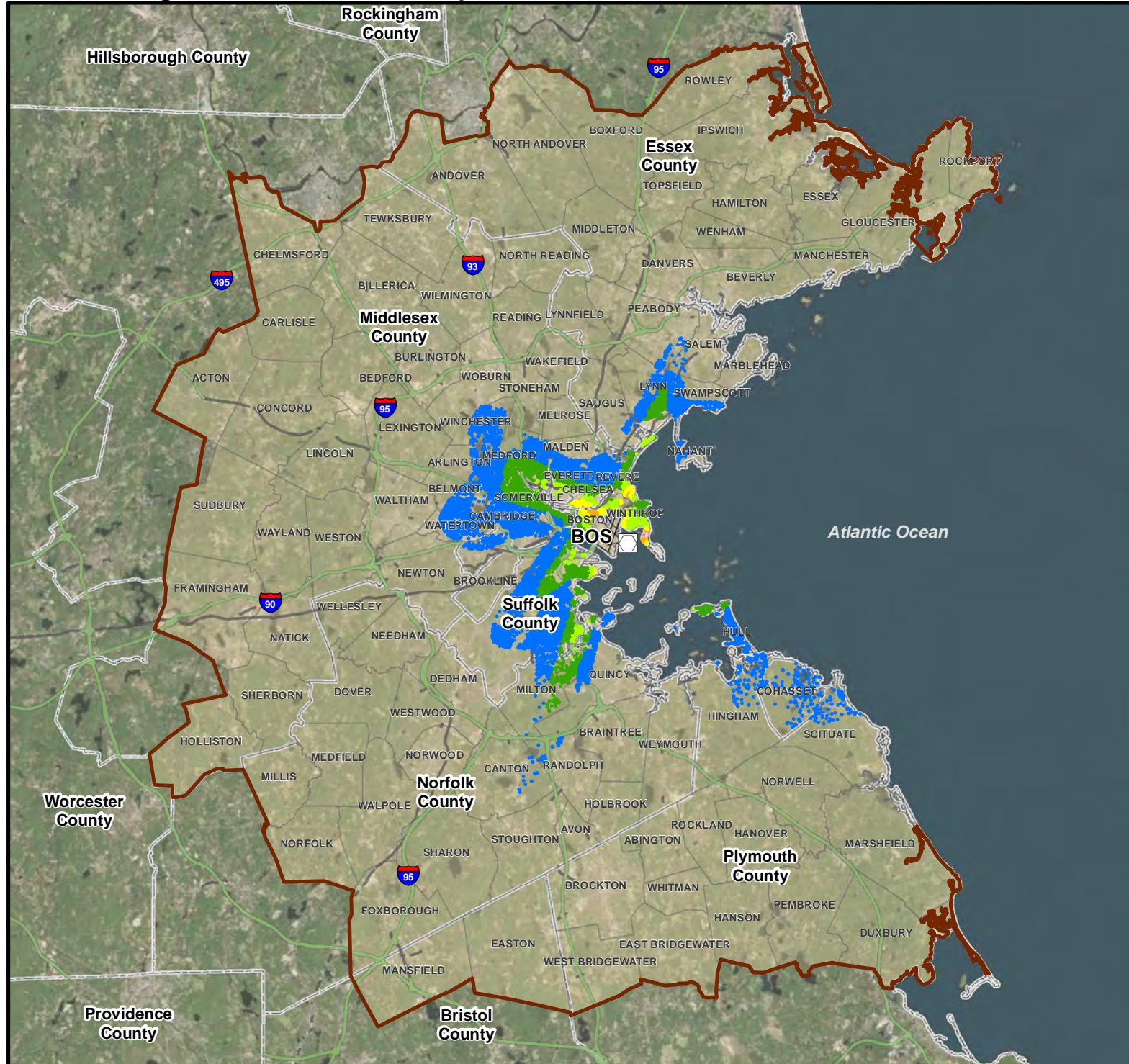
The 2009 existing conditions include all of the BONS alternatives implemented prior to 2010, including RNAV SIDs from other Logan Airport runways. The 2009 noise analysis is the foundation upon which the noise modeling for the future conditions is developed.

#### 3.3.1.3 Existing Aircraft Noise Exposure at Population Centroids

**Figures 3-4** and **3-5** show the existing (2009) noise exposure levels at population centroids between 45 and 75 DNL. As would be expected, the areas closer to Logan Airport are exposed to the highest noise exposure levels. As shown in **Table 3.1**, the majority (69%) of people residing within the Study Area are exposed to aircraft noise levels less than 45 DNL.



# Boston Logan International Airport



**Figure 3-4**  
Existing (2009) Noise  
Exposure at Population  
Centroids - Study Area

## LEGEND

- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL

Note:  
Noise exposure is shown for populated  
census block centroids only.



**Boston Logan  
International Airport  
Runway 33L RNAV SID  
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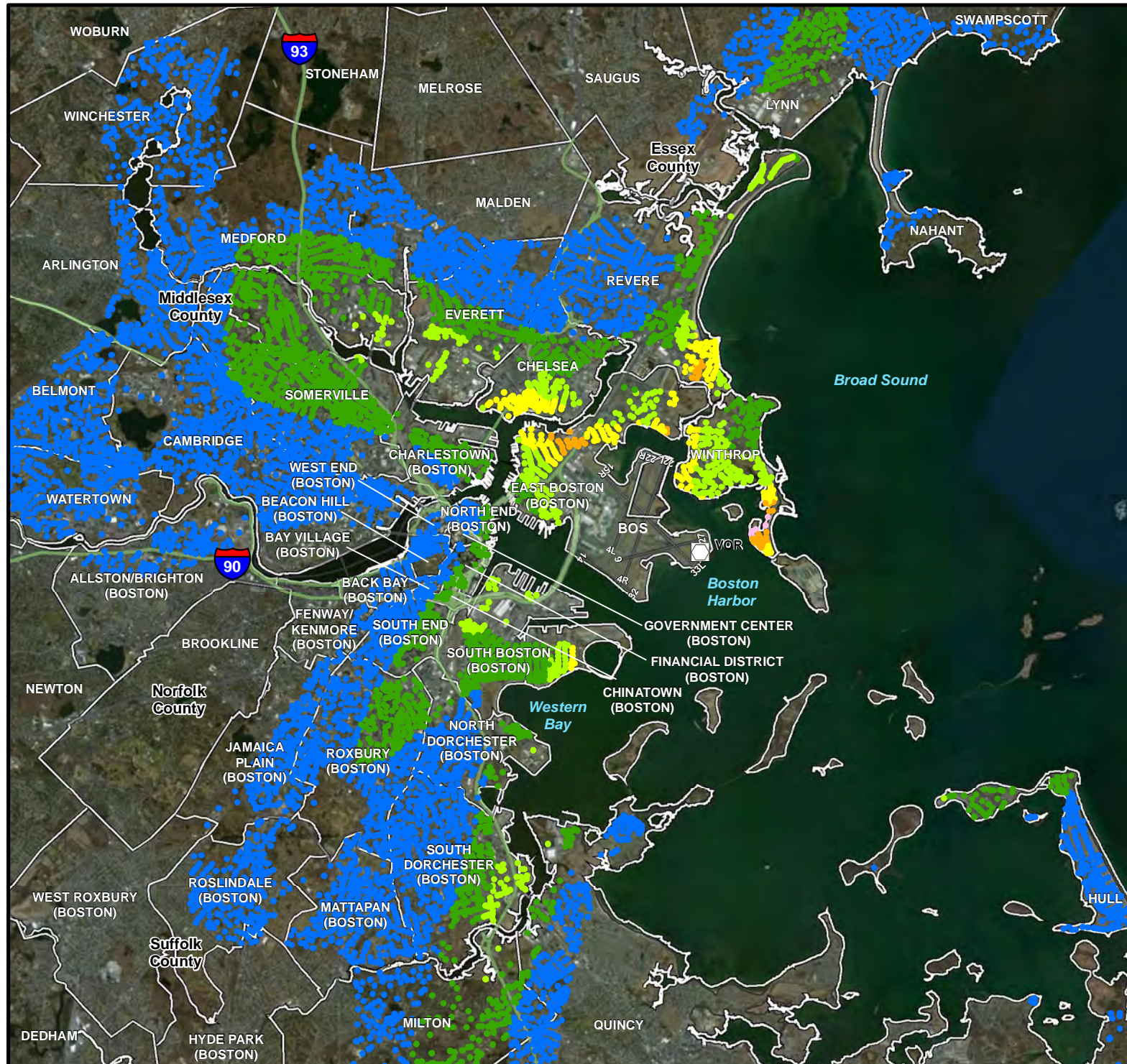
0 1.25 2.5 5 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
ESRI, 2010 U.S. Census Bureau



# Boston Logan International Airport



**Figure 3-5**  
Existing (2009) Noise  
Exposure at Population  
Centroids -  
Logan Airport Vicinity

## LEGEND

- BOS VOR/DME
- Community within Study Area
- County Boundary
- Town Boundary
- Interstate
- Highway

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL

Note:  
Noise exposure is shown for populated  
census block centroids only.



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0 0.3 0.6 1.2 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
ESRI, 2010 U.S. Census Bureau

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Noise levels between 45 and 60 DNL include nearly 30% of the Study Area population. 27,830 persons would experience aircraft noise levels between 60 and 65 DNL, and 4,673 people would

experience aircraft noise levels of 65 DNL or higher.

Table 3.1

**Study Area Population Exposed to Aircraft Noise – Existing (2009) Condition**

<b>DNL Range (dB)</b>	<b>Population</b>	<b>Percentage of Total</b>
Less than 45	2,204,095	69.1%
45 to less than 50	656,560	20.6%
50 to less than 55	238,619	7.5%
55 to less than 60	57,115	1.8%
60 to less than 65	27,830	0.9%
65 to less than 70	4,466	0.1%
70 to less than 75	207	0.01%
Greater than or equal to 75	0	0%
<b>Total</b>	<b>3,188,892</b>	<b>100%</b>

Note: Totals may not equal 100% due to rounding.

Source: HNTB analysis, 2012, U.S. Census 2010.

### **3.3.2 Section 4(f) and 6(f) of the DOT Act**

49 U.S.C. Section 303(c), commonly referred to as Section 4(f) of the Department of Transportation (DOT) Act, states that the "...Secretary of Transportation will not approve a project that requires the use of any publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land from a historic site of national, state, or local significance as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land...and [unless] the project includes all possible planning to minimize harm resulting from the use."

The term "use" encompasses both direct and indirect impacts to Section 4(f) properties. Direct use is the physical taking

of the 4(f) property. Indirect adverse impacts such as noise that compromise the use of Section 4(f) properties for their intended purpose are considered a "constructive use." The determination of use must consider the entire property and not simply the portion of the property being used for the proposed project. Privately owned parks, recreation areas and wildlife refuges are not subject to Section 4(f).

FAA has established guidelines for aircraft noise and land use compatibility under 14 CFR Part 150. Part 150 is limited, however, in its ability to assess the impact of noise in areas where quiet and serenity are expected. Special consideration is given to parks and natural areas where a quiet setting is a generally recognized purpose and attribute. In these areas the FAA official "must consult all appropriate Federal, State, and local officials having jurisdiction over the affected Section 4(f) resources when

determining whether project-related noise impacts would substantially impair the resource.”<sup>6</sup>

Natural areas, as defined for the purpose of this document, include national parks, wildlife refuges, forests, wildlife management areas and other places that are considered recreationally and environmentally significant. The Study Area encompasses city, county, state and federally maintained parks as well as other natural areas (National Parks and National Wildlife Refuges), as identified in **Figure 3-6**.

Many Section 4(f) properties are also subject to Section 6(f) of the Land and Water Conservation Fund (LWCF) Act.<sup>7</sup> In Massachusetts, LWCF state matching grants are administered by the Division of Conservation Services (DCS). Since 1965, nearly 4,000 acres have been acquired using grants totaling more than \$95.6 million.<sup>8</sup>

#### **3.3.2.1 State Parks, Forests and Other Areas of Significance**

The Commonwealth of Massachusetts manages a number of parks, forests, reservations and other parklands under the jurisdiction of the Department of Conservation and Resources, the Department of Fish and Wildlife and others. There are a number of State Parks and other Section 4(f) resources within the Study Area. Figure 3-6 also illustrates the location of State parks, forests and other areas (e.g. reservations and Wildlife Management Areas) of state significance which are contained in the project record.

### **3.3.3 Historical, Architectural, Archaeological, and Cultural Resources**

A number of federal laws and regulations address protection of the Country's cultural resources. The statute specifically devoted to cultural resource issues is the National Historic Preservation Act of 1966 (16 USC 470), as amended, which contains two provisions that are pertinent to changes in aircraft routing.

Section 106 of the Act requires federal agencies to consider the effect of federally funded or licensed projects on properties and districts listed, or eligible for listing, in the National Register of Historic Places (NRHP).<sup>9</sup> National Historic Landmarks, a designation bestowed on a limited number of particularly significant cultural resources, are afforded special protection under Section 110 of the National Historic Preservation Act.<sup>10</sup> NRHP has established standards by which individual resources (both archaeological and architectural) are evaluated to determine their eligibility for listing. Resources may include buildings, sites, objects, and structures and are placed on the NRHP in reference to their: (1) association with events that have made a significant contribution to the broad patterns of American history; (2) association with the lives of persons significant in our past; (3) architectural or archaeological significance; and/or (4) ability to yield information important in prehistory or history.<sup>11</sup>

A broader range of cultural resources are protected under Section 4(f) of the DOT Act of 1966 which requires projects funded by the DOT to avoid “any significant historic site” unless there is no “feasible or prudent” alternative. This provision generally applies



This map illustrates the Greater Boston area, highlighting various parks, historic sites, and wildlife refuges. The map includes labels for surrounding counties (Hillsborough, Rockingham, Essex, Middlesex, Suffolk, Norfolk, Worcester, Plymouth, Bristol, and Providence), major highways (I-95, I-93, I-90, I-495), and numerous cities and towns. Specific sites highlighted include Longfellow National Historic Site, Great Meadows National Wildlife Refuge, Assabet River National Wildlife Refuge, Minute Man National Historic Park, John Fitzgerald Kennedy National Historic Site, Frederick Law Olmsted National Historic Site, Parker River National Wildlife Refuge, Salem Maritime National Historic Site, Saugus Iron Works National Historic Site, Boston National Historical Park, Boston African American National Historic Site, Boston Harbor Islands National Recreation Area, and Adams National Historical Park. The Atlantic Ocean is to the east.

## LEGEND

- 



**Source:** Office of Geographic Information (MassGIS), ESRI

to resources listed, or eligible for listing, in the NRHP.

Although implementation of the Proposed Action does not require the physical taking of any cultural resource, the Proposed Action may result in an indirect impact to cultural resources. Indirect adverse impacts such as noise may be considered a "constructive use" or taking of the property. Therefore, cultural resources in the Study Area have been identified as shown in **Figure 3-7**. There are 2,168 listed national historic resources in the Study Area, the details of which are contained in the project record.

The Massachusetts Historical Commission (MHC) is the designated State Historic Preservation Office in the Commonwealth of Massachusetts. The State Register of Historic Places was established in 1982 and includes buildings, structures, objects and other sites that are designated by local, state, or national resources. Three-hundred twelve (312) cities and towns in Massachusetts include over 60,000 significant historic or archaeological resources. Complete geographic coordinates are not available for State designated resources.

Potential impacts to Tribal lands must also be assessed when evaluating impacts to cultural resources. The Study Area does not include any Native American Lands, Indian Reservations or State Designated American Indian Statistical Areas.

### **3.3.4 Air Quality**

This section describes the existing air quality conditions within the Study Area, as related to national air quality standards.

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for ambient (i.e., outdoor) concentrations of the following criteria pollutants: Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Ozone (ground-level O<sub>3</sub>), Sulfur Dioxide (SO<sub>2</sub>), Lead (Pb), particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>) and particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>). Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings.

States must identify geographic areas that do not meet the NAAQS for each criteria pollutant. These areas are then identified as non-attainment areas for the applicable criteria pollutant(s). States must develop a State Implementation Plan (SIP) for non-attainment areas that includes a variety of emission control measures that the state deems necessary to produce attainment of the applicable standard(s) in the future. If a SIP already exists, it must be revised if an area becomes non-attainment for a criteria pollutant.

An area previously designated non-attainment pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently re-designated as attainment, is termed a maintenance area. A maintenance area must have a maintenance plan in a revision to a SIP to ensure attainment of the air quality standards is maintained.

Within the Study Area there are no criteria pollutants in non-attainment, and one



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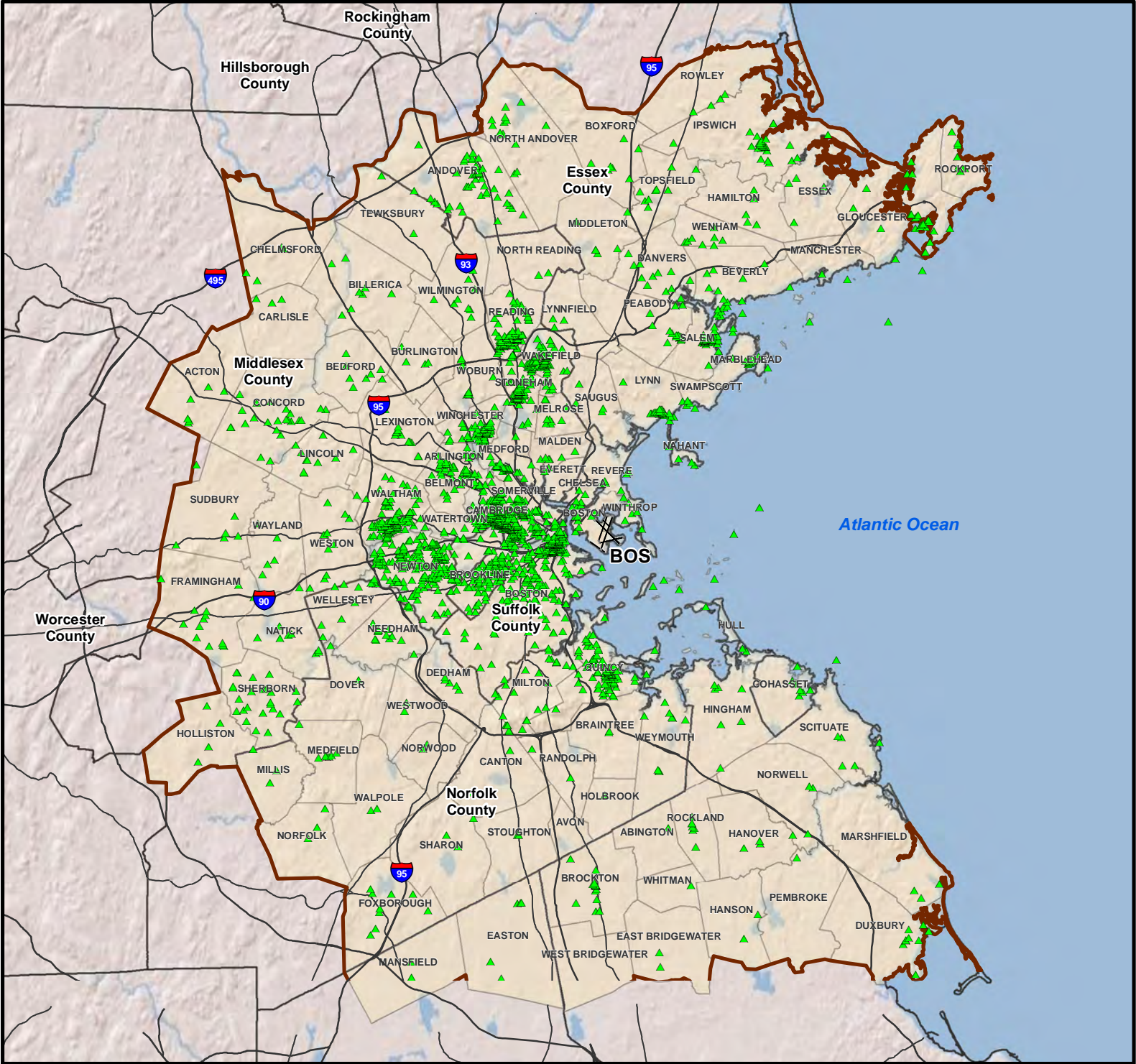


Figure 3-7  
National Register of  
Historic Places and  
National Historic  
Landmarks

LEGEND

- ▲ NRHP/NHL Property
- Study Area
- Community within Study Area
- County Boundary
- Interstate / Highway



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0 1 2 4 Nautical Miles





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criteria pollutant, CO, is in maintenance status.

#### 3.3.4.1 Carbon Monoxide (CO)

CO is a colorless, odorless and poisonous gas produced by incompletely burned carbon in fuels. The majority of CO emissions are from transportation sources, with the largest from highway motor vehicles. CO molecules survive in the atmosphere for a period of approximately one month, but eventually react with oxygen

to form carbon dioxide. CO levels found in ambient air may reduce the oxygen carrying capacity of the blood. Health threats are most serious for those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability, and decreased performance of complex tasks. There are no areas within the Study Area designated non-attainment for CO; however, there are three counties in the Study Area designated as maintenance areas for CO as shown in **Table 3.2**.

Table 3.2

**CO Maintenance Areas in the Study Area**

Pollutant	County	Classification Standard
CO	Middlesex (Boston, Lowell, Waltham)	Maintenance – Moderate to Not Classified
	Norfolk (Quincy)	Maintenance - Moderate ( $\leq 12.7$ ppm)
	Suffolk (Boston, Chelsea, Revere)	Maintenance - Moderate ( $\leq 12.7$ ppm)

Source: US EPA Office of Air Quality Planning & Standards, Green Book, available online at: [http://www.epa.gov/airquality/greenbk/anayo\\_ma.html](http://www.epa.gov/airquality/greenbk/anayo_ma.html) (accessed November 26, 2012).

#### 3.3.5 Climate

Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions. In terms of U.S. contributions, the General Accounting Office (GAO) reports that “domestic aviation contributes about 3 percent of total carbon dioxide emissions, according to EPA data,” compared with other industrial sources including the remainder of the transportation sector (20 percent) and power generation (41 percent).<sup>12</sup> The International Civil Aviation Organization (ICAO) estimates that GHG emissions from aircraft account for roughly 3 percent of all anthropogenic GHG emissions globally.<sup>13</sup> Climate change due to GHG emissions is a global phenomenon, so the affected environment is the global climate.<sup>14</sup>

The scientific community is continuing efforts to better understand the impact of aviation emissions on the global atmosphere. The FAA is leading and participating in a number of initiatives intended to clarify the role that commercial aviation plays in GHG emissions and climate. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies (e.g., NASA, NOAA, EPA, and DOE), has developed the Aviation Climate Change Research Initiative (ACCRI) in an effort to advance scientific understanding of regional and global climate impacts of aircraft emissions. FAA also funds the Partnership for Air Transportation Noise & Emissions Reduction (PARTNER) Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on

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global and U.S. climate and atmospheric composition. Similar research topics are being examined at the international level by ICAO.

### **3.3.6 Federally Threatened and Endangered Species and Migratory Birds**

Section 7 of the Endangered Species Act of 1973 (ESA), as amended, (16 U.S.C. § 1531 et seq.) provides protection to any wildlife, which includes endangered plants or animals. In compliance with Section 7(c) of the ESA, federal agencies are required to ensure development/improvements will not jeopardize the continued existence of threatened or endangered species, or result in the destruction or adverse modification of the critical habitat of such species. Endangered species are defined as those in danger of extinction throughout all or a significant portion of its range. Threatened species are defined as any species that are likely to become an endangered species, within the foreseeable future, throughout all or a significant portion of its range.

This section describes the affected environment as related to threatened and avian endangered species and migratory bird patterns. Migratory bird patterns are considered as avian species in the Study Area and may be impacted by changes to aircraft routing.

#### **3.3.6.1 Threatened and Endangered Species**

The U.S. Fish and Wildlife Service (USFWS) provides recommendations for threatened and endangered species under the authority of the ESA, as amended. In December 2012, an official species list was provided by the USFWS via the Information, Planning, and Consultation System (IPaC) tool that identified threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the six-county Study Area. **Table 3.3** provides a summary of the official species list provided by USFWS.

Table 3.3  
**Threatened, Endangered, Candidate, and Proposed Species by County**

<b>Group</b>	<b>Species</b>	<b>Scientific Name</b>	<b>Federal Status</b>	<b>Counties within Study Area Where Known or Believed to Occur</b>
Birds	Piping Plover	<i>Charadrius melodus</i>	Threatened	Bristol, Essex, Plymouth, Suffolk <sup>1</sup>
Birds	Roseate Tern	<i>Sterna dougallii dougallii</i>	Endangered	Bristol, Essex, Plymouth <sup>2</sup>

Notes:

<sup>1</sup> Species on this list are the species that may be affected by your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species.

<sup>2</sup> Northeast U.S. nesting population.

Source: U.S. Department of Interior Fish & Wildlife Service IPaC – Information, Planning, and Conservation System, December 2012.

There are four species listed by the FWS as threatened or endangered species within the six-county Study Area. There are no proposed or candidate species in the Study Area counties. The threatened and endangered species within the Study Area includes two birds, one flowering plant and one reptile. Because the Proposed Action would have no ground-based impacts, only avian species are considered to be potentially affected.

The Piping Plover (bird) is a threatened species, known to or believed to occur in the Study Area counties of Bristol, Essex, Plymouth and Suffolk. The Piping Plover is known to occur in the Parker River National Wildlife Refuge, located within the Study Area.<sup>15</sup> The Roseate Tern is an endangered species (bird) and is known to or is believed to occur in the Study Area counties of Bristol, Essex and Plymouth.

#### 3.3.6.2 Migratory Birds

Migratory birds are protected by the Migratory Bird Treaty Act (MBTA). The USFWS is the Federal agency responsible for the management of migratory birds as they spend time in habitats of the U.S. Most species of birds, including eagles and other raptors, are protected under the MBTA (16 U.S.C. 703), which makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The MBTA applies to 1,007 species of migratory birds, identified in 50 C.F.R. § 10.13.<sup>16</sup>

Although the MBTA does not protect the habitats of migratory birds, activities that

affect habitats and result in the “take” of migratory birds do violate the MBTA. The Piping Plover and the Roseate Tern are included in the list of migratory birds protected under the MBTA. Changes in where aircraft fly may occur in areas that are traditionally used as migration routes.

Migration routes may be defined as the various lanes birds travel from their breeding ground to their winter quarters. The actual routes followed by a given migratory bird species differ by variables such as distance traveled, time of starting, flight speed, geographic position and latitude of the breeding, and wintering grounds.

Birds migrate along four main routes or flyways in North America: the Atlantic, the Central, the Mississippi, and the Pacific flyways. These flyways are not specific lines the birds follow but broad areas through which the birds migrate. The most frequently traveled migration routes conform very closely to major topographical features that lie in the general north-south movement of migratory bird flyways. Therefore, the lanes of heavier concentration in the Study Area follow principal river valleys and mountain ranges. The Atlantic Flyway is the only North American flyway to cross near or through the Study Area and is the only flyway that could potentially interact with the Study Area.

#### 3.3.6.3 Bald and Golden Eagle Protection Act

Bald eagles and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668). The BGEPA prohibits individuals and companies from knowingly, or with wanton disregard for the

consequences of the Act, taking any bald or golden eagles or their body parts, nests, chicks, or eggs, which includes collection, molestation, disturbance, or killing. The BGEPA affords eagles additional protections beyond those provided by the MBTA by making it unlawful to "disturb" eagles. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, injury to an eagle or causes either a decrease in its productivity or nest abandonment due to interference with breeding, feeding, or sheltering. A permitting process provides limited exceptions to the BGEPA's prohibitions and the Service has issued regulations concerning the permit procedures in 50 C.F.R. § 22.

The Bald Eagle was historically a very rare breeder in Massachusetts, and prior to 1989, the last presumed nesting of this species was at the beginning of the century. In 1982, the Massachusetts Division of Fisheries and Wildlife teamed with Mass Audubon to launch a project to restore the Bald Eagle as a breeding bird in the Commonwealth. The number of nesting eagles has increased and spread across the state in subsequent years. During the winter months, when the nesting season is over, Mass Audubon reports that Bald Eagles can be seen searching for food in any large pond, lake, or river in the state and that nests have been confirmed on lakes in Plymouth County, which is in the Study Area.



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**Endnotes**

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- <sup>1</sup> <http://aspm.faa.gov/opsnet/sys/Airport.asp>.
- <sup>2</sup> <http://www.massport.com/logan-airport/about-logan/Pages/Airlines.aspx>.
- <sup>3</sup> 14 CFR Part 150, Appendix A, Table 114 CFR Part 150, Appendix A, Table 1 (<http://www.gpo.gov/fdsys/pkg/CFR-2011-title14-vol3/pdf/CFR-2011-title14-vol3-part150-appA.pdf>).
- <sup>5</sup> Population data was determined based on the total number of households and the average population per household. The Census defines a household as consisting of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters. Those residing in group quarters are not included in this analysis. Group quarters include correctional facilities, nursing facilities/skilled nursing facilities, in-patient hospice facilities, mental (psychiatric) hospitals, group homes for juveniles, college/university housing, group homes intended for adult, residential treatment facilities for adults, or workers' group living quarters.
- <sup>6</sup> U.S. Department of Transportation Federal Aviation Administration (FAA), Order 1050.1E, CHG 1: *Environmental Impacts: Policies and Procedures*, March 20, 2006, see Appendix A, pg A20. [http://www.faa.gov/documentLibrary/media/order/energy\\_orders/1050-1E.pdf](http://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf).
- <sup>7</sup> 16 USC 460 (<http://www.nps.gov/boha/parkmgmt/park-legislation.htm>).
- <sup>8</sup> <http://www.mass.gov/eea/grants-and-tech-assistance/grants-and-loans/dcs/dcr-rant-programs/massachusetts-land-and-water-conservation-fund.html>.
- <sup>9</sup> Regulations related to the Section 106 process are outlined in 36 CFR Part 800 *Protection of Historic Properties*. (See <http://www.achp.gov/regs-rev04.pdf>).
- <sup>10</sup> 16 USC 470 *National Historic Preservation Act of 1966*, promulgated under 36 CFR Part 800.10. (See <http://www.nps.gov/history/local-law/nhpa1966.htm>).
- <sup>11</sup> 36 CFR Part 60 *National Register of Historic Places* (<http://www.gpo.gov/fdsys/pkg/CFR-2011-title36-vol1/pdf/CFR-2011-title36-vol1-part60.pdf>).
- <sup>12</sup> *Aviation and Climate Change*, GAO Report to Congressional Committees, (2009). <http://www.gao.gov/new.items/d09554.pdf>.
- <sup>13</sup> Alan McIrose, ICAO Environmental Report, *European ATM and Climate Adaptation: A Scoping Study, 2010*, ([http://www.icao.int/environmental-protection/Documents/Publications/ENV\\_Report\\_2010.pdf](http://www.icao.int/environmental-protection/Documents/Publications/ENV_Report_2010.pdf)).
- <sup>14</sup> As explained by the U.S. EPA, "greenhouse gases, once emitted, become well mixed in the atmosphere, meaning U.S. emissions can affect not only the U.S. population and environment but other regions of the world as well; likewise, emissions in other countries can affect the United States." Climate Change Division, Office of Atmospheric Programs, U.S. EPA, *Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act 2-3* (2009), available at <http://epa.gov/climatechange/endangerment.html>.
- <sup>15</sup> USFWS, Species Profile: Piping Plover (*Charadrius melodus*), <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B079>, accessed 12/5/12.

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<sup>16</sup> USFWS, Migratory Bird Program,  
<http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtandx.html>, Updated April 2012,  
accessed 12/6/12.

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## **CHAPTER 4: ENVIRONMENTAL CONSEQUENCES**



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## Chapter Four:

# ENVIRONMENTAL CONSEQUENCES

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This chapter describes the potential environmental consequences associated with the No Action and the Proposed Action Alternatives in accordance with FAA Order 1050.1E.

The potential impacts associated with the Proposed Action Alternative are determined by comparing the Proposed Action Alternative and the No Action Alternative, for projected conditions in 2015, consistent with the years of analysis in the BLANS.

### 4.1 Noise

This section describes the noise analysis methodology and compares forecast aircraft noise exposure levels in the Study Area for the No Action and Proposed Action Alternatives.

#### 4.1.1 Noise Modeling Methodology and Operational Input

The noise modeling methodology described in Section 3.3.1 is also used for the 2015 noise analysis. The noise modeling methodology is consistent with noise modeling of aircraft operations as required by the FAA, inclusive of requirements for consideration in airspace actions, such as changes to air traffic routes.

As part of the BLANS study, noise model input was prepared for 2015 conditions. Average daily flight schedules were developed for 2015 to supply arrival and departure times, aircraft types, and origin/destination information. Aircraft type

information is used for estimating performance and noise characteristics for each flight while the origin/destination data are used to assign trip distance at departure. Forecast operations in 2015 are projected to be approximately 1,087 on an average annual day. Runway use was forecast based on the three-year average runway use between 2007 and 2009. In 2015, Runway 33L departures are forecast to account for approximately 17% of all BOS departures (approximately 88.7 on an average annual day).

Modeled flight tracks (i.e., the path and direction the aircraft fly) are based on radar data collected during the existing 2009 condition analysis, plus incorporation of RNAV SIDs and STARs previously analyzed. The Proposed Action Alternative for the Runway 33L RNAV SID procedure was initially designed in TARGETS by the FAA and converted to INM input at the end of Phase 2 of the BLANS process. The Proposed Action would only affect departures that already depart from Runway 33L – no other change to input data was made. Appendix A provides additional detail pertaining to the No Action noise modeling in this EA.

#### 4.1.2 Noise Impact Criteria

Change in noise exposure for each point in the Study Area is evaluated based on FAA guidance to determine the degree of change in noise exposure. Aircraft noise is required, per FAA Order 1050.1E, to be evaluated in

terms of the DNL metric. The Order further defines that a significant impact would occur if a proposed action would result in an increase of 1.5 DNL or more in any noise-sensitive area at or above the 65 DNL exposure level when compared to the No Action Alternative for the same timeframe.<sup>1, 2, 3</sup>

In 1992, FICON recommended that in cases where increases of 1.5 DNL or more occur at noise-sensitive locations at or above 65 DNL, further evaluation should be completed to assess whether or not noise increases of 3 DNL or more occur at noise-sensitive locations between 60 and 65 DNL. The FAA adopted FICON's recommendation into FAA Order 1050.1E for consideration in airspace actions, such as changes to air traffic routes.

The FAA issued a noise screening procedure in 1990 for determining whether certain airspace actions above 3,000' AGL might increase DNL by 5 dB or more. The procedure serves as a response to FAA experience that increases in noise of 5 dB between the DNL 45 and 60 dB has the potential to be highly controversial on environmental grounds and may be the subject of extraordinary circumstances precluding the use of a categorical exclusion. The FAA determined that 45 DNL is the minimum level at which noise needed to be considered because "even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this [45 DNL] value."<sup>4</sup>

For the purpose of this noise analysis, increases of 1.5 DNL above 65 DNL are

considered significant. Per FAA Order 1050.1E, increases of 3 DNL between 60 and 65 DNL are to receive consideration when evaluating the environmental impacts of a proposed project, and will be identified regardless of whether a significant impact is identified.<sup>5</sup> Increases of 5 DNL or greater at levels between 45 and 60 DNL are to be disclosed. The increase in noise at these levels is enough to be noticeable to some people, but the cumulative noise level is not high enough to constitute a "significant impact."

The FAA noise level criteria are used to compare DNL changes at the population locations in the Study Area, which is evaluated under the following categories: (1) those receiving an increase in noise exposure relative to the No Action Alternative; (2) those receiving a decrease relative to the No Action Alternative; and (3) those having no change relative to the No Action Alternative. The reasons for defining the increase, categories and the sources for each are presented in **Table 4.1**. Additionally, in accordance with FAA Order 1050.1E, special consideration will be given to the evaluation of the significance of noise impacts on noise sensitive areas within national parks, national wildlife refuges and historic sites, as described in Sections 4.3 and 4.4, respectively. For example, the DNL 65 dB threshold does not adequately address the effects of noise on visitors to areas within a national park where other noise is low and a quiet setting is the recognized intention of the area.<sup>6</sup>



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Table 4.1  
**Criteria for Determining Impact of Increases in Aircraft Noise**

<b>DNL Noise Exposure with Proposed Action</b>	<b>Minimum Increase in DNL with Proposed Action</b>	<b>Level of Impact</b>
65 DNL or higher	1.5 DNL <sup>1</sup>	Exceeds Threshold of Significance
60 to 65 DNL	3.0 DNL <sup>2</sup>	For Consideration When Evaluating Air Traffic Actions
45 to 60 DNL	5.0 DNL <sup>3</sup>	Information Disclosed

Source:

(1) FAA Order 1050.1E, Appendix A, Paragraph 14.3, Title CFR Part 150, Sec. 150.21(2)(d); and FICON, *Federal Agency Review of Selected Airport Noise Issues*, August 1992.

(2) FAA Order 1050.1E, Appendix A, Paragraph 14.4c and 14.5e; and FICON, *Federal Agency Review of Selected Airport Noise Issues*, August 1992.

(3) FAA Order 1050.1E, Appendix A, 14.5e.

#### **4.1.3 Aircraft Noise Impact Analysis**

Based upon the noise methodology described in Section 4.1.1 and the noise impact criteria described in Section 4.1.2, a noise analysis was conducted to evaluate noise exposure levels using the applicable thresholds for the Proposed Action Alternative as compared to the No Action Alternative.

#### **4.1.4 No Action Alternative**

Noise exposure was calculated for population centroids with a population greater than zero for the No Action Alternative. For consistency with previous BLANS analysis, **Table 4.2** presents the overall population exposed to various noise levels in 2015. **Figures 4-1** and **4-2** depict 2015 noise exposure greater than 45 DNL at Census block centroids.

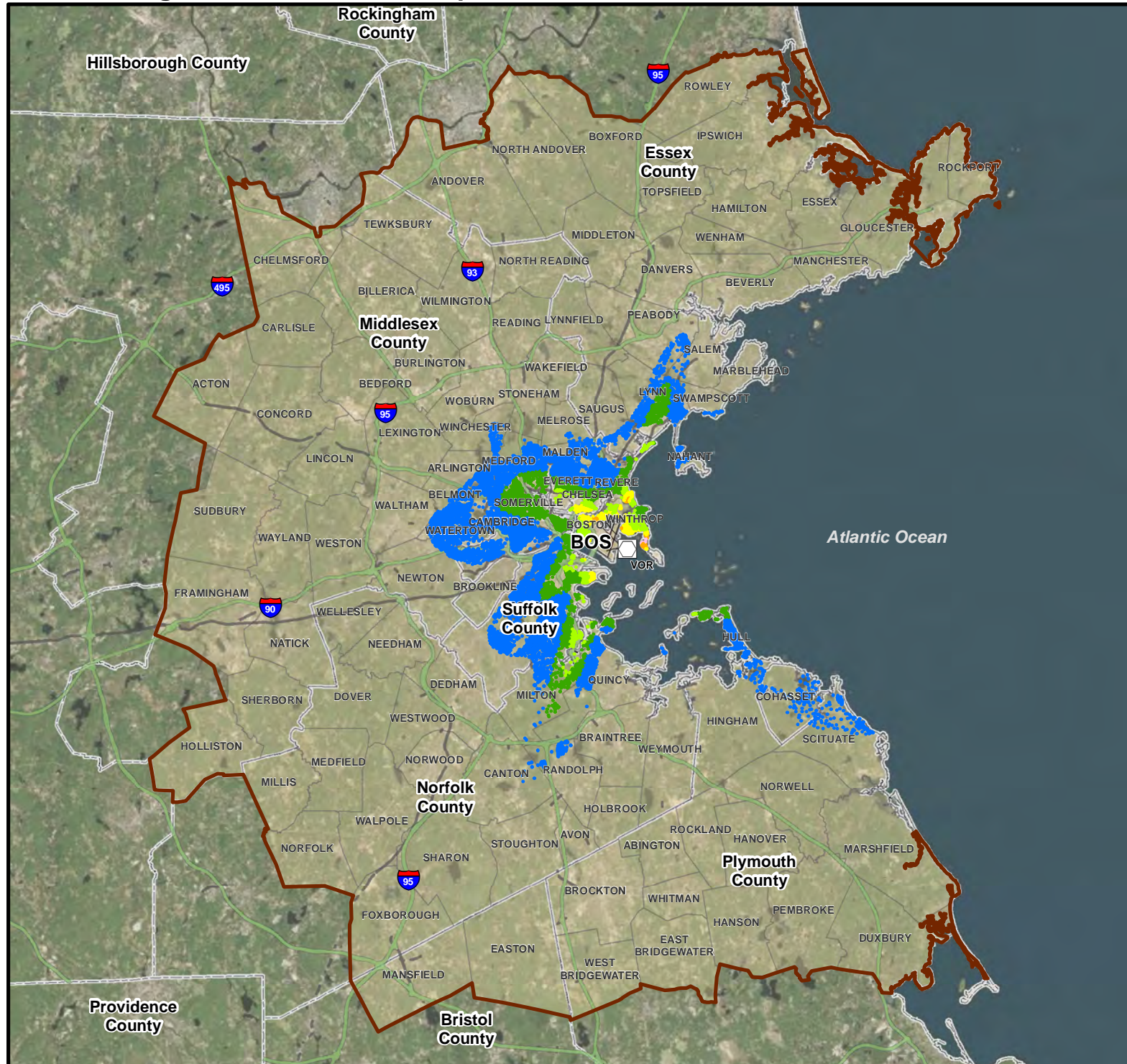
#### **4.1.5 Proposed Action Alternative**

The following section presents the noise results for the Proposed Action Alternative. There is no change to the number of aircraft operations or types of operations, nor does overall runway use change. The noise analysis therefore reflects changes in noise

exposure only due to the implementation of an RNAV SID from Runway 33L (the Proposed Action), as compared to the No Action Alternative.

A comparison of the 2015 No Action and 2015 Proposed Action Alternatives noise exposure for populated centroids indicates there are no significant impacts (increases of 1.5 DNL in areas that would experience DNL noise levels of 65 or above). Even though no significant impacts were identified, the Proposed Action was evaluated for an increase of 3 DNL in population centroids between 60 and 65 DNL and an increase of 5 DNL for population centroids between 45 and 60 DNL, neither of which were identified. **Figure 4-3** and **Figure 4-4** depict noise exposure greater than 45 DNL at population centroids due to the implementation of the Proposed Action Alternative.

# Boston Logan International Airport



**Figure 4-1**  
**2015 No Action Noise**  
**Exposure at Population**  
**Centroids - Study Area**

## LEGEND

- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL

Note:  
 Noise exposure is shown for populated  
 census block centroids only.



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

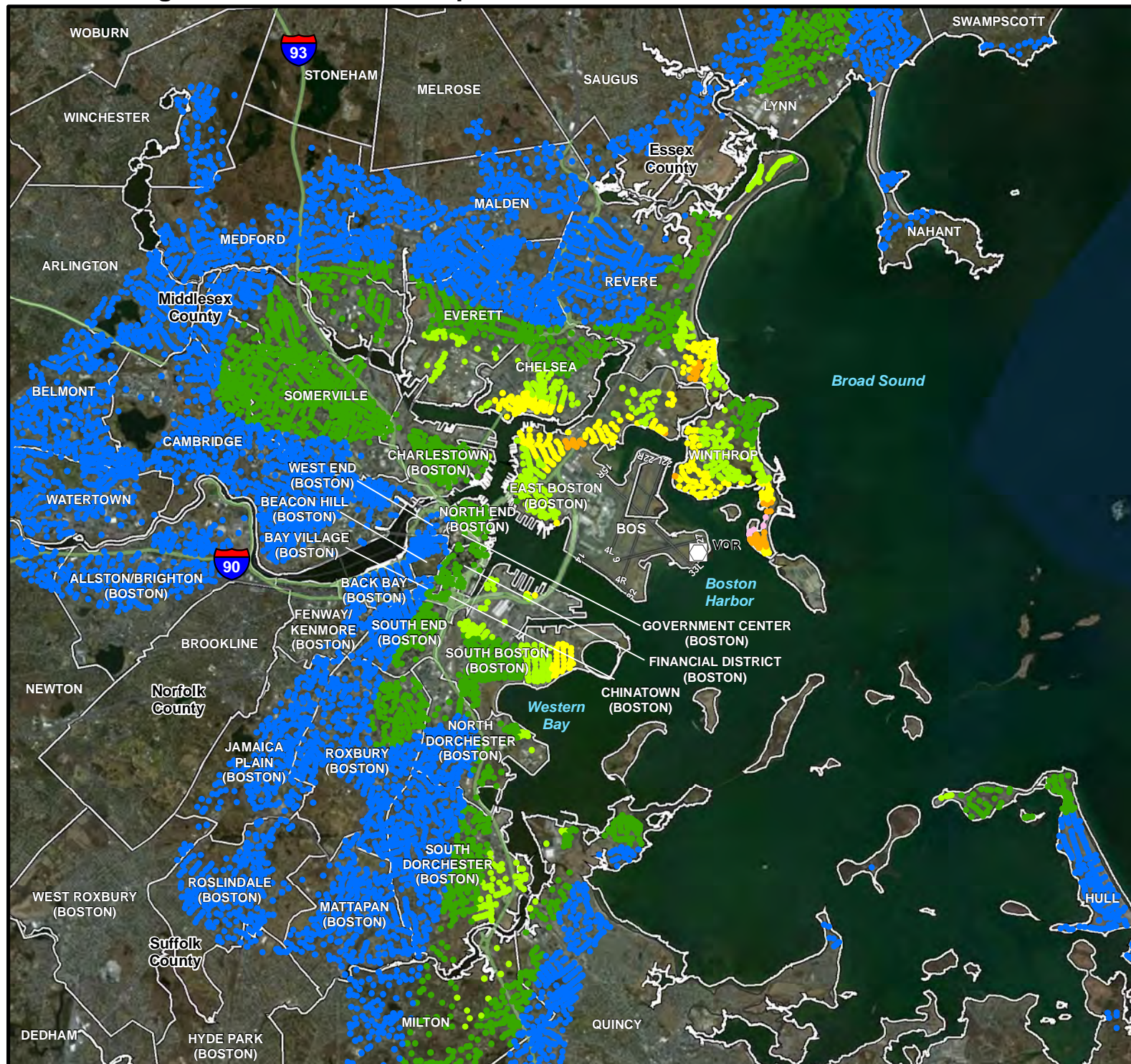
0 1.25 2.5 5 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
 ESRI, 2010 U.S. Census Bureau



# Boston Logan International Airport



**Figure 4-2**  
**2015 No Action Noise**  
**Exposure at Population**  
**Centroids -**  
**Logan Airport Vicinity**

## LEGEND

- BOS VOR/DME
- Community within Study Area
- County Boundary
- Town Boundary
- Interstate
- Highway

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL

Note:  
 Noise exposure is shown for populated  
 census block centroids only.



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**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

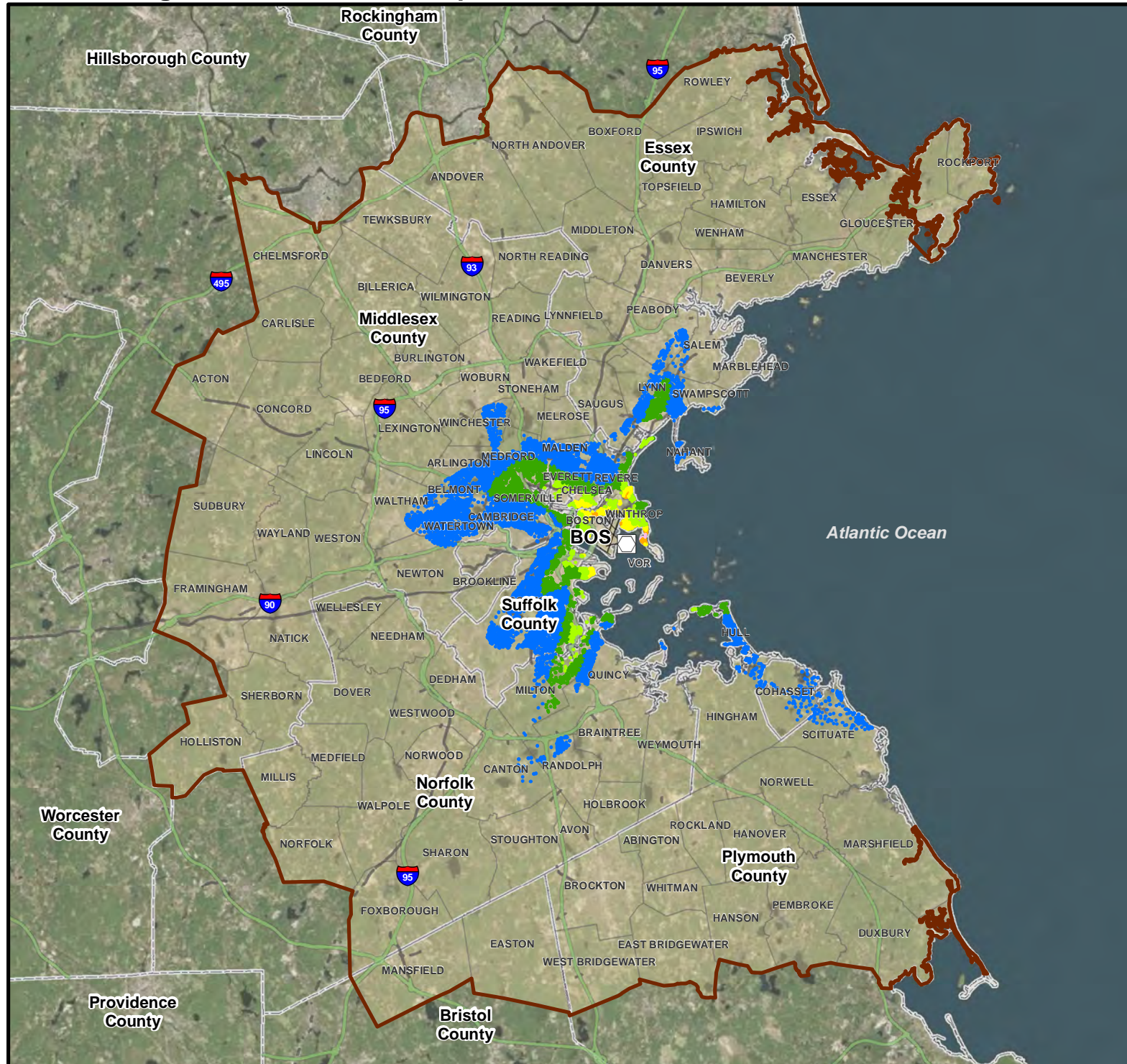
0 0.3 0.6 1.2 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
 ESRI, 2010 U.S. Census Bureau



# Boston Logan International Airport



**Figure 4-3**  
**2015 Proposed Action**  
**Noise Exposure at**  
**Population Centroids -**  
**Study Area**

## LEGEND

- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road
- Noise Exposure**
  - 45-50 DNL
  - 50-55 DNL
  - 55-60 DNL
  - 60-65 DNL
  - 65-70 DNL
  - 70-75 DNL
  - >75 DNL

Note:  
 Noise exposure is shown for populated  
 census block centroids only.



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**Draft EA**

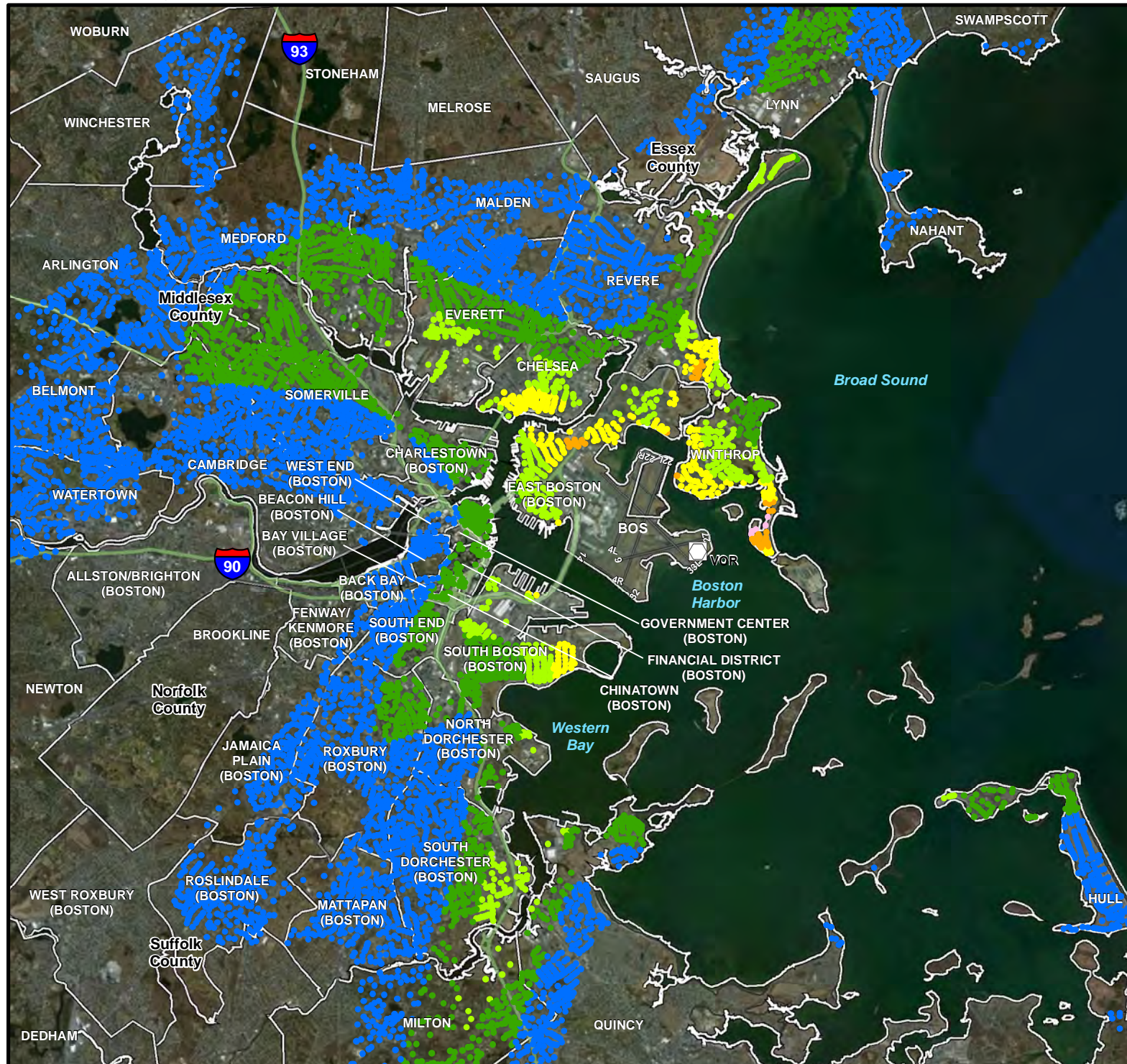
0 1.25 2.5 5 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
 ESRI, 2010 U.S. Census Bureau



# Boston Logan International Airport



**Figure 4-4**  
**2015 Proposed Action**  
**Noise Exposure at**  
**Population Centroids -**  
**Logan Airport Vicinity**

## LEGEND

- BOS VOR/DME
- Community within Study Area
- County Boundary
- Town Boundary
- Interstate
- Highway

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL

Note:  
 Noise exposure is shown for populated  
 census block centroids only.



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**Runway 33L RNAV SID**  
**Final EA**

0 0.3 0.6 1.2 Nautical Miles



Source: Office of Geographic Information (MassGIS),  
 ESRI, 2010 U.S. Census Bureau

Table 4.2

**2015 No Action Alternative Population Exposed to Aircraft Noise**

<b>DNL Range (dB)</b>	<b>Estimated Population</b>	<b>Percentage of Total</b>
Less than 45	2,111,973	66.2%
45 to less than 50	704,091	22.1%
50 to less than 55	270,184	8.5%
55 to less than 60	64,672	2.0%
60 to less than 65	35,092	1.10%
65 to less than 70	2,680	0.1%
70 to less than 75	200	0.01%
Greater than or equal to 75	0	0.0%
<b>Total</b>	<b>3,188,892</b>	<b>100%</b>

Note: Totals may not equal 100% due to rounding.

Source: HNTB Analysis, 2012, U.S. Census 2010.

**Table 4.3** depicts the population exposed to various levels of noise under the Proposed Action Alternative. 28% of the Study Area population would be exposed to levels between 45 and 55 DNL, and less than 4% would be exposed to noise levels above 55 DNL. The areas of highest noise exposure are located in the immediate vicinity of Logan Airport.

**Table 4.4** presents the changes in the population exposed to various levels of noise exposure for the 2015 Proposed Action Alternative compared to the 2015 No Action Alternative. Although not a criteria for significance based on the use of 2010 Census data, implementation of the Proposed Action Alternative would not result in changes to the number of persons exposed to noise levels of 65 DNL or higher.



Table 4.3

**2015 Proposed Action Alternative Population Exposed to Aircraft Noise**

<b>DNL Range (dB)</b>	<b>Estimated Population</b>	<b>Percentage of Total</b>
Less than 45	2,179,819	68.4%
45 to less than 50	640,539	20.1%
50 to less than 55	262,448	8.2%
55 to less than 60	67,456	2.1%
60 to less than 65	35,750	1.1%
65 to less than 70	2,680	0.1%
70 to less than 75	200	0.01%
Greater than or equal to 75	0	0.0%
<b>Total</b>	<b>3,188,892</b>	<b>100%</b>

Note: Totals may not equal 100% due to rounding.

Source: HNTB Analysis, 2012, U.S. Census 2010.

Table 4.4

**Change in Noise Exposure Between  
2015 No Action and Proposed Action Alternatives**

<b>DNL Range (dB)</b>	<b>Estimated Change in Population</b>
Less than 45	Increase of 67,846
45 to less than 50	Decrease of 63,552
50 to less than 55	Decrease of 7,736
55 to less than 60	Increase of 2,784
60 to less than 65	Increase of 658
65 to less than 70	No Change
70 to less than 75	No Change
Greater than or equal to 75	No Change

Source: HNTB Analysis, 2012, U.S. Census 2010.

The FAA recognizes and is responding to the CAC's and general public's desire to understand changes in noise exposure by community as a result of the ongoing BLANS. To that end, although not usually disclosed at this level of detail in a NEPA analysis, **Table 4.5** presents the range of noise exposure and change in noise

exposure by community. **Table 4.6** presents the range of population exposed to DNL levels above 45 DNL under the No Action and Proposed Action Alternatives. As stated previously, none of these changes meet the threshold of significance or reporting criteria as listed in Table 4.1.

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Table 4.5  
**Noise Results (2015 No Action and 2015 Proposed Action)  
for Populated 2010 Centroids Above 45 DNL**

<b>Town</b>	<b>No Action Range of DNL Values</b>	<b>Proposed Action Range of DNL Values</b>	<b>Range of DNL Increase</b>	<b>Range of DNL Decrease</b>
Arlington	45 to 48.6	45 to 49.9	0.6 to 1.9	-
Belmont	45 to 47.7	45.2 to 48.7	0 to 2.0	-0.6 to 0
Boston, Allston/Brighton	45 to 48.1	45.1 to 45.6	-	-2.7 to -2.5
Boston, Back Bay	45.1 to 48.3	45 to 48.1	-	-0.6 to -0.2
Boston, Bay Village	48.4 to 50.4	48.3 to 50.3	-	-0.2 to -0.1
Boston, Beacon Hill	47.4 to 49.6	47.1 to 49.5	-	-0.4 to -0.2
Boston, Charlestown	50.1 to 54.9	48.6 to 53.9	-	-2.2 to -0.9
Boston, Chinatown	50.3 to 52.3	50.2 to 52.2	0 to 0	-0.1 to 0
Boston, East Boston	54.7 to 65.9	54.2 to 66	0 to 0.3	-0.9 to 0
Boston, Fenway/Kenmore	45 to 46.8	45 to 46.4	-	-0.6 to -0.3
Boston, Financial District	49.7 to 53.8	49.6 to 53.8	0 to 0	-0.2 to 0
Boston, Government Center	50.3 to 50.6	50.2 to 50.4	-	-0.2 to -0.2
Boston, Harbor Islands	54.7 to 58.3	54.7 to 58.2	-	0 to 0
Boston, Hyde Park	45 to 45.4	45 to 45.2	-	-0.2 to -0.2
Boston, Jamaica Plain	45 to 48.3	45 to 48	-	-0.7 to -0.3
Boston, Mattapan	45 to 48.8	45 to 48.6	-	-0.5 to -0.2
Boston, North Dorchester	48.1 to 57.9	47.8 to 57.9	- to -	-0.3 to 0
Boston, North End	50.3 to 53.2	49.9 to 53.2	-	-0.6 to -0.1
Boston, Roslindale	45 to 47.8	45 to 47.5	0 to 0.1	-0.4 to 0
Boston, Roxbury	46.5 to 51.8	46 to 51.8	-	-0.5 to 0
Boston, South Boston	50.3 to 64.5	50.3 to 64.5	0 to 0.1	-0.1 to 0
Boston, South Dorchester	46.8 to 59.4	46.4 to 59.4	-	-0.4 to 0
Boston, South End	46.8 to 53	46.4 to 53	0 to 0	-0.4 to 0
Boston, West End	48 to 50.3	47.6 to 49.8	-	-0.5 to -0.4
Boston, West Roxbury	45 to 45.5	45 to 45	-	-0.4 to -0.4
Braintree	45 to 45.4	45 to 45.3	0 to 0	-0.2 to -0.1
Cambridge	45 to 50.4	45 to 50.4	0 to 1.4	-3.1 to 0
Canton	45 to 46.6	45.1 to 46.9	0.3 to 0.4	-
Chelsea	47.6 to 62.2	47.9 to 62.7	0 to 1.6	-0.8 to 0
Cohasset	45 to 45.8	45 to 45.7	-	-0.1 to 0
Everett	45.7 to 57.2	46 to 57.9	0.1 to 1.9	-0.6 to 0
Hingham	45.1 to 46.5	45 to 46.4	-	-0.1 to 0
Hull	45.1 to 55.7	45 to 55.7	-	-0.1 to 0
Lynn	45 to 53.8	45 to 53.8	-	-0.2 to 0
Malden	45 to 51.5	45 to 53.2	0 to 2.0	-0.2 to 0
Medford	45 to 54.6	45.1 to 54.9	0 to 2.1	-0.7 to 0
Melrose	-	45.3 to 45.3	0.4 to 0.4	-
Milton	45 to 56.8	45 to 56.8	0 to 0.5	-0.4 to 0
Nahant	45 to 48.2	45 to 48.2	-	-0.1 to 0
Newton	45 to 45.6	45 to 45.6	0 to 0.4	-0.4 to 0
Peabody	45 to 47.7	45 to 47.6	-	-0.1 to 0
Quincy	45 to 58.2	45 to 58.1	- to -	-0.4 to 0
Randolph	45 to 47.7	45 to 47.9	0.1 to 0.4	-

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Table 4.5  
**Noise Results (2015 No Action and 2015 Proposed Action)  
for Populated 2010 Centroids Above 45 DNL**

<b>Town</b>	<b>No Action Range of DNL Values</b>	<b>Proposed Action Range of DNL Values</b>	<b>Range of DNL Increase</b>	<b>Range of DNL Decrease</b>
Revere	45 to 65.9	45 to 65.9	0 to 0.3	-0.2 to 0
Salem	45.1 to 48.5	45.1 to 48.4	-	-0.1 to 0
Saugus	45 to 47.9	45 to 47.7	-	-0.3 to -0.1
Scituate	45 to 46.1	45 to 46.1	0 to 0	0 to 0
Somerville	47.5 to 53.9	45.7 to 53.3	0 to 1.6	-3.0 to 0
Stoneham	45 to 45.1	45 to 46.1	0.2 to 1.1	-
Swampscott	45 to 45.8	45 to 45.7	-	-0.1 to -0.1
Waltham	-	45 to 46.5	0.9 to 2.1	-
Watertown	45 to 47.8	45 to 47.5	0 to 1.6	-1.9 to 0
Winchester	45 to 45.6	45 to 46.3	0.1 to 1.3	-
Winthrop	51.4 to 71.9	51.4 to 71.9	0 to 0	0 to 0

Notes:

- DNL values represent the cumulative noise level from all operations on all runways.
- Ranges of DNL values are reported for populated family and non-family households based on US Census Block centroids within each community.
- No significant impact, per FAA Order 1050.1E would result from the Proposed Action.

Source: HNTB Analysis, 2013

Table 4.6  
**Population Results (2015 No Action and 2015 Proposed Action)  
for Populated 2010 Centroids Above 45 DNL**

<b>Town</b>	<b>Total Population</b>	<b>No Action Population exposed to 45 DNL or Greater</b>	<b>Proposed Action Population exposed to 45 DNL or Greater</b>	<b>Net Change Exposed to 45 DNL or above</b>
Arlington	42,552	16,219	20,298	4,079
Belmont	24,537	20,703	23,308	2,604
Boston, Allston/Brighton	65,425	33,118	0	(33,118)
Boston, Back Bay	16,053	14,643	11,880	(2,762)
Boston, Bay Village	2,392	2,392	2,392	0
Boston, Beacon Hill	9,603	9,603	9,603	0
Boston, Charlestown	16,309	16,309	16,309	0
Boston, Chinatown	4,345	4,345	4,345	0
Boston, East Boston	40,283	40,283	40,283	0
Boston, Fenway/Kenmore	22,312	9,151	5,091	(4,059)
Boston, Financial District	3,755	3,755	3,755	0
Boston, Government Center	62	62	62	0
Boston, Harbor Islands	0	0	0	0
Boston, Hyde Park	31,596	881	264	(617)
Boston, Jamaica Plain	38,457	28,290	18,830	(9,461)
Boston, Mattapan	34,144	30,070	27,703	(2,367)
Boston, North Dorchester	26,431	26,431	26,431	0
Boston, North End	11,211	11,211	11,211	0



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Table 4.6  
**Population Results (2015 No Action and 2015 Proposed Action)  
for Populated 2010 Centroids Above 45 DNL**

<b>Town</b>	<b>Total Population</b>	<b>No Action Population exposed to 45 DNL or Greater</b>	<b>Proposed Action Population exposed to 45 DNL or Greater</b>	<b>Net Change Exposed to 45 DNL or above</b>
Boston, Roslindale	31,765	23,192	22,665	(527)
Boston, Roxbury	59,174	59,174	59,174	0
Boston, South Boston	33,022	33,022	33,022	0
Boston, South Dorchester	59,258	59,258	59,258	0
Boston, South End	31,555	31,555	31,555	0
Boston, West End	4,479	4,479	4,479	0
Boston, West Roxbury	29,785	556	106	(450)
Braintree	35,199	0	0	0
Cambridge	88,057	87,487	60,402	(27,085)
Canton	21,246	173	245	72
Chelsea	34,496	34,496	34,496	0
Cohasset	7,463	4,044	3,723	(321)
Everett	41,466	41,466	41,466	0
Hingham	21,893	1,148	1,145	(3)
Hull	10,294	9,359	9,359	0
Lynn	89,498	74,765	73,243	(1,523)
Malden	59,073	44,941	46,394	1,453
Medford	54,233	53,569	53,713	144
Melrose	26,716	0	0	0
Milton	25,488	16,890	15,970	(920)
Nahant	3,357	1,687	1,636	(51)
Newton	78,048	3,417	2,934	(483)
Peabody	50,739	7,908	7,708	(200)
Quincy	90,875	28,830	25,896	(2,934)
Randolph	31,783	3,129	3,725	596
Revere	51,469	50,894	49,241	(1,653)
Salem	39,570	1,814	1,629	(185)
Saugus	26,306	3,550	2,013	(1,537)
Scituate	17,947	4,635	4,428	(207)
Somerville	73,481	73,481	73,481	0
Stoneham	21,194	0	0	0
Swampscott	13,609	639	402	(237)
Waltham	53,952	0	6,584	6,584
Watertown	31,691	29,346	30,857	1,511
Winchester	21,051	3,103	8,912	5,809
Winthrop	17,445	17,445	17,445	0
	<b>1,776,148</b>	<b>1,076,919</b>	<b>1,009,073</b>	<b>(67,846)</b>

**Notes:**

- DNL values represent the cumulative noise level from all operations on all runways.
- DNL values are reported for populated family and non-family households based on US Census Block centroids within each community. Those residing in group quarters are not included in this analysis.
- No significant impact, per FAA Order 1050.1E would result from the Proposed Action.

Source: HNTB Analysis, 2013

## 4.2 Compatible Land Use

Compatibility of land uses surrounding airports is usually determined by the extent of the airport's noise impacts. Existing land use in the Study Area is discussed in Chapter 3, *Affected Environment*, Section 3.1.4. Because the Proposed Action Alternative does not result in significant noise impacts (as measured by an increase of noise exposure in populated centroids), it can be concluded that there will be no impacts to compatible land use. Additionally, existing non-compatible land uses currently exposed to noise levels greater than or equal to 65 DNL will not experience significant increases in noise levels as a result of the Proposed Action Alternative, as discussed in Section 4.1 of this chapter.

## 4.3 Section 4(f) and 6(f) of the DOT Act

The primary basis for determining the effect of the undertaking on potential impacts to Section 4(f) and Section 6(f) resources was based on the magnitude of the increase in aircraft noise exposure level between the No Action and the Proposed Action Alternatives. **Figures 4-5 and 4-6** depict noise exposure greater than 45 DNL at parks, forests, wildlife refuges and wilderness areas in the Study Area for the No Action Alternative in 2015, while **Figures 4-7 and 4-8** present noise exposure at Section 4(f) resources with implementation of the 2015 Proposed Action Alternative.

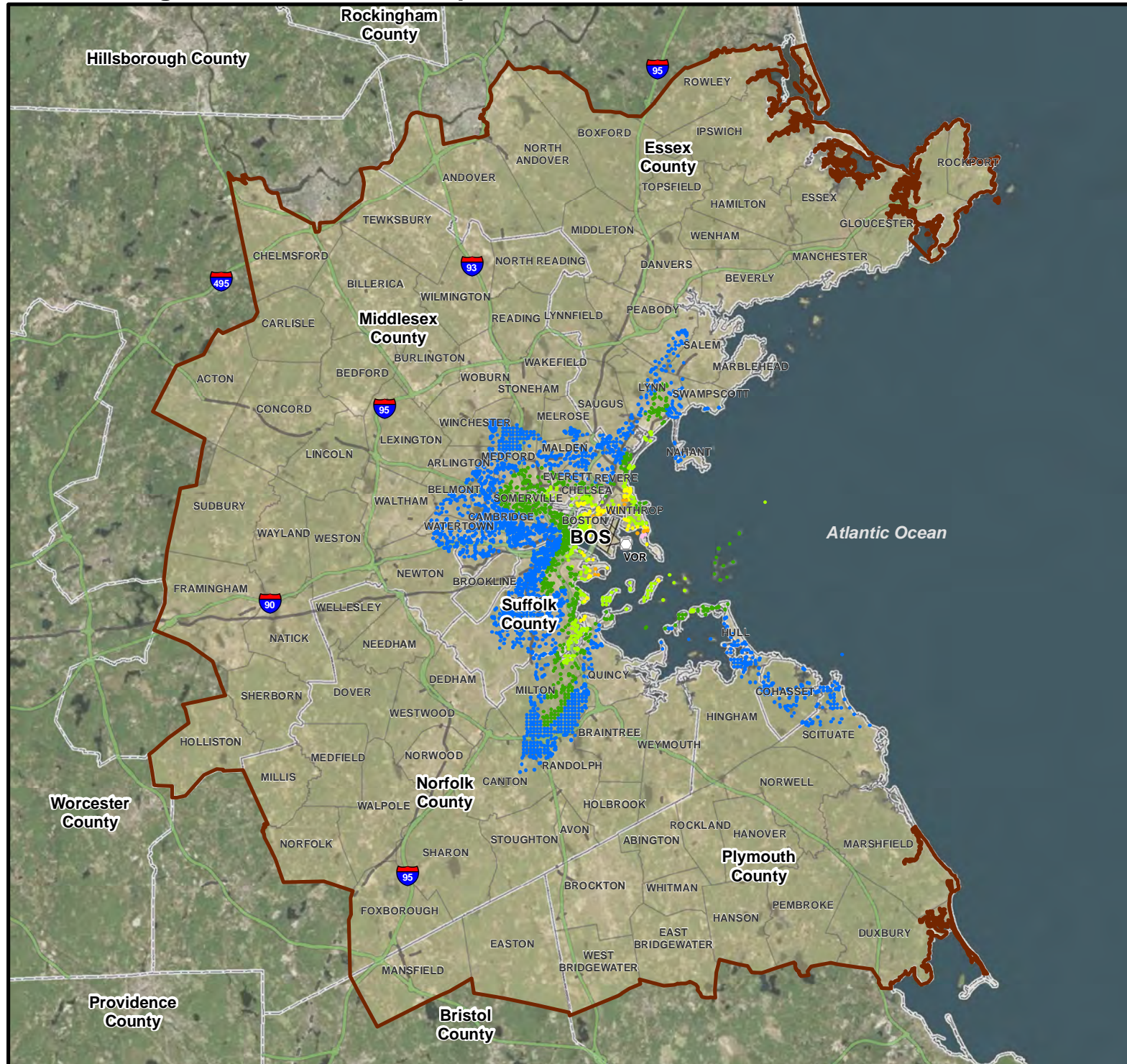
The Proposed Action Alternative does not include any land-based impacts as there is no physical disturbance or land acquisition. Therefore, the Proposed Action Alternative does not result in a direct use of any Section 4(f) property.

Adverse *indirect impacts* including noise may constitute a "constructive use" of a Section 4(f) property. When considering the potential for constructive use of a Section 4(f) property, the FAA must first determine if the possibility of adverse indirect impacts (constructive use) exists. If so, the FAA must consult with officials of the 4(f) resource to determine whether noise increases would result in the substantial impairment of the resource.

Section 4(f) properties were evaluated to identify potential noise increases that may represent an adverse impact or constructive use of the property. While a 1.5 DNL increase within the 65 DNL may result in a constructive use to all types of 4(f) properties, reportable impacts (increases of 3.0 DNL between the 60 and 65 DNL or 5.0 DNL between the 45 and 60 DNL) are intended to address those section 4(f) properties with a quiet setting as an attribute. Noise exposure was calculated for over 22,000 points representing Section 4(f) resources. Noise exposure levels were calculated for grid points at equal intervals throughout the larger Section 4(f) properties. Grid spacing was 1,000' for potential Section 4(f) resources with a size of 100 acres or more. For those less than 100 acres, (i.e., smaller parks and monuments), noise exposure was calculated as a single point located in the center of the park.

There is no possibility of constructive use of a Section 4(f) resource, such as any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance or land from an historic site of national, State, or local significance. No significant noise impact to lands devoted to traditional recreational activities, including national

# Boston Logan International Airport



**Figure 4-5**  
**2015 No Action Noise**  
**Exposure at**  
**Section 4(f) Resources -**  
**Study Area**

## LEGEND

- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

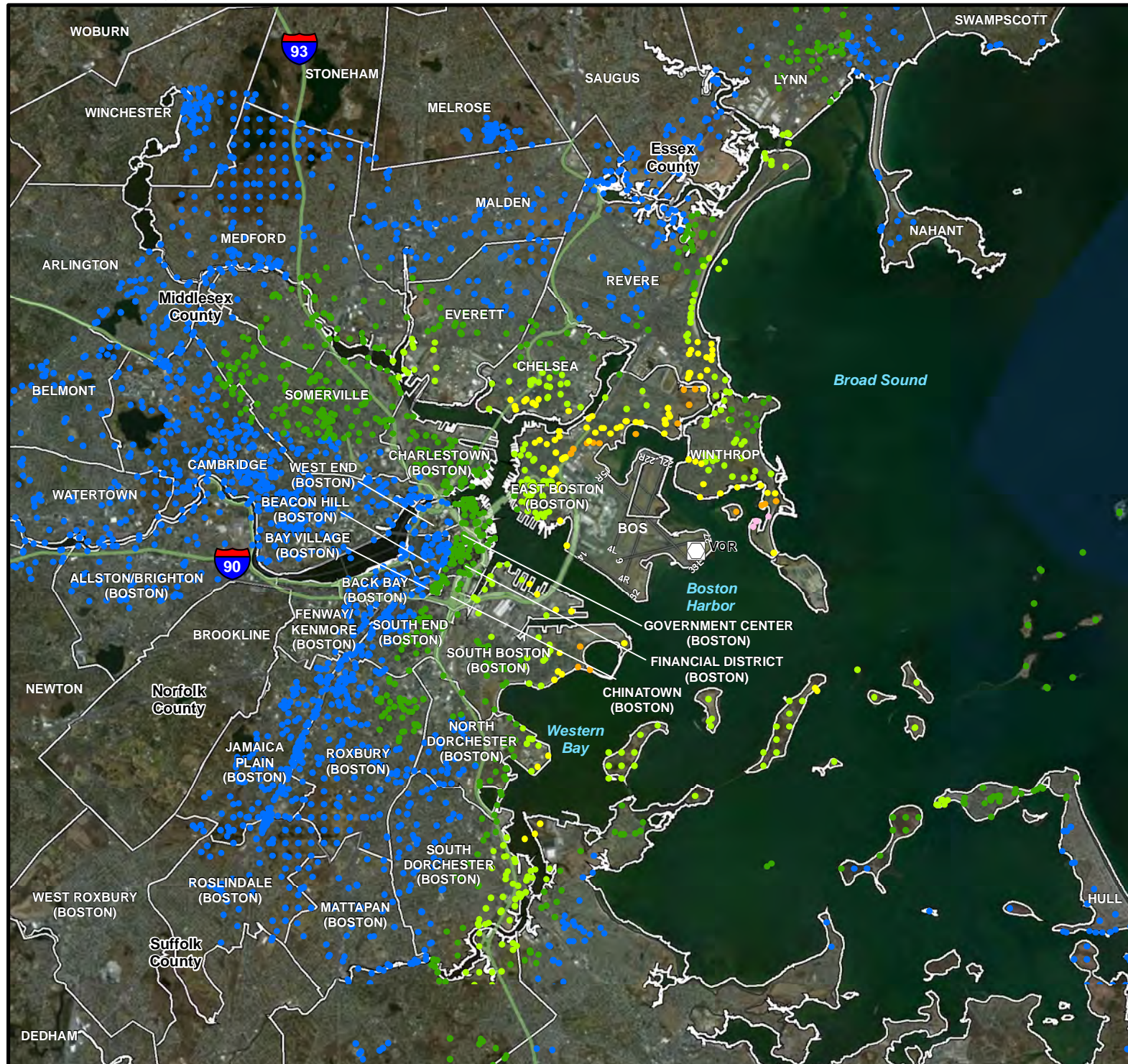
0 1.25 2.5 5 Nautical Miles



Source:  
 Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 4-6**  
**2015 No Action Noise**  
**Exposure at**  
**Section 4(f) Resources -**  
**Logan Airport Vicinity**

## LEGEND

- BOS VOR/DME
- Community within Study Area
- County Boundary
- Town Boundary
- Interstate
- Highway

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

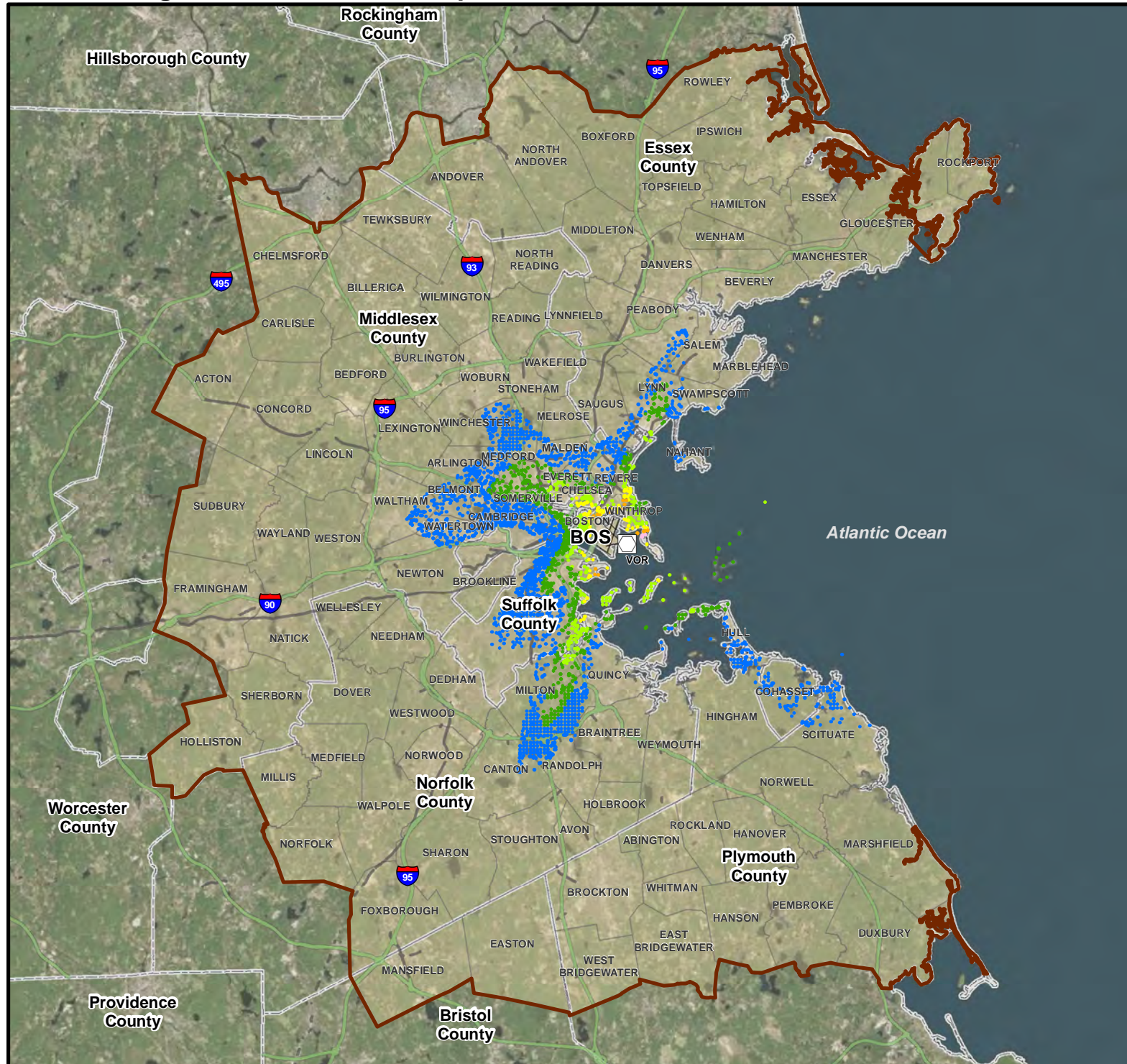
0 0.3 0.6 1.2 Nautical Miles



Source: Office of Geographic Information (MassGIS), ESRI



# Boston Logan International Airport



**Figure 4-7**  
**2015 Proposed Action**  
**Noise Exposure at**  
**Section 4(f) Resources -**  
**Study Area**

## LEGEND

- BOS VOR/DME
- Study Area
- Community within Study Area
- County Boundary
- Major Highway
- Major Road

## Noise Exposure

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL



**Boston Logan**  
**International Airport**  
**Runway 33L RNAV SID**  
**Final EA**

0 1.25 2.5 5 Nautical Miles









Source:  
 Office of Geographic Information (MassGIS), ESRI



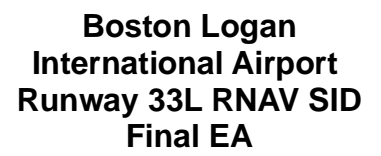
This map illustrates the geographic distribution of data points (dots) across the Boston metropolitan area. The dots are color-coded: blue, green, and yellow. The map shows the following locations and features:

- Cities and Towns:** Woburn, Stoneham, Melrose, Malden, Everett, Chelsea, Winthrop, Boston (various neighborhoods including West End, Beacon Hill, Bay Village, Back Bay, Fenway/Kenmore, South End, South Boston, North Dorchester, South Dorchester, Jamaica Plain, Roxbury, Roslindale, Mattapan, West Roxbury, and Allston/Brighton), Cambridge, Somerville, Charlestown, East Boston, Revere, Lynn, Nahant, Swampscott, Dedham, Quincy, Milton, and Hull.
- Counties:** Middlesex County, Essex County, Norfolk County, and Suffolk County.
- Water Bodies:** Broad Sound, Boston Harbor, and Western Bay.
- Highways:** I-93 and I-90.
- Data Point Distribution:**
  - Blue Dots:** Primarily concentrated in the western and northern parts of the map, including areas like Woburn, Stoneham, Melrose, Malden, Everett, Chelsea, and the western part of Boston.
  - Green Dots:** Scattered throughout the central and eastern parts of the map, including areas like Boston, Charlestown, East Boston, and the South End.
  - Yellow Dots:** Primarily concentrated in the eastern part of the map, including areas like Winthrop, East Boston, and the South End.

### LEGEND

-  BOS VOR/DME
-  Community within Study Area
-  County Boundary
-  Town Boundary
-  Interstate
-  Highway

- 45-50 DNL
- 50-55 DNL
- 55-60 DNL
- 60-65 DNL
- 65-70 DNL
- 70-75 DNL
- >75 DNL





parks, national wildlife refuges, and historic sites, was identified. In addition, there are no noise increases above 45 DNL in section 4(f) properties located in a quiet setting, where the setting is a generally recognized feature or attribute of the site's significance, such as national parks or national wildlife refuges, within the Study Area. There is no possibility of constructive use of a historic property, as no historic property would be used for Section 4(f) purposes when FAA issues a finding of No Adverse Effect under Section 106. The MHC concurred with FAA's determination that the Proposed Action would not adversely affect any historic properties, including those that could be used for Section 4(f) purposes. In addition, no possibility of constructive use would exist for Section 4(f) properties located in a quiet setting, and where that setting is a generally recognized feature or attribute of the site's significance, as no significant impacts or reportable impacts (increases of 3.0 DNL between 60 and 65 DNL or 5.0 DNL between 45 and 60 DNL) were identified. As a result, a determination under Section 4(f) of the U.S. Department of Transportation Act is unnecessary.

#### **4.3.1 National Park Service Lands**

None of the listed NPS lands would experience a 1.5 DNL increase resulting in a noise exposure level greater than or equal to 65 DNL in the Study Area. Further, per FAA criteria provided in Table 4.1, there would be no reportable change in noise (increases of 3 DNL between 60 and 65 DNL or 5 DNL between 45 and 60 DNL) due to the Proposed Action Alternative. Noise exposure at NPS lands range from approximately 38 to 59 DNL under the No Action Alternative, while changes in noise exposure with the Proposed Action Alternative range from a decrease of 1.6

DNL to an increase of less than 0.1 DNL, changes that would be imperceptible to negligible to the human ear.

#### **4.3.2 National Wildlife Refuge System**

Under the No Action Alternative, none of the National Wildlife Refuges in the Study Area would be exposed to noise levels of 45 DNL or above. With implementation of the Proposed Action Alternative, noise exposure changes range between an increase and decrease of less than 2 DNL at all locations, levels which are generally imperceptible at noise levels lower than 45 DNL, particularly in areas that currently experience aircraft overflights.

#### **4.3.3 State Parks, Forests and Other Areas of Significance**

In state parks, forests, reservations or other areas of state significance, noise levels range from below 45 DNL to 68 DNL. With implementation of the Proposed Action Alternative, the largest increase in noise would be an increase of 2 DNL and the largest decrease in noise is nearly 3 DNL. These changes occur in areas that currently experience aircraft overflights. None of these resources would experience a 1.5 DNL change resulting in a noise exposure level greater than or equal to 65 DNL or reportable changes in noise due to the Proposed Action Alternative.

#### **4.3.4 Section 6(f) Properties**

Section 6(f) properties within the Study Area are described in Section 3.3.2. NPS has determined that conversion of 6(f) parkland occurs under four conditions: 1) property interests are conveyed for non-public outdoor recreation uses; 2) non-recreation uses are made of the project area, or a portion of it; 3) non-eligible indoor facilities

are developed within the project area without approval; and 4) public outdoor recreation use of the property is terminated.

Because the Proposed Action Alternative would not convey Section 6(f) property and would not include the construction of indoor facilities, there would be a Section 6(f) impact only if the Proposed Action Alternative would result in the constructive use of a park such that it would cause a permanent and substantial use of the Section 6(f) property.

There are no Section 6(f) properties that would experience a 1.5 DNL change resulting in a noise exposure level greater than or equal to 65 DNL. As with Section 4(f) resources, the Proposed Action Alternative would not cause reportable increases in noise. Therefore there will be no constructive use of a Section 6(f) property and no further analysis is required.

#### **4.4 Historical, Architectural, Archaeological, and Cultural Resources**

Archaeological and historic architectural resources that will be affected by federally funded and licensed undertakings come under the protection of the NHPA. Section 106 of this Act requires Federal agencies to consider the effects of such undertakings on properties listed, or eligible for listing, on the NRHP.

An adverse effect is considered to be one that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. If a determination of adverse impact is made, the consultation procedures of the Advisory Council on Historic Preservation must be followed.<sup>7</sup>

*Primary impacts* include the removal or alteration of historic resources. There would be no ground disturbance as a result of the Proposed Action Alternative. Therefore, there would be no direct impacts on properties listed on or eligible to be listed on the NRHP.

*Secondary or indirect impacts* include changes in noise, vehicular traffic, light emissions, or other changes that could interfere substantially with the use or character of the resource. Indirect impacts include noise impacts that would diminish the integrity of the property's setting.

To assess the potential indirect effects on historic resources, noise exposure was calculated at each NRHP listed resource within the Study Area. No historic properties would experience a 1.5 DNL increase in areas of noise exposure of 65 DNL or higher, nor are there reportable changes between 45 and 60 DNL. The maximum change in noise exposure with implementation of the Proposed Action Alternative is an increase of 2 DNL and a decrease of 3 DNL. Thus there are no adverse effects to historic properties resulting from implementation of the Proposed Action Alternative. Appendix B provides a letter from the MHC dated May 1<sup>st</sup>, 2013, stating their concurrence with the FAA's finding of "no adverse effect" to historic properties.

#### **4.5 Natural Resources and Energy Supply**

FAA Order 1050.1E, Section 13 requires the identification of any proposed changes in stationary facilities or the movement of aircraft for the Proposed Action that may have a measurable effect on local supplies of energy or natural resources. The Proposed Action Alternative would not

require the need for unusual natural resources and materials, or those in short supply. The Proposed Action Alternative would not increase the number of aircraft operations or runway use compared to the No Action Alternative, nor does implementation of the RNAV SID increase the overall flying distance for Runway 33L departures. Therefore the Proposed Action Alternative would have minimal impact to natural resources and energy supply and no further analysis is required.

#### **4.6 Light Emissions and Visual Impacts**

Although FAA Order 1050.1E does not identify specific regulatory requirements, Appendix A, Section 12.2 provides guidance for the assessment of light emissions and visual impacts.

##### **4.6.1 Light Emissions**

Lighting associated with the Proposed Action should be evaluated to identify if it would create an annoyance among people in the vicinity or interfere with their normal activities. However, lighting associated with NAVAIDS and air traffic typically represent relatively low levels of light intensity, light emissions impacts are unlikely to have an adverse impact on human activity or the use or characteristics of the Section 4(f) properties. No change from the No Action Alternative would be expected to occur; therefore no further analysis is required.

##### **4.6.2 Visual Impacts**

Federal guidance does not identify thresholds of significance for visual impacts. Because the Proposed Action Alternative does not represent a change in the location of aircraft departing from Runway 33L, no significant visual impact would occur.

#### **4.7 Air Quality**

The CAA requires that all Federal actions conform to an applicable SIP. FAA actions are subject to the General Conformity Rule. General Conformity refers to the requirements under Section 176(c) of the CAA for federal agencies (other than FHWA and FTA) to show that their actions conform to the purpose of the applicable SIP. The EPA established criteria and procedures for Federal agencies to use in demonstrating conformity with an applicable SIP (40 CFR 93.150 *et seq.*).

On July 30<sup>th</sup>, 2007, the FAA issued a presumed to conform list of actions under General Conformity [FR 41565]. In the aforementioned notice, the FAA summarized documentation and analysis which demonstrated that certain actions will not exceed the applicable *de minimis* emissions levels for nonattainment and maintenance areas as specified under 40 CFR 93.153(b). The FAA includes air traffic control activities and adopting approach, departure and enroute procedures for air operations in their list of presumed to conform actions thereby indicating that these types of actions will not exceed *de minimis* emissions levels.

The Proposed Action includes airspace and air traffic actions (e.g., changes in routes, flight patterns, and arrival and departure procedures) above the mixing height (generally 3,000' AGL) that are needed to enhance safety and increase the efficient use of airspace by reducing congestion, balancing controller workload and improving coordination between controllers handling existing air traffic. The FAA's presumed to conform list is therefore applicable to the Proposed Action. Additionally, the Proposed Action is not regionally significant. Specifically, the total number of aircraft



operations would not differ between the No Action and Proposed Action Alternatives.

In terms of air quality impacts related to vehicle emissions, neither the No Action nor the Proposed Action Alternative would induce changes to vehicular traffic. Aircraft operations and vehicular traffic would grow with or without the proposed RNAV SID. In addition, the implementation of the Proposed Action Alternative would not significantly alter the distribution of vehicular traffic among the airports because the RNAV SID would not likely change airline service trends and/or air passenger preferences on use of an airport. Air passengers traditionally select an airport based on the ticket cost, airport location, and service to a desired destination.

Since the Proposed Action is presumed to conform and would have a negligible effect on vehicle traffic no further analysis is required.

#### **4.8 Climate**

Although there are no federal standards for aviation-related GHG emissions, it is well-established that GHG emissions can affect climate.<sup>8</sup> The CEQ has indicated that climate should be considered in NEPA analyses. As noted by CEQ, however, “it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand.”<sup>9</sup>

GHG emissions are commensurate with fuel consumption. Because the Proposed Action Alternative overlays as closely as possible (given existing RNAV design criteria), the existing LOGAN SIX procedure, implementation of the Proposed Action

Alternative is not anticipated to increase fuel consumption and consequently, CO<sub>2</sub> emissions. It is possible that, because the use of RNAV procedures increase the reliance on on-board avionics to control the speed, thrust, and flap settings of an aircraft, fuel consumption could be reduced, thereby causing a net reduction in CO<sub>2</sub> emissions.

#### **4.9 Socio-economic Impacts, Environmental Justice and Children’s Health and Safety Risk**

The Proposed Action will not involve any construction of physical facilities or change in noise exposure levels in excess of the applicable thresholds of significance. There would be no acquisition of real estate, no relocation of residents or community businesses, no disruption to local traffic patterns, no loss in community tax base, and no changes to the fabric of the community. Accordingly, there would be no socioeconomic impacts.

Because there are no significant impacts as a result of the Proposed Action, there are no adverse human health or environmental effects associated with the Proposed Action (including the noise, air quality, or cultural resource categories), which would exceed applicable thresholds of significance. As such, no persons of low income or minority populations would be affected at a disproportionately higher level than would other population segments. Accordingly, there would be no significant environmental justice impacts.

There are no impacts associated with the Proposed Action (including the noise, air quality, or cultural resource categories) which would exceed applicable thresholds of significance. The Proposed Action would

not affect products or substances that a child is likely to come into contact with, ingest, use, or be exposed to, and would not result in environmental health and safety risks that could disproportionately affect children. Accordingly, there would be no significant impacts related to children's environmental health and safety risks.

#### **4.10 Federally Threatened and Endangered Species and Migratory Birds**

This resource category includes consideration of impacts to threatened and endangered avian species, including migratory birds.

##### **4.10.1 Threatened and Endangered Species**

Potential impacts to threatened and endangered avian species were evaluated in accordance with FAA Order 1050.1E. A significant impact would occur if the Proposed Action Alternative would jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of critical habitat for any species.

There are two threatened or endangered avian species known to or believed to exist in the Study Area counties. The Piping Plover is designated a federally threatened species, and the Roseate Tern is a federally endangered species. The Proposed Action Alternative will not introduce aircraft to new areas; aircraft depart Runway 33L in the same general direction currently. Therefore the Proposed Action Alternative is not expected to impact any threatened or endangered species.

The Proposed Action Alternative involves implementation of an RNAV SID which involves airborne aircraft only and does not include any ground-based impacts. Thus, it will not destroy or modify critical habitat for any species. Additionally, in accordance with Executive Order 13112, no species that meet the definition of an invasive species will be introduced in the project area due to the Proposed Action Alternative.

Coordination with the USFWS was undertaken. On February 19<sup>th</sup>, 2013, the New England Field Office of the USFWS provided their concurrence that the proposed project is not likely to adversely affect either the roseate tern or the piping plover. Coordination is shown in Appendix B. Therefore, no significant impacts to threatened or endangered species are expected.

##### **4.10.2 Migratory Birds**

The FAA National Wildlife Strike Database contains records of reported wildlife strikes since 1990. The database includes over 121,000 (civilian and United States Air Force (USAF)) wildlife strikes between 1990 and 2010. In 2009, there were a total of 149 reported wildlife strikes in the Commonwealth of Massachusetts, with 76 of those reported at Logan Airport.<sup>10</sup>

Migratory birds do not generally fly at altitudes greater than 10,000 feet and the majority (92 percent) of the bird strikes to commercial aircraft occur at or below 3,500 feet AGL and occur during the approach and landing roll.<sup>11</sup>

Any changes to flight paths/patterns due to the Proposed Action Alternative would occur above 3,500 feet AGL, at a higher altitude than where the majority of bird strikes occur. Additionally, the Proposed Action

Alternative will not change the arrival and departure flows at Logan Airport so the approaches and departures are not expected to differ from those today. Therefore, based on the available information from the FAA National Wildlife Strike Database, it is concluded that the impacts to migratory bird patterns resulting from the Proposed Action Alternative would be minimal.

#### **4.11 Cumulative Impacts and Connected Actions**

Airport development activities, including airport improvements and airspace redesigns, often create the potential for cumulative impacts. This analysis of cumulative impacts defines cumulative impacts, identifies potential impact categories, and presents the potential cumulative impacts of these categories.

##### **4.11.1 Definition of Cumulative Impacts**

The concept of cumulative impacts addresses the potential for individually minor but collectively significant impacts to occur over time. CEQ Regulations, Section 1508.7, defines “Cumulative Impact” as the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of the agency (Federal or non-federal) undertaking such actions. CEQ Regulations, Section 1508.25, defines the types of actions that should be considered in assessing cumulative impacts. These actions include the following:

- (1) Connected actions, which are defined as:
  - Actions that automatically trigger other actions which may require an Environmental Impact Statement;

- Actions that cannot or would not proceed unless other actions are taken previously or simultaneously; and/or
- Actions that are interdependent parts of a larger action and depend upon that action for their justification.

- (2) Cumulative actions that, when considered with other proposed actions, would have cumulatively significant impacts; and
- (3) Similar actions that have similarities such as timing or location with other reasonably foreseeable or proposed projects that provide a basis for evaluating their environmental impacts in the same NEPA document.

#### **4.12 Projects for Consideration of Cumulative Impacts**

There are no connected actions that apply to the Proposed Action. Independent of this EA, the FAA has transitioned the current RNAV SID design for Runway 27 (WYLYY ONE) into the NAS via the exit fixes HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS. This action was not dependent on the implementation of an RNAV SID for Runway 33L. An RNAV SID for Runway 27 has been in place since the late 1990s and the WYLYY ONE remains in place after the RNAV SID design is incorporated to the existing RNAV procedures. Recent noise modeling results in the BLANS showed that there were no DNL changes with the Runway 27 RNAV SID modification and the activity was therefore categorically excluded from the preparation of an EA or EIS. The FAA has also informed the CAC of this proposal.

In addition, the FAA conducted a cumulative noise analysis inclusive of both the Runway



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27 and Runway 33L RNAV SID and prepared a comparison to the No Action Alternative. Implementation of both procedures cumulatively resulted in no significant or reportable increases in noise. The FAA will use this cumulative noise analysis as a baseline to study potential runway use measures in Phase 3 of the BLANS expected to begin in June 2013.

The typical airport capital improvement project (CIP) planning horizon is five years, and includes the identification of individual airport capital improvement projects. No projects that would be anticipated to cause an environmental impact related to the Proposed Action (i.e. an action, such as an airspace redesign, opening of a new runway, runway extension, etc.) are anticipated to occur within the five-year planning horizon.

The Level 3 analysis completed under the BLANS project includes some noise abatement measures that are being carried forward for implementation, such as single-engine taxi operations. Measures implemented in Phase 1 of the BLANS, including RNAV procedures, have resulted in noise decreases. Future BLANS analysis will include an evaluation of the preferential runway use system in place at Logan Airport, which will include an analysis of potential noise benefits, and, accordingly, cumulative impacts.

#### **4.13 Summary**

The following environmental impact categories were evaluated for potential

impacts in accordance with FAA Order 1050.1E due to the Proposed Action:

- Noise and Land Use;
- Department of Transportation Section 4(f) and 6(f) Resources;
- Historical, Architectural, Archaeological, and Cultural Resources;
- Natural Resources and Energy Supply;
- Light Emissions and Visual Impacts;
- Air Quality;
- Climate;
- Socio-economic Impacts, Environmental Justice and Children's Health and Safety Risk;
- Federally Threatened and Endangered Species and Migratory Birds; and
- Cumulative Impacts and Connected Actions.

No significant impacts are associated with the Proposed Action Alternative. Furthermore, the procedures would not result in any ground based impacts, as no construction is required for the RNAV procedure implementation.

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**Endnotes**

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- <sup>1</sup> Federal Aviation Administration, Order 1050.1E, CHG 1: *Environmental Impacts: Policies and Procedures*, Appendix A, Section 14.3, March 20, 2006.
- <sup>2</sup> 14 C.F.R. Part 150, Section 150.21(a)(2)(d).
- <sup>3</sup> Federal Interagency Committee on Noise (FICON), “*Federal Agency Review of Selected Airport Noise Analysis Issues*,” August 2992, p.3-5.
- <sup>4</sup> Federal Aviation Administration, “*Final Environmental Impact Statement, Expanded East Coast Plan – Changes in Aircraft Flight Patterns Over the State of New Jersey*,” 1995.
- <sup>5</sup> Federal Aviation Administration, Order 1050.1E, CHG 1: *Environmental Impacts: Policies and Procedures*, Appendix A, Section 14.5e, March 20, 2006.
- <sup>6</sup> Federal Aviation Administration, Order 1050.1E, CHG 1: *Environmental Impacts: Policies and Procedures*, Appendix A, Section 14.3, March 20, 2006.
- <sup>7</sup> 36 CFR Part 800 (<http://www.achp.gov/regs-rev04.pdf>).
- <sup>8</sup> See *Massachusetts v. E.P.A.*, 549 U.S. 497, 508-10, 521-23 (2007).
- <sup>9</sup> *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*, CEQ (2010).  
[http://ceq.hss.doe.gov/nepa/regs/Consideration\\_of\\_Effects\\_of\\_GHG\\_Draft\\_NEPA\\_Guidance\\_FINAL\\_02182010.pdf](http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf).
- <sup>10</sup> FAA, FAA Wildlife Strike Database, <http://wildlife-mitigation.tc.faa.gov/wildlife/database.aspx>, accessed 12/7/12, dates used: 1/1/2009 – 12/31/2009.
- <sup>11</sup> FAA, FAA Wildlife Strike Database, <http://wildlife-mitigation.tc.faa.gov/wildlife/default.aspx>, accessed 4/3/12.

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## **CHAPTER 5: PUBLIC AND AGENCY INVOLVEMENT SUMMARY**



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# Chapter Five:

## PUBLIC AND AGENCY INVOLVEMENT

### SUMMARY

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Public and agency involvement is important to ensure that information is provided to the general public and public agencies as federal actions are being considered. As described in 40 CFR 1501.7 and FAA Order 1050.1E Section 208, public and agency involvement is required for an EIS but optional in the case of an EA. The FAA considers an open public process to be an important component of this project. Engagement with the CAC, general public, and agencies with jurisdiction or special knowledge in the environmental review process is described in the following sections. Appendix B, *Agency Consultation and Public Comment* includes materials related to the public involvement process.

#### 5.1 Consultation

The FAA has coordinated with the CAC and Massport throughout the BLANS and EA process. Consultation with the MHC and coordination with the USFWS were undertaken. Coordination with the aviation industry occurred during the PBN development and design process of the Proposed Action. No formal scoping was undertaken as part of this EA.

#### 5.2 Logan Airport Community Advisory Committee (CAC)

The CAC was initially established in 1978 in response to flight track changes at Logan Airport. The CAC is comprised of

representatives from those communities impacted from various types of activities associated with Logan Airport. CAC members are appointed by their elected officials. As of May 2013, there were over 30 CAC members representing the communities surrounding Logan Airport. The CAC has represented communities around Logan Airport on specific noise abatement issues and has maintained a long-standing working relationship with Massport and the FAA. Because of the CAC's familiarity with the BOS RNAV initiatives, as well as the Runway 33L RNAV SID BLANS Measures described in Chapter 1, FAA has coordinated with the CAC throughout the EA process. A series of meetings and teleconferences were held with the CAC and Massport to provide input and receive feedback regarding the scope of work, the Proposed Action Alternative, and methods of public consultation.

##### 5.2.1 October 9<sup>th</sup>, 2012 CAC Meeting and Teleconference

The purpose of this meeting between the FAA and the CAC was to provide an overview of the Runway 33L RNAV SID EA to interested members of the CAC and Massport. Two individuals from Massport and one CAC representative from Somerville participated. Due to technical difficulties with the teleconference, other interested CAC members were not able to participate. The presentation included a

discussion of the history of the Runway 33L RNAV SID development, the Proposed Action, the components of a Focused EA, and the project schedule. Discussion of potential health impacts, NEPA requirements for consideration of additional modal sources for traffic noise, the noise modeling procedure, and public involvement ensued. A presentation and discussion regarding the Runway 27 RNAV SID (unrelated to this EA) analysis also took place.

#### **5.2.2 October 23<sup>rd</sup>, 2012 CAC Teleconference**

A second teleconference was held on October 23<sup>rd</sup>, 2012, to allow for additional participation by members of the CAC who were not able to participate on October 9<sup>th</sup>. CAC members included representatives from Milton, Hingham, South End, Beacon Hill, Chelsea, Somerville, Boston, and Weymouth. One individual from Massport also participated. The format, presentation, and overall content of this teleconference were the same as the October 9<sup>th</sup> meeting/teleconference. Additional topics of discussion included revisions to previous project graphics (BLANS), the years of analysis used in the EA, and runway use.

#### **5.2.3 October 31<sup>st</sup>, 2012 CAC Teleconference**

On October 31<sup>st</sup>, 2012, members of the FAA and Massport held a teleconference with CAC representatives of Cambridge, who were unable to attend previous meetings/teleconferences. The same presentation was provided, and additional discussion included an explanation of RNAV procedures, including flight track dispersion, potential noise impacts in Cambridge, and the public involvement process.

### **5.3 Notice of Draft EA Availability**

On January 14<sup>th</sup>, 2013, the FAA published the Draft EA, which was made available for public review in the following locations:

- Framingham Public Library  
49 Lexington Street  
Framingham, MA 01702
- Winthrop Public Library  
2 Metcalf Square  
Winthrop, MA 02152
- Boston Public Library  
East Boston Branch  
276 Meridian Street  
East Boston, MA 02128

Further, the FAA created a project website ([www.BostonRNAVEA.com](http://www.BostonRNAVEA.com)) to provide interested parties the opportunity to review the Draft EA, to comment on the Draft EA, and to provide supplemental information (e.g. an overview of the National Airspace System and a summary of noise and its effects on people). The website also provided information related to the ongoing BLANS project.

Notice of the availability of the Draft EA was provided via Public Notice published in the Boston Globe (January 14<sup>th</sup>), Boston Herald (January 14<sup>th</sup>), and MetroWest Daily News (January 15<sup>th</sup>). A copy of the Public Notice is provided in Appendix B.

The public notice included the project website address as well as the libraries in which the document could be reviewed. Additionally, the FAA Regional Administrator's office provided notification and a copy of the legal notice in advance of



release of the Draft EA to members of the U.S. Congress.

Numerous newspapers publicized the study following the issuance of the Draft EA, including the Boston Globe, the Patriot Ledger, Dedham Patch, Randolph Herald, Newton Patch, Belmont Citizen-Herald, and local publications in Milton and Winchester.

## **5.4 CAC Public Meeting**

On January 24<sup>th</sup>, 2013, the FAA presented the findings of the Draft EA to interested members of the CAC. The meeting was held at the Massport Board Room at the Logan Office Center at 10:00 a.m. The purpose of the meeting was to allow CAC members an opportunity to ask FAA questions about the Draft EA to gain a better understanding of the Proposed Action in order to facilitate more informed comment on the Draft EA. A presentation provided an introduction and project history, reviewed the previous BLANS measures, discussed the No Action and Proposed Action Alternatives, explained the criteria used for evaluation of significant impacts, provided details related to the noise analysis, and summarized the next steps.

## **5.5 Public Comment Period**

The initial public comment period for the Draft EA extended from January 14<sup>th</sup> to February 15<sup>th</sup>, 2013. Due to a high level of interest from the public and elected officials, (including specific requests to extend the comment period), the comment period was extended to March 15<sup>th</sup>, 2013. 384 comments, including a petition with over 1,000 signatures, were received during the comment period, submitted both via postal mail and electronically to the FAA's environmental specialist.

### **5.5.1 Comments Received**

The majority of comments originated from areas southwest of Logan Airport, from residents and town officials in Randolph, Milton, and Canton. These towns are located in an area in which the Proposed Action would concentrate existing flights that currently overfly these areas, with noise levels generally ranging from less than 45 to 50 DNL under the Proposed Action. A majority of the comments can be categorized as follows:

- Opposition to the Proposed Action due to an perceived increase in aircraft overflights, and to a lesser degree, potential health impacts, especially in areas which already receive noise from arrivals to Runway 04 and departures from Runway 27.
- Requests to extend the comment period.
- Statements that the environmental analysis was insufficient, that the noise model is inadequate, and that additional alternatives should be considered.
- The potential for negative impacts to property values.
- Concern with the Blue Hills Reservation State Park, which includes parts of Milton, Quincy, Braintree, Canton, Randolph, and Dedham, and the potential impact on wildlife and recreation.

A number of CAC, local, state and Federal elected officials also commented on the study. Comments and responses are provided in Appendix B.

### **5.5.2 Response to Comments**

In accordance with FAA Order 1050.1E, although the FAA need not formally respond to public comments concerning EAs, this Final EA reflects consideration of public concerns. As part of the public comment process, the FAA advised that all comments would be made part of the project record and taken into consideration in the preparation of the Final EA. The FAA also attempted to respond to comments from elected officials and others that requested additional relevant information as much as possible prior to the end of the comment period to facilitate more informed comments on the Draft EA. The content of the comments, where feasible and necessary, has been incorporated into this Final EA. Each comment received was assigned a numeric code, and each commentor's concerns were grouped into categories. Tables B-1 and B-3 in Appendix B provides a response to comments made by elected officials, town representatives and the public. Table B-2 provides the comments received from the public and a code that corresponds to the response to comments table (Table B-3 in Appendix B).

### **5.6 Additional Meetings**

Due to a high level of public interest in the FAA Runway 33L RNAV SID proposal, Massport agreed to attend a briefing to elected officials and two other public meetings to provide additional information and answer questions as appropriate. FAA attended a briefing to elected officials and provided input to Massport on information presented at all three additional meetings.

#### **5.6.1 Massachusetts State House Briefing**

On February 5<sup>th</sup>, 2013, Massport, with FAA support, presented information related to the Proposed Action to a group of elected officials and staff at the Massachusetts State House. Approximately 23 state, federal and local representatives attended. Massport provided information related to the project background, airport operations, an overview of RNAV (both nationally and at Logan Airport), and specific information on the FAA's Proposed Action. The presentation was posted to the project website. In general, representatives expressed concern about increases in noise over certain communities and a desire to extend the comment period to allow more time for comments. FAA also distributed an updated table by community showing details of noise increases or decreases in areas above 45 DNL.

#### **5.6.2 Town of Milton Board of Selectmen Meeting**

On February 7<sup>th</sup>, 2013, Massport attended a Town of Milton Board of Selectmen meeting. FAA worked closely with Massport to develop content and discussion points for the meeting. The presentation given by Massport was similar to that given on February 5<sup>th</sup>, but also included additional information related to aircraft overflights over Milton.

The meeting was attended by approximately 35 citizens, State Senator Brian Joyce, a staff representative from Congressman Stephen Lynch's office, and representatives from local media. Massport presented the following statement on behalf of the FAA:

“After careful consideration and evaluation of alternatives, the FAA has determined it to be in the best interest of the public to extend the comment period for the Boston Logan Runway 33 Left Area Navigation (RNAV) Standard Instrument Departure (SID) Draft Environmental Assessment until the close of business on March 15<sup>th</sup>, 2013. Additionally, the FAA will conduct a re-evaluation of the operational data used in the environmental analysis as part of a post-implementation review six (6) months following the implementation of this procedure.”

#### **5.6.3 Town of Randolph Board of Selectmen Meeting**

On March 18<sup>th</sup>, 2013, Massport attended a meeting of the Board of Selectmen in the Town of Randolph. Massport made similar statements to those presented in Milton regarding the Proposed Action. No members of the public attended this meeting.



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## **CHAPTER 6: LIST OF PREPARERS**

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# Chapter Six:

## LIST OF PREPARERS

### 6.1 List of Preparers

This chapter identifies the individuals assisting in the preparation and independent review of this EA along with each preparer's responsibilities.

**Table 6.1** includes FAA staff who are responsible for the preparation of the EA and/or who were involved in its review. Supporting the FAA in this effort are individuals from HNTB.

Table 6.1  
**List of Preparers**

Name	Project Role	Education/ Registration	Experience (Years)	EA Project Responsibility
<b>Federal Aviation Administration</b>				
Terry English	Project Manager	FAA, Air Traffic Organization	28	COTR/Project Management
Cully Beasley	Operations Manager, BOS TRACON	FAA, Air Traffic Organization	30	Subject Matter Expert
Stephen H. Henrich	CPC Boston Area, BOS TRACON	FAA, Air Traffic Organization	30	Subject Matter Expert, A90 RNAV Development Team
Brian Brunelle	Support Manager, BOS Air Traffic Control Tower	FAA, Air Traffic Organization	30	Special Project Manager
Jon Harris	Mission Support Services, PBN Integration Group	FAA, Air Traffic Organization	30	RNAV/RNP Design
<b>HNTB Corporation</b>				
Kim Hughes, P.E.	Project Manager	B.S. Civil Engineering/ P.E.	27	Overall Document Review
Royce Bassarab	Environmental Planner	B.A. Urban and Regional Planning	12	Purpose and Need, Affected Environment, Environmental Consequences Documentation, Noise Analysis



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Table 6.1  
**List of Preparers**

<b>Name</b>	<b>Project Role</b>	<b>Education/ Registration</b>	<b>Experience (Years)</b>	<b>EA Project Responsibility</b>
Caroline Pinegar, A.I.C.P.	Environmental Planner	B.A. Historic Preservation, M.C.R.P. Masters in City and Regional Planning / A.I.C.P.	9	Purpose and Need, Affected Environment, Environmental Consequences Documentation
Kent Miller	GIS Analyst		15	GIS Analysis

# **APPENDIX A**

## **Noise Modeling Technical Report**

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# APPENDIX A:

## Noise Modeling Technical Report

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The FAA has been undertaking an evaluation of flight and ground procedures for potential implementation as part of the BLANS since 2005. Phase 1 of the study, the Boston Overflight Noise Study (BONS), evaluated a series of RNAV SID procedures that resulted in a Categorical Exclusion/Record of Decision, issued in October 2007. Phase 2 began in 2008 and is called the Boston Logan Airport Noise Study (BLANS) and resulted in seven noise abatement measures. Logan Airport currently operates with RNAV SID procedures to all major runways with the exception of Runway 33L. An RNAV SID departure for Runway 33L was first considered in 2008 and several measures were extensively analyzed and vetted as part of the BLANS.

This technical appendix documents the input parameters of the 2009 existing conditions, 2015 No Action, and 2015 Proposed Action noise contours. **Section A.1** reviews the methodology used to conduct the noise analysis. **Section A.2** documents the input data development and sources for the 2009 existing conditions. **Sections A.3** and **A.4** document the input data for the 2015 No Action and 2015 Proposed Action alternatives, respectively.

For this EA, FAA modeled the Proposed Action using the BLANS INM input as the baseline. This method provides consistency between both studies, which is believed to be critical during the public coordination process. The method will also expedite the EA process by requiring only minor adjustments to the baseline model,

including use of the U.S. Census 2010 population data. Additional input data is derived from the *Environmental Review of Proposed RNAV STARs at KBOS and Selected Satellite Airports Technical Memorandum*, for which the FAA issued a categorical exclusion in 2011.

### A.1 Methodology

The methodology to conduct the noise analysis of the proposed Runway 33L RNAV SID followed the previously established protocol for the ongoing BLANS. Since the noise analysis process established for the BLANS has been thoroughly vetted, this same process was used for the analysis of the proposed RNAV SID for Runway 33L. The FAA Office of the Environment and Energy (AEE) approved the noise model input data provided in this report.

The *Noise Analysis Protocol*<sup>1</sup> developed under the BLANS and used in subsequent analyses governed the collection of aircraft operational and trajectory data, the development of input data, the use of FAA-approved models, and the format of the output. The following paragraphs highlight relevant elements of the Protocol.

The noise analysis was conducted using the Integrated Noise Model (INM) Version 7.0a to calculate noise exposure levels within the Study Area, roughly a 20-nautical mile lateral radius centered at Logan Airport up to an altitude of 14,000 feet MSL. Noise exposure levels were calculated for existing conditions, and for future conditions with

and without the Proposed Action. All alternatives from the BLANS project that were implemented after 2009 are included in both the 2015 No Action and Proposed Action.

## **A.2 2009 Noise Model Input**

Input data included in the development of the 2009 existing conditions include aircraft operations, runway use, flight tracks and profiles, flight track use, weather conditions, terrain, and runway geometry. The terrain data was obtained from the MicroPath Corporation and the runway geometry data including end coordinates was obtained through the BLANS. For the 2009 Existing Conditions, the weather input from the BLANS analysis (51.8° Fahrenheit, 30.06 inches Mercury, 65.2% relative humidity) was used.

### **A.2.1 2009 Aircraft Operations**

For noise modeling, aircraft operations are input into INM in terms of an average annual day (AAD). The total annual operations at an airport are divided by the number of days in the year to determine the AAD. Data from Massport's AirScene Noise and Operations Monitoring System (NOMS) and Massport's Draft 2009 Environmental Data Report (EDR) was used to develop operations data for Logan Airport. In accordance with the Protocol, only Instrument Flight Rules (IFR) itinerant operations were included in this study. **Table A.1** shows IFR itinerant operations for Logan Airport in 2009 by aircraft category and time of day. **Table A.2** provides the AAD operations by INM aircraft type.

Table A.1  
**2009 Annual Operations (IFR Itinerant)**

<b>Operation</b>	<b>Category</b>	<b>Day &amp; Evening (7:00 am - 10:00 pm)</b>	<b>Night Shoulder (10:00 pm - 12:00 am &amp; 6:00 am - 7:00 am)</b>	<b>Late-Night (12:00 am - 6:00 am)</b>
Arrival	HEAVY <sup>1</sup>	7,017	691	825
	LARGE <sup>2</sup>	113,540	15,120	4,835
	PROP <sup>3</sup>	26,246	1,052	206
	SMALL <sup>4</sup>	2,773	197	118
Departure	HEAVY <sup>1</sup>	6,162	2,226	144
	LARGE <sup>2</sup>	119,441	11,532	2,518
	PROP <sup>3</sup>	26,466	653	386
	SMALL <sup>4</sup>	2,820	175	87
<b>Total Annual Operations<sup>5</sup></b>		<b>304,464</b>	<b>31,646</b>	<b>9,118</b>

Notes:

<sup>1</sup> Jet aircraft weighing 255,000 pounds or more and Boeing 757s

<sup>2</sup> Jet aircraft weighing between 41,000 and 255,000 pounds

<sup>3</sup> Propeller airplanes

<sup>4</sup> Jet aircraft weigh less than 41,000 pounds

<sup>5</sup> Differences may exist due to rounding

Source: Massport 2010 (Draft 2009 EDR)

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Table A.2

**2009 Annual Average Day Operations (IFR Itinerant)**

Aircraft Type	Category	Day (7am-10pm)		Night (10pm-7am)	
		Arrivals	Departures	Arrivals	Departures
1900D	PROP	0.96	0.1	0.97	0.08
717200	LARGE	13.88	1.95	14.13	1.7
727EM1	LARGE	0.01	0	0	0
727EM2	LARGE	0.5	0.48	0.62	0.36
737300	LARGE	1.28	0.19	1.23	0.24
7373B2	LARGE	1.14	0.29	1.25	0.17
737400	LARGE	3.28	0.03	3.1	0.21
737500	LARGE	5.33	0.32	4.99	0.66
737700	LARGE	9.11	2.22	9.19	2.14
737800	LARGE	13.99	3.36	15.18	2.17
737N17	LARGE	0.04	0	0.04	0
737N9	LARGE	0.03	0	0.02	0
74720B	HEAVY	0	0	0	0
747400	HEAVY	3.11	0.01	3	0.12
757300	LARGE	0.04	0.1	0.14	0.01
757PW	LARGE	18.19	6.86	20.82	4.24
757RR	LARGE	13.48	3.98	15.85	1.61
767300	HEAVY	3.48	0.35	3.34	0.49
767CF6	HEAVY	0.14	0.26	0.07	0.34
767JT9	HEAVY	0	0.03	0	0.04
777200	HEAVY	1.58	0.18	1.72	0.04
777300	HEAVY	0.01	0	0.01	0
A300-622R	HEAVY	0.68	1.84	1.07	1.46
A300B4-203	HEAVY	0.08	0.13	0	0.2
A310-304	HEAVY	0.46	0.07	0.02	0.51
A319-131	LARGE	37.84	6.57	39.17	5.24
A320-211	LARGE	5.28	1.9	6.39	0.79
A320-232	LARGE	29.17	10.41	34.83	4.75
A321-232	LARGE	0.34	0.34	0.28	0.4
A330-301	HEAVY	3.61	0.01	3.41	0.21
A330-343	HEAVY	0.61	0	0.44	0.17
A340-211	HEAVY	2.75	0.03	2.13	0.65
A340-642	HEAVY	0.76	0	0.73	0.02
BEC58P	PROP	49.68	1.79	50.32	1.15
C130	PROP	0	0	0	0

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Table A.2

**2009 Annual Average Day Operations (IFR Itinerant)**

Aircraft Type	Category	Day (7am-10pm)		Night (10pm-7am)	
		Arrivals	Departures	Arrivals	Departures
CIT3	SMALL	0.12	0.01	0.12	0.01
CL600	SMALL	1.17	0.12	1.19	0.08
CL601	LARGE	39.71	1.69	39.58	1.83
CNA172	PROP	0.02	0	0.02	0
CNA206	PROP	0.23	0.01	0.24	0
CNA208	PROP	0.67	0.04	0.68	0.02
CNA20T	PROP	0.03	0	0.02	0
CNA441	PROP	0.22	0.03	0.22	0.03
CNA500	SMALL	0.35	0.03	0.37	0.01
CNA510	SMALL	0.03	0	0.03	0
CNA55B	LARGE	1.2	0.09	1.18	0.11
CNA750	SMALL	0.69	0.12	0.74	0.06
CRJ9-ER	LARGE	4.72	0.76	4.42	1.05
CRJ9-LR	LARGE	0.02	0	0.02	0
DC1010	HEAVY	1.09	0.73	0.64	1.19
DC1030	HEAVY	0.47	0.36	0.26	0.57
DC3	PROP	0	0	0	0
DC86HK	HEAVY	0	0	0	0
DC870	HEAVY	0.4	0.11	0.03	0.48
DC93LW	LARGE	0.24	0.02	0.22	0.04
DC95HW	LARGE	1.93	0.34	1.79	0.48
DHC6	PROP	0.6	0.07	0.62	0.06
DHC8	PROP	4.9	0.06	4.93	0.03
DHC830	PROP	2.1	0.56	2.16	0.5
DO328	PROP	0	0	0	0
ECLIPSE500	SMALL	0.01	0	0.01	0
EMB120	PROP	0	0	0	0
EMB145	LARGE	29.67	1.99	28.64	3.02
EMB14L	LARGE	5.16	0.05	4.86	0.36
EMB17D	LARGE	14.54	2.6	14.48	2.66
EMB19D	LARGE	29.05	3.51	31.05	1.48
F10062	LARGE	0.01	0	0.02	0
FAL20	SMALL	0	0	0	0
FAL50	SMALL	0.26	0.02	0.26	0.02
FAL900	SMALL	0.28	0.02	0.28	0.03



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Table A.2

**2009 Annual Average Day Operations (IFR Itinerant)**

Aircraft Type	Category	Day (7am-10pm)		Night (10pm-7am)	
		Arrivals	Departures	Arrivals	Departures
GASEPF	PROP	0.05	0	0.05	0
GASEPV	PROP	0.46	0.03	0.47	0.02
GII	LARGE	0.01	0	0.01	0
GIIB	LARGE	0.08	0.02	0.09	0.01
GIV	LARGE	0.74	0.07	0.72	0.09
GV	LARGE	0.53	0.07	0.53	0.07
HS748A	LARGE	0.01	0	0.01	0
IA1125	SMALL	0.1	0	0.09	0
J328	SMALL	0	0	0	0
LEAR25	SMALL	0.02	0	0.02	0
LEAR35	SMALL	2.76	0.31	2.81	0.27
MD11GE	HEAVY	0	0	0	0
MD81	LARGE	0	0	0	0
MD82	LARGE	5.34	1	5.92	0.41
MD83	LARGE	24.93	3.45	26.19	2.19
MD9025	LARGE	0.28	0	0.27	0
MU3001	SMALL	1.8	0.22	1.8	0.23
PA28	PROP	0.03	0	0.02	0
PA30	PROP	0	0	0	0
PA31	PROP	0.59	0.74	0.47	0.87
PA42	PROP	0	0	0	0
SD330	PROP	0.01	0	0.01	0
SF340	PROP	11.34	0.02	11.29	0.07
<b>Total (Annual Avg. Day)</b>		<b>409.8</b>	<b>63.13</b>	<b>424.35</b>	<b>48.55</b>
<b>Total (Annual)</b>		<b>149575.96</b>	<b>23043.69</b>	<b>154888.42</b>	<b>17720.29</b>

Note: Differences may exist due to rounding.

Source: Massport 2010 (Draft 2009 EDR)

## A.2.2 2009 Runway Use

To develop the necessary input data for INM, aircraft operations must be assigned to specific runway ends, by determining the average annual runway use.

Logan Airport operates in multiple configurations depending on wind and weather conditions, as well as other Air Traffic Control (ATC) considerations. The BLANS configuration use and the associated runway use served as the starting points to determine the

configuration and runway use for this study.

**Table A.3** presents the operating configurations reflected in the noise model.

The BLANS configuration use and the associated runway use were adjusted such that the combined runway use better matched the Massport's Draft 2009 EDR Average Annual Day Runway Use. The resulting configuration use for the Existing Conditions is shown in **Table A.4**, while **Table A.5** presents runway use by aircraft category.

Table A.3

**Definition of Runway Operating Configurations**

Name	Day/Evening/Shoulder (6:00 am–Midnight)		Late Night (Midnight–6:00 am) <sup>1</sup>	
	Arrival Runway(s)	Departure Runway(s)	Arrival Runway(s)	Departure Runway(s)
Configuration 1 - Visual	4L, 4R	4L, 4R, 9, 15R	Annual average late-night conditions	Annual average late-night conditions
Configuration 2 - Instrument <sup>2</sup>	4R	4L, 4R, 9, 15R		
Configuration 3 - Visual	22L, 22R	22L, 22R, 15R		
Configuration 4 - Instrument	22L	22L, 22R, 15R		
Configuration 5 - Visual	33L, 32, 33R	33L, 27		
Configuration 6 - Visual	27, 22L	22L, 22R		
Configuration 7 - Visual	27, 32, 33L <sup>3</sup>	33L, 27		

Notes:

1. Late Night operations use different configurations than daytime operations.  
There is no correlation between a given daytime and late night configuration.
2. Instrument Conditions are defined as less than 3 statute miles visibility or cloud ceiling below 1,000 ft above ground level.
3. Configuration 7 Runway 33L arrivals are infrequent.

Source: Massport, 2010 (runway operating configuration log 2009)

Table A.4

**Logan Airport Runway Operating Configurations Utilization  
(Annual Average Day, 6:00 am–Midnight)**

ID	Runways	Percent
C1	4/9	28.8%
C2	4/9	10.2%
C3/4	22/22	11.5%
C5	33-32/27	8.8%
C6	27/22	26.1%
C7	27-32/33	14.7%
<b>Total</b>		<b>100%</b>

Source: Massport 2010 (Draft 2009 EDR; runway operating configuration log)

**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

Table A.5

**Logan Airport 24-hour Annual Average Day Runway Use (IFR Itinerant)**

Operation	Category	Runway	Percent	Operation	Category	Runway	Percent
Arrival	HEAVY	04L	0%	Departure	HEAVY	04R	14%
		04R	38%			09	16%
		15R	3%			14	0%
		22L	19%			15R	14%
		27	25%			22L	7%
		33L	14%			22R	28%
						27	3%
						33L	18%
Arrival	LARGE	04L	7%	Departure	LARGE	04R	6%
		04R	31%			09	33%
		15R	2.6%			14	0%
		22L	17%			15R	3%
		27	30%			22L	2%
		32	1%			22R	34%
		33L	11%			27	6%
						33L	15%
Arrival	PROP	04L	24%	Departure	PROP	04L	17%
		04R	14%			04R	5%
		15L	0%			09	11%
		15R	2%			14	0%
		22L	19%			15R	6%
		22R	2%			22L	1%
		27	18%			22R	42%
		32	11%			27	3%
		33L	7%			33L	14%
		33R	1%			33R	0%
Arrival	SMALL	04L	17%	Departure	SMALL	04R	4%
		04R	21%			09	37%
		15R	2%			14	0%
		22L	11%			15R	3%
		27	33%			22L	0%
		32	7%			22R	37%
		33L	9%			27	4%
						33L	14%

Note: May not add to 100% due to rounding.

Source: Massport 2010 (Draft 2009 EDR Report)

### **A.2.3 2009 Flight Tracks, Profiles and Flight Track Use**

For the purposes of noise modeling, representative flight tracks are modeled with backbone tracks surrounded symmetrically by sub-tracks which account for the dispersion of operations across a corridor. The noise model flight tracks were developed by updating previously modeled BLANS flight tracks to reflect 2009 operating conditions. Radar data from the Massport's NOMS was overlaid with the INM tracks and profiles from the BLANS 2007 INM study. The NOMS data was analyzed in accordance with the Protocol to develop flight track utilization percentages for each modeled backbone track for each aircraft category, operation type and runway. These utilization percentages were applied to the operations (by INM aircraft type) to distribute the operations by modeled flight tracks for each aircraft category. The modeled backbone tracks include corresponding subtracks with the utilization percentages.

INM includes a series of "standard" arrival profiles for use in the model, with variability in the altitude provided by trip length (effectively a surrogate for aircraft weight). The BLANS project also includes a series of INM custom profiles for frequently utilized and louder aircraft. These custom profiles were developed based on radar data analysis of specific operating configurations at Logan Airport, and were included in previous BLANS analyses.

### **A.3 2015 No Action Noise Model Input**

INM input data represents forecast operations in 2015. The key differences between the Existing Conditions (2009) noise model inputs and the No Action Condition (2015) are weather conditions, forecast operations and the projected runway utilization for Logan Airport.

For the 2015 No Action condition, the weather data from the BLANS was averaged with the 2008 and 2009 weather data obtained from the National Oceanic and Atmospheric Administration (NOAA) to compute the annual average daily temperature, barometric pressure and the relative humidity. Weather conditions for the 2015 No Action and Proposed Action was 51.6° Fahrenheit, 30.01 inches Mercury, and 65.6% relative humidity.

#### **A.3.1 2015 Aircraft Operations**

Operations and the aircraft fleet mix for Logan Airport in 2015 were determined from the following sources: Boston Logan Airport Noise Study Future Planning Activity Level (FPAL) Design Day Flight Schedule (May 17, 2010) and FAA Terminal Area Forecast (TAF) downloaded July 2010. 2015 annual operations are summarized in **Table A.6**, and detailed AAD operations are provided in **Table A.7**.



**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

Table A.6

**Logan Airport 2015 Annual Operations**

Operation	Category	Day & Evening (7:00 am - 10:00 pm)	Night Shoulder (10:00 pm - 12:00 am & 6:00 am - 7:00 am)	Late-Night (12:00 am - 6:00 am)
Arrival	HEAVY <sup>1</sup>	17,298	2,883	1,602
	LARGE <sup>2</sup>	117,142	11,676	4,089
	PROP <sup>3</sup>	28,188	1,461	295
	SMALL <sup>4</sup>	12,462	1,166	576
Departure	HEAVY <sup>1</sup>	16,978	4,805	0
	LARGE <sup>2</sup>	119,398	10,985	2,537
	PROP <sup>3</sup>	28,483	871	590
	SMALL <sup>4</sup>	12,167	871	281
<b>Total (Annual)</b>		<b>352,116</b>	<b>34,718</b>	<b>9,970</b>

Notes:

<sup>1</sup> Jet aircraft weighing 255,000 pounds or more and Boeing 757s

<sup>2</sup> Jet aircraft weighing between 41,000 and 255,000 pounds

<sup>3</sup> Propeller airplanes

<sup>4</sup> Jet aircraft weigh less than 41,000 pounds

Source: FAA TAF 2015, Ricondo FPAL DDFS 2010, Massport 2010 (Draft 2009 EDR)

Table A.7

**Logan Airport 2015 Annual Average Day Operations**

(IFR Itinerant)

Aircraft Type	Category	Day (7am-10pm)		Night (10pm-7am)	
		Arrivals	Departures	Arrivals	Departures
717200	LARGE	9.65	8.78	0.88	1.76
737400	LARGE	0.88	0.88	0.00	0.00
737700	LARGE	37.74	36.86	5.27	5.27
737800	LARGE	21.06	22.82	4.39	2.63
747400	HEAVY	1.76	1.76	0.00	0.00
757300	LARGE	24.57	24.57	4.39	4.39
757PW	LARGE	6.14	5.27	1.76	2.63
767300	HEAVY	25.45	27.21	6.14	4.39
767CF6	HEAVY	0.00	0.00	0.88	0.88
777200	HEAVY	3.51	3.51	0.00	0.00
A300-622R	HEAVY	0.00	1.76	3.51	1.76
A310-304	HEAVY	1.76	0.88	0.00	0.88
A319-131	LARGE	35.98	36.86	4.39	4.39
A320-232	LARGE	39.49	46.51	13.16	6.14
A321-232	LARGE	8.78	8.78	0.88	0.88
A330-343	HEAVY	3.51	3.51	0.00	0.00
A340-211	HEAVY	8.78	7.02	0.00	1.76

**Boston Logan International Airport Runway 33L  
RNAV SID Final Environmental Assessment**

Table A.7

**Logan Airport 2015 Annual Average Day Operations**

(IFR Itinerant)

Aircraft Type	Category	Day (7am-10pm)		Night (10pm-7am)	
		Arrivals	Departures	Arrivals	Departures
BEC58P	PROP	49.16	50.74	2.43	1.62
CIT3	SMALL	4.00	5.62	0.81	0.00
CL600	SMALL	3.16	4.00	0.81	0.77
CL601	LARGE	39.69	39.69	2.43	2.43
CNA206	PROP	1.62	1.62	0.00	0.00
CNA500	SMALL	1.62	1.62	0.00	0.00
CNA750	SMALL	0.00	0.00	0.77	0.77
CRJ900	LARGE	11.32	9.70	0.00	1.62
DC1030	HEAVY	1.76	0.00	0.00	1.76
DC870	HEAVY	0.88	0.00	0.00	0.88
DHC6	PROP	2.39	3.16	0.00	0.00
DHC8	PROP	6.47	6.47	0.81	0.81
EMB145	LARGE	28.30	28.30	2.43	3.23
FAL900	SMALL	0.77	0.77	0.00	0.00
GASEPF	PROP	0.81	0.81	0.00	0.00
GASEPV	PROP	4.66	3.12	0.77	0.77
GIIB	LARGE	0.81	0.81	0.00	0.00
GIV	LARGE	3.12	2.35	0.00	0.00
GV	LARGE	41.12	43.54	3.23	0.81
LEAR25	SMALL	3.93	3.12	0.00	0.00
LEAR35	SMALL	6.31	5.46	0.77	0.00
MD11GE	HEAVY	0.00	0.88	1.76	0.88
MD83	LARGE	3.51	3.51	0.00	0.00
MD9025	LARGE	8.78	7.90	0.00	0.88
MU3001	SMALL	14.36	12.74	1.62	1.62
PA31	PROP	0.81	0.81	0.81	0.81
SF340	PROP	11.32	11.32	0.00	0.00
<b>Total (Annual Avg. Day)</b>		<b>479.70</b>	<b>485.00</b>	<b>65.06</b>	<b>57.37</b>
<b>Total (Annual)</b>		<b>175090</b>	<b>177026</b>	<b>23748</b>	<b>20941</b>

Note: Differences may exist due to rounding.

Source: FAA TAF 2015, Ricondo FPAL DDFS 2010

### A.3.2 2015 Runway Use

Forecast runway utilization for Logan Airport was determined from an average of runway operations for 2007, 2008, and 2009. This methodology reflected long-term average runway use as opposed to the runway use

from a single year. The configuration use for the 2015 No Action condition is shown in **Table A.8**, while **Table A.9** presents annual runway use for each year and the 3-year average used for the 2015 No Action condition.

Table A.8

**Logan Airport 2015 Runway Operating Configurations Utilization  
(Annual Average Day, 6:00 am–Midnight)**

ID	Runways	Percent
C1	4/9	29.5%
C2	4/9	10.4%
C3/4	22/22	8.0%
C5	33-32/27	6.5%
C6	27/22	29.0%
C7	27-32/33	16.7%
<b>Total</b>		<b>100%</b>

Source: Massport 2010 (Draft 2009 EDR; runway operating configuration log)

Table A.9

**Logan Airport Annual Runway Use Comparison**

Runway	EDR AAD Rwy Use 2007		EDR AAD Rwy Use 2008		EDR AAD Rwy Use 2009		2015 AAD Rwy Use (3-Year Average)	
	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
04L	7%	2%	8%	3%	9%	3%	8%	2%
04R	29%	4%	28%	4%	28%	6%	28%	5%
9	0%	30%	0%	33%	0%	29%	0%	31%
14	0%	0%	0%	0%	0%	0%	0%	0%
15R	1%	4%	2%	3%	3%	4%	2%	4%
22L	15%	0%	17%	0%	17%	2%	16%	1%
22R	0%	34%	0%	37%	0%	35%	<1%	35%
27	36%	7%	33%	6%	28%	6%	32%	6%
32	2%	0%	2%	0%	3%	0%	2%	0%
33L	11%	19%	11%	16%	11%	15%	11%	17%
33R	0%	0%	0%	0%	0%	0%	<1%	0%
<b>Sum*</b>	<b>101%</b>	<b>100%</b>	<b>101%</b>	<b>102%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>101%</b>

Sources: 2007 Environmental Data Report (Massport 2008);  
2008 Environmental Data Report (Massport 2009);  
2009 Draft Environmental Data Report Database (Massport June 2010).

### **A.3.3 Flight Tracks, Profiles, and Use**

The 2015 No Action includes previously approved measures from the BLANS study, including RNAV SIDs and STARs. The implementation of the RNAV SIDs began in February 2010. The BLANS Phase 1 RNAV SID procedures were environmentally evaluated in a separate analysis culminating in a Documented Categorical Exclusion and ROD dated October 16, 2007. The BLANS RNAV STARs were environmentally evaluated and resulted in a CatEx in 2011.

The No Action profiles from the BLANS study included custom arrival profiles for a subset of the jet aircraft, the frequently utilized and louder aircraft. No changes to the profiles were made under the No Action condition. INM standard arrival profiles, which typically model a continuous descent arrival, were used for the remaining aircraft. In addition to the lateral adjustments to flight tracks due to the implementation of the RNAV STAR procedures, vertical flight profiles were adjusted.

95% of aircraft that are appropriately equipped were assumed to use the RNAV SIDs and STARs off of the runway. Not all aircraft that were appropriately equipped can use the RNAV SID off the runway due to weather, trail separation, and level of traffic. Aircraft not equipped to utilize the RNAV SID remained on the current vector departure procedures. In the 2015 noise model, departures were assigned to a specific RNAV SID based on their destination. The detailed schedules developed for the BLANS included city pair information, which was associated with a departure fix and ultimately an RNAV SID.

Other flight tracks, profiles, and track utilization remained unchanged from Existing Conditions, with some exceptions

related to previous analysis (BONS Arrival Alternatives 6 and 11).

### **A.4 2015 Proposed Action Noise Model Input**

The only change between the 2015 No Action and 2015 Proposed Action is implementation of the Runway 33L RNAV SID for RNAV-capable aircraft departures. All other assumptions modeled in the 2015 No Action Alternative remain valid.



## **Endnotes**

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- <sup>1</sup> For more detailed information related to the Noise Analysis Protocol, see the BLANS project website at [http://www.bostonoverflight.com/docs/ExistingConditions\\_AircraftNoise\\_2005\\_Noise%20Modeling%20Protocol%20\\_071210.pdf](http://www.bostonoverflight.com/docs/ExistingConditions_AircraftNoise_2005_Noise%20Modeling%20Protocol%20_071210.pdf)).

## **APPENDIX B**

### **Agency Consultation and Public Comment**

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## APPENDIX B

# Agency Consultation and Public Comment

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Public and agency coordination is conducted as part of the National Environmental Policy Act (NEPA) process to ensure exchange of information relevant to the Proposed Action. The following pages contain communications between the Federal Aviation Administration (FAA), the Logan Airport Community Advisory Committee (CAC), the consultants, the public, and other agencies that could be affected by the Proposed Action. Communications include presentations, informational documents, meeting agendas and notes, public comments received, and responses to comments.

The following documents are referenced in Chapter 6, *Public and Agency Involvement*:

- 1 Agency Consultation - Massachusetts Historic Commission
- 2 Agency Consultation - USFWS
- 3 Public Notice of Release of Draft EA
- 4 Table B-1: Response to Comments – Elected Officials and Representatives
- 5 Table B-2: Comments Received
- 6 Table B-3: Response to Comments – Public





**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

May 1, 2013

Terry English  
Program Manager  
Boston Logan Airport Noise Study  
Federal Aviation Administration  
11 Murphy Drive  
Nahsua NH 03062

RE: Logan Airport Runway 33 Left Area Navigation RNAV Standard Area Departure SID Procedure.  
MHC #RC.8562.

Dear Ms. English:

Staff of the Massachusetts Historical Commission (MHC), the office of the State Historic Preservation Officer, have reviewed the additional information provided for the project referenced above, received by the MHC on April 17, 2013.

The information provided included a determination of the area of potential effect, a summary of the results of the identification effort for historic properties in the area of potential effect, and an assessment of the effects of the undertaking to historic properties.

After review of the information provided, I concur with the Federal Aviation Administration's finding of "no adverse effect" (36 CFR 800.5(b)) to historic properties in the area of potential effect for the undertaking.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and the Nationwide Programmatic Agreement with the National Park Service. Please contact Edward L. at the MHC if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Brona Simon".

Brona Simon  
State Historic Preservation Officer  
Executive Director  
Massachusetts Historical Commission

xc:

Flavio Leo, Massachusetts Port Authority  
Najah Duvall-Gabriel, Advisory Council on Historic Preservation  
Cassius Cash, Boston National Historical Park  
Nancy Nelson, Minute Man National Historical Park  
Michael Quijano-West, Salem Maritime National Historical Park

220 Morrissey Boulevard, Boston, Massachusetts 02125

(617) 727-8470 • Fax: (617) 727-5128

[www.sec.state.ma.us/mhc](http://www.sec.state.ma.us/mhc)



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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70 Commercial Street, Suite 300  
Concord, NH 03301-5087  
<http://www.fws.gov/newengland>

February 19, 2013

Ms. Terry English  
Federal Aviation Administration  
11 Murphy Drive  
Nashua, NH 03062

Dear Ms. English:

This is in response to your January 17, 2013 letter requesting our concurrence that the proposed action to implement a new air traffic control Area Navigation standard instrument departure procedure on Runway 33 Left at Boston-Logan International Airport will not likely adversely affect either the endangered roseate tern (*Sterna dougallii dougallii*) or the threatened piping plover (*Charadrius melodus*). Our comments are provided in accordance with the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531, *et seq.*).

Both species are known to occur within the six-county study area. However, there is no physical construction activity associated with the proposed project and aircraft will not be introduced to any new areas. Therefore, we concur that the proposed project is not likely to adversely affect either species.

Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. Thank you for your cooperation. Please contact Brett Hillman of this office at 603-223-2541, extension 34, if you have any questions or need additional assistance.

Sincerely yours,

Thomas R. Chapman  
Supervisor  
New England Field Office

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**Federal Aviation Administration**  
Boston-Logan International Airport Runway 33L  
RNAV SID Environmental Assessment

The Federal Aviation Administration (FAA) released the Draft Environmental Assessment (EA) to implement a new air traffic control Area Navigation (RNAV) departure procedure on Runway 33 Left (33L) at Boston-Logan International Airport on January 14, 2013. The Draft EA is available for review online at [www.bostonRNAVEA.com](http://www.bostonRNAVEA.com) or in hard copy at the Framingham, Winthrop, or Boston (East Boston Branch) Public Libraries.

In accordance with the National Environmental Policy Act (NEPA), the Draft EA was prepared to address the potential environmental impacts that could result from the implementation of a new RNAV procedure at Logan Airport. The RNAV standard instrument departure (SID) procedure would be used by RNAV-capable jet aircraft and closely overlays existing flight departure corridors from Runway 33L at Logan Airport. Detailed noise analysis was conducted for the Proposed Action in accordance with FAA environmental requirements, and is presented in the Draft EA.

The FAA encourages interested parties to review the Draft EA and provide comments during the public comment period. Written comments will be accepted by the FAA until **February 15, 2013**. The public is invited to comment by mail or email to the following address:

Ms. Terry English  
Project Manager  
Federal Aviation Administration  
11 Murphy Drive  
Nashua, NH 03062  
[Terry.English@faa.gov](mailto:Terry.English@faa.gov)



# PUBLISHER'S CERTIFICATE

Commonwealth of Massachusetts } ss.  
County of Suffolk

On this 25<sup>th</sup> day of January A.D. 20 13  
personally appeared before the undersigned, a Notary Public, within and for

the said county, Laurie Kluse

of the Boston Herald, a newspaper published by  
Boston Herald, Inc., in Boston, County of Suffolk, in the Commonwealth of  
Massachusetts, and who being duly sworn, states on oath that the

FAA Boston-Logan Intl Airport Runway 33L advertisement  
was published in said newspaper in its issues of

January 15 A.D. 20 13

Subscribed and sworn to before me this 25

day of JANUARY A.D. 20 13

[Signature]  
Notary Public

**Federal Aviation Administration**  
Boston-Logan International Airport Runway 33L  
RNAV SID Environmental Assessment

The Federal Aviation Administration (FAA) released the Draft Environmental Assessment (EA) to implement a new air traffic control Area Navigation (RNAV) departure procedure on Runway 33 Left (33L) at Boston-Logan International Airport on January 14, 2013. The Draft EA is available for review online at [www.bostonRNAVEA.com](http://www.bostonRNAVEA.com) or in hard copy at the Framingham, Winthrop, or Boston (East Boston Branch) Public libraries.

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Ms. Terry English  
Project Manager  
Federal Aviation Administration  
11 Murphy Drive  
Nashua, NH 03062  
[Terry.English@faa.gov](mailto:Terry.English@faa.gov)

Jan 15



**REGINA MUNROE**  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
March 21, 2019





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BOSTON-LOGAN INTERNATIONAL AIRPORT RUNWAY 33L  
**LEGAL NOTICE**  
**Federal Aviation Administration**  
Boston-Logan International Airport  
Runway 33L  
RNAV SID Environmental Assessment

The Federal Aviation Administration (FAA) has released the Draft Environmental Assessment (EA) to implement a new air traffic control Area Navigation (RNAV) departure procedure on Runway 33 Left (33L) at Boston-Logan International Airport on January 14, 2013. The Draft EA is available for review online at [www.bostonRNAVFA.com](http://www.bostonRNAVFA.com) or in hard copy at the Framingham, Winthrop, or Boston (East Boston Branch) Public Libraries.

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Ms. Terry English  
Project Manager  
Federal Aviation Administration  
11 Murphy Drive  
Nashua, NH 03062  
[Terry.English@faa.gov](mailto:Terry.English@faa.gov)

AD#12880647  
MWDN 1/16/13

**Table B-1**  
**Response to Comments – Elected Officials and Representatives**

Organization/ Representative Group	Comment	FAA Response
<p align="center">Michael E. Capuano, House of Representatives, 8th District, MA</p>	<p>I respectfully write regarding the implementation of the Area Navigation (RNAV) SID on Runway 33L at Boston-Logan International Airport. I applaud the FAA's continued commitment to NextGen technology. As must be expected, questions have been raised regarding the environmental impacts that this implementation will have on certain communities in and around Greater Boston, particularly regarding over-flight noise.</p> <p>First and foremost, I ask that the FAA extend the existing comment period deadline of Friday, February 15, 2013. An extension will allow citizens and my office to more fully explore the ramifications as well as any benefits of this change. Only then will we be able to make informed comments on this issue.</p> <p>I have great faith that RNAV technology is an improvement over the approach and departure system currently in place. My questions arise from assessing whether we are using this technological innovation to its fullest. Balancing aviation safety and security with efficiency and community impact is always a difficult undertaking. I believe that the RNAV technology will improve our ability to better strike that balance.</p> <p>As it pertains to over-flight noise, my preference has consistently been the "share the burden" through fanning. It is my initial understanding that, although the proposed RNAV guided departure plan will benefit some areas now heavily impacted by noise, it will further condense flight paths in other areas. My thoughts are that RNAV, with its ability to create tighter channels for flight paths would also allow for the creation of multiple channels within the boundaries of current flight paths. Thus, this technology could present an opportunity to create an "intentional fanning" system rather than the haphazard system that exists today or the deliberate concentration that is planned upon implementation of RNAV.</p> <p>This more balanced approach would be consistent with my previous position on over-flight noise. All of Greater Boston benefits from the existence of an international airport and the burden of such a facility should be spread amongst as many as</p>	<p>Comments noted.</p> <p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p> <p>In this particular case, the FAA determined that overlaying the existing conventional procedure as closely as possible would meet the project purpose and minimize noise impacts to the communities surrounding Logan Airport, since noise exposure changes are measured by the delta between the No Action and Proposed Action alternatives.</p> <p>The purpose of the Proposed Action is to increase the efficiency of air traffic control procedures at Logan Airport and in Boston TRACON's adjoining/ overlying airspace by using NextGen technology – defined procedures instead of less efficient ground-based and/or radar vector procedures. A procedure is a predefined set of guidance instructions that define a route for a pilot to follow. "Fanning" is not consistent with the purpose and need for the project as described in Section 1.5. There are currently no RNAV "intentional fanning" systems. NOTE: Although a separate process, CAC voted to eliminate fanning in the BLANS.</p>

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	<p>possible to achieve equity. Determining whether this approach is sound and feasible and answering other reasonable concerns of citizens requires time - thus my request for an extension.</p> <p>Boston has always served as an innovator in many arenas, industries and technologies. Aviation is no different. I applaud the FAA for their patience and creativity as we dealt with the on-set of Runway 14/32; the nation's first uni-directional, weather restricted runway. Also, the effort by so many on the Boston Logan Airport Noise Study (BLANS) is an admirable example of the work that can be accomplished when industry, government and the people we represent sit at the same table.</p> <p>I have great confidence that we can build upon this record of communication and cooperation for the Next Generation of aviation innovation. I look forward to continuing to work with you and the fantastic team at FAA on this issue and many more. Thank you for your attention to this matter.</p>	
<p>Stephen F. Lynch, House of Representatives, 9th District, MA</p>	<p>I write to you in regards to the RNAV SID EA for Logan Airport Runway 33L. It is my understanding that the FAA will be accepting public comments on this Assessment until February 15th 2013. We have received numerous emails and calls from constituents who are concerned they will be negatively impacted by this change to the RNAV procedure. Many of them are concerned about the brief public comment period. Therefore, I respectfully request that you extend the public comment period in order to give residents ample time to express their concerns and have those concerns addressed.</p>	<p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p>

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<p>Stephen F. Lynch, House of Representatives, 9th District, MA</p>	<p>I write to you in regards to the RNAV SID EA for Logan Airport Runway 33L. I have received dozens of letters as well as a petition signed by nearly 1000 residents of Milton expressing their concerns over this procedure. Some of the concerns have been about the population data that was used in the EA that would determine how many people will be affected by the new departure route. They have also expressed concern over the data used in the year-averaged Day-Night Average Sound Level (DNL) metric. As I am sure you are aware, the Town of Milton is already significantly affected by two other runways. The residents are fearful that this new procedure will have an additional negative impact on their community.</p> <p>I, too, share these concerns. I respectfully request information explaining how the FAA arrived at these conclusions. This proposed change directly affects the quality of life in the Town of Milton. We need to be as certain as possible in determining whether or not the information used is accurate prior to implementing any changes in the traffic patterns over the Town of Milton.</p>	<p>The FAA prepared a written response dated April 1<sup>st</sup>, 2013:</p> <p>This is in response to your letter dated March 14, 2013, in which you stated concerns over data used by the Federal Aviation Administration (FAA) in the Draft Environmental Assessment for a proposed Area Navigation (RNAV) departure procedure for Runway 33L at Logan Airport. Specifically, you requested information explaining how the FAA arrived at conclusions related to populations affected by the new departure route and the data we used in the yearly day-night average sound level (DNL) metric to predict changes in noise levels from the proposed RY 33L RNAV procedure.</p> <p>Section 3.3.1 in the Draft EA explains the noise modeling methodology FAA uses to assess impacts from aircraft noise. FAA regulations require the use of the DNL metric and the FAA's Integrated Noise Model (INM), which is used to predict changes in DNL such as those caused by changes to air traffic routes around an airport. Section 4.1 in the Draft EA further explains that the INM input data for 2009 and the 2015 forecast year was taken directly from the Boston Logan Airport Noise Study (BLANS). INM data input was developed by FAA expert noise consultants and further reviewed and approved by an independent noise consultant representing the Logan Airport Community Advisory Committee in the BLANS. Modeling the proposed RY 33L RNAV departure required relocating RNAV equipped aircraft already departing runway 33L onto new RNAV tracks provided by the FAA. This input data and final noise results was reviewed by two separate FAA expert noise consultants and ultimately approved by the FAA. As a result, we maintain the input data and results of the INM model are accurate based on FAA</p>



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		<p>requirements.</p> <p>The noise exposure graphics depicted noise exposure at levels of 45 DNL or above for populated Census block centroids. Where noise exposure is below 45 DNL (in either the 2009, 2015 No Action, or 2015 Proposed Action condition), no census block centroid is shown. Thus, where noise levels are below 45 DNL, it may appear that no aircraft noise exists. This is not the case, as the Draft EA states on page 4-2 “The FAA determined that 45 DNL is the minimum level at which noise needed to be considered because “even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this [45 DNL] value.”” The Draft EA published a table of population impacts by community. Table 4.5 (page 4-5) depicts the Population Exposed to Noise Levels by Community between 45 and 65 DNL. This table reports only the population exposed to noise levels above 45 DNL in either 2015 No Action or 2015 Proposed Action condition. The remainder of the population of any town in the Study Area not included in the table is forecast to be exposed to aircraft noise less than 45 DNL.</p> <p>By public request following the Boston Logan Community Advisory Committee meeting on January 24, 2013, the FAA modified Table 4.5. The project website (<a href="http://www.bostonmavea.com">www.bostonmavea.com</a>) was updated with two tables (Noise Results by Study Area Town – DNL Values and Noise Results by Study Area Town – Population). The population table added the total population of each town as well as a breakdown of neighborhoods within the City of Boston.</p> <p>The FAA provided detailed results data to a concerned constituent who has provided input to elected officials in Milton regarding the Proposed Action. Your constituent suggested that noise was not calculated or reported in one</p>

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		<p>specific location, for which the FAA provided the clarification that the geography of the census block indeed included no population. The constituent also pointed out that the census reports a higher population than that provided in the Draft EA for Milton, a difference that is attributable to the number of persons residing in group quarters. The Final EA and response to comments will clarify this second point.</p> <p>Overall, the Draft EA indicates that there is no significant noise impact anywhere within the Study Area, and that the number of persons that would be exposed to noise levels above 45 DNL is forecast to decrease with implementation of the Proposed Action</p>
<p>Brian A. Joyce, Senator, Norfolk, Bristol and Plymouth District, MA</p>	<p>I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on towns that I represent, including Milton, Canton, and Randolph due to the noise and environmental impacts from heavy airplane traffic. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well.</p> <p>Moreover, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route.</p> <p>I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths.</p>	<p>The environmental review conducted as part of the EA process was thorough and concluded that there were no significant impacts to any applicable resources within the 1,500 square mile study area. As a result, there is no need to conduct a more detailed Environmental Impact Statement as part of the NEPA process.</p> <p>As requested, the FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p> <p>See response to Congressman Lynch regarding populations within Milton.</p>

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<p>Emily J. Kowtoniuk Chief of Staff Office of Senator Brian A. Joyce</p>	<p>A couple constituents have come to us with follow up questions –</p> <ul style="list-style-type: none"> <li>• How will the proposed flight path affect Washington Street in Canton (near Canton Center)? From the more detailed map of our district that you sent to us, it appears that the narrowed flight path will not cross over that area. Could you provide the change in DNL (if any) for Canton Center?</li> <li>• How high will the planes fly when crossing over Milton? I seem to remember that you mentioned 10,000-12,000 feet, but I wanted to confirm.</li> <li>• How high are the planes currently flying when departing from runway 33L and crossing over Milton?</li> </ul> <p>How high are the planes currently flying when arriving on Runway 4 and departing from Runway 27 when they cross over Milton?</p>	<p>The FAA responded via email on March 15<sup>th</sup>, 2013 as follows:</p> <p>The Proposed Action (Runway 33L RNAV SID) traverses northeast of Canton Center and the intersection of Washington Street. Noise values in this area are well below the threshold for which FAA reports noise exposure (45 DNL). The noise modeling indicated that most census block centroids in this location might experience increases of less than 1 DNL. However, at these low levels, noise exposure from other sources (automotive traffic, industrial and commercial noise, etc) would likely exceed aircraft DNL levels.</p> <p>Expect an increase in the existing average altitude of 10,000 feet to 11,000/12,000 feet.</p> <p>As illustrated in Figure 2-9 of the Draft EA, aircraft fly over Milton about 10,000 feet on average after departing from Runway 33L.</p> <p>When arriving Runway 4 aircraft are at about 2,500 feet descending to about 1,700 feet over the town of Milton.</p> <p>When departing Runway 27 aircraft are at about 3,200 feet climbing to about 5,500 feet over the town of Milton.</p>
<p>Mike Rush, State Senator, Norfolk and Suffolk District; Angelo Scaccia, State Representative, 14th Suffolk District</p>	<p>As elected state officials who represent the citizens and neighborhoods of the Hyde Park section of Boston, we want to voice our opposition to the FAA Proposed Action to implement a new air traffic control Area Navigation SID procedure on Runway 33L. Our opposition stems from many factors, including issue yet unaddressed and the absence of basic data to justify a new implementation.</p> <p>Hyde Park is a suburban residential area whose neighbors' have</p>	<p>A large portion of the Study Area currently experiences aircraft overflights, especially those in close proximity to Logan Airport. The area of Hyde Park experiences aircraft overflights from arrivals to Runway 04R, Runway 22 (from the south), Runway 09, and Runway 27, and from departures from Runway 27, Runway 22L, Runway 22R, and Runway 33L.</p> <p>Noise exposure in the area of Fairmount Hill/Hyde Park is generally less than 45 DNL, therefore not shown in the map.</p>

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	<p>not previously been overflowed by Logan air traffic. The new proposal causes concern with the resident of our neighborhoods, who are especially apprehensive about noise levels and potential environmental impacts. The EIA does not appear to account for the noise level exposure to the population that are directly under the proposed path. The FAA did not include any population centroids for the Hyde park neighborhoods and communities that will be impacted by the proposed 33L RNAV SID departure route. Furthermore, our constituents' concerns regarding health and future air quality have not been addressed to a manner sufficient to relieve anxieties that aircraft emissions pose no detriment to the residents who lie in the path of these findings.</p> <p>A lack of representation from Hyde Park on the Logan CAC, the absence of FAA public meetings to discuss plans, coupled with the potential negative effects on citizens and their quality of life, only adds to the confusion.</p> <p>While we do not profess expertise regarding FAA and flight issues, we will continue to support approaches and departures that utilize the ocean side of Logan Airport, rather than heavily populated areas. The NextGen program, although worthy in theory, has lead to numerous lawsuits from communities that have not been overflowed previously. It is incumbent on all decision-makers to take advantage of the landscape of the airport keeping the communities that are affected at the forefront of any assessment.</p> <p>While our opposition remains, our goal is to provide our constituents with the most current information that is available from the FAA and Massport to address any concerns and apprehensions regarding the proposed RNAV SID departure for Runway 33L. Therefore, we will be calling on you to provide use with timely and specific data so we can mitigate negative effects on the residents we represent.</p>	<p>Noise exposure shown in the figures represents ALL operations at Logan on an average annual day at levels of 45 DNL or above. Modeled noise levels in Fairmount Hill/Hyde Park tend to fall in the 40-45 DNL range (with the northwest portion falling slightly above 45 DNL). Analysis of the Proposed Action indicates that less population would be exposed to noise levels above 45 DNL.</p> <p>The CAC President confirmed that CAC membership has included representatives of the Hyde Park and Roslindale areas.</p> <p>The FAA process for involving the public and soliciting public comment on the Draft EA is consistent with the NEPA. According to FAA's NEPA implementing regulations (FAA Order 1050.1E Environmental Impacts: Policies and Procedures), the FAA should involve the public, to the extent practicable, in preparing EAs. In addition to meeting with the CAC on January 24, 2013 to answers questions about the Draft EA; FAA published notices in the Boston Globe, Boston Herald and Metrowest Daily newspapers announcing availability of the Draft EA for public comment (see Section 5.4). The newspaper notices included a website address for the public to review the Draft EA and information on how to send comments to the FAA within the specified comment period.</p> <p>In some situations, aircraft flights can be directed over compatible land uses when there are compatible land uses, such as the Atlantic Ocean, and adequate navigation techniques available. The FAA agrees that flying over water is a way to reduce noise exposure for some communities. Because Logan Airport is located in a densely populated area, it is impossible to fly solely over compatible land use. Therefore, it would be impossible to route aircraft to avoid densely populated areas. Aircraft procedures at Logan</p>



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		<p>Airport take advantage of compatible land uses as frequently as possible. The commentors are encouraged to explore the resources available regarding the extensive study of potential noise abatement measures evaluated under the BLANS (<a href="http://www.bostonoverflight.com/index.aspx">http://www.bostonoverflight.com/index.aspx</a>), as well as Massport's noise abatement web site (<a href="http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx">http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx</a>).</p>
<p>William C. Galvin, State Representative, 6th Norfolk District</p>	<p>Permit me to offer this letter as my opposition to the proposed RNAV departure route for Logan International Airport's Runway 33L.</p> <p>If implemented, this proposal will increase the noise and damaging environmental effects on the residents of Canton and neighboring communities. Changing the existing airplane pattern at Logan to those recommended in the FAA's Runway 33L RNAV will have an adverse effect on the health and overall wellbeing of all those who reside in this area. These residents are already heavily impacted by southbound departures from adjacent runways.</p> <p>In closing, may I request that a more in-depth examination of this route be undertaken as well as additional time be granted to enable full community participation before any change in the existing air traffic pattern is made.</p>	<p>The environmental review conducted as part of the EA process was thorough and concluded that there were no significant impacts to any applicable resources within the 1,500 square mile study area. As a result, there is no need to conduct a more detailed Environmental Impact Statement as part of the NEPA process.</p> <p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p>
<p>Walter F. Timilty, State Representative, 7th Norfolk District</p>	<p>I am taking this opportunity to write to you regarding the FAA's proposed RNAV departure route from Runway 33L. If implemented as planned, this route will have a tremendously adverse effect on the quality of life in the Town of Randolph, which I have the privilege to represent, and many other surrounding towns that lie under the proposed southbound departure route.</p> <p>After reviewing the FAA's proposal, concerns remain regarding the increased volume of air traffic over the town and the</p>	<p>The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable Air Traffic Control departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Randolph will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts</p>

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	<p>corresponding increase in noise pollution for the citizens of the Town of Randolph. Moreover the potential environmental side effects for the swath of land beneath this flight path and its inhabitants generate further concern. Additionally, Randolph is already subjected to a high rate of aeronautical traffic from arrivals on Runway 4 and departures from Runway 27. In short, the addition of departures from Runway 33L would be extremely deleterious to a community such as Randolph, which is already overburdened by air traffic.</p> <p>For these reasons, it is my hope that you will urge the FAA to revisit this proposal with a neighborhood specific study of noise increases for Randolph, as was done in Boston. In addition, it is my further goal to extend the public comment period. This will enable the residents of Randolph, many of whom were unaware of the comment period, to weigh in with their valuable opinions. It is my belief that increased dialogue generated by our citizenry is a positive in any public discourse.</p> <p>I appreciate your consideration of both my concerns and the requests that have derived from such concerns. I look forward to continuing to work with you to find a solution that is suitable to all communities affected by the proposed changes.</p>	<p>to residential land uses in Randolph based on FAA noise impact criteria, although with the Proposed Action, approximately 596 additional residents would be exposed to noise levels above 45 DNL.</p> <p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p>
<p align="center">Rob Consalvo, Boston City Councilor, District 5</p>	<p>I am writing to express my objection to the FAA's RNAV SID Draft EA. After weighing the goals of NextGen and the anticipated environmental impacts, I have determined that FAA goals do not trump the present or future quality of life expectations of my constituents living under the more precisely prescribed flight path.</p> <p>Upon thorough review and consideration of the data, I do not share the conclusion or recommendations that air traffic flying at a higher altitude along carefully prescribed routes does not pose a noise impact on those individuals, especially my constituents, under its path. In fact I believe that more concentrated air traffic will have an adverse effect on my constituency contrary to the draft EA.</p>	<p>Those residents directly beneath the RNAV SID flight track may experience more aircraft overflights as a result of implementation of the Proposed Action. However, the noise analysis performed for this EA indicates that there would be no significant impact (an increase of 1.5 DNL in areas of 65 DNL or greater exposure), nor would there be increases of 3 DNL or 5 DNL in areas exposed to 60-65 DNL or 45-60 DNL, respectively. In addition, over 67,000 less people will be exposed to noise levels above 45 DNL.</p> <p>Section 1.5 of the Final EA outlines the Purpose and Need for the Proposed Action. The purpose of implementing an RNAV SID from Runway 33L is to increase the efficiency of air traffic control procedures at Logan Airport and the surrounding</p>

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	<p>Furthermore, I suggest that the FAA continue to utilize conventional means of directing air traffic from Logan Airport because we are learning through review and public comment that the alternative is neither perfect nor ideal. I have come to the conclusion through feedback and public comment that the conventional means of directly air traffic presently in use results in a more equitable distribution of noise and air traffic from departures at Logan Airport.</p> <p>I suggest that before any decisions are finalized a more thorough and convincing emphasis be placed on existing noise impact prior to the impending six month review period for the proposed new flight path.</p>	<p>airspace by using NextGen technology. Further, Runway 33L is the only major runway at Logan without an RNAV SID. Operating with one runway that requires a different procedure could have the potential to cause flight deck confusion.</p>
<p>William Lyman, Logan CAC Jamaica Plain Representative</p>	<p>As the Logan Airport Community Advisory Committee member representing the Jamaica Plain section of Boston, I am writing to object strongly to the "Proposed Action Alternative Runway 33L RNAV SID Procedure" as presented in the Draft EA released on January 14th of this year.</p> <p>I have attempted to keep up with the dense, technical material produced by the BLANS consultants during which I believed the R33L RNAV SID procedure would be solely a noise-reducing alternative for the communities north of Boston. Not until I reviewed the graphic (Figure 1-4) in the FAA's Draft EA did I recognize two ways in which I now believe this proposal would violate established guidelines for CAC action:</p> <ol style="list-style-type: none"> <li>1. The proposed action would concentrate noise from southbound 33L departures over Brookline, Dedham, West Roxbury and Milton—areas that already experience aircraft noise pollution from other runways.</li> <li>2. The proposed action would newly impact Newton and Watertown—areas that have no representation in the CAC and are uninformed of this proposed change.</li> </ol> <p>The CAC's code of ethics should not, in my opinion, allow this proposal on either count. My question for you is whether the</p>	<p>The FAA's Proposed Action is independent of the BLANS. The purpose as described in Section 1.5 of the Final EA is to increase the efficiency of air traffic control procedures at Logan Airport and in Boston TRACON's adjoining/overlying airspace by using NextGen technology – defined procedures instead of less efficient ground-based and/or radar vector procedures. As stated in Section 2.1 of the Final EA, FAA considered information learned in the BLANS and the BLANS goals when designing the RNAV SID for operational purposes.</p> <p>FAA cannot speak for the Logan Airport CAC on what may "violate established guidelines for CAC action" or what may be inconsistent with "CAC's code of ethics". The FAA process for involving the public and soliciting public comment on the Draft EA is consistent with the National Environmental Policy Act (NEPA). According to FAA's NEPA implementing regulations (FAA Order 1050.1E Environmental Impacts: Policies and Procedures), the FAA should involve the public, to the extent practicable, in preparing EAs. In addition to meeting with the CAC on January 24, 2013 to answers questions about the Draft EA; FAA published notices in the Boston Globe, Boston Herald and Metrowest Daily newspapers announcing availability of the Draft EA for public</p>

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	<p>second objection in particular violates the FAA's compliance with NEPA regarding moving routes over previously unaffected, unsuspecting communities. I cannot attend the CAC meeting where this will be discussed on January 24th. I will ask Chairwoman Sandra Kunz to read this letter into the minutes of that meeting. Please accept this as my formal EA comment on this proposal.</p>	<p>comment (see Section 5.4). The newspaper notices included a website address for the public to review the Draft EA and information on how to send comments to the FAA within the specified comment period. As a result, notice was available to Newton, Watertown and any other towns not represented on the CAC, to comment on the Proposed Action or "route" regardless of how it impacts their particular community.</p> <p>In addition, as part of the ongoing Boston Logan Airport Noise Study (BLANS), FAA sent certified letters to the elected officials of each community in the study area several times since 2007. FAA encouraged officials to review the BLANS website and join the CAC, if they were concerned that any of the measures could potentially impact their communities. An RNAV SID for Runway 33L has been under consideration in the BLANS since 2008. The letters included information on how to contact the CAC co-chairs. Copies of these letters with the extensive mailing list can be found on the BLANS website at <a href="http://www.bostonoverflightnoisestudy.com">www.bostonoverflightnoisestudy.com</a>.</p> <p>Since most communities in the study area elected not to join the CAC and noise modeling results showed that there were no significant or reportable noise increases within the study area as a result of the Proposed Action, FAA determined a meeting with the CAC and posting notices of availability of the Draft EA for public comment in area newspapers was the most appropriate method to involve the public.</p> <p>Implementation of the Proposed Action does not violate NEPA. Moving flights over a previously unaffected area would not be in violation of NEPA. NEPA procedures ensure that environmental information is available to public officials and citizens before decisions are made and actions are taken. In general, the purpose of NEPA is to disclose potential environmental impacts, solicit public comment, and if necessary, evaluate mitigation options.</p>
Mona Thaler, Brookline CAC	I have represented Brookline on Logan Airport's Community	See response to Will Lyman above.



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Representative	<p>Advisory for over 30 years. I am shocked at the “Proposed Action Alternative Runway 33L RNAV SID Procedure” submitted in the Draft EA, 1/14/13 and hereby register my formal objection to the same. This is my official EA comment on the proposal.</p> <p>According to everything I have read, the R33L RNAV SID procedure was to be a noise-reducing alternative for the communities north of Boston. However, the graphics (Figure 1-4), in the FAA’s Draft EA violate the established guidelines for CAC action...i.e.</p> <p>a.. The proposed action would concentrate new noise from southerly 33L departures over Brookline, Dedham, West Roxbury and Milton, cities and towns that already receive significant aircraft noise from other runways.</p> <p>b. Newton and Watertown would receive new, and uninformed noise as a result of this proposal. These cities are unrepresented in the CAC</p> <p>Additionally, NEPA disallows moving routes over communities that have been previously unaffected. CAC must discuss this over time, and, it seems get political, legal, and technical input before proceeding with any formal stand. I am unable to be at the January 24 CAC meeting and request that Chair Sandra read this letter into the minutes for that evening.</p>	
Wig Zamore, Somerville CAC Representative	<p>I am writing to support the Runway 33L RNAV proposed in the January 2013 Draft Environmental Assessment, and to thank you for all the work that FAA, Massport, and your consultants put into this timely effort. As you know, several years ago the Logan CAC participants who represent the communities most affected by recent R33L take-off patterns and volumes met together and amicably decided to ask the FAA and your Boston Logan noise consultants to consider flight patterns that could be concentrated over the most compatible land uses. We proposed that the flights be over waterways, marsh land and industry as much as possible and that more sensitive land uses such as dense residential neighborhoods be avoided as much as possible, especially in</p>	<p>Support of the Proposed Action is noted. Phase III of the BLANS study will evaluate runway use measures for potential noise reduction on surrounding communities.</p>

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	<p>those communities with jets flying under 5000 feet.</p> <p>Although our initial proposals, backed by fellow Logan CAC active members and leadership, asked that the flight tracks proceed further and higher before most of the jets turned toward their eventual routes and destinations, we have tried to be reasonable in accepting your professional responses that raised concerns regarding flight safety and the complicated air space as other regional airports, such as Bedford, needed reservations for their flight paths as well. I believe that the proposed RNAV comes as close to meeting our original objectives as you could, especially until the flights leave the Mystic River area, and appreciate that. Speaking as the Somerville representative, I am grateful for the relief that may be given to eastern Somerville residents who shoulder so many regional transportation burdens.</p> <p>Western Somerville will not receive substantial noise relief until and unless a fairer runway use pattern can be achieved in ongoing collaborative work of the Logan CAC, FAA and Massport. Many other communities also have need for substantive noise relief. Those communities closest to Logan, who are within sight of the airport, are affected by extensive ground noise, as well as the large volume of taxiing, take-off and landing operations. Some of them, especially East Boston neighborhoods abutting the airport, are also affected by airport ground traffic. Neighborhoods close to Logan and downtown Boston are affected by smaller planes operating out of Logan, by local banner planes and by helicopter routes. For better or worse, we are in this together. Either everybody counts, or nobody does.</p> <p>We can only make substantial future progress if we minimize the total environmental burdens of Logan and then fairly share those which remain, including noise. I am committed to treating all communities and people equitably and deeply appreciate all those others who share that commitment, both on and beyond the Logan CAC. Thank you very much for the opportunity to comment.</p>	

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<p>Judy Kennedy, Milton CAC Representative</p>	<p>The southbound route of the Proposed Action RNAV for Runway 33L should be moved further west to mirror the southbound route of Alternative F-HH(v4) voted on by the CAC to avoid going over the Blue Hills Reservation. The noise and environmental pollution the Proposed RNAV from Runway 33L will cause to the Blue Hills reservation is significant. Those visiting the Blue Hills Reservation by law are entitled to “Peaceful Enjoyment”. The Blue Hills are already impacted by low-flying Runway 4 arrivals that disrupt this “Peaceful Enjoyment”. High numbers of residents and non-residents frequent the Blue Hills Reservation annually. This park is a natural and historic treasure.</p> <p>The FAA claims that the Proposed Runway 33L RNAV closely mirrors Alternative F-HH(v4) that was voted upon by the CAC in April of 2012. In truth, the southbound route of the Proposed Runway 33L RNAV does not mirror the southbound route of Alternative F-HH(v4) voted upon by the CAC.</p> <p>The CAC alternatives were based upon valid independent consultant work. The FAA Draft EA regarding the proposed RNAV southbound route from runway 33L departures appears to dismiss valid consultant work. Further, the Proposed RNAV does not closely overlay the southbound route of the current 33L departures. For the FAA to claim that the noise levels will be “imperceptible, negligible, or not noticed” is arbitrary.</p> <p>The DNL metric used as the FAA’s measurement for noise is bad science. There are other valid ways to get a noise measurement that would provide a more accurate presentation of the true noise burden on the human environment. The narrow corridor of the Proposed 33L RNAV will produce excessive, continual and cumulative noise that is not taken into consideration in the DNL metric noise measurement. The town of Milton is already under 2 RNAV flight paths, which are the Runway 4 arrivals and Runway 27 departures. Placing a third RNAV over Milton which is already overburdened with unacceptable levels of noise and pollution is unfair and will have a negative effect on quality of life and property values.</p> <p>In the Draft EA report, the FAA claims there will be minimal</p>	<p>The Draft EA process included the calculation of noise exposure at 307 location points across the Blue Hills Reservation, including properties listed in the NRHP located within the park boundaries. Aircraft departing Runway 33L and turning towards southerly destinations currently overfly the Blue Hills Reservation. Under the Proposed Action, DNL values ranged from less than 45 DNL to 52.9 DNL, and the greatest increase and decrease remaining below 1 DNL, therefore there is no significant noise impact. Additionally based on the location of the park and/or the activities conducted in the park, the park is not located in quiet setting where the setting is a generally recognized feature or attribute of the park’s significance. Consequently, a determination under 4(f) of the Department of Transportation Act is not necessary. The Massachusetts State Historic Preservation Officer concurred with FAA’s finding of “No Adverse Effect” to historic properties within the study area by letter dated May 1<sup>st</sup>, 2013.</p> <p>The Draft EA does not state that the Proposed Action closely mirrors Measure F-HH(v4). Rather, Section 1.4 states that the Proposed Action “will overlay as closely as possible (given existing RNAV design criteria) the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKE ...” It is true that the location of the southbound route of the Proposed Action does not overlay the southbound route of Measure F-HHv4. However, as shown in Figure 1-8, the southbound route of the Proposed Action does overlay the westernmost conventional corridor of Runway 33L departures. Note, that CAC Measure F-HH(v4) in the BLANS was only described up to the Boston VOR 5 DME or at 5,000 feet and not into the enroute environment. For noise modeling purposes, a 6 NM wide corridor was used, because FAA could not determine where the final RNAV route would be beyond the initial waypoint (i.e. TEKKE) until completing the 18-step RNAV process.</p> <p>It is unclear how the Draft EA dismisses valid consulting work. The Proposed Action was evaluated based on required FAA methodologies for noise and is the same approach used</p>

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	<p>impact to Children's Health and Safety Risks. However, studies in the UK have proven otherwise for those subjected to airplane emissions. It is irrational not to give full consideration to the health and safety risks posed to those who may be under the proposed new flight path. For the above reasons, the FAA should not be issuing a "Finding of No Significant Impact". I am in opposition to the southbound route of the Proposed Runway 33L RNAV.</p>	<p>in the BLANS, which was reviewed and approved by both FAA and CAC noise consultants.</p> <p>DNL has been formally adopted by most federal agencies for measuring and evaluating aircraft noise for land use planning and noise impact assessment. Federal interagency committees such as the Federal Interagency Committee on Urban Noise (FICUN) and the Federal Interagency Committee on Noise (FICON) which include the EPA, FAA, Department of Defense, Department of Housing and Urban Development (HUD), and Veterans Administration, found DNL to be the best metric for land use planning. They also found no new cumulative sound descriptors or metrics of sufficient scientific standing to substitute for DNL. Other cumulative metrics could be used only to supplement, not replace DNL. Furthermore, FAA Order 1050.1E for environmental documents requires that DNL be used in describing cumulative noise exposure and in identifying aircraft noise/land use compatibility issues. As described in Section 3.3.1 of the Final EA, DNL is the average sound level from aircraft operations over a 24-hour period, including all time-varying aircraft sound energy within that period, with a 10-dB penalty for nighttime operations. DNL is a metric that accounts for both the frequency of aircraft noise events and the individual noise levels.</p> <p>According to information released in the Airport Cooperative Research Program (ACRP) Synthesis 9, "Health effects on children, particularly those with decreased cognitive abilities, mental disturbances, or other psychological stressors, and studies of pregnancy and low infant birth weights, all indicate either little correlation or conflicting results of relationships between aviation noise and childhood psychiatric disorders, environmental factors, or low infant birth weights. Additionally, recent studies conclude that aviation noise does not pose a risk factor for child or teenage hearing loss."</p> <p>Regarding the impact of aircraft noise on children's abilities to learn, an increasing number of studies have been undertaken to identify a relationship between aviation noise and</p>



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		<p>children's learning. Many historic studies focused on steady-state noise at levels higher than those reported in Milton (rather than intermittent noise sources such as aircraft). However, in 2000, the Federal Interagency Committee on Aviation Noise (FICAN) published a position paper regarding effects of aircraft noise on classroom learning that summarized research on its effects, and indicated that aircraft noise can interfere with learning in the areas of reading, motivation, language, speech acquisition, and memory. Newer studies attempt to compare student learning and cognitive ability between a low-noise environment and a high-noise environment, or in an environment where the source of noise has been removed (i.e. an old and new location for an airport). There is ongoing research into the topic of how aircraft noise affects student learning. The ACRP program is currently undertaking ACRP 02-26 <i>Assessing Aircraft Noise Conditions Affecting Student Learning</i>. This project aims to identify and evaluate conditions under which aircraft noise affects student learning, including evaluation of alternative noise metrics (versus the 65 DNL).</p> <p>Due to the lack of significant noise impacts, it is not expected that implementation of the Proposed Action would result in impacts to children's health or learning.</p>
<p>Sandra M. Kunz, Braintree CAC Representative, President Logan Airport Community Advisory Committee, Inc.</p>	<p>On April 6, 2012 the Logan Airport Community Advisory Committee, Inc. (CAC) voted to recommend measures to be implemented by the FAA. One of those measures was for Departures on Runway 33L. The measure voted is as follows:</p> <p>“6. Runway 33L Departure Measures: The CAC voted to reject measure F-HHv3 and to endorse measure F-HHv4 for departure from Runway 33L. While both measures adversely change the numbers of persons impacted by the measure, the long-term overall impacts of each are less than those of the No-Action alternative.</p> <p>Reasoning: Understanding that the FAA is under direction to</p>	<p>Comment noted.</p>

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	<p>establish an RNAV jet departure procedure from Runway 33L, the CAC considered the comparative impacts of Measures HHv3 and HHv4 against the baseline condition. The baseline was clearly found to be less preferable than either alternative, based on the greater total number of persons exposed to noise above 45 DNL. Assuming the FAA will implement an RNAV that is similar to the two proposed alternatives if the CAC does not recommend approval of one of them, the committee rejected HHv3 as having greater impacts than HHv4 and recommends implementation of the latter.”</p> <p>Although the FAA originally rejected Measure FHHv4, on re-examination the FAA stated that it would implement a measure that would nearly mirror the CAC's recommended Measure FHHv4.</p>	
Declan Boland, Hingham CAC Representative	<p>I have three comments although both are not directly related to the aspect of the overall project. Is this project affected by the recent budget cuts for the FAA? Is the FAA looking at RNP as a possibility for Logan? If yes, how come it is not been talked about. If not, why not? Will there be metrics created for accountability and performance and if yes, what are they and how transparent will they be to CAC and the public. If no, why not?</p>	<p>It is not anticipated that any cuts to FAA's current budget will impact the assessment of or the implementation of the Runway 33L RNAV SID.</p> <p>RNP is RNAV with on-board navigation monitoring and alerting, and is also a statement of navigation performance necessary for operation within a defined airspace. A critical component of RNP is the ability of the aircraft navigation system to monitor its achieved navigation performance, and to identify for the pilot whether the operational requirement is, or is not being met during an operation. This on-board performance monitoring and alerting capability therefore allows a lessened reliance on air traffic control intervention (via radar monitoring, automatic dependent surveillance (ADS), multilateration, communications), and/or route separation to achieve the overall safety of the operation. RNP capability of the aircraft is a major component in determining the separation criteria to ensure that the overall containment of the operation is met.</p> <p>RNP procedures are not part of the Proposed Action, and there are no current plans for implementation at this time at</p>

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		<p>Logan Airport. It is anticipated that as RNAV use becomes more widespread, the use of RNP procedures will also increase.</p> <p>The FAA regularly monitors aircraft operations for safety and efficiency. Immediately upon implementation of the RNAV SID from Runway 33L, the FAA will evaluate the use of the procedure. This evaluation will focus on the performance of individual aircraft and their ability to safely fly the procedure within the required parameters (such as the ability to make turns based on the waypoint locations and to remain within the identified flight corridor). The FAA will also evaluate the interaction of Runway 33L departures with arriving and departing traffic from other runways at Logan Airport. The duration of the post flight analysis is dependent on ensuring that sufficient flight data by all aircraft can be obtained, which is influenced by both the number of aircraft operations, and how frequently Runway 33L is used (driven by wind and weather conditions).</p> <p>Should issues arise, changes such as the movement of a waypoint or adjustment of performance specifications may need to be made. Any potential changes will be evaluated in the context of this EA to ensure that the procedure remains consistent with that analysis. No specific metrics beyond those already in use by the FAA will be created. The FAA does not anticipate the installation of temporary or permanent noise monitors following implementation of the Proposed Action. At a minimum, FAA will share the outcome of the post-implementation review with Massport and the CAC. The need for any additional public coordination will be discussed at the completion of the post-implementation review.</p>
Chris Marchi, East Boston CAC Representative	Coming to the CAC just recently and balancing family, work and volunteer interests, I have not been able to complete these comments until now. I hope FAA will take these thoughts into consideration.	<p>Comments noted.</p> <p>Recommendations regarding CAC and Massport goals and initiatives are outside the scope of this EA and should be coordinated directly with the organizations.</p>

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	<p>I oppose the use of the use of the RNAV system on runway 33L at Boston Logan Airport. RNAV on this runway will increase persistence of the most severe noise impacts for families living under the flight path.</p> <p>Where the goal of the Community Advisory Committee is to achieve an equitable distribution of noise impacts and FAA has failed to produce standards for such over the 10 plus year 8 Million dollar Noise Study, and Massport has refused to take a leadership role in this goal, this region is unprepared to conduct a comprehensive community process fairly representing the interests of the families under proposed flight paths.</p> <p>As a resident of East Boston, an in-close community with persistent impacts, I believe the CAC decision to support any RNAV proposal on 33L is a mistake. Basing such support on net abatement claims of the FAA compared to no action alternatives wrong. Growth of region-wide impacts associated with the growth of a region-wide airport are to be expected.</p> <p>Use of an accounting approach which nets out severe impacts on a one-for-one basis with less severe impacts is inappropriate. Rather than choosing to support what it considers the lesser of two evils, the CAC, to protect those isolated communities under the proposed RNAV flight paths and to meet the public's expectations and our stated goals of equitably distributing noise impacts throughout the region should support a third alternative which disperses flight tracks as widely as is practical and as soon as possible on departures off of any given runway.</p> <p>To correct this lack of proper, fair and representative public debate, Massport should lead an inclusive community discussion of the 'time above' metric of the Integrated Noise Model as soon as possible to fully inform the soon to be affected communities and to properly measure public support for such a proposal. Further, Massport should be the advocate for the few who oppose this in their efforts to protect their families from increased persistence of the greatest impacts regardless of the net public opinion, whatever it may be, for as long as that opinion is clearly based on other people's willingness to expose a few to dramatic</p>	<p>There are no significant impacts as a result of the Proposed Action. Section 4.1.5 presents a summary of the changes associated with the implementation of the Proposed Action.</p> <p>Phase III of the BLANS study will evaluate runway use measures for potential noise reduction on surrounding communities.</p>



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	<p>harm in order to protect themselves from minor inconvenience.</p> <p>With strong Massport leadership, this community has a history of productive collaboration with FAA which we should celebrate and continue. Sensitivity to the shortcomings of this RNAV proposal as it relates to densely populated communities under 33L's flight path, and potential subsequent dispersion tracks which could be developed could yield new improvements to FAA / airport public relations and create improved outcomes for impacted communities, making RNAV a powerful noise management tool.</p> <p>And finally, the FAA and Massport should expedite efforts to replace and improve PRAS, the Preferential Runway Assignment System in Boston, making it the Nation's first formal PRAS and therefore a real and sustainable solution to equitable airport noise impact management.</p>	
Joseph A. Curtatone, Mayor of Somerville	<p>This letter serves as the official response and comment from the City of Somerville, Massachusetts to the FAA's recently proposed change to the Area Navigation (RNAV) Standard Instrument Departure (SID) procedure for Boston-Logan Airport's Runway 33L.</p> <p>Since the opening of Logan's Runway 14/32 in November, 2006, the annual number of departure overflights passing through our community's airspace has tripled with a concomitant increase in disruptive jet noise experienced by Somerville residents and businesses. The vast majority of this air traffic has consisted of large commercial jets. This significant increase in aircraft noise has disproportionately affected a community already bearing an unfair burden of transportation-related environmental impacts from regional highway and rail routes.</p> <p>With these factors in mind, the City of Somerville wishes to express its strong support for the change in the RNAV SID for Boston-Logan Airport's Runway 33L as described in the FAA's January 24, 2013 Draft Environmental Assessment. While we do not believe that the proposed change will adequately address all</p>	<p>Support of the Proposed Action is noted. Phase III of the BLANS study will evaluate runway use measures for potential noise reduction on surrounding communities.</p>

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	<p>of the noise impacts inflicted on Somerville since 2006 by changes in runway utilization at Logan, we anticipate that the new SID will provide significant noise relief to residents in East and East-Central Somerville. We wish to express our appreciation to the FAA for its interest in undertaking this change, which will shift noise away from the most densely populated city in New England to areas in which it will affect far fewer people and at far lower levels.</p> <p>At the same time, we recognize that more can and should be done to reduce the historic rise in jet noise over Somerville – and especially in West Somerville, which will, at best, experience only marginal relief from the SID change outlined in the present environmental assessment.</p> <p>We therefore urge the FAA to press ahead quickly with its required Phase 3 analysis of fair runway use allocation – and, as soon as possible, to propose specific actions based on that analysis. Please expedite your work with Logan Community Advisory Committee to reduce the disproportionate noise inflicted unfairly and unnecessarily since 2006 on Somerville and other communities in the Boston metropolitan area. Given the importance of Logan Airport to our regional economy, an equitable distribution of burdens and impacts among the affected communities is a practical, prudent and desirable goal. To achieve that goal, Somerville will continue to offer its support to all other communities and neighborhoods disproportionately affected by Logan ground noise, and noise from low-flying helicopter and non-jet aircraft.</p> <p>Thank you for the opportunity to express our support for this valuable change. We appreciate the FAA's continuing effort to address noise impacts on those communities that have borne the brunt of jet noise increase engendered by the FAA's operational decisions over the past six years.</p>	
Robert W. Healy, City of Cambridge City Manager	The City of Cambridge is pleased to submit comments on Boston Logan International Airport Runway 33L RNAV SID Draft EA.	Due to the nature of RNAV procedures, portions of Cambridge will experience less overflights, while those

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	<p>Since the construction of the new 33L runway at Logan and the large increase in flights over Cambridge beginning in 2007, the City has expressed its concern and that of its residents over this increase in flights and change in runway occurring without any environmental review. In the meantime, the City has participated in the Logan Noise Advisory Committee study process to recommend alternative methods to reduce and redistribute noise via operational changes at Logan. Several iterations of flight path changes using RNAV procedures for runway 33L takeoffs, that would have had a positive affect for Cambridge, have been proposed by the advisory committee but were rejected by the FAA due to impacts elsewhere.</p> <p>In the absence of approval of previous suggestions, the FAA is now proposed to implement an RNAV procedure for runway 33L for operational and noise reduction reasons. This procedure has some modest benefits for parts of Cambridge in terms of redirecting flight paths, but our concern is that in doing this, flights are more concentrated in the northern section of Cambridge and will result in more noise for residents who have already been burdened with increased noise over several years.</p> <p>Cambridge would like to request that prior proposals, such as F-HH(v4) that included an additional waypoint to the west, be re-examined and adjusted so that such a waypoint may be included to ensure that flights will not be concentrated over the northern section of Cambridge.</p> <p>Cambridge also looks forward to participating in Phase III of the Logan Noise Study, when runway use allocation is examined, in order to find additional ways to mitigate the increase of flights over the city that has persisted since 2007.</p>	<p>residing beneath the flight track may experience additional overflights. There are no significant impacts to residential land uses in Cambridge, and noise levels under the Proposed Action range from less than 45 DNL to 50.4 DNL, with the largest increase in noise exposure of 1.4 DNL. These noise levels are well below the FAA criteria of a significant impact. Under the Proposed Action, approximately 27,085 fewer residents would be exposed to noise levels above 45 DNL.</p> <p>The FAA is independently proposing implementation of the Runway 33L RNAV SID for the purposes of increasing the efficiency of air traffic control procedures using NextGen technology. The FAA is not proposing the RNAV SID for noise abatement or noise reduction reasons.</p> <p>The BLANS Level 3 Screening Analysis Report dated December 2012 explains why various potential noise abatement measures proposed by the CAC (including Measure F-HH(v4)) were eliminated from that process. In general, the measure showed substantial population increases in noise and lesser decreases which was inconsistent with the overall purpose and goals of the BLANS. The Level 3 Report can be found on the BLANS website at <a href="http://www.bostonoverflightnoisestudy.com">www.bostonoverflightnoisestudy.com</a>. Regarding the request to reconsider previous BLANS measures, such as Measure F-HH(v4), the BLANS analysis, of which noise abatement was the purpose, focused on the development of an RNAV SID to the waypoint before aircraft diverge to their exit fixes. After this point, the BLANS measures assumed general routes to the various exit fixes based on RNAV criteria at the time. For the purposes of noise modeling, each of those routes included a three nautical mile wide swath either side of the backbone for a potential route. During the BLANS development and assessment of the iterations of Measure F-HH, the FAA indicated that it could not commit to any specific route beyond the initial stages of the procedure. With the Proposed Action, the location of the RNAV SID, from the TEKKE waypoint to the exit fixes (including the southbound route via CBEAR and COUSY)), is based on current RNAV design criteria and interaction and avoidance</p>

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		<p>of other existing RNAV and conventional flight procedures.</p> <p>TEKKK is located precisely where it is in part based on requests (under the BLANS process) by the communities to avoid certain areas directly off the end of Runway 33L and to ensure that no automatic turns would commence before aircraft were less than 5 NM from the BOS VOR.</p> <p>The Proposed Action will overlay as closely as possible (given existing RNAV design criteria) the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKK. The noise analysis performed for this EA indicates that there would be no significant impact (an increase of 1.5 DNL in areas of 65 DNL or greater exposure), nor would there be increases of 3 DNL or 5 DNL in areas exposed to 60-65 DNL or 45-60 DNL, respectively. In addition, over 67,000 less people will be exposed to noise levels above 45 DNL.</p>
Office of the Selectmen, Town of Canton, MA	<p>We write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on my home town of Canton due to the noise and environmental impacts from heavy airplane traffic.</p> <p>Canton which is located in close proximity to the southbound departure route path which is already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes. In our opinion, the environmental study conducted thus far does not sufficiently account for the population in Canton that would be adversely affected by the potential added noise and pollution from this proposed new route.</p> <p>We respectfully request that this proposal undergo a full, more thorough environmental review with independent analysis, to address the significant issue of noise, pollution, and other</p>	<p>The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable Air Traffic Control departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Canton will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Canton based on FAA noise impact criteria, although with the Proposed Action, approximately 72 additional residents would be exposed to noise levels above 45 DNL.</p> <p>Noise exposure in the area of Canton is generally both above and below 45 DNL. Noise exposure shown in the figures represents ALL operations at Logan on an average annual day at levels of 45 DNL or above. The noise exposure graphics depicted noise exposure at levels of 45 DNL or</p>



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	<p>important nuisance factors. The Board of Selectmen also urge you to extend the comment period, to allow for full community participation in this decision that may have a significant and long term environmental impact on our Community.</p> <p>We appreciate your consideration on these and many other concerns and look forward to continuing to work with you throughout a comprehensive and detailed evaluation process.</p>	<p>above for populated Census block centroids. Where noise exposure is below 45 DNL (in either the 2009, 2015 No Action, or 2015 Proposed Action condition), no census block centroid is shown. Thus, where noise levels are below 45 DNL, it may appear that no aircraft noise exists. This is not the case, as the Final EA states in Section 4.1.2: "The FAA determined that 45 DNL is the minimum level at which noise needed to be considered because "even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this [45 DNL] value." The Draft EA published a table of population impacts by community. Table 4.5 (page 4-5) depicts the Population Exposed to Noise Levels by Community between 45 and 65 DNL. This table reports only the population exposed to noise levels above 45 DNL in either 2015 No Action or 2015 Proposed Action condition. The remainder of the population of any town in the Study Area not included in the table is forecast to be exposed to aircraft noise less than 45 DNL.</p> <p>By public request following CAC meeting on January 24th, 2013, the FAA modified Table 4.5. The project website (<a href="http://www.bostonrnavea.com">www.bostonrnavea.com</a>) was updated with two tables (Noise Results by Study Area Town – DNL Values and Noise Results by Study Area Town – Population). The population table added the total population of each town as well as a breakdown of neighborhoods within the City of Boston.</p> <p>The environmental review conducted as part of the EA process was thorough and concluded that there were no significant impacts to any applicable resources within the 1,500 square mile study area. As a result, there is no need to conduct a more detailed Environmental Impact Statement as part of the NEPA process.</p> <p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p>
Board of Selectmen, Town of Dedham	I am writing to you on behalf of the Dedham Board of Selectmen	The air traffic control system in the United States is the safest

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	<p>who would like to express their concern over the proposal to direct air traffic from Logan Airport Runway 33L over the Town of Dedham.</p> <p>We appreciate the opportunity to comment on the Draft EA which describes the proposals being considered by the FAA. The departure of jets leaving Logan and flying directly over Dedham and some of our neighboring communities will result in a significant change in the noise level that these communities have enjoyed over many years. In addition, the increased number of flights over Dedham increases the threat level from a possible flight accident that could possibly occur over this community. While this community fully appreciates the FAA's emphasis on safety (and that emphasis is clearly depicted throughout the report) the fact remains that changing the flight paths to reject air traffic over Dedham does create the potential for negative impacts upon the quality of life for our residents.</p> <p>The NextGen technology that is now under consideration by the FAA is expected to make air traffic safer over the long term but like all new technology it still awaits the test of time and the establishment of a proven track record. Employing this new technology appears to be a contributing factor in changing the flight paths to direct jet traffic over our communities. Use of the NextGen technology also raises our communities' level of concern relating to safety until the new technology is proven to be safely employed.</p> <p>As this process continues to move forward the Town would like to continue to participate in the dialog so that we can further understand the impacts that these proposals might have on our community. We also want to explore alternative approaches that could help the process reach a more acceptable conclusion as we fully respect the need to address the growing level of interest in air traffic and the economic impacts of making Boston and this region accessible on a world-wide scale.</p>	<p>in the world and FAA works with airlines to make sure that safety is priority one. FAA will never implement an airspace procedure that sacrifices safety. The proposed RNAV SID does not compromise safety. A primary tenant of NextGen is to continue to improve the safety and efficiency of the National Airspace System. RNAV procedures facilitate this improvement in the terminal area environment with SIDs and STARs. Use of RNAV procedures allows for the increased predictability of operations, reduces the amount of voice communication between the controller and pilot, and reduces the interaction between dependent flows in multiplex airspace. At Logan Airport an RNAV SID for Runway 27 has been in place since 1998, other RNAV SIDs since 2010, and RNAV STARs since 2011. As aircraft currently overfly residential areas or areas of elevated terrain such as that present at the Blue Hills Reservation, no additional risk is anticipated or expected.</p>
Annemarie Fagan, Interim Town	My name is Annemarie Fagan. I am the Interim Town	The FAA declined to attend this meeting, as the FAA's policy

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Administrator, Milton	<p>Administrator for the Town of Milton. I wanted to reach out to you regarding the proposed new airplane departure route for Runway 33 at Logan Airport that will fly directly over Milton. Judy Kennedy, the Town of Milton Massport Liaison, first informed me of this issue on Friday, January 18th. This proposed new departure route will have a severe impact on residents of the Town of Milton. Ms. Kennedy is scheduled to attend the Board of Selectmen meeting on Thursday, February 7th at 6:30 p.m. to discuss this very important issue. The meeting will be held at the Senior Center, 10 Walnut Street, Milton. I am requesting on behalf of my Board of Selectmen that someone from the FAA attend the Selectmen's meeting (February 7th) in order to address the questions and concerns of Town Officials and residents. Due to the fact that this discussion will take place eight days before the comment period of February 15th, the Town requests that the comment period be extended beyond the February 15th date. The Town feels this comment period is critical to the success of this project and want our residents to have an opportunity to voice their comments and concerns. I look forward to hearing from you.</p>	<p>has been to work through the CAC and not meet with individual communities. Massport attended the Milton meeting and FAA provided input to Massport on the proposal prior to the meeting.</p> <p>The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.</p>
Office of the Selectmen, Town of Milton, MA	<p>We have concerns regarding the Proposed Runway 33L RNAV that will fly over Milton. Milton is already under 2 RNAV flight paths, the Runway 4 arrivals and Runway 27 departures. This proposal would place a third RNAV flight path over the town.</p> <p>Cindy L. Christiansen, a Milton resident and Ph.D. level research statistician has studied the Draft EA report and writes, "I am concerned that decisions are being made based on bad science, bad data, and/or misleading presentations of data." The concern over faulty data, as well as questionable information regarding the altitude at which the planes will be flying creates a situation under which no informed conclusion can be made. The amount of uncertainty about the proposed plan and its true noise and environmental impact on Milton is too great for the change in the runway 33L flight path to be made.</p> <p>We think that the Draft EA needs further study, clarification, and an explanation of why there needs to be a third RNAV flight path</p>	<p>The FAA provided detailed results data to Ms. Christiansen, who suggested that noise was not calculated or reported in one specific location, for which the FAA provided the clarification that the geography of the census block indeed included no population. Ms. Christiansen also pointed out that the census reports a higher population than that provided in the Draft EA for Milton, a difference that is attributable to the number of persons residing in group quarters. The Final EA and response to comments will clarify this second point.</p> <p>Regarding the questionable information regarding altitudes, the altitude of arriving and departing aircraft varies based on a number of factors, including distance from the airport, the type of operation, ATC instruction, and the performance characteristics of the aircraft. There is no one correct answer to the question "how high are aircraft over Milton", as the geographic area is large and aircraft, particularly those that</p>

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	over Milton when there are other alternatives.	<p>depart from Runway 33L under the current conventional procedure, climb at different speeds and begin their turn from the initial runway heading in different locations. Figure 2-5 in the Final EA provides a sample of the range of altitudes of aircraft departing Runway 33L.</p> <p>With implementation of an RNAV SID from Runway 33L, aircraft will follow a better defined trajectory, that generally increases the distance that aircraft would fly before reaching locations in Milton. Because aircraft typically climb as quickly as possible upon departure, this increased flying distance would result in an increase in altitude.</p> <p>For any Federal action, a NEPA analysis is required. Section 1.1 of the Final EA outlines the FAA's approach to the level of NEPA analysis undertaken for this project. The EA addresses and evaluates any and all potentially affected resource categories according to FAA-required guidelines outlined in FAA Order 1050.1E. Further, the EA uses data that has been developed as part of the ongoing BLANS study, which includes review by the CAC and its independent consultant, who continues to evaluate and advise the CAC.</p> <p>Regarding the request to reconsider previous BLANS measures, such as Measure F-HH(v4), the BLANS analysis, of which noise abatement was the purpose focused on the development of an RNAV SID to the waypoint before aircraft diverge to their exit fixes. After this point, the BLANS measures assumed general routes to the various exit fixes based on RNAV criteria at the time. For the purposes of noise modeling, each of those routes included a three nautical mile wide swath either side of the backbone for a potential route. During the BLANS development and assessment of the iterations of Measure F-HH, the FAA indicated that it could not commit to any specific route beyond the initial stages of the procedure. With the Proposed Action, the location of the RNAV SID, from the TEKKK waypoint to the exit fixes (including the southbound route via CBEAR and COUSY)), is based on current RNAV design criteria and interaction and avoidance of other existing RNAV and conventional flight</p>

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Organization/ Representative Group	Comment	FAA Response
		<p>procedures.</p> <p>TEKKK is located precisely where it is in part based on requests (under the BLANS process) by the communities to avoid certain areas directly off the end of Runway 33L and to ensure that no automatic turns would commence before aircraft were less than 5 NM from the BOS VOR. Several factors came into determining where COUSY should be placed: separation from two other westbound routes (the REVSS and the BLZZR), separation from departures off Runway 27, and the distance needed to stabilize the aircraft after making the 63 degree turn at TEKKK. CBEAR is on the western edge of historical radar tracks and its location also allows for crossovers of conflicting traffic within 10 NM of the BOS VOR, something that is required for safety and efficiency in this complex departure flow.</p>
<p align="center">John Mcveigh, Director of Public Health, Town of Randolph</p>	<p>I am the Director of Public Health for the good Town of Randolph Massachusetts and was inquiring where I could obtain a copy of the proposed FAA Route Change that impacts the Town's of Randolph, Canton and Milton Massachusetts. Is there a web page or online document that has this information?</p> <p>I had a few questions concerning the EA for Airport Runway 33L RNAV SID Environmental Assessment:</p> <ol style="list-style-type: none"> <li>1. Is the Town of Randolph located outside the nationally recognized threshold for significance, DNL 65 dB?</li> <li>2. If so what level is the Town considered on average?</li> <li>3. What will the average altitude be for flights over the Town?</li> <li>4. Are there studies that indicate noise impact vs. altitude that FAA can provide?</li> </ol> <p>Finally: Where can we mail our final comments before the February 15th deadline?</p> <p>Attached is the Board of Health comments regarding the Airport</p>	<p>The Draft EA was made available for review electronically (<a href="http://www.bostonmavea.com">www.bostonmavea.com</a>) or in hard copy at the Framingham, Winthrop, or Boston (East Boston Branch) public libraries.</p> <p>As shown in Figure 4-3, Randolph is located outside the DNL 65 dB.</p> <p>This EA does not determine an average noise level by town; rather noise levels were calculated for centroids provided by the 2010 Census block level data. In Randolph, forecast 2015 No Action and Proposed Action noise levels range from below 45 DNL to less than 48 DNL.</p> <p>Figure 2-5 in the Final EA provides a sample of aircraft overflights within the Study Area. Typical departures from Runway 33L would overfly Randolph between 10,000 and 14,000' AGL.</p> <p>The commentor is directed to the FAA's Airport Noise webpage</p>



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Organization/ Representative Group	Comment	FAA Response
	<p>Runway 33L RNAV SID Environmental Assessment. Please confirm receipt of this message. The Town's Board of Health wish to comment on the proposed flight path changes above.</p> <p>The concerns that we have are both environmental and socioeconomic. We are aware of the National Environmental Policy Act (NEPA), with required a draft EA/ EIS which was prepared to address the potential environmental impacts that could result from the implementation of a new 33L RNAV procedure at Logan Airport. The FAA and the sponsor should fully consider all mitigation recommendations and balance their benefits against those of the proposed action. If FAA or the sponsor does not adopt any mitigation recommended, the environmental assessment (EA) should explain why the recommendation was not adopted. The Board of Health believes that the proposed changes would potentially cause significant effects to the environment in the Town of Randolph.</p> <p>Extraordinary circumstances exist with the proposed alternatives that would prevent use of the categorical exclusion for implementation. The Town Board of Health cites Section 304 of FAA Order 1050.1E, paragraphs a, b, c, d, f, g, I, and j. Therefore both a full environmental assessment and environmental impact statement is required on said route changes.</p> <p>The FAA has developed specific guidance and requirements for the assessment of aircraft noise in order to comply with NEPA. This guidance, specified in FAA Order 1050.1E, requires that aircraft noise be analyzed in terms of the DNL metric. To this end, DNL noise levels are calculated for the average annual daily operations for the year of interest. The noise analysis is conducted for the entire Study Area up to an altitude of 14,000' with land use compatibility under 14 CFR Part 150 and, for purposes of Part 150, that all land uses are considered to be compatible with noise levels less than 65 DNL.</p> <p>The Town would ask that we receive a full environmental review due to the potential negative impacts on the Town of Randolph which may be within the nationally recognized threshold for significance, DNL 65 dB. Nocturnal aircraft noise exposure is</p>	<p>(<a href="http://www.faa.gov/airports/environmental/airport_noise/">http://www.faa.gov/airports/environmental/airport_noise/</a>), as well as the NoiseQuest (<a href="http://www.noisequest.psu.edu/">http://www.noisequest.psu.edu/</a>) for additional information.</p> <p>Comments were to be directed to Ms. Terry English, FAA.</p> <p>Mitigation may be warranted if the Proposed Action would have resulted in significant impacts, which it has not. The FAA is limited to offering sound insulation mitigation to areas that exceed 65 DNL, which is the threshold that the FAA identifies as the boundary for incompatibility with aircraft operations. Even when significant impacts are present, mitigation is not assured. In the case of the Proposed Action, mitigation is not required and is therefore is not included in the EA.</p> <p>The environmental review conducted as part of the EA process was thorough and concluded that there were no significant impacts to any applicable resources within the 1,500 square mile study area. As a result, there is no need to conduct an Environmental Impact Statement as part of the NEPA process.</p> <p>The noise analysis undertaken for this EA follows required guidance for an airspace action. As stated in Section 4.1.2, change in noise exposure for each point in the Study Area is evaluated based on FAA guidance to determine the degree of change in noise exposure. Aircraft noise is required, per FAA Order 1050.1E, to be evaluated in terms of the DNL metric. The Order further defines that a significant impact would occur if a proposed action would result in an increase of 1.5 DNL or more in any noise-sensitive area at or above the 65 DNL exposure level when compared to the No Action Alternative for the same timeframe. Noise contours were not developed as part of this study.</p> <p>Section 4.7 of the Final EA addresses air quality.</p> <p>Section 4.9 of the Final EA addresses Socio-economic</p>

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Organization/ Representative Group	Comment	FAA Response
	<p>associated with considerable public health impact for residents living near major airports or flight routes. Therefore, the FAA must perform a full environmental analysis of the effect that project and alternatives may have. The noise contour maps must clearly and prominently show noise sensitive land uses such as residences, schools, hospitals, churches, etc., relative to the DNL 65, 70, and 75 dB contours.</p> <p>The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for ambient (i.e., outdoor) concentrations of the following criteria pollutants: Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Ozone (ground-level O<sub>3</sub>), Sulfur Dioxide (SO<sub>2</sub>), Lead (Pb), particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>) and particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>). Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings. We would request that an EA and EIS be conducted to ascertain whether the Town of Randolph would be adversely affected by this potential air pollution.</p> <p>Noise as an Environmental Justice issue:</p> <p>The Town of Randolph qualifies under this Order due to its minority population status under Executive Order 12898 of February 11, 1994. Environmental justice analysis must consider the potential of Federal actions to cause disproportionate and adverse effects on low-income or minority populations.</p> <p>Environmental Justice ensures no low-income or minority population bears a disproportionate burden of effects resulting from Federal actions. DOT Order 5610.2 requires FAA to attempt to resolve significant environmental justice impacts before the FAA approves projects or changes. The agency must determine that no possible and prudent alternative to the project exists and that every reasonable step has been taken to minimize the adverse effect.</p>	<p>Impacts, Environmental Justice and Children's Health and Safety Risks.</p>

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Organization/ Representative Group	Comment	FAA Response
	<p>Socioeconomic impacts. The principal impacts to consider are associated with relocating or disrupting a residential or business community, transportation capability, planned development, or employment. Environmental documents should provide information on: Socioeconomic position; individuals living in poorer or minority social circumstances are more likely to have poorer health, as well as be exposed to greater noise. Therefore, measures of socioeconomic position need to be taken into account when examining associations between noise exposure and health.</p> <p>To conclude the Board of Health request a through environmental study on the effects this re-routing will have on the population of Randolph. We appreciate you timely response and would ask that you communicate any discrepancies or questions with these comments prior to publication.</p>	
<p align="center">Paul J. Meoni, Council President, Town of Randolph</p>	<p>On behalf of the town of Randolph, I wish to express my adamant opposition of the southbound impacts of the proposed changes associated with Runway 33L.</p> <p>Randolph is a proud community of approximately 32,000 people. We are a diverse, working class community that should not bear an unbalanced burden of the regional airport.</p> <p>This is a matter of basic human fairness. Randolph is but one of a dozen or so towns south of Boston that benefit from the close proximity to the regional airport. There are multiple communities to our east/southeast that will be alleviated from the air traffic that will be placed in the skies above us. This new plan shifts the burden disproportionately onto an Environmental Justice-designated community. That is patently unfair.</p> <p>Currently, plans to and from Logan Airport fly over the skies of Randolph. We gladly accept that as a trade-off for the convenient proximity of the regional airport. The current burden is reasonably shared. As a result, we are willing to accept our share. This new plan consolidates the burden and does not equitably share the responsibility of noise and environmental impacts.</p>	<p>The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable Air Traffic Control departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Randolph will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Randolph based on FAA noise impact criteria, although with the Proposed Action, approximately 596 additional residents would be exposed to noise levels above 45 DNL.</p> <p>See Section 4.9 of the Final EA regarding Socio-economic Impacts, Environmental Justice and Children’s Health and Safety Risk.</p> <p>It has been a longstanding policy of FAA to avoid shifting noise from one community to another solely for noise abatement purposes. In cases where aircraft flight trajectories may add or introduce additional overflights in a new</p>

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Organization/ Representative Group	Comment	FAA Response
	I would ask that the FAA reconsider the proposed plan and find a more equitable solution. The people of Randolph should not be treated with less respect than any other community.	community, because of aviation operational needs, then an environmental review must be done to disclose the impacts to the public of the necessity of such shifts in noise.
David C. Murphy, Town Manager, Town of Randolph	In my capacity as Town Manager of the Town of Randolph, Massachusetts I wish to express my staunch opposition to the FAA's plan to alter the route of southbound planes off Runway 33L. The proposed changes will consolidate air traffic over Randolph (and select other adjacent communities) in a disproportionate manner. This plan compromises the quality of life and safety for tens of thousand of people for little or no benefit for the public served by the FAA. The FAA is a public agency and as such should operate solely with the overriding principle of acting within the best interests of the public. This plan represents the opposite of the greater public interests and should not be implemented. At a minimum, it will increase noise in our town and over our neighborhoods. Occasional noise is an expectation that every community in reasonable proximity to the regional airport should expect. However, this plan eliminates air traffic in multiple towns to consolidate that impact over Randolph. We are an environmental justice community, a working-class, diverse community. We should not suffer while more affluent towns to the south and east are spared their share of the burden. That is simply not fair and is ignorant of the policies pertaining to environmental justice. We know that airplane traffic creates uncomfortable noise and amounts of air pollution. Those facts are a given. We should not expect a consolidation of that responsibility onto Randolph or any other town. Beyond the impacts of noise and pollution there are also remote (but major) impacts that flight patterns can cause. In 2012, there were five commercial airplane crashes that resulted in ground fatalities. There were countless more small aircraft crashes that resulted in deaths as well. Falling debris is also an occasional issue. By consolidating the flight patterns over specific neighborhoods, you are ignoring public safety impacts. You are consolidating the risk to our residents and thus increasing the danger. Two years ago, Milton Police spent days investigating a homicide that was	See response to Paul J. Meoni.  The air traffic control system in the United States is the safest in the world and FAA works with airlines to make sure that safety is priority one. FAA will never implement an airspace procedure that sacrifices safety. The proposed RNAV SID does not compromise safety. A primary tenant of NextGen is to continue to improve the safety and efficiency of the National Airspace System. RNAV procedures facilitate this improvement in the terminal area environment with SIDs and STARs. Use of RNAV procedures allows for the increased predictability of operations, reduces the amount of voice communication between the controller and pilot, and reduces the interaction between dependent flows in multiplex airspace. At Logan Airport an RNAV SID for Runway 27 has been in place since 1998, other RNAV SIDs since 2010, and RNAV STARs since 2011.

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	<p>actually a body that fell from the passing commercial airplane. In addition to the traumatic experience that community endured, the Town of Milton spent tens of thousands of dollars investigating this matter. This incident, and any falling debris, can pose a major health safety hazard. Though these are remote examples, there are real examples. Can the FAA provide an answer to the question why any amount of life safety risk should be consolidated upon a single people when an existing plan works just fine? Can the FAA justify the new plan ahead of the safety, quality of life, and environmental impacts on an environmental justice community like Randolph? I would suggest not. As a public agency, the FAA has a responsibility to the people which it serves. On behalf of the 32,000 people of Randolph, I would strongly request that the FAA reconsider this plan and return to the planning process to find a more equitable solution.</p>	



Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/18/2013	I am so upset to see that the FAA is proposing to place ALL of the southbound departures for runway 33 over my area of Milton. How could that even be a possibility for the FAA when they know we are already bombarded with low flying departures from runway 27, arrivals from runway 4, some departures from runway 22 and also already some departures from 33. We will have noisy low flying planes over us everyday and every night if you go through with this proposed RNAV path (specifically the southbound path that turns all the planes down over us from Newton). It is unbelievably unfair and immoral for the FAA to even think of putting us through this. I know you and like you as a person and am just hoping you missed seeing on the EA that the southbound route is directly over us because I don't feel that you as a person would do this to us.	Laurie Kennedy	A
1/18/2013	I live in northwest Milton and am appalled to find out that the FAA is planning on putting more departures over this area. We already suffer under one departure path from runway 27 and also an arrival path from runway 4. The planes already over us are low flying, noisy and unrelenting. How is it fair to put another departure path right over us? It appears unethical that the FAA could do this to an already bombarded part of Milton. Runway 27 was roaring over us starting very early in the morning today and in the east winds runway 4 roars over us. Now you plan on putting us under another path so we will never have one day without planes blasting over us? This is completely unfair and unethical to place most of the planes from Logan over one area of one town. I feel you should redesign this proposed path to spare Milton and other affected towns already so heavily impacted by other runway paths.	Pat Greeley	A
1/23/2013	The Federal Aviation Administration (FAA) is proposing a new airplane departure route for Runway 33 that will fly directly over Milton (see your website, chapter 1, figure 1-4). Milton is already heavily affected by 2 other airplane runway flight paths - Runway 4 arrivals and Runway 27 departures - and therefore Milton does not need to have an additional flight path added from airplane departures on Runway 33 or any other runways for that matter!	Tamara Berton	A
1/27/2013	My family strongly opposes the proposed change that will affect Milton Ma. We work off hours and sleep during the day and early evening hours. This proposal would seriously alter our quality of life. I urge you to reconsider this proposal.	Bill Vaugh	A
1/27/2013	I received your email address from Judy Kennedy of Milton, MA who is a member of the Citizens Advisory Committee. I am a Dedham, MA resident and I am sending this email to you from my wife's email address. I am writing to you concerning the recent events regarding the Boston -Logan International Airport Runway 33L RNAV SID Draft Environmental Assessment. Ms. Kennedy sent me all of the information and schematics about the prospective departures that are being examined and their pathways' effects on various towns and neighborhoods regarding noise and air pollution. I am very concerned that the constancy of planes departing from Logan with this new plan will cause a negative impact on the quality of life for those neighborhoods in the schematics that will be affected; i.e., specifically Milton, Dedham, Hyde Park, Canton, Randolph and Readville, just to name a few. Is anyone going to represent those voices in the neighborhoods of the people who have no idea about this horrendous plan? This is why I am sending this email to you opposing the plan for planes to be departing from Logan like a "pitching machine!" The noise and air pollution will also affect the property values of the homes in these new pathways. I have been a Dedham, MA resident for 15 years and do not want to see such a plan affect our beautiful town. I would appreciate it if you could let me know what action steps you will be taking in the prevention of this plan. I realize written comments must be sent to you by Friday, February 15, 2013. It is my hope that this Runway 33L plan will never happen. I also understand that the target date for its implementation is March 7, 2013. This has to be stopped.	Bob St. Germain	HH, G
1/27/2013	I strongly oppose a third flight path over Milton. We are already dealing with two noisy flight paths in our town. Please consider an alternative since our town has had to deal with noise pollution and more recently with some added attention from the very sad turn of events when a young man fell and died from an airplane into our neighborhood. Please consider our requests and I appreciate your time and assistance.	Eileen Heller	A

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/27/2013	I am a resident of Milton and I am writing to express my objections to the proposed revised flight path which will increase airplane traffic over Milton. Milton is already subjected to a large volume of airplane noise, and this proposal would make it significantly worse. I respectfully request that Massport hold a public meeting in the Town of Milton to present the plan in detail, including a thorough explanation of the justification for the plan and the impacts of the plan on the Town.	Ellen DeNooyer	A, H
1/28/2013	I'd like to register my discomfort with the idea of a third flight path over Milton. With two active flight paths over our town, I'd say we're doing our part. A third flight path, particularly one as active as the one planned, is an unfair burden on one suburban town. Please consider other options for routing this flight path. I appreciate your attention to this issue.	Robert Davis	A
1/28/2013	I am writing to you to express my displeasure with the proposed change to the flight plan to West Milton, Hyde Park. I feel that this change will put undue noise over a densely populated area of Milton and Hyde Park section of Boston. Please let me know why these changes are being proposed?	Bill Walsh	C
1/28/2013	I live in Milton & am writing to strongly object to the change in the flight path over my town which the FAA is proposing. We already are in path for one runway & oppose adding another. It also seems to me that this proposed change would greatly increase danger of plane collisions which should of course be the primary concern of the FAA & airline industry regardless of the latter's interest in making profits. Thank you for your sincere interest in opposing the change.	Susan Monack	A, D
1/28/2013	I am writing to you to express my displeasure with the proposed change to the flight plan to West Milton, Hyde Park. I feel that this change will put undue noise over a densely populated area of Milton and Hyde Park section of Boston. Please let me know why these changes are being proposed?	Bill Walsh	A, D
1/28/2013	Here are my questions: 1. How will this affect me? (I'm sure that this is the question most people have!) I read in the report that this will increase noise for about 6,000 people in Winchester. I live on Winthrop Street, in Winchester, and I am wondering how much this will increase the noise in my neighborhood. Can you give some context or description for how many more planes or how much more noise there will be? 2. Winchester appears to be in the 45-50 DNL zone. (Blue on the Chapter 4 Figures.) How loud is that? How much will the increase be? 3. How will this affect other people in Winchester? 4. Is there any way to mitigate the impact of this change? Can the flights take a steeper ascent or decent to reduce noise? I really appreciate your help on this. Please give me a call at your convenience.	John Kilborn	P, O
1/29/2013	I've lived in Randolph for twenty years, on a quiet dead end street with long-time neighbors, just one street away from the wilderness acreage of the Great Pond Reservoir and the adjacent Blue Hills Reservation. I already have planes from Logan flying over my house on a regular basis. I don't welcome the prospect of the sound of more planes. I don't want repeated interruptions of the peace and quiet of my neighborhood from Logan Airport planes going over my house. I'm concerned not only with how this will affect my quality of life, but also my property values. Who will want to purchase my house if it is regularly rattled by low-flying planes? Who would want to continue to live in my town if it is constantly bombarded with unwanted airplane noise? Who would want to raise their children in such a town? I work in nearby Canton. I volunteer my time to my community as a member of the Randolph Historical Commission and the Randolph Historical Society. I'm building a database of Randolph's Civil War records including rare photographs of our Civil War veterans. I'm helping the Trustees of Stetson Hall, a National Register of Historic Places building in Randolph Center, create a concert series for our town residents. I'm personally, invested in this town and this wonderful community of diverse people. Randolph is vital and alive. We don't need, and we don't want, Logan's planes flying over our town. I am in opposition to this plan. Please help me protect Randolph.	Lynn Feingold	E
1/29/2013	I am a resident of Randolph. I do not approve of the change that is being proposed that will impact the southern flight route. When flights come over Randolph it is quite loud and sometimes our hose shakes. Please reconsider the route structure you are considering.	Sandra Castelluccio	E

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/29/2013	I live on Fairmount Hill in Hyde Park. We can currently hear planes as they fly overhead, but luckily this doesn't happen often enough to make it a nuisance. If you aren't familiar with Fairmount Hill it is elevated quite a bit above the surrounding area making it more susceptible to noise from planes above. It is a very quiet and peaceful neighborhood right on the Milton border. Most residents live here to enjoy the quiet suburban like feel while still being inside the city limits of Boston and having access to the benefits of living in Boston. It would be a shame to impact this neighborhood with the increase in plane volume flying overhead. Please do not proceed with this change.	Jess Hamilton	C
1/29/2013	As a life long resident of Randolph I am very concerned regarding the proposal to route more plane traffic over Randolph, Ma. We currently have 2 major highways running through our town which creates a large volume of noise as well as air pollution. Your proposal with increase both of these detrimental factors, Noise and air pollution, which will negatively affect our way of life in this community. There must be an alternative to the disruption of our lives and livelihood in this community and I very strongly oppose this proposal.	Helen Butler	E
1/30/2013	Hello. My name is Afrika Afeni Mills, and my family has been living in Randolph, MA for seven years. I grew up in Brooklyn, NY, which was very noisy, and I was determined to raise a family in a quiet place. Randolph is that place for us. Additionally, Randolph is in the midst of a revitalization, and it would be very difficult to continue to attract people to our town with the noise of planes constantly flying overhead. Please do not establish a new flight path that would include planes flying over Randolph. Thank you.	Afrika Mills	E
1/30/2013	As a resident of Randolph, I strongly oppose the FAA's plan to concentrate more flights over my community. This is a peaceful town. And while consolidating flights into one route may be beneficial to you and the various airlines that fly into Boston, our town and others that this proposal effects should not bear the brunt of the noise that these planes create. In diversity, everyone shares equally in the adverse effects as well as any benefits that are created.	Stephen Alkins	E
1/30/2013	This e-mail is in opposition to any more air-flights over Randolph than we already have. We currently have a lot of noise as a result of planes flying overhead. Randolph's property values are low, and they will only get lower. The noise bothers many people as it is.	Jamie Lieghton	E, G
1/30/2013	I am a life long resident of Milton, MA and I recently read with dismay the FAA's apparent plan to send more plans over our town. This is simply unacceptable. Right now during the warmer months when the windows in my house are open, I can barely hear the TV secondary to the proximity of airplanes flying directly over my house. This is made even worse by the number of flights that are routed over this area. Though I am sure there are certain scheduled intervals between flights, when one is sitting on their back patio on a late afternoon, it seems as if an airplane comes overhead every 45 seconds or so. It is LOUD and INCESSANT. We do not need anymore. Count me as one who strongly objects to what you are trying to do.	John Monahan	A
1/30/2013	On behalf of our entire community: We understand that the FAA has proposed a new departure route from Boston Logan International Airport that would fly directly over Milton, beginning on March 7th. We believe that this flight path will have a significant adverse impact on the quality of life in Milton, particularly for those residents who live near Curry College, Route 138, as well as parts of Canton Avenue and Brush Hill Road. We believe that the FAA has not sufficiently considered environmental, noise, and other nuisance factors. Specifically, the environmental study does not fully account for the population in Milton that would be affected by the noise and pollution produced. Please do NOT allow this flight path to take effect until more study has been completed. If we are to maintain our wonderful status as one of the best communities of our size in the country in which to live, then we do not need more planes flying overhead than already do.	Glenn Kidder; Cecilia Broshahan	A, L

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/30/2013	I am a resident of Fuller Village, a non-profit independent senior housing complex located along a half mile section of Brush Hill Road in Milton, MA. Fuller village consists of approximately 320 units housing approximately 400 senior citizens. In addition, it abuts Milton Health Care, a large private nursing home and day care facility, the population of which is unknown to me. I note from the draft Environmental Assessment (EA) dated January 14, 2013 that consideration was given to routing departing Runway 33L southbound flights outside of the Route 128/I-93 beltway (see Figures 2-1 thru 2-4 of the EA) thereby bringing them over what, arguably, are less densely populated areas. In light of that, I don't understand why the alternative flight path depicted in Figures 2-5, 2-9 and 2-10 is being favored. While I don't profess to fully comprehend the many criteria that have been laid out and commented upon in the EA, I urge you weigh the impact each flight path will likely have upon the residents of Fuller Village and the adjoining nursing facility, and then select the path projected to have the least adverse impact.	Michael Ryan	A, J
1/31/2013	Please do not allow any more flights over Milton. The noise and pollution from constant planes, which often are flying low, are becoming a health hazard for our neighborhood. Many people here are diagnosed with asthma who never had it before in their lives. Surely the planes could fly over the ocean, which is only a mile or so away. In fact, I live so close to the ocean that my homeowners insurance tacks on a special hurricane deductible for houses that are located very close to the ocean. If I'm close enough to have this hazard, then it should be easy for the planes to fly over the ocean rather than my house.	Hilary Hoge	A, I, J
1/31/2013	As a Canton, MA resident, I am writing you to express my concerns regarding the proposed RNAV departure route for Runway 33L. This proposal will negatively impact my quality of life due to the noise and environmental impacts from heavy airplane traffic. Please consider having the proposal undergo a full and thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also request that the comment period be extended to allow full community participation in this decision that will have a significant environmental impact on each of us and the town located below these flight paths. Thank you in advance for any consideration to these concerns.	Catherine Walsh	N, L, M
1/31/2013	We are extremely concerned about the proposed RNAV departure for 33L runway at Logan Airport. We have a few residential developments in the area directly under the proposed flight path and feel that such an action will significantly decrease quality of life concerns due to noise factor. This will, of course, be subsequently reflected in lower tax assessment for the foreseeable future. We hope that as Project Manager with the FAA, you will strongly consider the current draft environmental proposal for the Town of Milton, MA 02186. In closing, thank you for your attention to this matter.	Scott Sherman	A, G
1/31/2013	The FAA has proposed a new departure route from Boston Logan International Airport that would fly directly over parts of Canton beginning on March 7th. This flight path will have a significant adverse impact on the quality of life in the affected residence of Canton and surrounding communities. This will be compounded having enormous impact during early morning hours for first flight routes, attention span of children in schools and flights later in the evening. After reviewing the FAA's Draft Environmental Assessment, I believe that the FAA has not sufficiently considered environmental, noise and other nuisance factors. Specifically, the environmental study does not fully account for the populations that would be affected by the noise and pollution produced. Your consideration to review this subject in more detail is expected.	Roger Sanderson	N, Q, R
1/31/2013	There is not adequate information to confirm a flight route change that would affect the residence of Milton, Ma. Please consider not approving this flight route diversion when there is no pressing reason for change.	Jeremiah Lowney	L, S
1/31/2013	I am very concern that there is a new departure route that could fly directly over Randolph, I have lived in this town for 48 years, we have had many changes, good and bad. The town now has just started to grow, young families are moving in, the town has improved so much in the last few year with the assistance of Senator Joyce, and the new make of the town councils, that I am sure this will be a place that families will flock to, but not if planes fly over with all nuisance factors. This flight path would certainly deter young families from wanting to raise their children in a town that has these Environmental issues. Please reconsider your choice of destroying our quality of life and our town.	Mary Donnellan	E
1/31/2013	As a Canton citizen, I strongly object to the new proposed flight route that may create noise and air traffic over our community. We are already impacted by noise from the Norwood Municipal Airport. Please consider other options.	Elizabeth Parker	E

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I wanted to share with you my concerns about the proposed route changes for flights out of Logan Airport that maybe flying over the Town of Randolph. As it stands right now, I personally have incoming flights circling over my house during the week. At times, the noise is disruptive, especially to my young children trying to sleep. The noise comes through my house whether the windows are open or not. My tax dollars are supposedly assuring me and my family a peaceful place to live. However, it seems that air traffic "Right of way" is given a variance. We have circling flights that come from an easterly direction heading west and then circling northerly to Logan for arrival. We also have a steady stream in incoming flights traveling from a southwesterly direction past my house, header north into Logan. I do not track what days and can only estimate altitudes and noise levels. My point is this – I already feel maxed out on air traffic noise pollution. More importantly though, is my air quality concern. Most people are unaware of FAA programs like VALE, where we are improving airport air quality by replacing ground support engines with battery technology. Most people are not aware that we are reducing the quantity of aircraft at gates using auxiliary engines for preconditioned air requirements, and using preconditioned air units on gate bridges to reduce emissions. All good, however, none eliminate the aircraft engine emissions over my house. Aircraft engine emissions have no hazard mitigation, like those implemented on every car. The pollutants, even dispersed, are a health concern. While you may be able to allay concerns by providing a handy particulate dispersion rate(in ppm) or a summarized report on favorable outdoor air quality around airports, I will contend that we are already subjected to enough pollutants from aircraft flying overhead. I understand your need for continued efficiency, ATC flight consolidation and reduced fuel consumption. However, the families of Randolph are already “Pressurized” with routine air traffic. Most do not know that their air quality has been compromised. Kindly, let us revisit the proposed changes and seek alternatives.	Michael Rossini	E, U
1/31/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on towns that I represent, including Milton, Canton, and Randolph due to the noise and environmental impacts from heavy airplane traffic. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. Moreover, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a full, more thorough environmental review with Independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns.	John Cullen	A, L, M
1/31/2013	please do not change what has worked for Milton for so long. I grew up in the city and remember planes flying overhead. We couldn't hear each other at the dinner table. W2. We moved to Milton and still had the planes. They were a real problem. Milton being so close to Logan. My father knew the type of plane it was before it flew over us. The country like town is now congested and there is stimuli everywhere. Please let us have the little quiet we have. The planes flew over Milton in the late 70's and they rerouted them. The FAA listened then. So please listen now....	Mary Stenson	A
1/31/2013	I write to express my strong opposition to the proposed new flight pattern which will fly directly over Milton, beginning on March 7th. This flight path will have a significant adverse impact on the quality of life in Milton, particularly residents like myself who live off Brush Hill Road and Route 138, This area is the most historic in Milton and has homes which date back to the 1700s. It is outrageous to propose that the charm and tranquility of this neighborhood be disturbed by the noise pollution and damage caused by the excessive noise of airplanes. Residential values should not be trumped by commercial interests which will change one of the Boston area's most attractive and historic sections. I urge you to develop a plan that preserves rather than significantly negatively impacts our neighborhood.	Robert Newton	A
1/31/2013	The planes already fly over Randolph? It appears they have already begun as I see them all the time flying over.... I guess its time to get the permit to so????	William Cronin	E



Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I would like to add my voice to those of others who are distressed by the proposed southern departure route changes which will create new flight paths over neighborhoods in Milton, Massachusetts. Given the already high traffic over Milton, a decision to increase it is puzzling. I can only conclude that logistical analysis fails to put a human face on such decisions and that letters like this will help to correct that deficiency. As you know, Milton was settled in the 1600's and far antedates both the airline industry and Logan airport. Many areas of the town are designated historic places and great effort has been expended to preserve them as such. In the past, we in Milton have welcomed expansions at Logan when they have not harmed us and tolerated them like good neighbors when they did. Further expansion, however, takes advantage of this friendly tolerance and ignores our right to not be overwhelmed by environmental pollution. Beneath the trees that one sees from the air are many people simply trying to live peacefully. I respectfully request that you look more deeply into the impact that this route change will have and consider those of us living below. Why expand air traffic if we are gradually creating an environment that no one will want to live in or visit?	Michael McManus	A
1/31/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on my town of Milton due to the noise and environmental impacts from heavy airplane traffic. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. Moreover, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. I appreciate your consideration of my concerns.	Linda Naclerio	A, L, M
1/31/2013	I am writing on behalf of my family and neighbors to STRONGLY oppose this recommended departure route. There is far too much air traffic in our Brush Hill Road, Milton, neighborhood already. PLEASE put the peace of our community above commerce and do not go forward with this proposal.	Chris Link	A
1/31/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on my family's health and welfare due to the noise and environmental impacts from heavy airplane traffic. My home is located underneath the southbound departure route path. The environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I appreciate your consideration of my concerns and I look forward to continuing to work with you throughout this process.	Douglas White	A, L, M
1/31/2013	I am a resident of Randolph who already has to deal with considerable noise from airplanes, the highway etc. Senator Joyce has informed us that there is an FAA Plan that will impact on us further. Please, try to find an alternative as the situation as it is now is unpleasant at best. Thank you for your consideration on this matter.	Paul Stone	E
1/31/2013	We are opposed to the change proposed in the RNAV departure route for Runway 33L, at Logan Airport in Boston. As a long time Milton resident I strongly believe that this change will create a significant environmental impact on our community, as well as undue noise and pollution. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths.	Sharon & Richard Williams	A, L, M
1/31/2013	I am writing to voice my opposition to the southbound route for departures on Runway 33L. As a Milton resident I feel that the community will be adversely affected by the increase in both noise and environmental pollution this runway will cause. I feel that there should be further options explored before this new plan is enacted with essentially no time for public opposition or debate.	Joseph Morrison	A

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	As a 30+ year resident of Milton, I am distressed by the new proposal for runway 33L. My house is situated in the Blue Hills region of Milton. For years, guests have commented on the air traffic noise in this area. I can't imagine how much more noise would be generated with this new proposal. I strongly urge you to veto this proposal not only for the benefit of the residents but the thousands that visit regularly to hike, bike, ski, swim and picnic in the Blue Hills Reservation.	Jadwiga Allison	A, Y
1/31/2013	I'm writing to let you know I strongly disagree with the new flight path recommended over Milton. The noise of the planes will be very close overhead due to the fact that Milton is so close to the airport and will greatly affect the quality of life here. I am asking you to reconsider this proposal.	Frederica Eder	A
1/31/2013	I am definitely concerned as a resident of Randolph, MA about the new proposed flight pathway. Our town already suffers from enough noise and congestion during the day and night that we do not need the added noise of constant passenger and commercial air traffic. I am writing this email urging you to reconsider the flight path and not put it above Randolph and the surrounding communities. We don't need the added noise and stress while trying to sleep at night and even being at home during the day. This is an issue that has real health and environmental effects on many people. Please do not put any other flight paths over Randolph. Thank you for your time and consideration.	Edward Crowdord	E
1/31/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on the town of Milton, and I am sure all neighboring communities Canton, due to the noise and environmental impacts from heavy airplane traffic. We already have more traffic than the skies can handle, experience debris and pollution (and a dead body occasionally) and fundamentally are abused by the FAA. More specifically, the towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. Moreover, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. And what about the historic significant and wildlife habitat of The Blue Hills Reservation. This resource is one of the City of Boston's rare resources that citizens and utilize for outdoor natural experiences, quiet environments away from all the noise and pollution and it is home to many bird species and reptile species. The current traffic already threatens this vital resource. More traffic will kill it. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns.	Michael Zimmer	A, L, M, Y
1/31/2013	I am writing regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on Canton due to the noise and environmental impacts from heavy airplane traffic. Canton is already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. The environmental study conducted does not sufficiently account for the population that would be affected by the noise and pollution from this proposed route. I request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths.	Jeffrey Wernick	L, M, N

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I think we all understand the necessity of air traffic and accept a reasonably shared burden of air traffic noise and related noises associated with a busy urban airport. We have lived in Milton for about 25 years now, on Adams Street. Every 5 years, the air traffic coming into Logan has escalated; plane arrivals are the early morning "wake up" call, and by 5 pm, we have to stop all conversation if we are outside as planes come in for a landing. The intensity and frequency of the noise has become something to consciously content with, rather than the occasional annoyance. We are not pleased with the new information regarding even more flights over Milton, including more "take off" flights, which I read generate more noise. We are also concerned about the related pollution from airline exhaust. I am wondering whether we, as a community of Milton, are being asked to bear more than our fair share of this burden?? It would be helpful for citizens of affected areas could see the facts about the projected # of flights (both takeoff and landing) that may be coming right over our roofs each day, into our ears, lungs, sleep patterns. We are not objecting to a reasonable share of this burden (although this begins to beg the question about whether it is time to move Logan to a less congested area outside of the metropolitan area), but your office needs to offer up more facts about the proposed volume of traffic over Milton and to assure us that our town is not being excessively burdened in these future plans. thank you, in advance, for your response to these concerns.	Susanna Place	A, U, V, W
1/31/2013	I'm writing because I recently became aware of the new proposed flight path that will negatively impact my neighborhood. I read the following article in the Patriot Ledger this weekend: <a href="http://www.patriotledger.com/news/x459333706/FAA-proposes-new-flight-path-over-Milton-Canton-Randolph">http://www.patriotledger.com/news/x459333706/FAA-proposes-new-flight-path-over-Milton-Canton-Randolph</a> . I live in Milton and was keenly aware when I bought my house, that it was directly under a few different flight paths. I've actually gotten used to some of the noise over time, but I feel that adding additional flights at this point would negatively impact our community. In particular, I'm talking about the southbound departures from runway 33L (a concentrated flight path). There are times when I'm woken by the early morning (red-eye from California) mid-week flights, and ask that you please take into consideration how heavily impacted we already are by runway 4 and runway 27. Please give special consideration to those neighborhoods already affected, such as ours. I understand Logan is a busy airport (I utilize it often)! I appreciate the difficulty you must face in figuring out the various flight patterns and how they affect the neighboring communities.	Tristen D'Arcy	A
1/31/2013	We are getting word that there will be even more airplanes flying over us! This is unfair and unjust! Perhaps it is time for laws limiting the amount of planes allowed to land at Logan!	Richard and Noreen Craig	A
1/31/2013	I am writing this email in regards to the proposed RNAV departure route for runway 33L. As a Randolph resident we are already dealing with heavy air traffic and can't afford to have anymore. In the evening traffic is heavy and flying low enough that things in my home shake. If the weather is bad it's even worse because they planes are flying even lower. We purchased a home away from the airport and shouldn't have to endure the noise population we do on a daily basis and the thought that there may be more is disturbing to say the least. Also, how is this being announced to communities? I found this only because I have signed up from emails from Senator Joyce, but I want to know how others are supposed to know about this and given the opportunity to speak up? Seems like this is a very sneaky way for the FAA to do what they want. I expect a response.	Leigh Minicucci	E, T
1/31/2013	I am writing to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have significant negative effects on the town that I live in due to the noise and environmental impacts from heavy airplane traffic. We already feel the impacts from the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Randolph is already a struggling town with falling home values. I fear that the increased air traffic will drive residents out of Randolph and will degrade the quality of living in Randolph even further. I plan on raising children here and I will seriously consider relocating if this proposed decision is implemented. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths.	Jessica Lutz	E, M

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I object to your proposed air routes over Canton Ma and the harmful effects your proposal will have on my town, health and property. As a non resident from this area, I do not believe you should have any authority to make decisions for the people that live here. I further hope your plan is defeated by the wake of outrage.	Tom Giblin	N
1/31/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect Canton the town that I live in due to the noise and environmental impacts from heavy airplane traffic. Canton located underneath the southbound departure route path is already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns.	Chris Shannon	N, L, M
1/31/2013	I am a resident of Milton, MA, and I am writing to you today to strenuously object to the proposed departure route for runway 33L. Milton residents are already severely impacted by excessive air traffic noise and environmental pollution from jets approaching Logan airport, as well as the seemingly completely unregulated TV news helicopter traffic each morning. I feel that the existing noise needs to first be addressed and abated before forcing Milton residents, and its neighboring towns to accept additional noise and air pollution that this proposed runway departure will surely bring. There are many nights when the approaching planes are separated by mere seconds, and often this lasts well beyond midnight. Each morning brings the loud drone of helicopters hovering in place over my house for long periods of time - usually waking me before 6 a.m. I shudder to think what kind of disaster we'll face when these helicopters collide over heavily populated residential areas. It's clear the FAA is paying no attention to this. Milton does not need any more noise or air pollution caused by air traffic! I urge deeper study into this issue and the health and environmental impacts this proposed departure route will impose upon people living in Milton and surrounding towns. Thank you for your consideration.	Mary Ryan	A, L, Z
1/31/2013	I am writing to you about the rerouting of airplanes over Milton. On my street alone, there are many babies and small children who nap at so many various times during the day and night. In addition, we have children with special needs also who react badly to loud noises and we have a boy who has a hearing problem. Milton, in general has many elderly people including several elderly living residences. We have a hospital with a great many patients. Thank you for your attention to this matter.	Dorothy Hanrahan; Daniel Feerick; William Lacey	A, R
1/31/2013	I am writing in regards to the proposed flight pattern change affecting runway 33L. I am a Milton resident residing on Brierbrook Street which abuts the Blue Hills Reservation. We currently are on the flight path for two of Logan's runways and I believe the addition of this runway will be disruptive to the quality of life in our community. While I can understand and applaud the efforts of Massport to pursue more efficient flight patterns for the sake of preserving quality of life and land as well as reducing our carbon footprint, I also believe that the current flight pattern status must hold much greater weight when reviewing new proposals – especially when considering one that would add to an existing pattern. I appreciate how difficult your job is but I ask that you take into serious consideration how disruptive this addition would be to our community. I consider this the proverbial “straw that broke the camel's back.” It has the potential to make our reservation less attractive to outdoor enthusiasts, our town less attractive as a residential community (which will have an economic domino effect) and potentially increase health hazards to our residents and animals. Thank you for your consideration.	Christopher Mylod	A, Y
1/31/2013	As a resident of Canton, I oppose any new departure route from Boston Logan International Airport that would fly directly over parts of Milton, Canton and Randolph, beginning on March 7th. In my opinion it would have a significant adverse impact on the quality of my family's life. I would request that the FAA reconsider the impact it would have on our lives with regards to environmental, noise and other nuisance factors. Thank you for your time.	Terry Thomas	A, L

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I have just been informed by Senator Brian Joyce about the plan for a new departure flight route due to start March 7, 2013 out of Logan Airport. As a resident of Milton in an area that would be directly impacted by the proposed new flight route, I want to voice my strong objection to this proposal. For many years I have endured the disturbance caused by planes coming into Logan at one - or two-minute intervals in the early evening hours. The noise and vibrations caused by these low-flying planes makes it impossible to be in my back yard in the late afternoon and early evening hours. This is a form of coercion, invisible yet all too real, not to be tolerated in a free society. The detrimental impact of this additional proposed disturbance of the peace is a menace that violates the constitutional rights of individual citizens.	Lilian Randall	A
1/31/2013	I agree with Senator Joyce. I copied his letter below.	Pauline Oleary	N, L, M
1/31/2013	As a Canton resident I am also writing in opposition to the proposed departure route for Runway 33L We already get a constant barrage of incoming flights. Enough is enough. Please consider an alternative to this new route over the water.	Gary Titus	N
1/31/2013	I am asking for a representative, a decision maker from the FAA to come to the Selectmen's meeting in Milton on February 7 to face the public for the purpose of explaining the reasons for the change and discussing the benefits that will accrue to town residents, if any. I understand that this change will result in efficiency. For the people living on the ground that efficiency may come at a tremendous price. Should we evaluate the price to the residents in Milton before considering implementation of this change? Who benefits from this efficiency? Is it the airlines? Is it the FAA? Should town residents be burdened with the cost of noise and air pollution in order to confer a benefit on airlines or the FAA? Is idea of noise abatement furthered by this action? How might a better compromise be reached? Can all of the proposed options be reviewed during the Selectmen's meeting? What in the environment has changed that has caused the FAA to consider this change in departure routings? I look forward to seeing a representative of the FAA at the February 7 meeting so that a meaningful discussion can be had prior to making changes in departure routings.	Philip Johnenning	X, AA
1/31/2013	I understand that plans are being developed to change the flight paths of planes approaching Logan airport in a way that will send them over Milton and several neighboring towns. We already have quite a few low flying planes over the town. I am writing to urge you to explore flight paths that will have the least possible impact on residential communities, possibly approaching the airport from the ocean side when possible.	Gerda Conant	A, BB
1/31/2013	I am writing about the proposed RNAV departure route for Runway 33L. I am a resident of Milton, and I understand that this proposal will affect us both in terms of noise as well as environmental impacts. We residents of Milton pay a high price in terms of property values and taxes to live here, and this proposal sounds like not only will it affect our quality of life, but also the monetary value of our homes. If the FAA does desire to proceed with this proposal, please consider a more comprehensive review and community input period.	Carolyn Lyons and Chris Dangel	A, G, L, M
1/31/2013	This note serves to register our complaint of the proposed new air flight plans. We are deeply troubled by this plan. We want to be sure you understand that we are totally opposed to the plan for health reasons, for how it affects our home resell and for how it disturbs our peace. Please reconsider this plan.	Karen and Harry Daniels	G, L, J
1/31/2013	After studying the proposal to add a new flight path much further west than the existing flight path over Milton, I am hereby registering my opposition to the Runway 33L RNAV departure procedure due to the noise and environmental impacts it will have on the southbound departure route path. Most of this area is already heavily impacted by airplane noise and pollution from airplane arrivals to runway 4 and departures from runway 27. Furthermore, the FAA's environmental study does not fully account for the population in Milton that would be affected.	Sam Panarese	A, L
1/31/2013	Gracias Terry ... visit Milton; see what we mean. :-)	Glenn Kidder; Cecilia Broshahan	A



Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	We are writing to you to express my concern about and opposition to the proposed runway 33L. As residents of Milton, MA, this runway would have many adverse effects on our daily lives in terms of noise and environmental impacts, which in my opinion, are bad enough in this beautiful town. There are many low fly-overs in our town, to the point where people know exactly which flight is passing over their house. Please do your very best to look into other options with less adverse impact.	Thorunn and Ben Zimmerman	A
1/31/2013	My neighbors and I are very concerned about the proposed new flight plans over Milton. We live in a highly populated area, with a large number of children (who play outside as much as possible). We are strongly opposed to the proposal of additional flight paths over Milton. Please consider an alternative route due to the fact that Milton is already on the receiving end of (loud) flight paths as it is. Thanks so much for your consideration.	Audrey Gavin	A
1/31/2013	After studying the proposal to add a new flight path much further west than the existing flight path over Milton, I am hereby registering my opposition to the Runway 33L RNAV departure procedure due to the noise and environmental impacts it will have on the southbound departure route path. Most of this area is already heavily impacted by airplane noise and pollution from airplane arrivals to runway 4 and departures from runway 27. Furthermore, the FAA's environmental study does not fully account for the population in Milton that would be affected.	Ted Panarese	A, L
1/31/2013	I am writing to voice my concern regarding the proposed RNAV departure route for Runway 33L. I reside in the town of Randolph which is already impacted by flights flying over Randolph from the existing airplane arrivals on Runway 4, and airplane departures from Runway 27. Adding another runway path will adversely affect residents. In particular, air pollution leads to deteriorating health conditions and death. We want to be as healthy as possible for as long as possible, and lead quiet lives in our communities. I am asking that all parties involved take into consideration the concerns of those of us who reside in Randolph, Milton and Canton, and that you put this proposal under the magnifying glass of an environmental review before moving forward. We don't want more noise and pollution. We want a better quality of lives for ourselves, our families and children and grandchildren for generations to come. February is a short month and before we know it, February 15th will be here. To ensure that residents get a fair chance to educate themselves on this matter and respond, please extend the comment period at least to the end of February.	Judy Littlejohn	E, L, U
1/31/2013	After studying the proposal to add a new flight path much further west than the existing flight path over Milton, I am hereby registering my opposition to the Runway 33L RNAV departure procedure due to the noise and environmental impacts it will have on the southbound departure route path. Most of this area is already heavily impacted by airplane noise and pollution from airplane arrivals to runway 4 and departures from runway 27. Furthermore, the FAA's environmental study does not fully account for the population in Milton that would be affected.	Mark Panarese	A, L
1/31/2013	I am writing to you regarding the proposed RNAV departure route for Runway 33L. I believe that your proposal will significantly effect, in a negative way, the town of Canton, where I am a life long resident, as well as surrounding towns to Canton, from the noise, and other environmental impacts from the heavy airplane traffic. We are already inundated by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. I respectfully request that you engage in a more comprehensive environmental study with independent outside consultants to address the ever present issues of mostly noise, but also pollution and environmental factors, and further look into alternatives to this plan. I appreciate your consideration of the impact this will have on our already congested and noisy skies above our Town.	Michael Galer	N, L
1/31/2013	I object to the new runway being scheduled over Milton. We already have enough noise, particularly in the summer the noise is nonstop.	Joan Clifford	A
1/31/2013	I received the letter below from my State Senator, Brian Joyce, regarding the proposed RNAV departure route for Runway 33L. As a resident of Randolph, Massachusetts for the past five years, I have observed a significant transformation in this town -- from an environment where one was afraid to walk down the street to an actual thriving community. My biggest concern with this proposed change is that the momentum we have built over the past few years will be stunted, as families and businesses choose not to establish roots in Randolph due to the potential environmental impact of this initiative. This being said, I hope that you will take Mr. Joyce's requests into consideration, as I am certain that my fellow neighbors would also like to express their feelings regarding this proposal.	Brian Brostek	E, L, M

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	As a resident of Canton, Ma, I adamantly oppose a new flight path over the town of Canton. We already have too many planes flying over our community.	Lisa McGrath	N
1/31/2013	Please reconsider the new path over the town of Milton. Airline traffic is so disruptive – and we are already on the “bad weather route” on many days. When planes are in their approach (over our house) we can’t even hear on the phone. It is incredibly disruptive. Milton has so many children, the noise makes it less safe for them to do simple things like cross the street. Thank you for your consideration.	Nancy Gaden	A
1/31/2013	I have been a life long resident of Randolph. I 100% oppose this new flight path over Randolph. I'm sure you are aware that when the weather becomes stormy planes have flown over Randolph as far back as I can remember. I hope with enough residents join me in the opposition of this new flight path.	Vin LaFond	E
1/31/2013	I am writing in concern over the proposed runway 33 into Logan airport in Boston. I live with my family in the town of Milton; a town blessed with urban, suburban and rural areas and a great deal of protected green space. this is a quiet town. although we are close to many major routes, it is a town where you can hear birds in your backyard and children playing outside. we already have a Logan arrivals route that goes right over the blue hills reservation (I know because I see it every time we land from that direction) and we can hear the planes overhead. isn't this enough disruption for one town? now faa is proposing ANOTHER route over our town? please DO NOT set up this runway/route and spare our children the noise, carbon emissions, and distraction it would bring.	Veronica Guerrero-Macia	A, Y
1/31/2013	Please do not allow the flight path over Randolph, MA. This will seriously effect the quality of life for my family and our neighbors. There is already enough noise in our neighborhood with all of the heavy trucking traffic coming through. Air noise will hurt us all and will totally terrify my 86 year old mother. I am doing my best to keep her here with the family instead of in a nursing home. Please help us. Many thanks in advance for your concern and assistance.	Linda Monti	E
1/31/2013	I live on the highest point in Randolph, Ma right on the Canton line. It is impossible for us to use our outside facilities during the summer as there is a constant drone of aircraft all day and early evening lining up with the Blue Hills observatory for landing at Logan ,,,,,, and now you are considering additional aircraft over the same areas. Please reconsider this proposal..... I think that the people of Milton, Canton and Randolph deserve better consideration that this new proposal. We would like to be able to at least open our windows without being blown away with ear blasting airplane noise. PLEASE!!!	Bob Pransky	E
1/31/2013	I am writing in reference to the proposed RNAV route of Runway 33L, which will affect the towns of Milton, Canton, and Randolph. I reside in Randolph which is already exposed to the airplane noise and pollution from other airplane routes. I am asking that the proposal be reviewed more thoroughly in regards to noise and pollution. The communities should also have input in the final decision. Thank you for your time in this matter.	Anthony Ortiz	E, U
1/31/2013	As a resident of Milton, Massachusetts, I share the concern expressed to you by Senator Joyce about the proposed RNAV departure route for Runway 33L. We already are subject to considerable airport noise, especially from the airplane arrivals on Runway 4, which sometimes sound like they are a hundred feet over our house. I join with Senator Joyce in requesting that the proposal undergo a full environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. This study should be widely disseminated, especially to local papers of the affected areas. (Our local paper is the Milton Times.) I appreciate your consideration of the concerns I have expressed.	Robert Murray	A, L, M
1/31/2013	I am a resident of the Town of Randolph located at 30 Lewis Drive. I am aware of the new proposed FAA departure scheme for south-bound planes. I strongly urge the FAA to find an alternate departure path for south-bound flights that is not over the Randolph area. There is already substantial and noisy air traffic over the town , specifically, flights on arrival to Logan International Airport using runways 4Right/4Left. Aircraft noise is a continual problem over my neighborhood , especially in the Spring/Summer months. I have reported planes flying extremely low in their air space several times to the Logan Noise Abatement Line; however, pilots continue to fly ‘low’ over my house. There are nights I need to sleep with ear plugs due to the sound of air craft engines on approach to Logan. I cannot imagine more planes and more noise in this air space. I urge the FAA to find an alternate plan.	Gina Ruvido	E

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Date Received	Comment	Commenter	Response Letter (See Table B-3)
1/31/2013	I am a yet another Milton resident concerned about the FAA flight path proposal. I urge you to please reconsider the new departure route and proposed flight path changes. This change would have an extremely adverse impact on Milton and neighboring communities, in terms of pollution, noise pollution, and a number of other factors. Milton is a unique community. Just a town south of the bustle of Boston, it is a quiet town, home to a number of farms and stables. The noise and environmental pollution will be extremely disruptive to the residents, many of whom settled in Milton precisely because of its quiet, tranquil allure. This changed flight path would also affect the agricultural and animal farms, and make it difficult or impossible to raise horses in the community. This would be detrimental to the economic activity of the town, not to mention the lifestyle of many residents. The Blue Hills Reservation: This 7,000 acre oasis is the largest open space within 35 miles of Boston, with 22 hills and 125 miles of trails. It attracts countless visitors each year. A truly beautiful and scenic area, it is home to a variety of important wildlife, including rare and endangered species such as the timber rattlesnake. Having reviewed the FAA's Draft Environmental Assessment, I am of the opinion that the FAA has not sufficiently considered the way this change in flight path will affect the largest, most popular, and vulnerable open area in the Greater Boston Area, not to mention its residents. Please reject these changes to the FAA flight path,	Adam Greenberg	A, CC, Y
1/31/2013	As a resident of Randolph, I am against another runway project (runway 33L) that directly impacts the town along with Canton and Milton. We are heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. I ask that your group review other venues for this new runway.	Andrea Bohn	E
1/31/2013	I have become aware that the FAA has proposed a new departure route from Boston Logan International Airport that would fly directly over parts of Canton beginning on March 7th. This flight path will have a significant adverse impact on the quality of life affecting residence of Canton and surrounding communities. After reviewing the FAA's Draft EA, I believe that the FAA has not sufficiently considered environmental, noise, and other nuisance factors. Specifically, the environmental study does not fully account for the populations that would be affected by the noise and pollution produced.	Kory McCloud and Brett McCloud	E, L
2/1/2013	My neighborhood will be terribly disturbed by jet engine noise from departing Logan flights. I lived in another neighborhood with heavy jet traffic and it is unbearable. Please cancel FAA proposed plans for jet departure paths over Milton or face strong opposition from neighborhood associations.	Rich McCampbell	A
2/1/2013	I moved to Milton 3 years ago with full awareness that planes would be flying closely overhead. In the end, the benefits of living in Milton outweighed the detriments. But I am dismayed to hear that yet another route passing over Milton is being considered. We already bear quite a bit of noise and more would be quite burdensome. Thank you for your consideration.	Susanne Bloom	A
2/1/2013	We have been residents of Milton, MA since 1997. We purchased our home knowing that there is a fair amount of air traffic above our community. Some days are heavier than others and most of it seems to be landing approach. As property owners and taxpayers in the town of Milton we are against any additional air traffic over our community. Kindly reconsider the proposed plan which will most definitely negatively impact the quality of life in Milton. If you have any questions please feel free to contact us.	Anthony and Sandra Barbera	A
2/1/2013	I am writing to express my displeasure at the proposed new routes for Logan Airport. I live in Randolph and would dread the noise and pollution caused by this. We already have enough planes overhead and I particularly notice it in foggy or other bad weather. I hope you will not make any rash decisions and examine the potential harms this could cause residents of Randolph, Milton, and the other proposed towns.	Marcia Israel	E
2/1/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on towns that I represent, including Milton, Canton, and Randolph due to the noise and environmental impacts from heavy airplane traffic. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths.	Marge Sampson	E, L, M

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Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/1/2013	As a homeowner in Canton, Ma. I am very concerned about the proposed changes of departure routes that will apparently result in an increase of air traffic over my town. My State Senator, Brian Joyce, expressed my feelings perfectly in his recent communication to you: "I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths." I too feel that, given the population density involved, this proposed change merits a much more thorough review and input from the community.	Ed Brendel	N, L, M
2/1/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on my home town, Milton, MA due to the noise and environmental impacts from heavy airplane traffic. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. My home is situated directly under the airplane arrival route. I have lived at this address for almost 40 years. We used to have the FAA noise control complaint telephone number which we used frequently to complain. On Sunday evening, especially, it was like the Berlin Airlift. You could see the line of planes on the horizon waiting to come in for a landing. After all these years of complaints and protests, what do you think are the results? The FAA promised that the new jets would have mufflers and I am now profoundly deaf in my right ear. If this new departure has to be somewhere why can't it be somewhere else. Why can't we share the wealth. One of the earlier FAA cures was to require takeoffs to gain altitude over the Atlantic Ocean and then assume their routes. What happened to that? Additionally, this proposed route is several miles west of existing routes(why can't the existing routes stay where they are), and so will impact additional communities and towns as well. Moreover, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. The FAA hasn't changed the departure route over my residence in forty years! I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns and I look forward to continuing to work with you throughout this process.	Francis Coughlin	A, L, M
2/2/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. I can not imagine more flight paths over my home. When I first moved to Canton I was awoken several times a night thinking a plane was crash landing into my house. Although I am more used to the noise, I find it very disturbing and impacts my quality of life. This proposal will have a significant adverse effect due to the noise and environmental impacts from heavy airplane traffic. The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Additionally, this proposed route is several miles west of existing routes, and so will impact additional communities and towns as well. Moreover, the environmental study conducted does not sufficiently account for the population in Canton that would be affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns.	Lorraine Pigeon	N, L, M
2/2/2013	I agree with Sen. Joyce that a more comprehensive study and independent analysis are needed before any changes made.	Paul Vozzella	N, L, M
2/2/2013	We in the Quisset Brook area of Milton are very much opposed to any more airplane noise. We have an unfair portion of noise already and not so long ago we had the terrible experience of a body falling from a plane. We would appreciate your reconsidering the change in flight patterns you are planning.	Mary McLaughlin	A

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Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/2/2013	I would like to express my disappointment that planes will be redirected over Randolph. Noise is an important quality of life issue in our modern world. Adding more to our daily lives reduces that quality. I urge reconsideration of this plan.	Gloria Solon	E
2/2/2013	I love data! Thanks again for sending it; I've been playing with it most of today and have prepared a draft report that is attached to this email. I'm an academic so am used to comments and criticism about things I write. Please, if you see something that is incorrect or needs clarification, let me know. In my write-up I attempted to give some additional information on the burden to the Milton population and also to give residents a way that they can check the estimates for their residence. As I wrote in the report, I don't know much about DNL measures, but it sure seems like Milton will have only very small changes when the new plan starts. Annemarie, I thought this draft should also go to Judy Sullivan for her comments/criticism but I don't know her and don't have her contact information either. I thought that after you and she have a chance to look at it, along with any others who would be helpful in doing a review, I will make the suggested changes and you can send it to the selectmen. If you think they should get the report in draft form, that's okay too. Frank from My Town Matters also has been very helpful to me so I would like to send the report to him at the same time it goes to the selectmen. Thanks again for sharing the data!	Cindy L. Christiansen, Ph.D.	F
2/2/2013	I am extremely upset and shocked to hear that you are proposing a new departure flight path over Milton, MA right over our neighborhood. I would not have moved here if I had known this would happen. In such a crazy, hectic world my family and I cherish a little peace and quiet in at our home and neighborhood, and would be devastated if this was taken away from us by a new flight plan overhead. Milton is totally residential with families and thus is not a good place for a new flight path. Secondly our health would be in jeopardy due to noise and air pollution. Our health and emotional well being would be severely compromised by the adverse environmental impact of noise pollution and air pollution from this route. It will totally hurt our quality of life. Please reconsider this proposal. I sincerely hope and pray that you will cancel this proposal. Thank you so much for listening and reevaluating this proposal.	Jeanne Val	A, J
2/2/2013	I live in the town of Milton, Massachusetts and I am very concerned and disappointed that, with the new additional flight path being proposed for Logan airport, I will experience even more noise than I do now. Please do not make this change, it will negatively impact my whole neighborhood. Our neighborhood does not need more noise, it needs less. Thank you for your consideration.	Stefano Keel	A
2/2/2013	As a Canton resident, I support Sen. Joyce's position that a comprehensive study and independent analysis are in order before any change is made to Logan Airport flight patterns in this area. In addition to potential negative impact to residents, this area is also important as a wildlife habitat. Thank you for your consideration in this matter.	Marcia McDonnell	N, L, Y
2/2/2013	I would like to protest any air traffic changes that would further increase the current level of noise that the proposed change would effect. Please include me in any protests that are presented to the decision makers.	Leslie McKenna	N
2/2/2013	My husband and I agree with Senator Brian Joyce that any more plane traffic over Canton will be detrimental to our quality of life. We already have air traffic going overhead from Norwood Airport and other areas. Any more would be a real burden.	John and Cynthia McDonough	N
2/2/2013	This family strongly opposes a change on new route departure on runway33L which flies over our property on Brush Hill Lane, Milton. We have fought this route several years ago and found the noise unbearable --- especially in hot weather when the planes seemed to zero in on our houses when returning to Logan airport. We hope the FAA will revise its proposal.	Quinby family	A
2/2/2013	I lived for 37 in Dorchester across from the rainbow gas tanks off Morrissey Boulevard. We were on the flight path for Logan and had to endure quite a lot of noise almost every day. My wife and I moved to the Route 138 side of Milton to escape that constant noise. Now we are going to have to endure it again? At the very least, the FAA should slow things down and reassess the impact to the towns affected. The FAA has given residents a very short time to respond. I hope I am wrong, but this proposal has all the earmarks of a done deal: short turnaround, no timely notice from the FAA to residents. If that is the case, then shame on you all.	Paul DeLorie	A, M



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2/2/2013	As a resident of Milton I am writing in strong opposition to the suggested airplane route over the town of Milton, MA. We already have a considerable amount of air traffic overhead. It is so loud that sometimes we cannot hear our television or even carry on a conversation until the plane has passed. We do not need additional noise pollution, or the air pollution from any more airplanes overhead. Not to mention the potential dangers of things falling from the airplane, which I know is unlikely, but you will recall it did happen in Milton a few years ago. Please try to find an alternative route that does not involve planes taking off over Milton.	Nancy Broderick	A, BB
2/2/2013	I am asking that you please not add a new flight route over Canton! Please! We moved from Quincy to escape the noise! Canton is so beautiful, peaceful, green, walking trails, wildlife, and has so much wonderful conservation land & scenic routes! Please keep Canton free from city noise like a new flight route!!!! We are not a city. We are a quiet town and want to keep it that way!	Moiria Sweetland	N
2/3/2013	As a resident of Canton, I also echo the sentiments and concerns as the Senator Brian Joyce and agree that a further analysis and impact should be undertaken.	Raul and Jamie Carr	N, L, M
2/3/2013	I and many others in my community oppose this decision by the FAA to route departures and arriving planes to fly over our city.	Albert Williams	HH
2/3/2013	We are Milton residents living in the area (Route 138) that will be affected if the new air traffic route takes place. Please reconsider your plans as our rights to a healthy quality of life in Milton will be impacted.	Lorgia Melendez	A
2/3/2013	I already have planes from Logan flying over my house on a regular basis. I don't welcome the prospect of the sound of more planes. I don't want repeated interruptions of the peace and quiet of my neighborhood from Logan Airport planes going over my house. I'm personally invested in this town and this wonderful community of diverse people. Randolph is vital and alive. We don't need, and we don't want, more plans from Logan flying over our town.	Lisa Prostack	E
2/3/2013	We write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on my home town of Milton due to the noise and environmental impacts from heavy airplane traffic. Milton is already located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. The environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors on Milton.	Michele Garvin and Mary Beckman	A, L
2/3/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. This proposal will have a significant adverse effect on the town of Randolph due to the noise and environmental impacts from heavy airplane traffic. I respectfully request that the proposal undergo a full and more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also urge you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on each of the towns located below these flight paths. I appreciate your consideration of my concerns and I look forward to continuing to work with you throughout this process.	Dianne Gillin	E, L, M
2/3/2013	I am against the new flight plan for Logan airport. As a tax payer I am appalled to think would not give us a chance to state our non support of such a change. Thanks to Brian Joyce was the only way I would have known of such a change. With all due respect please count my vote for nay on the flight plans.	Carol Deal	E
2/3/2013	thank you for your help with this bad news. As a Milton resident I am obviously against it, especially since I live in the Curry College area, and would like to help in the effort to prevent it. I have to ask though, what are the reasons for the change? Why does the FAA feel it would benefit the general public? Is it to save time? How can we weigh our complaints against the FAA with their bureaucratic power and legalities? If they had a good list of reasons why this change is so important, I might be able to better address the bad vs. the good.	Julia Getman	A
2/3/2013	I'm still reading through the plan and have a couple questions about submitting comments. Is there a formal process to submit, or do I just send them in an email to you? And I just want to confirm that February 15th is the deadline for submitting comments.	Eric Miller	GG

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2/3/2013	I'm writing to you to let you know that I vehemently oppose this new flight route that the FAA wants to approve that will severely impact Randolph, the town that I live in. We in Randolph are struggling as it is with much lower home values as well as severe school issues. Adding this flight route will in my opinion be the nail in the coffin for this town. We cannot survive any more negative things that will deter decent people from looking at Randolph as a place that maybe they may want to live in. As it is - our tax rate is very high, property values close to the lowest in the state. This new flight route will cause our property values to go down even more. I cannot afford for the FAA to add this route. Add to all above, the noise will be awful. I've had planes fly over before and it is the most obnoxious noise. The FAA needs to find another solution. There are less flights to/from Logan airport these days so the FAA should be able to resolve this issue without disrupting a town that has so many issues already from having to deal with planes flying overhead. Please plan your route somewhere else.	Helen Driscoll	E, G
2/4/2013	Attached is my letter on the proposed flight changes to Runway 33L. If you could confirm receipt, it would be appreciated.	Brian Howard	N/A
2/4/2013	I am writing to express my opposition to the proposed changes to the flight paths for Runway 33L. The changes will not only have a significant effect on the residents of Randolph, but many of the surrounding communities as well. One of the main reasons listed for the change to the flight patterns was the new patterns would be more efficient. However, when something is going to change the quality of life for thousands of residents, the main issue should not be efficiency but fairness. There are many types of businesses that must sacrifice efficiency for the impact that it would have on neighboring communities. An airport would certainly fall into that category. One of the key elements to building the public's trust with government on an issue is transparency. It is critical to ensure that the process is open and that it allows for people to be educated on the issue and allow for input from as many individuals as possible. The short implementation time frame for the proposed change does not allow for that to occur. I urge you to delay the proposed start date of March 7, 2013, until more residents and businesses that will be impacted are given an opportunity to be educated on the issue and given a chance to respond. In addition, I do not think that the FAA's draft Environmental Assessment fully considers the complete environmental impact from noise and other pollutants. I urge the FAA to delay this change to allow for a more inclusive and greater review process.	Brian Howard	E, M, V, L
2/4/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton, MA as well as surrounding towns. Currently, Milton has two extremely busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton, MA residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33 L.	Virginia Corcoran	A, G
2/4/2013	I am writing to oppose the new runway that will fly over parts of Milton, Massachusetts. I currently live directly under the path of planes heading into Logan. In the last few years the size of the planes and associated noise and frequent approach has been terrible. They fly so low they sound like they are going to hit the house and if your are outside when one passes over it looks like it will be a crash landing a few streets away. I never thought of the effects of the fumes from these planes till recently also and I sure the noise level can't be good for ears. They also affect TV as I am probably one of the few left without cable and they interrupt the signal when they come over every few minutes you can't watch the nightly news ,etc. I hope this letter will help spare another neighborhood from the noise and distraction this new runway will create.	Catherine Certusi	A
2/4/2013	I have read the info below regarding the proposed flight path over the Town of Milton and is very disappointed to hear this. As it is the noise can at times be very overwhelming...for us to endure more would be more than we could tolerate. If there is an alternate option I am asking you to consider it. Thank you...	Patricia Uter	A

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2/4/2013	I wish to strenuously object to increasing the number of planes flying over Milton . I understand that the planes have to approach the airport from SOME direction , but as someone who spends the whole summer turning the volume up and then down every time the TV is on , it seems unfair to ask the town to be further inconvenienced . My house does not have a/c, so we leave our windows open from May to September. While I love the fresh air, I hate the noise from the airplanes overhead. Please consider all other alternatives before subjecting Milton to additional noise pollution.	Anne Comber	A, BB
2/4/2013	We are Randolph residents that wish to have some input on the FAA decision that will have a negative effect on our towns We get enough planes flying over us. Sometimes it sounds like they are landing on our roof. This is defiantly not good for our quality of life. We put up with this because someone else wants to make more money. I feel we have already done our share. What about the people who's life you are destroying.	Ken & Nancy Fahey	E
2/4/2013	I live down on the other side of Milton. Right by the Neponset River. We can't even sit outside all summer long The planes fly over the house every 30 seconds. This happens every night. Logan should be able to come up With some kind of better plan. These planes are landing. It's awful.	Clare Kenney	A
2/4/2013	We are writing to you to express our concern over the proposed new flight plan at Logan airport which would seriously impact the residents of Milton, Ma. The level of noise that such a plan would cause to Milton presents serious problems to its residents. We do not think that sufficient study has been given to the detrimental effect this would have not only on Milton, but on several other nearby communities, and to the more acceptable alternatives that can be put in place. We hope you will involve and work closely with environmental engineers whose advice would enable you to adopt a plan that will work for the affected towns as well as the airlines. We ask that you give serious consideration to examining and coming up with a more acceptable plan, one that benefits both the residents whose lives would be impacted and the airlines effectiveness as well.	Maureen and Joseph Sweeney	A, L, BB
2/4/2013	We are writing to express our concerns to the FAA in having Runway 33L departures at Logan Airport fly over Milton, MA. We live in a senior citizens community that now has Runway 4 arrivals and Runway 27 departures flying directly over us. We feel that the noise is more than substantial and do not want any more planes on a route over Milton. We sincerely hope that you will take all concerned citizens' requests into consideration in making the final decision. Thank you for your kind consideration of this matter.	Carol and Louis Rege	A

Table B-2  
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Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/4/2013	I am writing to you regarding the proposed RNAV departure route for Runway 33L. I am a current resident of Randolph, MA who selected to reside in this town partly for the amount of quiet that it has to offer and its location and proximity to my place of employment. I am very concerned about the negative impacts of having the flight path moved into my general vicinity. As Sen. Brian Joyce has mentioned in a letter to you, the proposed route is several miles west of existing routes and will impact additional communities and towns. I decided NOT to purchase property in towns that are currently under flight paths because I didn't want to be affected by pollution of jet fuel and noise. Those properties have a much lower value than those outside the flight path region which might appeal to the people who purchase the properties in those locations. However, I purchased property with a higher value to escape the aforementioned problems. By changing the flight path, you would essentially be depreciating property values in the towns that would be affected to the dismay of the citizens who had to sacrifice money for quiet. Additionally, studies have shown the negative effects noise pollution could have on an individual. I currently do very specialized testing for leukemia and lymphoma. This is a very tedious procedure and requires the utmost care and concentration. Noise pollution has been known to cause sleep deprivation which causes decreased performance and alertness, memory and cognitive impairments, and occupational or physical injury. None of those above qualities seem conducive to patient care. If you had a loved one in a hospital awaiting test results for a malignancy, I'm sure you would not want to receive a positive diagnosis for cancer and later find out that someone made a mistake because they were sleep deprived. If the FAA decided that they want to pay the effected homeowners the amount their properties will depreciate as a result of this change, offer soundproofing paid by the FAA, and provide the installation of central air in all the houses so no windows need to be opened, then I see little negative impact for residents. However, I am highly dubious that the FAA would pay for these necessary measures to ensure the safety of citizens in the selected areas. I implore that the FAA look further into the negative effects of this endeavor before making a hasty decision. To not give this necessary thought would be to accept responsibility for the impact that this will have on the communities.	Yun Tang	E, G, J, FF
2/4/2013	I am writing to strongly object to the proposal for a new runway that would send even more flights over Milton, MA. We already have two active flight patterns over our town which significantly impact quality of life. Airplane noise and pollution is already a major concern and grievance among Milton residents. I urge you not to increase that burden even more. Thank you for your consideration.	Joshua Kessler	A
2/4/2013	My wife and I live at 14 Williams Street in Canton. Many planes already fly over Reservoir Pond where we live. We would not want to add to the noise. Hopefully, our wishes will be taken into consideration.	Alan Freedman and Cheryl James	N
2/4/2013	As a resident of 56 Barbara Lane in Milton, I write on behalf of my family and neighbors to express concerns about the proposed change in the flight route which will re-direct much of the Logan outbound traffic over our neighborhood. A review of the Draft Environmental Assessment suggests that additional study of the various impacts of the proposal (including the many aspects of noise impact, including sleep deprivation, annoyance and health related issues) is necessary and appropriate. We urge additional study, a public hearing process and an extended comment period which would allow informed citizens an opportunity to have meaningful input with respect to this important issue. Thank you for your attention to this matter.	Brian Hurley	H, J, M
2/4/2013	I am writing to you regarding the proposed RNAV departure route for Runway 33L, which will impact Milton. I have significant concerns about the noise and environmental issues that would be created by this proposal and request that it undergo a more thorough review to address things like the potential noise, pollution and other nuisance factors. As a resident of Milton, we are already impacted by arrivals and departures from Logan and feel that this proposal puts more strain on Milton and other surrounding towns. I appreciate your consideration of my concerns.	Laura Boynton	A, L
2/4/2013	I am concerned about the flight plan that you have set up. I think the new plan would adversely effect those living in the fly route I happen to live close to 138 and think it will be a concern on summer evening when the windows are wide open. I would encourage you to rethink this plan.	Kim Kackley	A

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/4/2013	I was recently informed that a possible new flight path is being contemplated by the FAA for departing planes from Logan International Airport which would encroach upon the Brush Hill Road/Green Street area of Canton/Milton. The reason for my letter is to implore you and the folks at the FAA to consider the impact such a decision would have on our community. My wife and I only just recently purchased our home, which is part of an old estate, after an exhaustive search that included many communities and areas surrounding the Boston Area. Our search focused on areas that offered the utmost in peace and quiet after our move from the city. Cities and towns within existing flight paths were not part of our search as we had had our fill of that in our years living in the city. We realize that as MA residents we all need to absorb some of the impacts of plane etc given that we all share the benefit of the airport but please understand that we based our most important purchasing decision on the fact that existing flight paths were in place for a long time and that real estate prices etc. were such that those flight paths were baked into the values in those areas. Furthermore, when purchasing in areas where existing flight paths fell, that information was available to educated consumers before making the choice to buy there. What you are proposing completely disregards that process and places us in harm's way. I do understand the need for efficiency throughout business and everyday life and that changes, even unwelcome ones, are inevitable but this change will drastically and without warning change the metric that all in our community have used when purchasing here and impact the way of life that we as thoughtful buyers feel we are entitled. Boston is a coastal city that has existing flight pathways that all in the communities affected by them are aware of. My suggestion would be to minimize or eliminate any new encumbrances that the people of MA have to bear by keeping to the existing flight pathways or to find alternate ones that utilize space over the ocean such that further burdens are not indiscriminately placed in unsuspecting residents.	David Zenga	N
2/5/2013	I am very concerned over the possible route changes that will have planes flying directly over Randolph. I used to live in Squantum and am well aware of planes flying overhead. As my parents aged, I moved them from Quincy to Randolph as the overhead noise was extremely irritating to my father who has dementia. Now I understand you are considering (and very quickly I may add) changing the routes to fly over Randolph, Dedham and surrounding towns. This will greatly impact my family's quality of life and with this economy I cannot afford to move again at this time. Unless the FAA is willing to purchase properties at values above what they are worth today. When you buy property in Boston and the towns along the coast, planes are a way of life. That was (and is) not the case in Randolph and I believe these changes require more input from the towns you now are going to disrupt. I am against the changing of the flight patterns and hope that more discussion is held before this is just shoved on us, (the residents of the Randolph, Dedham, etc.)	Jean Duddy	E
2/5/2013	As a 30 year resident of Milton, MA, I am very opposed to adding more air traffic over Milton. We already have two landing patterns flying over our town. My house vibrates when these planes come directly over my home. In warmer months, outside activity in our yards is put to a stop when the flight paths are active. Milton already bears it's share of traffic from Logan International Airport. I am concerned that my home value will be adversely affected by more plane noise. Extreme noise from planes will not be a plus for Milton and it's citizens. Please, enough is enough. Thank you for your consideration	Robin O'Neil	A, G
2/5/2013	Having lived in the Neponset area of Dorchester for 9 years Aug 1963-Sept 1972 I would like to go on record as opposing the proposed flight paths from Logan Airport over Milton, Canton and Randolph. The noise from the planes flying into Logan was very loud and some planes came so low that they sounded as if they might land on our roof. The spray from the jets left a film on our windows at times causing me to be concerned about the environmental impact on our town of Canton as well as Milton and Randolph.	Elaine Kenneally	N, U



Table B-2  
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2/5/2013	<p>I have tried to get someone from the FAA to attend our town Selectmen's Meeting in Milton, MA on February 7 for about two weeks. I would ask them to explain what is going on with new departure routings from runway 33 in Boston. There was recently a notice in our town paper that said that the FAA was soliciting comments from the public by 15 February. The notice also said that the new routings would go into effect by 7 March 2013. I understand from this notice that the comments from the public don't really matter and that the FAA will go ahead with its plans no matter what. I have contacted the offices of Congressman Stephen Lynch, Congressman Michael Capuano, Senator Elizabeth Warren and Senator Mo Cowan. All indicated to me that it was a long shot to get a representative of the FAA to the meeting. Why would that be? Why would the FAA not be answerable to the public in this democracy? I spoke with Sarah Revell in Congressman Lynch's Boston office. She asked me to write to Terry English at the FAA. I never received a response. I put Terry's name out there on a town blog and I suggested that others write with specific questions. I later read comments that no one had ever received a response. I spoke with Dan Ryan in Congressman Capuano's office. He said that he would do his best to get the FAA to our town's Selectmen's Meeting but that he didn't expect much. I spoke with the executive secretary at our town hall. She said that there was a meeting today at the State House in Boston today with Massport and a representative of one of our congressmen. She said that she did not think that the FAA would attend. What is this? Why would public meetings not be a correct course of action when the FAA makes a decision that will affect the public? Already our town is overflowed by runway 4 arrivals and runway 27 departures from BOS. What has changed to make it essential that runway 33 departures would now be required to overfly the town? I have read that it is for efficiency. Was the old routing inefficient? What does that mean? Was it inefficient for the airlines, the pilots or the tower? It was not inefficient for me or my neighbors. I have often thought that new technology would enable the FAA to fan out arrivals and departures so that they do not approach BOS in a pipeline over my home. When I look at the map it seems that arrivals and departures are becoming more concentrated as opposed to less. I had hoped that in the future aircraft could be fanned out so that they would pass directly over my home every 4 or 5 minutes rather than every minute or less. I think that it is critical for the FAA to listen personally to the people who are affected by noise and air pollution. I think that it is essential to take into consideration noise abatement as well as the considerations of airlines and flight controllers. Only by meeting with the public will we have any prayer of influencing the FAA's policies to the extent that the airlines and its own employees do. I understand that Massport will be at the meeting. I appreciate it but that means little to me. They do not make the decisions that directly affect my quality of life. The FAA does. Hopefully, they have the time to face the consequences from the public of the decisions that they make. Hopefully, the needs of the public can be weighed equally with those of other constituents. Meeting face to face will make that happen. I look forward to seeing one of your representatives at our town hall on Thursday night. The details are on the website, townofmilton.org.</p>	Philip Johnenning	A, X
2/5/2013	<p>I'm very concerned about the current plans of the new Runway 33L which will route planes over Milton at a more concentrated rate than currently. Having worked around Milton as a landscaper, I am very aware of how certain parts of the town are tremendously disturbed by the already existing plane route. At one property which my former colleagues and I maintained, we could literally not communicate among ourselves once the regular high volume of traffic started coming through every ten minutes in the afternoons. The idea that this kind of disruption will become even more common is unacceptable. It severely affects the quality of life in our town. Until your team can find a better way to deal with this awful noise pollution, I would urge you to at least keep the route that is currently in effect, since it distributes planes equally over the South Shore. Thank you for your positive action on this.</p>	Diane D'Souza	A
2/5/2013	<p>I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton, MA as well as surrounding towns. Currently, Milton has two extremely busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton, MA residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33 L.</p>	Kathleen Corcoran	A, G

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/5/2013	I am writing to strongly oppose to the FAA's proposed flight plan in which planes would fly over parts of Randolph. I have been sound asleep some nights and the back log from Logan sounds like they are landing in my yard. I feel that this flight plan would cause environmental issues, noises, and pollution. Thank you for your consideration in this matter.	Donna Costello	E
2/5/2013	PLEASE carefully consider the impact that a slight shift to the West will have on humans from southbound jets departing Logan. Currently, I hear and see a jet every minute or two just to me East... I often view when the wheels come down. This slight proposed shift could likely give me an overhead view. Not something I would enjoy!! With Massachusetts' Bay just to Logan's East, it seems foolish to encumber humans with additional noise and pollution. Thank you for your consideration of my plea.	David Ehrmann	E
2/5/2013	I am concerned with the proposed departure route from Logan. While I understand that the proposal will allow airplanes to use area navigation rather than visual to keep on route, I am concerned with the increased level of noise as Milton, Randolph and Quincy already are experiencing loud noise from a flight path that directs arriving airplanes to Logan. Randolph is recreating itself with more attention to quality of life to encourage people to consider moving here, now with this new flight pattern I'm afraid it will turn prospective home-buyers away. Please reconsider a different departure path that is less intrusive and consider that our surrounding areas are already in the path of arriving flights- this will create non-stop air traffic over-head.	Carolyn Green	E
2/5/2013	I am writing this letter to let you know that I am very against additional flights over our town. We already have many planes flying over at all times of the day and night. I am personally aware of two families who have decided to move out because of the current airplane noise, and another who decided not to purchase a home for the same reason. I fear there are many more that I am not aware of. We need to share the burden of the flights over head, people from all towns fly and I do believe that all of the surrounding towns of Logan Airport should also share the burden of overhead flight paths. Please do not allow the flight path they are suggesting, it just puts to much of the burden on one town, ours. Thank you.	Kathleen and Jonathan Sullivan	A, V
2/5/2013	WE HAVE TOLERATED LANDING NOISE FOR MAY YEARS . THE NEW FAA PROPOSAL WILL HAVE A MAJOR IMPACT ON THE QUALITY OF LIFE AND WELL BEING OF MILTON RESIDENTS, NOT TO MENTION PROPERTY VALUES . WE OBJECT VEHEMENTLY TO THIS INVASION BY THE FAA.	Thalia and Nicholas Zervas	A
2/5/2013	I have read about the proposed flight pattern to run over Milton, and the organized effort of Milton residents to prevent that happening. I plead with you to find some other route. It's already quite loud in my yard, to the point that a fellow doing work for me last fall stopped and asked "How can you stand this?"	Mary Driscoll	A
2/5/2013	My house is located on the Randolph, Stoughton, and Canton town lines. I am concerned about the increased air traffic noise hazard. Right when I am outside the planes are so low and loud I have to stop talking if I am having a discussion with my wife or neighbor. Sometimes the planes are so low I can see the passengers through the windows when the plane banks a turn. The engines very often shake my house. Very often I cannot tell the difference between thunder and jet engines. Because I live near route 24 the noise from the highway is already bad. There are always accidents and I see numerous traffic helicopters constantly flying at all altitudes. I would not be surprised if there was a collision one day. Although no one really considers low frequency ultra-sound a problem the effects are real. Just ask anyone living next to a wind turbine.	Rodney Merrikin	E, EE
2/5/2013	For 20 years we lived in Boston's south end. For 20 years we were awakened early on weekend mornings by airplanes roaring overhead. Three years age we moved to Milton in search of a quieter life outside the City limits. We are accustomed to planes cruising right over our heads on their way into Logan; fortunately the noise is bearable as the planes are landing, not taking off. Now we have learned that Logan is proposing a new runway that will send jets right over our heads again! We already suffer the planes landing at Logan, we already have too many helicopters flying overhead. Please no more air traffic over Milton.	Laura P. Beebe	A
2/5/2013	I am opposed to the new flight path 33L over Milton. We already have 2 flight paths over Milton. The additional noise pollution will further destroy out quality of life, outdoor activities, wild life, and property values.	Barbara Dragon	A, G

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Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/6/2013	I'm writing to voice our concerns regarding the proposed runway 33L that would fly over historic Milton and the Blue Hills Reservation. I do not believe that adequate study and/or review have been conducted to approve this new flight path. The noise disruption and pollution to members of the community (including wildlife) could be devastating. I hope that you take our concerns under advisement and return to evaluating the impact of this runway and flight path on our community. We look forward to hearing back from you regarding your intentions.	Rebecca and Tom Kenney	A, L, Y
2/6/2013	Milton has taken the brunt of the airports noise for all of the forty seven years my family and I have lived here in Milton, we have had enough!!The airplanes go directly over our house every one to two minutes, we have endured and now it is someone else's turn, Dear God, give us a break!!	H.J. Rogers	A
2/6/2013	I am totally confused by the new route proposal. The whole purpose of the meetings and drafts were to alleviate the burden of certain communities who are currently shouldering most of the Logan airport traffic. It would seem to me Milton has the most traffic especially for arrivals on 4R. If at all possible could you check the percentage of arrivals to 4R for 2012. I have checked the statistics and they seem to be no longer using a percentage but a raw number that does not make sense. Another issue Milton has with the arrivals is the noise meter. The flight path has moved but the meter did not. I think a noise analysis needs to be done for the town and the meter moved. As you can see Massport has done nothing to listen to the town's concerns or even acted as if they have the town's best interest in mind. Who is this new route supposed to help? And how is this new route spreading the traffic more evenly throughout the communities? At a certain point is Milton eligible for compensation for extreme noise and disruption. At what point does a community have a right to noise insulation reimbursement? The new route is not fair for Milton. If you look at all impacted communities I find it hard to believe any other town is as heavily impacted. Any information would be helpful.	Kristin O'Brien	A, W, AA, DD
2/6/2013	I object to the proposed new flight route at Logan Airport, Boston. My house lies between the flight paths for runways 4R and 4L. My husband and I have lived in this home for 33 years. Over time the increased noise and pollution from air traffic has made it unpleasant to be outdoors on our property. In addition, it has been almost impossible to hear the television, talk on the telephone, or enjoy the outside yard. Many days we can smell the burnt jet fuel. We already experience too much airplane traffic noise and pollution. My husband is a retired US Navy aviator and he loves airplanes. But our property feels as if it is on an air base! Three of my family members have breathing problems. Going to sleep early or sleeping late is out of the question. Our home is no longer a retreat from the world. Instead of quiet, there is airplane noise, and lots of it. Who wants to live like this, and worse, to know that more of the same is on the way? 29,000 residents of Milton, students at Milton Academy and Curry College, patients in Milton Hospital, residents of Fuller Village, and patients at Milton Health Care, to name a few vulnerable groups, will be negatively affected by increased flight traffic over Milton. Boston's own beautiful Blue Hills Reservation, the largest metropolitan park in the world, with its wild animals, clean ponds, recreational areas and long history, will be further stressed. Past studies have shown that pregnant women experience more complications, and children and adults alike suffer more respiratory disease, from the air and noise pollution caused by airplanes. Milton already endures a high volume of noise and pollution from Logan. The Constitution of the United States grants us the right to "Life, liberty, and the pursuit of happiness." What will it take to convince the FAA that increased flight activity over Milton threatens: public health the unborn, children, the elderly, clean ponds wildlife forests and our collective pursuit of happiness. The Town of Milton has endured more than its share of environmental pollution from air traffic. It's citizens should not suffer further harm to satisfy the commercial gain of others. Please tell the FAA to find another way.	Elizabeth Rogerson	A, J, R, Y
2/6/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton, MA as well as surrounding towns. Currently, Milton has two extremely busy routes and adding a third route will impact the quality of life for children do adults alike. The environmental currently bears a tremendous burden and eventually if this proposed departure is passed through, it will once again be on the shoulders of Milton, MA residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed sound bound departure route on Runway 33L.	Mr. and Mrs. James G. Curley	A, G

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2/9/2013	I understand that you have the responsibility for the decision on routing aircraft traffic. The route proposed over Milton is already heavily impacted, especially by incoming traffic. I have returned to Boston weekly by that approximate route and each time said to myself that's a beautiful yellow house down there, I'm glad we do not live near it. Some is bad - more is worse and it seems you have some responsibility to minimize the current condition and certainly not make it worse.	George T. Ryan	A
2/11/2013	I write to ask you to reconsider your plan to send more airplanes over my home (I live off of Brush Hill Road, near Rt 138). I believe we have much too much noise overhead, as it is now, and to add more noise will be unfair and hurtful, both to our right to peace and quiet, and to our real estate values. Can't you spread out to the other communities the cost of living near Boston? Can't the planes take off over the ocean? Please reconsider the flight path.	Linda B. Meech	A, V, I
2/13/2013	I am a long-time resident of (western) Milton, MA. I was very concerned to learn that the Federal Aviation Administration is proposing a new flight path over Milton, using Runway 33L. The area that will be affected by the new flight departure path is already impacted by airplane traffic at Logan Airport. We stand to be significantly and negatively affected by the noise and emissions from the airplane traffic. It is not correct to state that the proposed departure path overlays the existing departure path and the Environmental Impact Assessment does not properly account for the noise exposure to the residents that are under the proposed new flight path. The noise study in the Assessment does not accurately reflect the noise impact from the FAA's proposed action and this study must be revised to reflect the correct information on impact. I am particularly concerned about the failure to provide correct information and adequate notice to the population that will be most impacted by the proposed action. Please inform the residents of Milton and other affected communities what steps the FAA will take BEFORE approving the proposed new flight path.	Martha Goldsmith	A, L, Q
2/13/2013	I write to you today in opposition to the proposed departure route for Runway 33L. This proposal will have a significant adverse environmental effects on the town of Milton due to the noise of airplane traffic. Milton is already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. The environmental impact study conducted does not sufficiently account for the sizable population in Milton that would be adversely affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a more thorough environmental review with independent analysis. The current plan has been poorly conceived as it does not consider so many other alternatives available, nor does it give enough consideration to those communities that are already affected.	Esther Jepson	A, L, Q, BB

Table B-2  
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2/13/2013	On warm summer afternoons I like to take a later lunch break than usual and sit on my front patio, listen to the birds, watch the local hawk circle, and enjoy my lunch alfresco. Everything is fine and wonderful unless I wait till mid afternoon when those European flight begin to arrive. Here they come; Virgin America, Lufthansa, Air Lingus, British Air amid all other US aircraft. We recognize them by their tail design and watch. It goes on and on right over our front yard day after day. We give up after a short time as we can hear less of the little birds and more of the big birds. We accept the fact that the planes need to fly safely and they surely have to fly over some communities at times. We appreciate the fact that this is one of the prices we pay for closer access to an airport when we want to fly away on vacation. We agree, we need to share. It would be wonderful if every flight could take off out over the Harbor as well as land from over the Harbor. The approach to Boston is lovely from that direction and we have enjoyed it many times. Having aircraft preparing to land over your front yard is surely an issue. Wheels are coming down, flaps are extending, engines are whining but we have had this for years and bear it for safety and access. However, since the planes are flying in low over my front yard in Milton and not somewhere else we feel that we are doing our share. There are other communities that seem to be able to avoid their share and that is not fair to all. Boston is very fortunate to have an airport located where is possible to have planes both take off and land without flying over any communities, that should be the first solution to any proposed flight path. The next solution has to be the minimalization of effects on communities by limiting noise and elevation of the aircraft overhead. The third solution to be included in plans is to assure that every community is impacted equally. Politics and property values are invested and affected everywhere around the airport and people are equally concerned everywhere around the airport. We strongly urge you to consider other alternatives to the proposed departure plan to spare Milton further environmental disruption.	Kenan and Stephanie Foley	A, V, G
2/13/2013	Gentlemen & Ladys, Your proposed flight change for run way 33 at Logan, I strongly oppose this change. It will cause unnecessary noise, pollution, and other dangers emanating from increased flight activate. I think more discussion with the affected towns should be held to better inform the public.	Richard Ganem	E, H
2/14/2013	I am writing to express my opposition to the plans to institute a new Logan flight path beginning in March. As a resident of the Quisset Brook/Blue Hills area of Milton, the proposed new flight path would route the planes directly over my home. As it is, there is already a flight path that routes the air traffic directly over my yard on certain days. Some summer days, if I sit out on my porch with company, it can be difficult to carry on a conversation due to the incessant roar of the planes passing overhead on the assigned days. I certainly do not want to have the rumble of air traffic doubled and made a daily irritant with the addition of a new flight path directly over Quisset Brook Road. In addition to the noise, I am also very concerned about the pollution the additional air traffic would bring to the Blue Hills Reservation area--an area set aside for foot traffic, rather than car or air traffic and their unavoidable pollutants. Given these factors, I urge you to reconsider the proposed flight path and find a more suitable alternative.	Anne McLaughlin	A, U, Y
2/14/2013	I have been a homeowner in Randolph, MA for 13 years. In that time I have noted an increased amount of noise from planes flying low over my home. We are a family of four with a pool and spend much of our time outdoors. I like to keep my windows open but due to the noise and pollution from planes flying over, usually do not as it wakes our children. The proposed increase in planes overhead is quite disturbing to us. It is a quality of life issue! I urge the FAA to reconsider their decision to change the flight patterns.	Tina Fegan	E
2/14/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. I am a longtime resident of Milton, MA and I concur with my State Senator BRIAN A. JOYCE in this matter. This proposal will have a significant adverse effect on the town of Milton due to the noise and environmental impacts from heavy airplane traffic. My family, neighbors and I are already fed up with the negative impacts on our health as well as our peace and quiet. We bought our homes in Milton--not East Boston or Winthrop-- and we did not expect to have to put up with ever increasing noise and pollution from Logan airport. We are opposed to the proposed RNAV departure route for Runway 33L!! The towns located underneath the southbound departure route path are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. As Senator JOYCE previously informed you, the environmental study conducted does not sufficiently account for the population in Milton that would be affected by the noise and pollution from this proposed route. I, like	Gerard F. Carmody	A, L



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	my Senator, hereby request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. My family and I appreciate your consideration of our concerns and I look forward to your response.		
2/14/2013	We will do everything we can to stop more planes from flying over Milton. The noise pollution is unbearable as it is and planes fly overhead all around us. We can't hear our children when they are calling for us outside. Please do not direct any more planes over our town because our lives would be very negatively affected. Please also decrease the amount of planes arriving to Logan which fly over Milton. The constant noise is horrible. Please do something positive!	Claire and Ralph Jaeger	A
2/14/2013	I am writing this letter to show my family's strong opposition to this proposed runway. We are dismayed at the thought of more air traffic. Milton currently handles its fair share of air traffic. (Our neighborhood, as you may recall was the place where Delvonte Tisdale landed to his death a few years ago.) We live on Hillside Street and overhead is where airplanes pull down their landing gear to prepare for a Logan Airport arrival. Please do not ADD to our plane traffic. We are handling our share of planes heading to Boston already. If you need proof of our Milton's present day situation, just look up in the sky anytime after it gets dark, especially in my neighborhood, and check out the planes, "no, those are not STARS" , waiting to land! Please, do the right thing, and spread the burden around.	Claire Lawton; John Lawton; Catherine Lawton; and John T. Lawton	A, V
2/14/2013	Normally I am critical of those who protest every change made to serve the general welfare if it happens to impinge directly on local convenience. "Not in my backyard" is a refrain that can result in stalling of beneficial changes for all of us. In Milton's case, however, it's not a refusal to put up with air traffic. Residents of the town have largely accepted overflights bringing traffic over the Blue Hills and the neighborhood paralleling the Blue Hills Parkway, as well as flights that pass over East Milton Square. Boston is fortunate in having a major airport that is located in close proximity to those of us who need to use it, and with this convenience comes the necessity of tolerating air traffic to and from that airport. Precisely because most of us have been and will continue to be tolerant of the patterns that already impinge on our peace, we are all the more reluctant to add to it with take-offs that, of course, are even greater sources of noise pollution than the landings that constitute most of what we currently already experience and tolerate. I don't ask for special treatment. I only ask that the FAA carefully consider whether the current plans for substantially greater numbers of departures passing over Milton constitute considerably more than our fair share of this burden, and whether modifications to the plans can be made, without thereby unfairly adding to the burden of another community.	John Hahnfeld	A, V
2/14/2013	Please do not implement this proposed Runway 33L RNAV departure procedure due to the noise and environmental impacts it will have on the populations underneath the southbound departure route path and especially because of the fact that most of the area that would be under this proposed route is already heavily impacted by airplane noise and pollution from airplane arrivals to Runway 4 and airplane departures from Runway 27. We should not be forced to be under another departure path from a heavily used runway.  1. In Chapter 1, a graphic labeled figure 1-4, you will see a solid yellow line. This is the proposed new airplane departure route by the FAA. As you can see western Milton (along with Dedham, Hyde Park, Readville, Canton and Randolph) is directly under the proposed southbound departure path of Runway 33L. It will be an RNAV (instrument) procedure which means that it is a concentrated path of departures and if you are under this, you will be subjected to constant airplane noise and emissions. The FAA also states that this new proposed RNAV departure path closely overlays the existing departure path. This is an untrue statement because the southbound departure route will be moved miles west of the existing route onto unsuspecting communities (as you can see in figure 1-4).  2. One of the main problems I see with this Environmental Impact Assessment is that it does not properly account for the noise exposure to the populations that will be under this new path. If you look in Chapter 4, figure 4-7, the graphic is called the proposed action (RNAV procedure) noise exposure to populations. This means you will see little dots which are representative of a population block and what level of noise - by color - they would be exposed to if this procedure is implemented. However, according the graphic, the FAA does not include any population blocks (represented by dots) in the northwestern/western part of Milton (nor in the other areas that will be affected). This appears to be a flawed noise study if it does not account for the populations that will be directly under this proposed flight path. How is this an accurate environmental assessment of noise impacts study?	Sarah Blake	A, Q, M

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	3. The most perplexing problem is that the FAA made a public notice of this on January 14th and is allowing only a one month comment period by the public. I feel this is blindsiding the populations under the proposed new airplane route and then steamrolling it upon us as the implementation date of the procedure is March 7th.		
2/18/2013	I am writing as a concerned and frustrated homeowner in the town of Milton to express my opposition to the proposed flight plan for Runway 33L. One year ago, we moved out of the city to Milton for a quieter life to raise our young children who are 2 and 4 years old. We were surprised to find that the noise level in Milton is not what we expected due to the air traffic right over home. The noise is tolerable during the day, but is extremely disturbing in the evening and early in the morning, I am talking about the 4 am and 5 am hours, waking our kids most mornings and making it difficult to fall asleep with jets landing every 5 minutes on several nights past the 9 o'clock hour. If I had known this was such a problem, I would never have bought a home in Milton. I beg you to consider the impact that this proposed flight plan would have on the residents of Milton, especially in an owner vs. renter dominant town and explore alternative flight plans that would not increase the already disturbing noise level in our town.	Allison Foley	A, BB
2/21/2013	I'm sure this email will not change anything that is proposed but I felt like I had to write something. As a new homeowner in Arlington I was excited to live in a quiet town and enjoy time outside in my yard. I have noticed recently the number of planes going directly over my house has increased dramatically since we first moved into this house less than a year ago. Now I hear the planes constantly, at least 10 to 20 an hour. One last night flew over my house at 10:30pm and was so loud I could feel it vibrate my house a bit. To say this makes me sad is an understatement. I now feel like the value of my home has diminished though we have been here less than a year and I doubt spending time relaxing outside in my yard will ever be relaxing again. I also am concerned with pollution as well. I am also now exposing my son to something that might affect his long term health? If there is any way to reconsider this proposal I would greatly appreciate it. I wouldn't have purchased this house if I ever thought I would have to listen to planes fly over my house at a very low altitude for the rest of my life. I hope something can change.	Catherine Clinton	JJ, G
2/22/2013	I am writing in opposition to the new flight plan that is being proposed over the towns of Canton, Milton and Randolph. We are currently being told that we will experience a "slight increase" in cumulative noise. Please come to my house on a summer day and sit out back and you will see that even a slight increase will be way too much. We are also being told that flight path will give us a day and night sound level higher than 45db. This estimate would be a stretch as the sounds are much louder than that now, at this time we are able to hear the jets adjusting their wings as they set for final approach. I would also like to add that this is with the windows and doors closed. Please reconsider as we are already burdened and any increase will seriously hurt our quality of life. Thank you for your time in this matter.	David and Dolores Bogosian	N, II
2/22/2013	I attended the selectman's meeting in Milton earlier this month, where 2 Massport officials talked about the new proposed flight departure path over west Milton. We were shown a map where now, the routes are over a wide path over several towns(I believe they said south departure route). With this new proposal all the planes leaving this runway fly in a much narrower path right over West Milton where we live. I feel that this is extremely unfair to the people who live in this proposed path. Why should all the flights now be concentrated over one area? It is much more fair to keep the paths in a wider area, maybe even over several towns. I am very concerned about noise pollution and air pollution with this concentrated scenario which will be detrimental to our physical and mental health. It also will affect the Blue Hills Reservation and its environment. Please stop this proposal. It is unfair and detrimental to the health and well being of those who live under this concentrated proposed model.	Jeanne Val	A, V, U
2/22/2013	As residents of Randolph we would like to voice our opposition to the new proposed route over Randolph, Milton and Canton. We have more than enough planes going over us at low altitude, now especially during the summer when for the most part the windows are open. Please spread the wealth, give some other towns the pleasure of all this extra noise that we have been living with for years.	Lou and Sandy Sandler	E, V

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2/23/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Evelyn Knight	A, G
2/23/2013	Please reconsider the flight plan that is up for change over the 138 / Milton canton area. To have flights coming over this area, every 10 minutes, will be extremely disruptive - affect property values, and cause 2 large communities to be very undesirable. There is a great deal of conservation land that is used by many people of Boston, who come to the Blue Hills to be with nature and enjoy the quiet. Thank you for this consideration.	Tina Malouf	A, Y
2/24/2013	<p>Estimation: Being somewhat acquainted with the IM software and the mathematics behind it I was very surprised to see in the draft EA reference to calculated DNL differences of 0.1 and 0.4 dB. These numbers are meaningless and therefore misleading because it is my understanding that the precision of accuracy of INM output is at best about +/- 1.0 dB [1]. So the output DNL numbers calculated here most likely have no better precision and accuracy and it is most likely less due to errors introduced by truncation, round off and averaging in the flight path estimation. The final EA should state the uncertainty in the output by indicating the validated range of the output DNL numbers, for example 63.45 +/- 0.05 dB. This range is commonly referred to as the confidence interval. For the INM successor, AEDT, the FAA's Office of Environment and Energy has undertaken an evaluation of the uncertainty for this new software, see AEDT Version 2a Uncertainty Quantification Report. Since AEDT uses modeling calculations very similar to INM it is likely the levels of uncertainty found in the AEDT sensitivity analysis are likely to also be present in the NIRS output. The recently studied AEDT levels of uncertainty should be cited as a guide to uncertainty in the similar NIRS software. The FAA NEPA regulations use round number, for example 65 dB, with one exception 1.5 dB (Order 1050.1E section 14), however table 23 in the draft EA on page 134 cites the noise limits as 3.0 and 5.0 dB. These are different numbers. A change of 4.6 dB would satisfy the 5 dB limit under standard numerical nomenclature [3] but would not be valid according to table 23. Table 23 should be revised in accordance with Order 1050.1E. Aircraft Take Off Weight Estimation: In the EA draft at section 4.1 it is stated that "the origin/designation data are used to predict aircraft weight at departure." INM has a default setting for take off weight estimation outlined in the INM technical manual on page 170 Table G-4-14: Guidance for Determining Departure Takeoff Weights. This method uses trip length to estimate fuel load and adds a factor of 65% payload to estimate the take off weight. The INM User manual warns however on page 13, Section 2.1.3 that the user should "Make every effort to develop accurate average values for input data. In particular, flight profiles and ground tracks must be modeled realistically, and if feasible, obtain actual takeoff weights and use average weight to choose profile stage numbers instead of using trip length." The EA should state specifically the algorithm used to calculate take off weights and specifically state the assumptions made in the calculations. While use of the default settings 65% payload may have been realistic in 1970, the current Load Factors clearly show it is not so today [see 4 at 3.4.1, page 20]. A more realistic average weight is most likely near 100% payload. INM noise calculations are especially sensitive to variations in take off weight. One study of input sensitivities has shown that a 10% variation in take off weight leads to an error of 3-7 dB [2]. Also since large jet aircraft are most likely the largest contributors of noise energy, an error in the largest contributors to DNL will predominate since noise as measured by DNL is aggregated logarithmically. Assuming unrealistically low take off weights have been used in the draft EA, it may be assumed that the calculated DNL's are significantly underestimated! The consequence of this conclusion has direct impact on the overall environmental impact determination because even the underestimated DNLs were extremely close to the 65 dB level of regulatory significance. If they in fact exceed this level, a finding of significant impacts is warranted instead of the finding of no significant impact stated in the EA draft. RNAV air procedures when compared to conventional air procedures show a noise focusing directly along the center line of the flight path of the air procedure [5]. While this focusing results in less noise impact</p>	Michael G. Kroposki	K

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	for many people away from the center line, those under the flight path have a significant noise impact. In many cases this impact exceeds the 65 dB level of significance and mitigation for them is in order. The most practical mitigation for those adversely impacted in sound proofing of homes, schools and churches.		
2/24/2013	I am opposed to the proposed departure route from Runway 33L that will direct planes over Canton & Milton. It will have a serious impact on the quality of life in this area creating unacceptable noise and a detrimental effect on the environment. It will also adversely impact the property values in this area. There is already a significant amount of air traffic over this area - so it is unreasonable and unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We urge you to find an alternate path for the Runway 33L traffic. Thank you for your consideration.	Donald Hunsicker	N, G, V
2/24/2013	I'm writing to ask you to reconsider the proposed new airport departure route 33L which will send a large amount of air traffic over the beautiful Blue Hills. This is a place of rest, splendor, and peace where many residents from the Boston area come to relax and enjoy nature. If this traffic is added to the planes that already come over the area, the resulting noise and pollution will change the quality of this respite. I sincerely hope there is an alternative.	Nancy Skolos	Y
2/24/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Joseph G. Genduso and Susan C. Genduso	A, G, V
2/24/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the air traffic over the already overburdened area of Canton and Milton. It is unfair to concentrate excessive airline traffic over just a few towns . Not only will such traffic have a detrimental effect on the environment , both physical and auditory, it will affect the value of the homes in the area. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else rather than over the already burdened towns of Canton and Milton. How about Brookline?	Polly R. Dowton	N, G, V
2/24/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are effected. There is already a lot of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Canton & Milton.	Gracanne Zenga	A, G, V
2/24/2013	We are writing to express our opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are effected. There is already a lot of air traffic over this area (we hear it every day) - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Canton & Milton.	Abram Cardoza and Michelle Cardoza	A, G, V

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2/24/2013	I object to this choice of all runway traffic going over a new path. From a fairness issue you have identified four routes and the traffic should be shared equally if nothing else. To announce we will have planes over our houses every five to ten minutes during the day and night is not acceptable. We already have some of your runways flying overhead. I don't think we should be the dedicated route. I was awoken at 6AM a few days ago and have heard planes as late as 10PM. In fact, I am hearing a plane as I write this--Sunday, 2:15PM. Please rethink this entire plan.	Joseph DiTroia and Susan DiTroia	BB
2/24/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Jacqueline Talarico	A, G, V
2/24/2013	I am a resident of Milton and am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. My house on Pleasant streets already gets a great deal of noise from the airplanes. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L. Please re-think your decision.	Harry Lee	A, G
2/24/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Paul Rooney and Lisa Rooney	A, G
2/24/2013	I am writing to express my strong opposition to the proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is going to have a detrimental effect on the environment as well as the property values in these communities. The Canton & Milton communities already shoulder at least their fair share of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. Can you please help me to understand why Brookline, for example, a community equi-distant from Logan Airport, has such minimal air traffic? Equitable distribution of this burden should be more carefully examined. The purchase price for our property was based on open space, conservation, and peaceful quiet and enjoyment of the surrounding natural beauty. The proposed Runway 33L departure route will adversely affect property values and invite questions of compensation for diminished property value for government use. I urge you to deny the Runway 33L proposal.	Dawn Couture	A, G, V



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2/24/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Barbara	A, G
2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Bethany Navarro	A, G
2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Joelle Auguste	A, G
2/25/2013	I called the Massport noise abatement office repeatedly over the weekend because of the never ending drone of aircraft approaching BOS over my home in Milton. When I asked for the wind speed and direction at BOS they always gave me a direction between 270 degrees and 360 degrees. The wind speed was never less than 10 knots. In the FAA's recent report regarding RNAV and departures from runway 33 in Boston the only factor cited in determining the runway that would be used for takeoffs and departures was wind direction. As we both know aircraft should land into the wind and should depart into the wind. If the wind was actually blowing from the Northwest (between 270 degrees and 360 degrees) whenever I call over the weekend, then why would the FAA opt to use a 40 degree runway. Why would arrivals not be pushed to runway 27 (a 270 degree runway) or 33 (a 330 degree runway)? Why would a 40 degree runway, a runway facing the Northeast, make more sense when landing aircraft with a Northwest wind? It seems that the direction of runway 4 was 270 degrees off of the correct runway choice this past weekend. To me this appears to be a safety issue. I worked for American Airlines for many year, albeit not in flight operations. This appears to run counter to common sense. If wind speed and direction are not the primary considerations for runway selection as you stated in your report then what considerations were you responding to this past weekend? How did those considerations enhance the safety of the flying public and the public living beneath those flights? What can you tell me to put my mind at ease?	Philip Johnenning	KK
2/25/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are effected. There is already a lot of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Canton & Milton.	Steven M. Windwer DC, PT	A, G, V

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2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Carroll Moe	A, G, V
2/25/2013	I am writing to express my opposition to the proposed new departure route off Runway 33L. Where we live in Milton, we already have a considerable amount of air traffic directly over our house. I'm concerned about adding to that. As someone else pointed out, people from all over the state use the airport; why should such a small area have to bear the burden of the overhead noise? It affects both the resale value of our property and our quality of life while we live here. I understand there are many factors that need to be considered, and I don't want to be a NIMBY, but it does seem unfair to simply add more to what we already have rather than spreading it around a bit. Thank you for your consideration.	Lisa White	A, G, V
2/25/2013	I live in Canton and am concerned about the changes, but I am having a difficult time figuring out exactly which streets and area it will cross over /effect Canton. would you be so kind as to explain it in "dummy" terms to me? which side of 138 will it be? also how will it effect the center of town, or where the police station is? I am located near there which is on Washington street. when we bought this house recently we never considered such an effect on the property and I would be concerned if it will effect us. Thank you in advance for explaining to me exactly where / what streets in Canton.	Pam	FFF
2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton. It is not fair that so many planes will use this route, placing the burden on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state uses the airport, so the airplane routes should be spread out over every town. Why does the city of Brookline have hardly any routes over it, but Milton has so many? Both cities are equidistant to the airport. This change will affect my and my neighbors' property values financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Pamela Dorsey	A, G, V
2/25/2013	I am writing to express my opposition to the new proposed departure route of Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic which is going to have a detrimental effect on the environment as well as the financial well-being of the home owners that are effected. There is already a lot of air traffic in this area and it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. The additional plan traffic will have a serious detrimental effect on the price of our home when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened area of Canton & Milton.	Steve Pirie and Linda Pirie	A, G, V
2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Beverly Van Orman and Peter Van Orman	A, G, V

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2/25/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	John F. Evans and Ericka Jacobsen	A, G, V
2/25/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that reside within area. There is already a lot of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Canton & Milton.	Lou and Karen Falcone	A, G, V
2/25/2013	We are writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. In our opinion it is not fair that so many planes will be using this route and that the burden will be on a very small area. This one residential area should not have to bear the brunt of all this plane traffic. This will affect our property as well as our neighbors' property financially as well as in the quality of life. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? We vehemently oppose this proposed southbound departure route on Runway 33L.	Arlene de la luz and Andrew Kupchaunis	A, G, V
2/25/2013	I have recently heard that there is a runway proposal for Logan airport that would direct more flights over Milton, and I am writing to express my opposition to the proposed Runway 33L air corridor that would increase the flight use over Canton and Milton. While it may be operationally expedient, or politically easier to target a small town rather than spreading the discomfort across a greater region, it is hardly democratic to over burden a few towns with excessive airline traffic. The burden of the air traffic should be shared by all the towns - and not just a small group. I urge you to redistribute proposed Runway 33L traffic over a larger area - rather than over the already burdened Canton and Milton.	Robert Cormack	A, V
2/25/2013	Just to let you know, not everyone is against the runway expansion. I have lived at this address for over 15 years. The planes fly overhead often. They are so high that the sound is minimal. Unless the new system will be lowering the flight paths, I have no problem. It is much "to do" over nothing. More important issues to be concerned with. Good luck!	Shirley Marse	LL
2/26/2013	Hi Terry: First, thank you very much for the excel data set for Milton and Quincy. I have studied it and many other aspects of the report and have some concerns, additional requests for data, and questions – all of which are contained in this message. I have talked with many residents in Milton and Hyde Park, studied some of the aviation noise literature and government documents, and attended several meetings of concerned residents over this proposed change. I, along with many others who have studied the report and the graphics it contains, cannot reconcile the information in the text and the correspondence we've had with the FAA/Massport. One resident who thoroughly studied the draft report raised the possibility that the science could be fraudulent. I now think there is substantial evidence that the analysis is flawed. Also, I'm convinced that the use of year-averaged-DNL as the metric of noise is misleading and does not represent the noise burden of individuals and communities . I think answers to the following questions will help to uncover the problems in the analysis and presentation of the results. I request that the No Action Alternative on the flight path take place and that further study be done on both the quality of the data and the scientific approach for its analysis. I request this, and the answers and data requested below because I think: 1. The science, including the metric used in the study, is seriously flawed and the results and presentation is misleading and 2. I have concerns about possible errors in the data. 1. What is the longitude and latitude of the Massport/FAA noise monitors in Dedham, Hyde Park, Milton, Canton and Randolph? I found on the Logan website the description of the locations but would like more precise measurements (the lat/long). I'm amazed that there is only 1 noise monitor in Milton and none in	Cindy Christiansen	F

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	<p>the Hyde Park area. 2. We have heard 2 explanations of why the report shows no noise exposure at population centroids for half of Milton. One explanation that was reported at the Selectman's meeting is that the report does not include areas where there is no change in the estimated DNL. The other explanation is that areas with current DNL under 45 are not included in the report, this seems to be what the draft report conveys. Please clarify why there is no data reported for half of Milton. 3. Related to question #2, I was provided data of the DNL estimates and changes in the estimates under the new plan for 272 census block centroids in Milton MA with population greater than 0 and 428 total locations (156 Milton locations included in the report have 0 population), representing 15,970 Milton residents. However the 2010 census had 652 census blocks in Milton. We would like latitude and longitude and the DNL estimates and estimates of changes in DNL under the new plan for the all 652 Milton census block centroids in Milton MA, even those with 0 populations, representing approximately 10,000 of our residents. Please include the FID number so we can match these to the data we already have. Please provide this in an excel spreadsheet as you did for my first request for data. 4. The data provided by the FAA, which was used in the draft report, indicates a population of zero for FID #38939, latitude 42.22282, longitude -71.0745, with a DNL estimate under the new plan of 51.034, an increase over the current plan. This location, around Brierbrook Street and Barberr Lane in Milton MA, is populated. Please give reasons for the use of zero population for this location. I only found this problem in the dataset because I used the data you provided to find street locations for the FID where there was an estimated increase in DNL (so for about 40 locations). When I work with databases, if one problem is found, there are others. I think there could be critical flaw in the quality of the database used in the analysis 5. We would like to see a graphic where the proposed 33L flight path Figure 2-5 is overlaid onto the noise exposure at population centroids Figure 4-3. 6. I'm also requesting the 95% margin of error for the estimated DNL for the 652 census blocks in Milton as well as the locations with estimated DNL for reasons such as historical sites, etc. Please include this in the excel spreadsheet requested in item #3 above. 7. We request an explanation as to why the noise exposure at population centroids in figure 4-3 are missing in the area of Hyde Park and the left side of Milton yet show up when the planes should be at higher altitudes further south in Randolph. 8. We request a graph showing locations newly exposed to noise under the proposed action and the level at which they are exposed (those locations at both the under 45 and over 45 DNL levels), under the southbound route including Newton, West Roxbury, Dedham, Hyde Park, Milton, Canton. 9. We request the longitude and latitude of waypoints - TEKKE, COLYN, CBEAR, COUSY 10. Please clarify why conditions in 2009 were used in the analysis rather than projected conditions in 2015. What conditions and values of these conditions were used to estimate DNL. For example, what is the distribution of departures and arrivals by runway, the equipment, the wind direction, etc. 11. Because of the concerns of several residents of Towns other than Milton, in addition, we request the latitude, longitude, estimated DNL, the 95% margin of error for the estimates in current and new plan for the entire study area affected by the southbound route. As in item #3, we would like data for all locations – those estimated to be under 45 and those estimated to be over 45 for all populated and non-populated locations. To clarify, we want DNL estimates as a continuous measure for all levels and locations, including those less than 45. Please include this in an excel spreadsheet. I know this is a substantial request. I appreciate the help you have given me and the work you will do to address the requests and comments in this email.</p>		
2/26/2013	<p>I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton &amp; Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? Milton has done more than its fair share with airplane traffic and noise for many years. EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.</p>	Janice Fahy	A, G, V

Table B-2  
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Date Received	Comment	Commenter	Response Letter (See Table B-3)
2/26/2013	Looking at the map chosen for takeoffs on 33L, it looks like the powers to be did a nice job avoiding Brookline with a beautiful almost 270-degree counter-clockwise loop outside of and around that city. From there they did an even better job by making sure the tangent out of the loop was aimed directly towards the southwest, avoiding any impact on the Weston-Wellesley-Needham-Dover-Westwood corridor, only to fly directly over Dedham, Hyde Park, Milton, Randolph and then over Holbrook where they did their best work by installing the sharpest of all turns towards the east for the overseas bound jets, which are shoehorned into a small corridor far enough to the south of Hingham and Cohasset, but well enough to the north of Duxbury, to assure peace and quiet in all three of those communities. What's all the fuss about?	Jack	A, V
2/26/2013	I'm writing to express my opposition to the new proposed flight path for departures from Logan. I live in near the police station in Canton on Washington St. and currently get "punished" with arrival noise. I hear the noise in my living room all day long (when I'm not at work of course). The noise pollution is devastating and I'm very concerned about the new flight path. It seems unfair to not spread the misery amongst all of the South Shore residents.	Tony	N, V
2/26/2013	We are writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton. It is not fair that so many planes will use this route, placing the burden on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state uses the airport, so the airplane routes should be spread out over every town. Why does the city of Brookline have hardly any routes over it, but Milton has so many? Both cities are equidistant to the airport. Why can't air traffic use a water approach to the airport? This change will affect our and our neighbors' property values. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate us for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Christopher S. and Karla L. Clifford	A, G, V
2/26/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Maureen Carroll	N, G, V
2/27/2013	I am writing to oppose the proposed new departure route off Runway 33L which would increase the already overburdened areas of Canton and Milton. There is no question that if this new route was allowed to proceed, it would seriously and disproportionately impact our towns in a negative way. There is already a lot of traffic over our communities and although we are happy to share the burden, this new proposed departure route would put us at a distinct disadvantage and would impact environmental concerns as well as property values and simply our quality of life. Everyone uses the airport and we should all (yes that is all cities and towns) proportionately share the overhead air traffic route burden versus disproportionately affecting Milton and Canton. We urge you to pursue an alternative that is fair and equitable so that we are not financially and otherwise adversely affected.	Joyce A. Murphy	A, G, V
2/27/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Michelle and Brendan Glynn	A, G



Table B-2  
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2/27/2013	Please be advised that as a Milton resident for over 60 years, I am strongly opposed to the additional southbound departure route that is scheduled to fly over the town of Milton. As you know this is a small bedroom community that already deals with 2 busy routes and adding a third one will severely impact the quality of life for the families who have chosen to live in the towns of Milton, Randolph and Canton. I encourage you to do whatever you can to prevent this from happening. Thank you for your consideration in this matter.	Pamela Piatelli Memmolo	A
2/27/2013	As residents of Milton, we are against this proposed flight path. We moved to Milton to live in a quiet community. We do not agree to having a flight path disrupt this environment. We understand the need for people to get where they need to go however, this should not be done at our expense. Efficiency should not be the only consideration when determining changes of this magnitude. As taxpayers to the town of Milton and the state of Massachusetts, we should have a strong voice in this decision. Please consider our opposition to this proposal. We kindly ask that this proposal be withdrawn.	Jack and Christina Saraf	A
2/27/2013	It is hard to tell what impact these flights might have on the quality of life. I would like to see the comment period extended again for the purposes of having the proposed flight paths be activated for a 1 week period to have the residents along the new flight path experience the impact first hand. If I was in charge I would just make it happen and not let the residents know that the flights are happening. This would be a great way to see if the noise would be an issue.	George Berdos	M
2/27/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are affected. There is already a lot of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plan traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Canton & Milton.	John Vinke	N, G, V
2/27/2013	I am writing to you over my concern with the proposed new Departure Route Runway 33L over Milton. We live on Quisset Brook Road in Milton, and already have a landing way that flies right over our area. Therefore we are doing our part to help Logan already, and I do not think it is fair that we should be further burdened with another route right over our heads. Thank you for your consideration.	Lou Alberino	A, V
2/27/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Julianne W. Fitzgerald	A, G, V
2/27/2013	First, I'd like to say thank you for extending the comment period regarding the flight plan over the towns of Canton, Milton & Randolph. I am a resident of Randolph, MA; a wife & mom of 2 teenaged sons, and hearing impaired. Everyday I see lots of planes passing over my house from many directions heading to Boston. I can see planes following each other on the same path. If my hearing aid is off, I don't hear them, but I can imagine that it's a nuisance for the hearing people to hear those planes flying overhead all the time. It's bad enough that I can see & hear Route 128 from house. I do get scared when I see planes flying too low thinking that it's going to crash. And seeing those planes fly over the Powers Farm reservation with farm animals in Randolph took away the tranquility of the farmland when I walk in that park with my family. So, yeah, I oppose to the new flight plan. I'm trying to understand this controversy that I read in the Randolph Herald (02/06/13) - does the planned new route for southbound departures from Runway 33 means more planes in the sky? I definitely do not want any more planes in the Randolph airspace than we already have to put up with. And this will be a "concentrated path" meaning one plane after another roaring overhead - no thanks.	Carla Provost	E, Y

Table B-2  
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2/28/2013	I am writing to express my opposition to the proposed departure route on Runway 33L. I grew up on Hillside Street in Milton and every single plane landing on I believe it was Runway 3R flew directly over my home. The only reprieve was on a windy day. My mother was extremely noise sensitive and the constant barrage of airplane noise had a negative impact on the quality of her life. The constant roar of the planes overhead became almost an obsession for my mother and we all had to bear the brunt. My mother and some other Milton residents were part of a group called Citizens Against Airplane noise. This group was not necessarily against airplanes but they wanted the arrivals and departures to and from Logan to be diverted over other communities as well so that Milton was not overburdened. Please oppose this proposal and consider how too much of one thing can adversely affect one's health and overall quality of life.	Mary S. McCourt	A
2/28/2013	This is a second letter expressing our concern about the proposed new runway 33L from Logan which will adversely effect our family, our home and our town, Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state uses the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Rebecca and Tom Kenney	A, V, G
2/28/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Canton & Milton. It is unfair to over burden a few towns with the excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are affected. My home of over 20 years is located on the edge of the Blue Hills Reservation and we have been dealing with this issue for as long as we have lived there and I know it will be much worse if this gets approved. The burden of the air traffic should be shared by all the towns – not just a small group. We urge you to send the Runway 33L traffic somewhere else – rather than over the already burdened Canton & Milton.	Mr. and Mrs. Paul Freeman	A, V
2/28/2013	As I awoke this morning at 6am to the sound of planes overhead, I am reminded of the negative impact the current flight paths of Logan Airport have on our town. I am writing to you with grave concerns regarding the proposed flight plan over Rt 138 in Milton for Runway 33L. As you know, Milton already bears the burden of TWO flight plans for Logan which adds increased noise pollution and adversely affects property values. As Logan services all of New England and especially the Greater Boston community, I ask you why the town of Milton has yet again been proposed as the site of another flight plan. We all share the benefits of Logan Airport and it only makes sense that we should share the burdens as well. I urge you to vehemently oppose this new southbound plan and bring a common sense approach to the table.	Collette Wain	A, V
2/28/2013	am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the already overburdened area of Milton. It is unfair to over burden this town with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are effected. There is already a lot of air traffic over this area, especially our neighborhood of Parkwood Dr/Hillside St. - so it is unfair to add more. The burden of the air traffic should be shared by all the towns. We have paid a premium for our house and our neighborhood and should not be further affected by the noise or the pollution. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened Milton.	Anacristina and Patrick Kenney	A, G, V
2/28/2013	We are writing to you to express our opposition with the new proposed Logan airport departure route (33L) over Milton. Please take a few minutes to read our concerns. As you well know the region is currently overburdened with air traffic. Subjecting our town to any additional noise, pollution and potential danger is unacceptable. Our children and fragile citizens do not need this added exposure. Also of great concern is the fragile ecosystem of the Blue Hills Reservation. Conservation land so close to Boston should be preserved and not polluted further. Not only is the area enjoyed by Milton residents, but those from all over the region. Finally, the citizens of Milton should not be made to suffer the consequences of decreasing property values that would come with this new runway. We are already have air traffic lanes and there are other communities that do not.	Dr Rizkalla and Constance Mouchati	A, Y, G

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3/2/2013	We are long time residents of Randolph and over the years have seen and heard a significant increase in air traffic. Now this will affect the departure air traffic as the increase over time has affected the arrivals. This new runway project will only add to this noise and pollution and quite frankly significantly impact the environment of our town.	Albert and Kathleen Fiore	E
3/3/2013	I have lived in Belmont for over a year and a half and purchased a home last June at 4 Broad St. Belmont, MA. I had never heard any more than a few airplanes fly overhead each night and now, as of about a week ago, it is literally, non stop. I am watching the clock there is a low flying plane passing overhead about every one minute. It is constant and noisy and terrible. I am totally distraught as I have just purchased this home based on how quiet the neighborhood was. My six year old daughter has been unable to fall asleep at night because of this new disturbance which seems to go on until about 11 PM at night, every night now. Please, if you could tell me what is going on and how we may be able to stop this before it is too late and I will have to sell my house and move out this neighborhood. I appreciate any information you can provide.	Kim Beer	PP
3/4/2013	I am a Milton resident writing to express my opposition to the FAA's proposed RNAV departure path from runway 33L at Logan Airport over Milton.	Debbie Haggerty	A
3/4/2013	Please reconsider the new proposed runway route through Milton. The detrimental effects of the noise should be shared by all. One community should not bear the brunt. In case you are not aware, there is an additional runway 33L which is going to channel ALL of its traffic through a new runway route - which is approx. 4 miles wide with its center being right over Rte 138. Basically, this means everyone living in Milton will now have planes going over their homes - at a rate of 1 every 9-10 seconds ! It's going to effect everyone - like who in Milton 'doesn't' live 2 miles east or west from Rte 138? Also, the closer to the city - the lower the planes will fly as they are descending into Boston. The FAA 's theory is to streamline ALL of this runway traffic over one area rather than spread it out so a lot of people are bothered - instead - they figure let a small group - just one town be effected by A LOT of planes. There were several alternatives - which DID not effect Milton - but they ruled all of those out - and chose Milton as the town to bear all of this additional air traffic. Milton already has areas which are effected by the airplanes. If you know people that are effected - they can tell you that it is annoying. Now there will be an increase in that traffic - along with many more neighborhoods being effected. it will only take few minutes to write an email - it's worth it.... once the traffic route is established - they will never change it. If you just don't have the time - you can just copy and paste one of sample emails below - and send it to the following email addresses:	Patricia Steiner	A
3/4/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Airplane routes should be spread out across the state. There must be an alternative/compromise I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Barbara Keohane	A, V
3/4/2013	I am very concerned Dedham resident, who has lost sleep over the upcoming flight path change. I live in Dedham center and awake every morning to the sound of planes overhead. Any additional air traffic over my home will surely be enough for me to find another place of residence. I am deeply saddened by the news to increase the air traffic over my family's wonderful home. Please do what you can to listen to the Dedham residents and please please take our message to heart. If you could hear what I hear in the morning I am sure you would stop this change in air traffic patterns over our house.	Steven Gardos	OO
3/4/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economic burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Karin L Mylod	A, G

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3/5/2013	I am concerned about the proposed flight path which will increase both noise and pollution over the Town of Winchester. In particular, I am very concerned over the proposal to narrow the flight paths of planes using Runway 33L. This runway is directly in line with Winchester. This will mean more concentrated flight paths directly over Winchester which will increase both the noise and pollution raining down on both our home and, most importantly, our children. As it stands now, I hear a plane going overhead approximately every 15 minutes. It becomes almost unbearable to be outside in the summer months due to the noise.	Allison Price	P
3/5/2013	In the most recent publication of the Winchester Star, I learned of a proposal to narrow the flight paths of planes using Runway 33L at Boston's Logan Airport; the runway directly in line with the town of Winchester. That means more concentrated flight paths directly over our town, which means more noise and more pollution raining down on us and our children. I do not want any more plane noise than exists today, which is already disruptive. Approximately 15 years ago, there was construction at Logan Airport and the amount of air traffic directly over our house was awful, with planes coming in every 30-60 seconds. In many cases, we could see the writing of the carrier on the plane that is how low they were flying. I am writing to voice my concern over this proposed change.	Beth Jerant	P
3/5/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. I imagine you have received dozens of emails regarding this matter, and have not read all of them. That decision lies with your conscience, as does moving forward with the runway plan with little consideration for the people that live in the affected communities. Fiscal relief for the FAA becomes a fiscal burden for our community when our property values plummet because of the constant blare of airplanes coming and going. I have unfortunately found these days that bureaucracy wins over community uprisings more often than not, but I cannot let that stop me from voicing my concerns. As residents of Milton, MA, my family has done its best to embrace the air traffic that rumbles above our heads. My four year old son loves to watch the airplanes pass and, as it sometimes seems, he can almost reach up to touch them. The planes fly so close to the tree tops on our property that, using easily visible identifying features, we are able to determine the make and model of the aircraft using our Airplane Guide Book. To be honest, that can be a fun activity with a four year old boy! What is not fun, is having to close our doors in the summer because we cannot maintain a conversation as the planes pass over every 90 seconds or so. Living in East Milton, the increase in airplane noise, in addition to the din of the highway and traffic helicopters that hover daily, is an unfair hardship. We knew what we were getting into when we bought a house close to the highway, we cannot control that noise, but what we can control is our response to the FAA's proposal to make things even louder and more disruptive in our neighborhood. It is not fair that so many planes will be using this route and that the burden will be on a very small area. We are seeking a more equitable disbursement of airline traffic over all neighboring communities, including Brookline, Cambridge, Somerville, Milton, Canton, and Boston neighborhoods. Why should our one area bear the brunt of all this plane traffic? I urge you to reconsider the plans of rerouting a significant portion of air traffic to Runway 33L. Thank you for your time and consideration.	Kate Diana	A, G, V
3/5/2013	I just read in the Dedham Times that Logan Airport is considering putting a flight path over the Oakdale section of Dedham. I do not want this to happen. This will lower property values in an already slumping housing market. It was also detract potential families from moving in . I know that I wouldn't move into a house with loud and distracting planes overhead all day. We just recently moved into our home and would not have done so if we knew this was a possibility. I trust you are doing everything possible on your end to prevent this flight path, but let me know what else I can do to help to stop this from happening.	Kay Moon and Gary Bridge	OO, G
3/5/2013	I share the serious concerns about noise pollution and impact to quality of life in our town. As a Selectman in the Town of Dedham - who has heard from many constituents who are distressed about this news - we respectfully urge your reconsideration of this plan.	Paul Reynolds	OO
3/5/2013	Please know that we are adamantly opposed to any new air traffic over the town of Dedham. We live in a neighborhood in Oakdale where we are constantly inundated with the noise of the commuter rail and freight traffic. In the summer months it is quite annoying. There is nothing that can be done about that but there is no reason to exacerbate the noise level in our neighborhood with NEW air traffic. Please be sure that the FAA knows this.	Patricia and Walter Hughes	OO

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3/5/2013	<p>Greetings, I know you are busy and appreciate your time in answering questions and requests on the 33L RNAV SID that the Fairmount Hill Neighborhood in Hyde Park was recently informed about. As we discussed last week, Hyde Park did not have a representative on the CAC during the development of the RNAV SIDs and STARS for the Logan Airport (BOS) runways. It is very confusing why the Hyde Park section of Boston was not included in this process as every other part of Boston has at least 1 if not 2 representatives. Information on who/how Hyde Park (Fairmount Hill) would address this situation would be appreciated. Last Wednesday evening, we held our monthly Fairmount Hill Neighborhood Meeting and I explained the Next-Gen system and an overview of the figures included in the 33L DRAFT proposal. This is the first time many of our residents heard about the proposed 33L RNAV SID. At our meeting many residents were upset and questioned why there was no public meeting planned by the FAA to inform the residents of Hyde Park and listen to feedback as well as the other communities that would be impacted by the proposed southbound route of the 33L RNAV SID. Most of the residents are very upset about the constant noise generated by the low flying approach (1500 - 2000 AGL) and departure (5000-6000 AGL) air traffic currently overflying the Fairmount Hill section of Hyde Park. hey asked if we are now under a flight path as the airplane noise is extremely loud and disturbing as well as continues throughout the day and night. In the past, there was never any air traffic WEST of the airport hence their investment and purchase of property in this QUIET, suburban tree-lined section of Boston. They wanted to know the reason for all the recent air traffic and noise and most importantly when will it go away? Would the FAA supply the current RNAV SIDs and STARS (flight paths) for runways; 4R, 4L, 9 STARS and 22R, 22L, and 27 SIDs and their paths over Hyde Park and Milton? FYI...Fairmount Hill is the section of Hyde Park in Boston that borders Brush Hill Road in Milton. Just curious, are the RNAV arrival and departure headings straight in and out using the runway headings vs. any form of a traffic pattern or let down over the water vs. traffic over populated residential areas? The FHNA voted that we request a public meeting with the FAA. FYI...The FAA is welcome to utilize the Municipal Building in Hyde Park or space at Curry College in Milton. There is ample space to accommodate people from the surrounding communities at either of these two venues. We would be happy to assist you with the arrangements and resident notification. As we discussed, I am interested in obtaining data from the FAA regarding the 33L RNAV SID; What is the maximum route width (nm) that can be accommodated for planes in the RNAV system? Do pilots fly the centerline with clearance of one nm mile on either side or can they fly a heading anywhere within the two nm wide path? What is the proposed location (latitude and longitude) of the CBEAR Waypoint? Is it possible for the CBEAR Waypoint be moved further West as Proposed by CAC in Rev 4 (Voted on by CAC members) prior to the southbound route turn? Regarding Figure 1-4 provided in the draft report. It is impossible to determine the exact streets/population locations in Dedham, Hyde Park, Milton and Canton that will be over flown for the proposed FAA Southbound route (From the COLYN, to CBEAR to COUSY Waypoints) for the proposed 33L RNAV SID. You mentioned that the consultants could provide a more detailed street map with the overfly sections of the route along with the projected AGL range at each of these waypoints. Regarding the DNL measurements for Hyde Park, Dedham and Milton; Curious how the raw noise data that are collected on the ground compare to the calculated DNL measurements for the Fairmount Hill, Reedville, as well as other sections of Hyde PARK, Dedham and Milton? There are no DNL noise dots recorded on the figures in the 33L RANV SID DRAFT report for the Fairmount Hill (Hyde Park) section of Boston. This is surprising as when viewing the MassPort website, there are planes frequently flying overhead on approach at 1500-2000 AGL at two-minute intervals. So it is difficult to understand how Fairmount Hill can be classified as a &lt;45 DNL on these FAA report figures. Am looking for the "raw data" noise measurements as well as the "calculated" DNL values in an electronic format. You mentioned that you had Excel spreadsheets with the DNL noise calculations for the different centroid locations (latitude/longitude) in Hyde Park, Dedham and Milton that were evaluated. I am a scientist and have managed the successful commercialization of FDA-approved medical devices, sensors, and instruments. These require performing numerous calculations, statistical analyses, and development of algorithms. I hope to be able to figure out how the FAA consultants analyzed the noise data in Excel-Am willing to try it. From my optical sensing experience, accurate algorithm development typically takes several iterations where the measured "raw" data collected is compared to the predictive result generated by the algorithm. What are the accuracy, reproducibility, standard deviation and standard error of the DNL data that is generated?</p>	Irene; gardengroup @fairmount hill.org	GGG



Table B-2  
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Date Received	Comment	Commenter	Response Letter (See Table B-3)
3/5/2013	Hello, As a resident of Winchester, MA I am NOT happy about hearing we will have more noise What I have heard lately is too much. What the change will do is make it worse.	Denise Tavilla	P
3/5/2013	Please do not increase the number of planes going over Winchester, particularly by 93 North Middlesex Fells. The volume and frequency of planes overhead already far exceeds what is reasonable to live with. It is very disruptive to my family already - both in terms of sleeping (early morning/evenings to very late flights) as well as normal enjoyment during the day. The planes are very loud. I am concerned about the FAA proposal to narrow the flight plan of planes using Runway 33L. This could be very damaging to our community. It appears that it has the most effect on Winchester. That is not fair. We already have way too much plane noise as it is.	Susan Johnston	P
3/5/2013	I'm new to the runway change. Was awakened Sunday morning at 6AM and couldn't understand what was going on. A friend from JP told me that runway 33 over our areas would be the new take off path. Supposedly the concentration of politicians in Boston were able to push this through. There is no doubt that property values in this area have just plummeted. Planes are going over constantly. A call to our town administrator was useless. He said to do anything about it would be "challenging". We just spent 6 million dollars restoring Dedham. Who would want to move here now?! There is supposedly a petition? Any information or updates would be appreciated.	Mary Jane Parnell	OO
3/5/2013	I have just learned about the proposed increase in flight paths over Winchester and would urge you to be our advocate against this change. As you may know, we have a large amount of conservation land in our town which supports a healthy number of wildlife species. One doesn't have to stretch their imagination to understand the negative effect the additional noise pollution would have on the current environmental balance.	JoAnne Artesani	P
3/5/2013	I am VERY CONCERNED about the increase in plane noise over Winchester because of the FAA's proposal to use RNAV for Runway 33L (re: Boston Logan International Airport Runway 33L RNAV SID Environmental Assessment). Plane noise over my house is very disruptive already. ANY INCREASE of this plane noise would adversely affect the health of my family. We live very close to 93 North and the Middlesex Fells (43 Lorena Road, Winchester), and are already quite disrupted by the VERY LOUD planes that fly overhead. This already affects my sleep as well as my concentration. These planes are LOUD and LOW. Any further increase in the frequency of these planes is UNACCEPTABLE.	Susan Fagerstrom	P
3/6/2013	Stop airway traffic via runway 33L over Milton. Thank you	Susan Bowers	A
3/6/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L. I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Bernadette Lundbohm	A, V, G
3/6/2013	I have absolutely no objection to the proposed changes in the approach route to Logan Airport. This is a total NIMBY crusade by a bunch of nut jobs. Planes already overfly my home on a regular basis and I see or feel no ill affects whatsoever.		LL

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3/6/2013	I am in agreement with the above statements and DO NOT support the proposed 33L flight path plans.	Liz O'Rourke-Harris	MM, Y, FF
3/6/2013	I wish to add my support to the Milton Garden Club position in opposition to the proposed runway 33L flight plan. Milton already has more than its fair share of air traffic, and further noise pollution seriously threatens the quality of life for our Town and disrupts our Conservation areas, which are enjoyed by people from all over the region.	Katherine Ware	MM, Y, FF
3/6/2013	I am writing to you concerning the new proposed departure route of Runway 33L that will adversely affect the Town of Milton, as well as the surrounding Town of Canton. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually, if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economic burden wherein the noise from the planes constantly passing over Milton will reduce our real estate values and deem Milton less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Beatriz Valdes	A, G
3/6/2013	I am writing in opposition to any change in Logan air traffic that would increase traffic over Winchester MA. The air traffic over our town is already quite dense and wakens us many mornings and often in the middle of the night. While one would expect some traffic due to our proximity to Boston, I do believe we are already shouldering a significant burden of the expected noise pollution from Logan. I do hope you take the concerns of local citizens into consideration while adjusting your traffic plans.	Linda McDonough	P
3/6/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Howard Rothstein	A, G
3/7/2013	I wish to add my support to the opposition to the proposed runway 33L flight plan. Noise is an often overlooked environmental issue that erodes the quality of life in communities. In the 1960's the construction of route 95 N was halted by concerned citizens. Plans to have 95 continue from Route 128 through the Blue Hills area and Milton straight into Boston were sidelined. And we have those citizens to thank for the quality of life they preserved in our area. Now again we are faced with keeping a transportation corridor from encroaching on the Town of Milton and our regional recreational resources. We already have 93 N (the Expressway) that slices East Milton in half and runway 4R which is the equivalent of a highway in the sky for arriving flights that rumble continuously overhead, rattling windows throughout the areas of Milton closest to the airport. Milton is already severely impacted by regional transportation and especially airplane noise. The proposed flight plans for runway 33L will concentrate departing aircraft along a narrower flight path as they cross over Milton once they turn south and east following takeoff. This flight path will be located further from Logan and thus air traffic will be slightly higher but planes will be more numerous. Because the flight path moves out over less densely populated areas of Milton, the Environmental Assessment can claim that fewer people will be impacted than are currently. However, the impacted areas will be adversely affected and experience more air traffic noise. This is a regional concern as well. The natural areas and historic features of Milton are well-known. The open space in Milton (which we pay for, to the benefit of all, through higher residential tax rates to offset the lack of revenue from areas dedicated to open space) is an amenity shared by people from all around the State of Massachusetts. The Blue Hills trails and ski area are a major recreational resource for the region and should be given special protections and consideration with regard to Logan air traffic over-flight. These are areas where quiet and serenity are expected and	Penney Gacicia	MM, Y, FF

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	sought after and should be fiercely defended as they are so scarce and precious. The Draft Environmental Assessment, which is based on a highly technical analysis that is difficult to translate into everyday life, has been questioned by those with relevant expertise. It states that under the Proposed Action Alternative, fully 31.6 % of the population of the entire study area (population 3,188,892 around greater Boston) experience noise above 45 DNL. DNL is Daily Noise Level - average daily noise of the average annual air traffic. In a related document, "Noise and Its Effect On People", Figure 6 shows that Quiet Suburban Towns begin to transform into Low Density Urban Areas at 52 DNL (dBA). If we wish to retain the characteristics of a 'Quiet Suburban Town', rather than an 'Urban Area', noise mitigation is of the utmost importance. Our quality of life and property values, and one of the major reasons that Milton is viewed as a desirable place to live, are at stake if we neglect to defend against increases in air traffic and allow the area to become more 'Urban' as a result. The bottom line is that the air traffic in Milton is already excessive and highly annoying to a large group of citizens. Any increase in the number of airplanes over the area will denigrate the quality of life in the community. Areas of natural and historic importance enjoyed by millions of people from around the State deserve special consideration and noise restrictions to protect the precious and rare serenity they provide.		
3/7/2013	I am against and further air traffic flying over the town of Milton. We already shoulder some of the burden and my home is in the direct path of many planes at certain times of year. The planes fly very low and the house vibrates when they do. Please find an alternate solution.	Carla Morey	A
3/7/2013	I have been a resident of Milton, MA for over 43 years. I add my voice to the groundswell of opposition to the plan to add yet more flights to the sky over Milton. Milton is a relatively quiet (except when the noisy parade of planes approaching runway 4L fly over) suburb of Boston that has many quiet, rural areas. It shares approximately one third of its boundary with the Blue Hills Reservation which is a unique sanctuary for hikers, walkers, bicyclists and recreation seekers from miles around, including a great many Boston residents seeking a quiet respite from the urban cacophony of Boston. The air traffic over Milton and the Blue Hills is already excessive and distressing to many of the citizens of Milton and, undoubtedly, a great many people who seek the quiet and beauty of the Blue Hills. The proposed increase in the number of airplanes over the area will further erode the quality of life in Milton which has long been recognized as a gem in the necklace of towns round Boston. I would like to point out that in 2007, 2009, and 2011, Money Magazine listed Milton 7th, 5th, and 2nd, respectively, on its annual list of the "Best Places to Live" in the United States. That designation speaks volumes about what the residents of Milton as well as the many visitors from around the commonwealth and around the world who visit Milton appreciate about the special qualities of Milton. Milton is home to many areas and buildings of historic importance which have been and will be, in the future, enjoyed by millions of people. Neither those many visitors nor the residents of Milton should have to shout at each other to be heard as the planes fly over President George H.W. Bush's birthplace on Adams street or over Governor Hutchinson's field, once owned by our revolutionary war era governor, Thomas Hutchinson, which provides a scenic vista across the Neponset River estuary toward Boston harbor. The noise from the descending planes where the engines are, relatively speaking, coasting, is conversation-stopping, even now. The vastly increased noise level of screaming jet engines trying to bring large planes up to a safe speed and altitude as quickly as possible can not help but increase the already disruptive and annoying noise that many Milton residents and visitors are subjected to on a minute by minute basis many hours of every day. I admit that noise is a downside of travel in the 21st century. However, Milton already has more than it's share of transportation generated noise between Rt. 93 cutting through the eastern side of Milton with its tens of thousands of cars, buses and trucks a day, runway 4L flights and the other frequent flights of smaller planes approaching Logan following the Neponset River which runs along the north side of Milton. For these reasons, I oppose the proposed flight plan for Runway 33L and ask that the noise burden be fairly spread around, thereby lessening the noise on each individual town around Logan, including Milton.	John Kerr	Y, V, NN

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3/7/2013	As a spokesperson for our neighborhood watch group, Readville/Camp Meigs, which is in alliance with the City of Boston Neighborhood Watch program, I have several questions/ requests to pose you from concerned residents. First, what are the coordinates of the flights along the proposed route from CBEAR to COUSY and what will be the altitudes of the aircrafts at each location? Next, please submit to me a listing of all flights in the past 30 days, up to this date of March 6, 2013, that have traveled above the route which you are proposing will now be CBEAR to COUSY. In other words, a listing of every plane from 33L that has traveled over Hyde Park/Readville. With each flight on that listing, detail the coordinates, the altitude, and the time of day in which it traversed Hyde Park/Readville. Finally, why has there not been an environmental impact study on Hyde Park/Readville as this will be a newly impacted community with the proposed 33L RNAV??? Please respond quickly to my questions/requests as there are a lot of concerned people awaiting your reply.	Martha McDonough	UU
3/8/2013	Ode to the FAA. In New York I was born and bred Those merits can surely be said But married and went away and I sent All NY thoughts out of my head. Then back to my NY I came and life was never the same! I had to reside where noise couldn't hide and the airports deserved all the blame! When living between JFK, and the airport they named LGA To speak any word And know you'll be heard left shouting it the only way! My constant reply was, "Say, what?" For one year I suffered that but I moved to MA At last, a new day was what my poor ears thought I got! For years with my hearing impeded To speak soft was now what was needed A pleasure for sure No screams to endure For saving my voice I succeeded! Now comes this new FAA plan To stop it we'll do what we can It stirs Randolph's wrath, this noisy flight path, upsets every woman and man! So you who are making the choice Please hear all the strength in our voice We want to preserve the life we deserve So please give us cause to rejoice!	J.S. Gangel	E
3/8/2013	I am writing to express my opposition to the new proposed departure route off Runway 33L that is going to increase the air traffic over the already overburdened area of Canton & Milton. It is unfair to penalize a few towns with excessive airline traffic. It is going to have a detrimental effect on the environment as well as the financial well-being of the homes that are affected. There is already a lot of air traffic over this area - so it is unfair to add more. The burden of the air traffic should be shared by all the towns - and not just a small group. We have paid a premium for our house - and the additional plane traffic will have a serious detrimental effect on the price when we put it on the market. We urge you to send the Runway 33L traffic somewhere else - rather than over the already burdened towns of Canton & Milton.	Patrice MacCune	N, G, V
3/9/2013	My name is Robert Gerbrands and I am writing to you with a request for you to re-consider the proposal of revising the departure route from Logan Airport. At the present time residents of Randolph have enough noise coming from existing flight paths and any additional traffic would be of a good deal of concern to myself on Turner Drive as well as my neighbors here in Randolph. I was hoping that flying at a higher altitude might dull the noise variable but since this will be a departure route I would assume that is not feasible.	Robert Gerbrands	E
3/10/2013	Where I live in East Milton, we seem to have everything most homeowners would try to avoid - air and noise pollution from various sources - the expressway, too many commuters and very heavy trucks cutting through on our very narrow streets, and planes and helicopters overhead. What more could we handle? Certainly not more planes flying lower overhead.	Gail Lussier	A
3/11/2013	I have followed with interest the groundswell of objection raised regarding the addition of a take-off runway at Logan. Currently, my home is directly below the southern approach to the airport; I know this because each time I return home from a trip, I can see my house. Unlike many in opposition to this project, I have not lived in Milton all my life, only 12 years. Yes, the planes have been coming over my house ever since. Virtually the only time I notice them is during severe storms when they are not flying. In my interactions with neighbors and other fellow residents at church, barbeques, in coffee houses, and on other social occasions I have never heard either a friend or stranger complain, "I wish the town would do something about those planes." Three years ago I sold one house in Milton and bought another. The realtor never said, "Your house is at a disadvantage because of the air traffic." The objection you are hearing is probably a knee-jerk reaction by people who haven't considered the project's benefits.	Thomas E. Leonard	LL
3/11/2013	Please do not allow westbound flights over Milton/Dedham/Canton. We have enough noise with the eastbound flights over our towns. Send them (as is) over the Atlantic to get height and then turn right. The fish don't mind the noise. As a 29 year aviation employee - leave it alone.	David Smith	N

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3/12/2013	Well I know you could care less as I sent an email once before. I'm a resident of Randolph Massachusetts.... to be quite frank I would prefer no planes over but they already fly over Randolph all the time so I'm not sure why the FAA cares as it is already apparent it is already being done.	William Cronin	E
3/12/2013	Being a resident of Canton I find that there is enough noise with trains going through town very frequently. The traffic is very heavy almost on a steady basis. We are exposed to unhealthy air as it is. I feel it imperative that the flight path be diverted away from the Canton area.	Dorothy Hennessey	N
3/12/2013	I am very concerned about the idea of having additional flight paths over Milton. At midnight on February 7th I awoke to the sound of a plane flying over our home. My first thought was that it was going to land on our house, that's how low it was flying. In the summertime I can not hear the television in our bedroom at night and my house shakes. On March 8th I could hear planes flying as late as 3am. Enough is enough. Something needs to be done about this problem and adding additional flight paths is not the answer. I have two questions for you. How low are the planes now flying over Milton and is there any time period they are not allowed to fly?	Susan Brady	A, W
3/12/2013	I oppose the proposed changes to flight patterns at Logan. It is unfair to make a small area bear the burden of all the noise of flights taking off. Please note that east of Boston lies the Atlantic Ocean where noise would be less noticed.	Nancy Teel	A
3/12/2013	I am writing my concern about the new flight plan that will affect Milton. I am very upset about this & believe it will become extremely disruptive to our daily life. I have a child with special needs & a terrible sleep pattern-anything can wake her & this frightens me that we now may have planes constantly going over our home. It will change our neighborhood & negatively impact our daily lives. I urge you to reconsider this please!	Kerry Hayes	A, R
3/12/2013	I am a resident of Randolph MA and my home is right under the current flight route of planes flying in and out of Randolph. As a matter of fact, I joke to family that I will waive when flying over our home. I am in favor of a change flight plan and appreciate Senator Joyce for keeping us informed. Unfortunately, this is the first piece of information I have received. Is it designed that way or for some reason, I have not received information on this subject. I would think all affected communities should be aware.	Donna Hill	E, T
3/12/2013	I've just finished looking at a map of the new flight corridor for planes departing from Runway 33L. 95% of these jets will now pass directly over my neighborhood. It seems unwise to me to have so many takeoffs pass over such a concentrated area instead of spreading out the flight paths so that many neighborhoods share the burden and no one area has to have the sound of planes overhead so frequently. I work outside in Milton and I can tell you that the noise from planes in the neighborhood near the cemetery is so loud that you cannot converse outside. Please give consideration to another path.	Nancy Lattanzio	A
3/12/2013	We would like to comment on the FAA's proposed changes to Boston Logan's runway 33L flight path. We live at 87 Oak Street in Randolph, MA. We have always experienced air traffic inbound to Boston flying over our home at low altitudes. Most traffic seems to occur in the early evening at this time of year. I understand that this new flight path would increase that traffic and prolong our exposure to these noise levels. My husband and I are registering our objection to the proposal that increases that traffic with this new flight path over the Town of Randolph.	Mr. and Mrs. John F. MacKenzie	E
3/12/2013	I used to live where the planes constantly flew overhead. I moved away because of it. Now your going to change the flight pattern so it's overhead again. Why? I can't afford to move again. Why the change now. Please keep it the way it is.	Vinny B.	HH
3/12/2013	Please accept this email as my opposition to runway path 33L. I live at 49 Russell St Milton and every Sunday every 30 seconds there is a plane going by. More are not necessary.	Charles Tufts, ChFC, CLU	A
3/12/2013	I am totally against the change in the runway, it would go over my house and I have a sick husband, so it would be something that would not be good for his health, nor mine. We are in our late 70s.	Margaret Duddy	E



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3/12/2013	The purpose of this letter is to kindly request that your office takes into consideration the quality of life, the protection, as well as the peace of lawful abiding citizens in Randolph and its surroundings, versus the airplane flights expansion of the FAA, specifically related to the proposed changes to Boston Logan's runway 33L flight path. I have owned my current home in Randolph since the summer of 2002. With great discomfort I have witnessed through the past 11 years, the increase in air traffic in my neighborhood. The noise from the arriving aircrafts is truly a daily disturbing and unhealthy occurrence as it affects the quality of my family's sleep at night. As a result, sometimes I can't fall asleep during my regular bedtime, or I get awoken too early in the morning. On occasions, the aircrafts sound so close to the rooftop that I must peek through my windows to ensure that my family is not in any imminent danger of a plane crash or else. This is certainly not a healthy way of living. Please stop the proposed changes to increase plane flights for Boston Logan's runway 33L flight path. Your consideration and assistance are most appreciated.	Bernadette Louis	E
3/12/2013	This Email is to add my name to the list of Milton residents who are objecting to the proposed flight plans for runway 33L. For many years now it is impossible to enjoy the amenities (most particularly lounging at a pool) anyone might have on their land in Milton as a result of the airplane noise. Each time something is changed regarding flight plans the situation worsens. If I remember correctly a few years ago I believe it was Runway 4R that was to be used under foggy conditions. It was used under any and all conditions. My neighbors and I suffered with an even greater number of planes disrupting our lives with a noise level that was unbearable with planes flying so low you could see which airline they belonged to. We no longer could enjoy our yards. You are awakened in the morning (5 or 6 AM) by airplane noise and you go to bed at night with airplane noise. Are there no restrictions on the hours that planes can fly over residential areas? I would ask that no further airplanes be added to the traffic overhead in Milton and ask that the number of airplanes flying overhead be reduced and that all planes fly at or above a height of 12,000 feet.	Ruth & Harold McDermott	A
3/12/2013	Please don't sanction this polluted path over Randolph. We have enough problems to contend with, without being targeted as a throw away flight path.	Linda Paglierani, Ed.D	E
3/12/2013	I would like to voice my strong opposition to proposed Flight Path 33L. I live in Milton, and already I feel that we have much too much air traffic. If I sit on my porch on a warm evening, there are often planes flying over every couple of minutes. It's not constant, but it is nearly constant. The noise is loud enough to break to the peace-- to block the sound of birds and the breeze. I would fervently ask you to please find another solution. And I would go even further to request that the current number of planes crossing over our town be reduced. This is our community. It's where we live and relax and have fun. Having airplanes roar overhead is not peaceful, nor relaxing, nor fun-- it's an interruption. It's not one that I have grown accustomed to, and it's not what I moved to Milton for. Thank you very much for your consideration.	Ann LaVigne	A
3/12/2013	Please do everything in your power to stop the air route from happening. I am confident you have our (Milton residents and others) best interest at heart. We in the Tucker neighborhood of Milton appreciate all your efforts. We look forward to positive results.	Bea Cockrell	A
3/12/2013	After reviewing the proposed new flight path for Runway 33L I had to write that I am opposed to this change. While my family is used to planes flying overhead it appears that the new path will condense the current flight path and bring even more air traffic over a smaller area of Randolph, Milton, and Canton. I don't think it is fair to inflict the increased traffic to a much smaller area and as you may have guessed directly over my home.	Karen Colageo	A
3/12/2013	I'm a life long resident of Canton, MA and concerned about the upcoming changes to Boston Logan's runway 33L flight path. The increase of noise level is a concern but also migrating flocks of birds. The Blue Hill is an area of great bird action and I'm concerned about flocks of migrating birds being sucked into an aircraft engine. A plane crash in a heavy populated area as Canton, Norwood and Milton would be a catastrophic disaster. Also, will our towns receive a tax break for sound proof windows such as our friends from Winthrop received?	Marleen Loughlin	N, Y, D, FF

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3/12/2013	I am sure that you read the article below (link to Globe article shown below). I did not recall two of the issues in the article being addressed in the FAA report regarding southbound runway 33L departures. They are: Safer landings and takeoffs Smoother rides for passengers Are these indeed benefits that were overlooked in your report or are these issues embellishments of the facts by the Globe? As we have discussed before I believe that the safest way to arrive or to depart from any airport is into the wind. I'm sure that you do as well because the FAA's report indicates only wind direction as an indicator of which runway to use. To this day I have received no response from the FAA regarding the eight day period prior to March 1 when 70% of all arrivals at BOS used runway 4R though the wind indicated use of that runway on only one of the eight days. Is safety a priority for the FAA? If safety is a concern of the FAA then why was runway 4 used for more than 50% of all aircraft arrivals in 2012? I understand from your document regarding runway 33L southbound departures that Logan airport experiences a northeast wind only 17% of the time. What could possibly account for an additional 33% of the arrivals if the wind did not justify them? I would also like to know where noise abatement falls on the FAA's list of priorities. The Globe article talks about intolerable noise. Is this not a fact? I'll appreciate a response to my questions. Though I was assured by you, Terry, that I would receive a written response to my previous questions from Frank Saulsberry, to this day I have received nothing.	Phillip Johnenning	HHH, KK
3/12/2013	I live on Ridgewood Road, Milton MA. I've looked over the proposed changes for Departing flights over Milton, they seem if they the flights would be at the height and frequency as stated to have a minimal impact on Milton. Of bigger concern are the arrival flights that constantly fly extremely low over Ridgewood Road and Milton. Now that I see that the FAA does change flight paths to elevate impact on residence, I ask that the FAA Consider addressing the bigger issue of the large number of arriving flights that fly so low over Milton. I've been told by Logan officials that the FAA requires planes to line up 10 miles which seem arbitrary and unnecessary. We're directly at the 10 mile point from Logan and 30-40% of arriving planes converge at a very low altitude from all directions over our home on Ridgewood Rd at what they say is 2000 feet, but seems much lower at times. I've asked that the FAA move the flight path currently over Ridgewood Road, 1/2 mile east, with that adjustment the arriving planes would fly over the blue hills reservation instead of people homes. There are no homes on that path for miles and would seem more ideal than the current path. I'd appreciate your feedback and what I can do to get the FAA to consider this request.	David Bacon	III
3/12/2013	Hi! I believe that the new flight routes proposed will concentrate a higher number of planes over my town then before. This will lead to a lower quality of life and potentially lower property values. Increased noise pollution and a higher likelihood of incidents that will affect a densely populated town like Dedham are not what I signed up for when I purchased my home. I feel that the burden of flights should be spread out over a larger area. I am not in favor of this new GPS-based system.	Lee Zazofsky	MM, OO, G, V
3/12/2013	I am concerned that adding a new flight path will add a significant amount of noise to our neighborhood. We currently live in Milton and there are many summer days that we have to keep windows closed on warm days / nights due to the noise.	Robert C McKinnon	A
3/12/2013	I would like to voice my displeasure with the proposed 33L flight path. As a resident of Randolph, the proposed flight path will fly directly overhead no matter the destination. Our town falls within the 95% corridor. When we moved here, there was limited overhead fights. This proposed plan will affect our quality of life and our home values. Your proposal does not take into effect the human cost. We chose our home location based on a number of things. Had we known that our town would be in the flight path, we would not have chosen it. Hence, we do not live in Revere, Chelsea, Winthrop, etc. I would respectfully request that the FAA reconsider this new runway flight path and give the effected communities an opportunity to be heard on this issue, one that will have a lasting impact.	Ronna Nesselle	E
3/12/2013	I just returned from a meeting with fourteen neighbors from here in Milton, and our overwhelmingly unanimous conclusion is that we are vehemently opposed to the new projected flight plan. Please consider our concerns, as I'm aware that you have received many other comments from people in our community. Thank you for taking our concerns into consideration when you make your decision.	Peter Plattes	A
3/12/2013	Please reconsider flights going over Canton. It's a fact that frequent loud noises are detrimental to people's health and well being.	Dorothy Mazzola	N

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3/12/2013	As one of the founding members of our neighborhood organization, Citizens for the Preservation of Readville (CPR), I submit to you a list of comments from residents of this corner of Boston. Readville is a portion of Hyde Park and is situated between East Dedham and Milton. Please accept each of the following comments on its own merit and do not view this letter as simply one comment. As a reminder, each comment will have a number assigned to it.	Craig Martin	N/A
3/12/2013	1) The proposed 33L departures in the EA illustrate a wide swath of conventional aircraft routes being compacted into a narrow path orchestrated by RNAV. Currently the disbursement of flights over the different towns comprising this approximate 20 mile swath is fairer than burdening this once community with all the aircraft traffic. It seems to me that this RNAV could be engineered to accommodate a larger swath than is proposed.	David Hallahan	MM
3/12/2013	2) I am presuming that the noise study engineers did not consider that Readville is a hub of railway activity. We must contend with noise all day and night from the Amtrak line and three different commuter rail lines which pass through and stop at the Readville train stop. Also contributing to the aching noise is the CSX freight train stop and the commuter train repair facility; both of which operate after midnight. Additional noise from the skies above is not welcome. Certainly a newly impacted community from the 33L proposal, as we would be, deserves a strict study for environmental impact.	Rosalie and Ken Carlson	LLL
3/12/2013	I've endured living on the edge of a loud industrial park for 40 years in Readville and do not wish to encounter more noise from different sources. Located at the end of my street is Fowl Meadows Reservation, which is part of the state's Blue Hills Reservation, and is a habitat for much prized and some endangered wildlife. We would all prefer that an alternate route be sought for the airlines. The Draft EA appears to identify this reservation as being qualified as a Section f(f) property and thus obligates FAA to confer with state officials to discuss any potential impact. Yet, there is no evidence in the Draft EA of such a conference. Also, the Draft EA states that if a conflict with Section 4(f) property does occur, then a feasible and prudent alternative should be sought an F-HH(v4) does appear qualified from the viewpoint of this reader.	Jeanne MacIsaac	Y
3/12/2013	The Draft EA is inconsistent in that it utilizes census data from 2000 in analysis of the FHH measures for 33L but yet it utilizes census data from the year 2010 for the noise studies presented later in the Draft. The population in the city of Boston has expanded in recent years and that includes this part of the city. Indeed, aside from the most recent survey in 2010, the city of Boston has argued the validity of the numbers produced from past surveys as the city has felt the numbers have consistently been too low; and as a result the Census Bureau would frequently return with revised numbers the following year. It's simply odd that this Draft EA, presented into the year 2013, would illustrate comparative alternatives which used numbers from the year 2000.	Craig Martin	QQ
3/12/2013	The Draft EA explains the preference by the CAC for F-HH(v4) and the following rejection of such by FAA. The reader would have benefited if the Draft detailed the reason for the rejection. One can speculate that a little bit of fuel and minimal mileage is saved but that hardly seems enough justification for this rejection. If only in the interest of economic justice it might be fairer to let the affluent communities of Weston, Wellesley and Westwood share the burden of F-HH(v4) does accommodate this.	Craig Martin	RR
3/12/2013	The text in the Draft EA tells the reader that the waypoints in Figure 2-9 will provide the minimum altitudes at that location but only two waypoints in the diagram actually illustrate such. Residents of Readville would be most interested in the altitudes at the proposed CBEAR and COUSY waypoints, but in the end would like to see CBEAR disappear.	Craig Martin	B, UU
3/13/2013	I am opposed to the FAA's proposed changes to Boston Logan's runway 33L flight path. Additional noise from increased air traffic impacts the quality of life in Randolph, Canton, Milton. I am opposed to the proposed changes to the runway 33L flight path, please forward my comments.	Philip Levine	E
3/13/2013	Today, March 13th, is a day that Runway 33L is being used extensively, creating non-stop noise directly over my house in Winchester. It is very disconcerting and loud. There is no relief to the plane noise - once cannot escape it in my house or outside. One cannot concentrate, because a plane is constantly overhead. Please do not implement this navigation system permanently.	Susan Johnston	P

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
3/13/2013	I would like to make a suggestion about implementing the proposed route over Milton MA via Runway 33L: I suggest a time period of 1-2 weeks when this route is first used as a TRIAL PERIOD, so that ALL those affected would be able to assess the impact of this usage on their lives and businesses in REAL Time, not via theoretical charts, graphs, and "someone's" opinion. This way the REAL IMPACT will be felt and the NOISE can actually be measured with instruments on the ground.	Arthur Clasby	SS
3/13/2013	As a resident of Milton, MA, I am writing to briefly comment upon the proposed flight plan for runway 33L. While I understand that flight paths to and from Logan are inevitable, we are a unique, small town in the Boston area with numerous flight paths already affecting residents. Indeed, a review of the proposed plan showing existing paths demonstrates that Milton has more than its share of flights passing through, which as you know adversely affects the town in numerous ways that I am sure have been outlined by others. I would respectfully ask that any chosen plan minimize the affects on our town.	Benjamin R. Zimmerman n	A
3/13/2013	We are strongly opposed to more air traffic above our homes in Milton. Over the past ten years since we moved into our home in central Milton the noise from planes overhead has increased dramatically and we have had to plead for relief directly to the airport. When planes fly overhead now the noise is overwhelming so that we have to wait to resume normal life each time. The noise awakens us and at times is deafeningly loud. This has increased and we need relief instead of more noise. Please help to redirect this new traffic in a fair manner somewhere else. Also help us to reduce the noise level already overwhelming this town.	Suzanne and Donald Knight	A
3/13/2013	I am writing to register my concern with you regarding critical flight noise over Roslindale. I live in a newly constructed home with excellent insulation. In the past I have accommodated the occasional flight noise. It was not sustained for any length of time, so it was something I could put up with for the greater good. In the past couple of weeks a new flight pattern is happening overhead. I am awoken by flight noise at pre dawn. Normally I could go back to sleep, but the flights overhead continue unabated. It is now 1pm and the same unrelenting pattern is happening. The penetrating noise makes it very hard to concentrate. If this persisted I would have to relocate. I greatly appreciate all efforts the Airline industry is taking to be more green. I am an ecologist. But people count too. Keeping flight paths diverse is an expense worth keeping; otherwise precious human energy is wasted to lost sleep and concentration and lowered property values. Bottom line, keep flight paths diverse!	Karen O. Piper	TT, G
3/13/2013	Please see the attached letter to Mr. Michael Huerta, Administrator U.S. Department of Transportation Federal Aviation Administration. It is my deepest hope that you will consider the public comments submitted to date and reconsider this entire process. In my letter to Mr. Huerta, I wrote, "After learning of no less than 12 lawsuits against the FAA for similar RNAV matters across the country, I respectfully suggest that review and consideration be given to how the FAA plans and implements change. Present planning policies are not cost effective in addition to being counterproductive to good decision making. Adopting a genuinely collaborative spirit with neighboring communities of each airport would resonate in cost savings that would more than off-set the cuts. A rigid policy mandating partnership with impacted communities that incorporates community representatives in a fair, transparent and meaningful way embodies fiscal prudence, comports with FAA fiduciary duty, provides time management efficiencies, provides all due safety considerations and reduces costly litigation. " A good neighbor policy has to come from the top down but I am hopeful of Logan International Airport setting the precedent and leading the way for the rest of the country. It is obvious that you have invested countless hours in detailed professional planning. I don't think anyone questions the volume of work that has been done. The issues related to the end result are because of the study work done by an outside entity. The study is flawed; there can be no public confidence when the science is misleading in parts and missing in others. There are too many questions that cannot be answered because of that flawed study work product. I am hopeful that you will not be overwhelmed by the volume of work and time involved to and optimistic that getting it right will prevail. I am grateful for your time and thoughtful consideration. Thank you.	Janet Irwin	N/A

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
3/13/2013	<p>I am writing to bring your immediate attention to urgent matters at Boston's Logan International Airport. Concerns were raised following the January 14, 2013 public announcement that a new 33L departure flight path would be over Milton and adjoining towns immediately after a thirty day comment period closed on February 15, 2013. The comment period was extended to March 15th but the more important issue is safety. The announcement shocked residents and elected local and State officials in Milton, Randolph, Canton, Hyde Park, Dedham and other impacted communities where no one knew anything about it. Only LIA personnel were aware of the newly lengthened RWY 33L and the plan to use it for departures via Milton's and adjoining communities' air space. Milton already has more than its fair share of airplane noise with two permanent flight paths; the addition of a third RNAV route is unfair and, after reading the so-called study which is questionable at best, the decision making in this process is an enigma. As residents learned more about this 3 year project and as more state and local officials were contacted by constituents, it became apparent that many who should have known were never notified. There were numerous questions but no answers were forthcoming and the information that was given has been without foundation. According to LIA representatives, environmental studies and noise studies were conducted, however, the study is problematic containing numerous flaws. Milton resident Cindy Christiansen, a PhD Statistician, reviewed the report and found a number of data inconsistencies. She and others found that claims about safety and cost effectiveness cannot be substantiated (topic specific study information is not within the study). Dr. Christiansen cited scientific flaws. The study is misleading and should be cause for alarm as it relates to safety. Dr. Christiansen provided her analysis to the Milton Board of Selectmen after making brief public comments at their February 28, 2013 meeting. At the same meeting, Milton resident Sheryl Fleitman told Selectmen that the study was produced by the same firm that performed the work on the runway. That creates an appearance of a conflict of interest; this fact alone should warrant the immediate attention and investigation by FAA officials. A digital recording of the meeting can be collected at Milton Cable Access at <a href="http://miltonaccessstv.org/">http://miltonaccessstv.org/</a> It has been reported that there were 4 alternative routes in addition to the Milton route under consideration. It has been reported that other routes were optimal, while the Milton route was less advantageous. Both residents and elected officials from several communities have been unsuccessful in their efforts to learn more about those routes, about why more optimal routes were not chosen and why Milton was chosen. All would like to understand how this process was conducted, how the flawed study was produced, why the more obvious errors noted by non professionals were not caught, who was involved, who was responsible, why no one outside of Logan was notified that the process was underway, etc. Because a flawed study was used in the decision making, it is imperative that a new study be commissioned using accurate data. It is incumbent upon the FAA/LIA to maintain the current runway/flight paths and immediately suspend the threatened changes. Reliable information must be assembled and studied. The FAA must conduct an investigation to learn how the published study was created, why it contains erroneous data, who is responsible and especially to ascertain how safety is impacted. The Freedom of Information Act compels compliance. The comment period was extended until March 15th; with the newly discovered knowledge that the study is unreliable, the FAA must guarantee that data concerning cost effectiveness, noise impacts and most especially, safety, must be accurate and reliable. The March 11, Boston Globe front page report (<a href="http://epaper.bostonglobe.com/epaper/viewer.aspx">http://epaper.bostonglobe.com/epaper/viewer.aspx</a>) included the news that this process and planning had been underway over the last 3 years. Why weren't the subject communities informed of the potential flight path changes at any time over the last three years? Why were communities limited to a 30 day comment period? Why did elected officials and residents have to plead for more time to make comments? The so-called well-studied change in the use of RWY 33L was mentioned during an October 23, 2012 conference call with the LIA Citizen Advisory Committee that included Logan official(s), Milton's liaison to the CAC, Ms. Judy Kennedy, and others but the communities under the flight path were not made clear until January 14, 2013. Your testimony of February 23 before the House Transportation and Infrastructure Committee concerning the cuts to your operating budget as a result of the sequester is relevant. After learning of no less than 12 lawsuits against the FAA for similar RNAV matters across the country, I respectfully suggest that review and consideration be given to how the FAA plans and implements change. Present planning policies are not cost effective in addition to being counterproductive to good decision making. Adopting a genuinely collaborative spirit with neighboring communities of each airport would resonate in cost savings that would more than off-set the cuts. A rigid policy mandating partnership with impacted communities that incorporates community representatives in a fair, transparent and meaningful way embodies fiscal prudence, comports with FAA</p>	Janet Irwin	V, L, T, D

Table B-2  
Comments Received

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	fiduciary duty, provides time management efficiencies, provides all due safety considerations and reduces costly litigation. Milton is and has been willing to share fairly in the noise from aircraft coming and going from Logan International Airport. It is not fair to unduly burden Milton and the other towns with more. But more importantly, the issues of safety must be paramount for all involved. Please notify Milton residents and elected officials of your intentions as soon as possible. It will be easier and more efficient to make notifications through Milton's Town Administrator Ann Marie Fagan via her email at afagan@townofmilton.org.		
3/13/2013	As a resident of Milton, a town that will be subject to the noise of the proposed new flight plan. I am opposed to the plan. With fortunately all of Boston Harbor and Boston Bay to the east of Boston I can not understand why the FAA is proposing new plans that fly over heavily populated areas. It makes no sense.	Richard Ballantyne	A
3/13/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Canton & Milton. It is not fair that so many planes will be using this route and that the burden will be on a very small area. Why should this one area bear the brunt of all this plane traffic? EVERYONE in the state used the airport, so the airplane routes should be spread out to everyone. For example, why does the city of Brookline have hardly any routes over it? Whereas Milton has so much? Both cities are equidistant to the airport. This will affect my property as well as my neighbor's property financially. How are we going to ever be able to sell our homes with all the air traffic noise overhead? Who is going to compensate me for the financial loss? I urge you to OPPOSE the proposed southbound departure route on Runway 33L.	Casel Walker	A, G, V
3/13/2013	am opposed to any new and/or additional flight path(s) that would result in any additional landings/take-offs over Milton. We are currently subject to flights coming in at all hours--after midnight and as early as 5:15 AM. WE DO NOT NEED ANY MORE. IF ANYTHING, WE WANT FEWER.	Paula Fullerton	A
3/13/2013	As Canton residents we are writing you to express our concerns regarding the proposed RNAV departure route for runway 33L. The proposal will negatively impact on our quality of life due to noise and environmental effect from airplane traffic. The number of homes that would be effected that was stated in a recent report seems as though it should be much larger than the 127 homes in Canton that would be impacted. Please consider having the proposal undergo a full and thorough environmental review including at least one public meeting to review this proposal with those that will be most effected. Thank you in advance for consideration of my concerns.	Susan and Mark Gibbs	N, L, H
3/13/2013	As a Winchester resident, I'm concerned about the additional noise pollution from the tightening of the flight paths for runway 33L. Given today's wind pattern, we've been reminded all day and evening of what's ahead for us. While I understand the likely safety improvement from the guidance upgrades, as a lifelong engineer, always looking for solutions, I have to believe that the tightened pathways could readily be varied week to week, with minor software upgrades, to spread the unhappiness around more towns, which seems the fairest solution in a democracy where all votes should count equally. I hope you will consider this solution.	Doug Johnston	P, O
3/13/2013	I live in Milton. It is a town with very high taxes. We also have wealthy students who attend the "Milton Academy". Would the school still be attractive with high level noise when the students are in classes or studying? I doubt it. You pay for what you get. I am very hopeful this new plan will not be considered. This is a bucolic community. It attracts buyers because it is the first suburb outside Boston on the expressway. It would be a shame to have people not want to live here because it is noisy from constant airplane noise pollution. Word travels fast. Thank you for reading this and thinking a little more about it.	unknown	A



Table B-2  
Comments Received

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3/13/2013	As I yet do not have a complete understanding of the planned 33L route at Logan, I would appreciate your response to three items of concern to me and my family. The Boston Globe article of March 11 the indicates that the proposed efficiency of flight paths will save “millions of barrels” of aviation fuel. That may be true in the aggregate (across how many airports & cities and routes?) but it would be helpful to understand what THIS particularly compressed route will generate toward such savings. Where does the increased altitude (of 1000’-2000’) commence? Planes gaining altitude are louder than those descending. (Should the town of Milton now be expecting increased departures?) What is the net change in decibels over comparable locations in Milton? Last, but not least, the frequency of such flights can (and will, IMHO) be particularly stressful to those directly under the flight path(s). The present “scattering of flight paths” is a little like an airborne noise lottery most people have learned to live with, but eliminating any degree of randomness will be nerve wracking to those directly affected. And that includes much of this town. I hope you will consider these comments seriously and respond accordingly.	Emmett Schmarsow	VV, WW
3/14/2013	Just a brief note to document that I, Kathleen Morson Willock, as a resident of the Fairmount Hills. Hyde Park area of Boston is adamantly opposed to the construction of the new 33L RNAV path. Please make every effort possible to cease construction of this pathway. I am convinced that the quality of life of the residents in my neighborhood would be very greatly negatively impacted were this proposed construction to take place. Thank you very much for your consideration of this matter.	Kathleen Morson Willock	C
3/14/2013	As a Fairmount Hill, Hyde Park resident, I respectfully urge you to do everything in your power to oppose and stop the proposed 33L RNAV SID path out of Logan Airport which will increase air traffic and noise over Hyde Park, Dedham, Canton, and Randolph. There are already too many planes flying overhead in these areas and an even greater increase in air traffic, pollution, and noise is unacceptable. This is a quality of life issue that is very important to myself and other residents in these communities and affects our health and well-being also. Air traffic should be spread out over a larger area not concentrated in this strip.	Kim Chaban Griffith	C, V
3/14/2013	I am opposed to any change in the flight paths being considered over the town of Milton. It was cause undue noise and disturb our town life and wildlife in the Blue Hill community.	Terry Douglass	A, Y
3/15/2013	As a resident of Somerville I want to express my strong support for the changes to the RNAV SID for Boston Logan Airport's Runway 33L as it has been described in the FAA Draft Environmental Assessment, January 24, 2013. Since 2006 when Boston Logan Airport opened Runway 14/32 the annual number of flights passing over Somerville has tripled. This increase in flights over the city has significantly increased in the number of people affected by the noise from the overflights. Thus, I very much appreciate that the FAA is proposing to reduce noise affecting eastern Somerville. Residents of eastern Somerville already deal with too much environmental pollution from the transportation infrastructure in the city which is divided by I-93 and Route 28. It is also the home of the Boston Engine Terminal and has all northern diesel commuter rail lines passing through. As a resident of East Somerville I think that our community is already overburdened with air pollution from these sources. Given that we must live with these environmental impacts that affect our health, the increased noise experienced from the opening of Runway 14/32 only adds to what is already too much of an environmental burden for Somerville, the most densely populated city in New England. I hope that the FAA will soon begin the Phase 3 analysis of fair runway use and propose specific plans based in the findings of the analysis. Thank you for the opportunity to comment on the proposed change.	Ellin Reisner	LL
3/15/2013	We are writing with regard to the proposed departure plan alternatives that have been proposed or runway 33L at Logan Airport. We are resident homeowners (since 1979) of a single family home in the Hyde Park neighborhood in the City of Boston, MA. We respectfully request that the final selected airport departure procedures and routing for Runway 33L be adjusted so that the southbound turning movement of aircraft occurs as far west of the Hyde Park neighborhood s possible and that the turning movement be required to occur at the highest practical elevation. In addition, the departure plan should limit the routing of aircraft that do not meet the highest standards for noise attenuation design and require that acoustically inferior aircraft take even greater measures to avoid impacting the Hyde Park neighborhood. We are submitting this comment with the benefit of already having experienced a major increase in the amount of noise generated recently by departing aircraft using Logan Airport's Runway 33L, as follows: Until recently, airport noise related to Logan Airport had been occasionally annoying but not a constant concern. During the recent past, there have been loud and continuous jet engine noises	Michael F. Glavin and Eleanor M. Glavin	XX, KKK, YY

Table B-2  
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	<p>caused by departing aircraft from Logan. This noise has been intrusive and irritating and has negatively impacted the quality of life in our neighborhood. Upon inquiry, we learned from a MassPort representative that much of the noise has been created due to the departure pattern for Runway 33L that has been adjusted from time to time during the colder weather for wind directional issues. The MassPort representative further explained that the departure activity that had caused the increase in noise in Hyde Park was not activity that had been approved – in any way – as part of the FAA’s departure plan review process for Runway 33L that is the subject of this comment. However, the representative did agree that the amount of noise generated by the recent activity was something that was noteworthy with respect to our comments on the plan since the changed departure routing for Runway 33L was the direct cause of the increase in noise. Based on this experience, we are very concerned that the proposed departure plan for Runway 33L will exacerbate this recent noise condition. With its location being relatively close to Logan Airport, Hyde Park would be heavily impacted by any aircraft routed in the general vicinity of the neighborhood and/or traveling at a low altitude over the area. For over thirty years, we have been generally satisfied that airport traffic planning for Logan Airport has respected the legacy of relative quiet that existed when we chose to reside in Hyde Park. It would be inappropriate and burdensome for the residents of Hyde Park if the FAA chose now to allow a departure plan to be implemented for Runway 33L that failed to honor the reasonable expectations of the Hyde Park community that aircraft noise would not be increased. Please keep us informed of the progress of this matter and any additional public comment opportunities that may occur with respect to the FAA’s proposed aircraft departure plan decision-making process for Logan Airport's Runway 33L.</p>		
3/15/2013	<p>Until recently, airport noise related to Logan Airport had been occasionally annoying but not a constant concern. During the recent past, there have been loud and continuous jet engine noises caused by departing aircraft from Logan. This noise has been intrusive and irritating and has negatively impacted the quality of life in our neighborhood. Upon inquiry, we learned from a MassPort representative that much of the noise has been created due to the departure pattern for Runway 33L that has been adjusted from time to time during the colder weather for wind directional issues. The MassPort representative further explained that the departure activity that had caused the increase in noise in Hyde Park was not activity that had been approved – in any way – as part of the FAA’s departure plan review process for Runway 33L that is the subject of this comment. However, the representative did agree that the amount of noise generated by the recent activity was something that was noteworthy with respect to our comments on the plan since the changed departure routing for Runway 33L was the direct cause of the increase in noise.</p>	Michael F. Glavin and Eleanor M. Glavin	YY

Table B-2  
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3/15/2013	<p>I am strongly opposed to the FAA's currently proposed FAA NAVSID Runway 33L Project as poorly conceived and woefully incomplete as to safety, health, property values and environmental consequences. 1. The 33L proposal puts the ground public and air passengers at obvious serious safety and health risk. There apparently have been no considerations of relevant topographical issue here in disregard of very likely high turbulence problems around the Blue Hills in Milton over which you propose (33L) intensive commercial aircraft use. The Blue Hills are a topographical anomaly which threatens to magnify and create a huge echo (noise) effect on the Milton residents immediately to the North. Furthermore Blue Hills characteristic turbulence (separate weather station) for 24/7) have been recognized by NOAA to create a huge "wave effect" which rises many times about the mountain, presenting very real aircraft navigation issues, especially when frequent sunspot activity interferes with the beacon . (See the NOAA (National Weather Service)publication, FRONT, November 2011.) We consider you projected noise of 65 decibels is artificially low and does not consider the effect of the Blue Hills as an echo chamber adversely impacting residences immediately to the North of the Blue Hills Reservation. 2. The FAA has incompetently failed to deal with the 33L project's effect, creating huge losses in Milton Real Estate values. Authoritative, credible real estate studies predict a 29% loss in residential property values, (see, Bell, The Impact of Noise on Residential Real Estate (The Appraisal Journal, July 2001) The project proposal indicates there has been no fair or competent determination of the loss of real estate values in the Milton area which borders the Blue Hills. The loss of home values is devastating. We home owners who will be impacted by the 33L project consider the FAA to be unlawfully 'taking' our property. The 33L project qualifies as a nuisance, wholly denying both the 'peaceful enjoyment of our residence' under Mass Real Estate law and further taking the value of our properties. If the average home is valued at \$400,000 (and this might be very low), the loss of value would be approximately \$133,000 per house time the 1000 or more residences, means a loss of a minimum of \$130,000,000 or 130 Million dollars alone to this part of the community of Milton. Legal action will generate damages that will be substantial and very costly for the FAA. Is the FAA /Airlines prepared to pay each homeowner \$130,000. Of course the physical harm done to the residents by the proposed decibel noise will be immeasurable, causing many Milton residents to move. Aircraft noise is seen as so damaging that there are more than 12 other law suits against such high handed proposals are currently in suit across the US. 3. Another objection we have is with trampling on our states rights , the trivializing of our State's Reservation – the Blue Hills Nature preserve, visited by over one million residents a year, is important for its serenity and wildlife and native American artifacts (as well as National Historic Landmarks) which will certainly be damaged by noise, turbulence and particulates. We object to the FAA's proposal which walks over states' rights to set up such preserves and sees only federal national parks as protectable. Because the proposed 33L project has such enormously damaging economic, environmental and health and safety consequences for the aircraft passengers and the ground residents of Milton, we request the project be terminated.</p>	Mary Steele Klein	D, G, ZZ
3/15/2013	<p>As a pilot I understand reasons behind GPS use but we are already inundated with air traffic from Hanscom Field. We also currently get departure traffic from Logan airport. Enough is enough! Please don't add more noise and traffic on our heads! Arlington recently voted to ban leaf blowers because of noise! Please don't change the routes anymore!</p>	Bob Kalustian	JJ

Table B-2  
Comments Received

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3/15/2013	<p>I have more comments and questions. Given the bit of time I discovered I still had with comments accepted up to midnight today, I found another data concern that needs clarification. The data file I was given on Tuesday contains three DNL numbers per location. One is the 2009 value that, according to my current understanding, is estimated using the INM model. The other 2 values are 2015 predicted DNL for no change and 2015 predicted DNL for the new plan. I can think of a reason for the DNL 2015 no-change predictions to be greater than the 2009 estimated DNLs (increase in air traffic) or equal to the 2009 estimate, but I do not understand how the predicted values for 2015 no-change can be less than the 2009 estimated numbers. I cannot understand how some 2015 no-change DNL predictions can be less than the 2009 estimates while others are greater than the 2009 values. But, they are – across Milton and other Towns. How does that happen? What changes in the input into IMN or to the prediction model were made to make some predictions go up and others go down in the NO-CHANGE plan? What does this say about FAA's method for which these Why isn't the FAA discussing things that could be done to reduce noise, not just playing with the paths and distribution of the total noise impact from Logan? I think it is misleading to report that fewer individuals will have levels of 45+ under the new RNAV plan for departures from 33L. The FAA is choosing to do this by concentrating the noise but has made no attempt to take action to reduce the noise. It is misleading to report that 68.4% of the study population will not be in areas with 45+ DNLs. The problem is with the definition of "study area". The FAA included populations of cities and Towns (e.g., Carlisle, Acton, Abington, and others) that have no population with a DNL estimate of 45+. With this strategy to mislead, the FAA could have expanded the study area even further, causing the percent of the population unexposed under the new plan to increase to 100% when rounded. The public doesn't understand these nuances – I didn't either until re-reading and studying the report over and over again. It is unfair to make the public work this hard and it is not right for the government to mislead with numbers. I'm amazed at the information I've uncovering by having the data. Has the FAA reported all information, graphs, tables to the public? Does the public know that the population numbers used for 2015 predictions are different from the US2010 Census? Terry, I started my venture into understanding this new RNAV and the draft report believing that there would be very little change in noise burden to my new Milton neighbors (I've lived here about 1.5 years) as the report and subsequent information from FAA and Logan suggests. I cannot continue to think that. I live in an area of Town that will be unaffected (I think) by the new 33L RNAV. However, the more I've researched and learned about the FAA, Logan, RNAVs, and noise measurements, the more I start to understand my fellow-citizens' concerns – those who feel that Logan and the FAA tell them one thing only to find that once a change is in effect, the information they received is nowhere close to matching what they experience. There are personal agendas played out within the CAC – not surprising given human nature and the threat to health, property value, and quality of life that these FAA decisions cause. There is suffering in Milton from the 2 RNAVs currently over this Town. I don't think Milton residents are over-reacting; I don't think they are trying to shirk a fair shared-burden of noise from Logan. This third RNAV over the Town is too much. It is difficult to trust that a 6 month test period will be anything but a spurious front for implementing a plan that is known to have substantial negative effects on Milton – much more than the study suggests. I wanted to believe differently, but all evidence I've been able to accumulate during this very short comment time period causes me to doubt the validity of the study and to question the motivations behind the FAA's decision to implement this new flight plan.</p>	Cindy L. Christiansen, Ph.D.	F

Table B-2  
Comments Received

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3/15/2013	<p>Terry: thank you for your response and for the data. The information has answered some questions and has created more. I think it is irresponsible to start the 33L RNAV path with the uncertainties and questions that remain, some of which I detail below, others that I'm sure are included in the comments of others who will be negatively affected by the FAA's decision, and those questions that I have not discovered because of the extremely short time frame the FAA requires. Given I have found other problems with the methods and the data and have only had access to the data you provided for about 3 days, I request that the FAA stop all decision-making on this topic until further study is done and better communication occurs. A. I believe the science is flawed and the data are faulty for the noise analysis reported in the draft document a. I asked for data for all 652 2010 US Government census blocks in Milton MA – even those with populations of 0. I received 642 locations. The analysis for the draft report appears to have omitted 10 of Milton's census blocks. The analysis is flawed and no decisions should be made until this is reconciled and all of the data checked for other omissions. b. From the recent data provided to me, the total population of Milton used in the FAA study is 25,488.420. This is 1514.58 fewer people than the 2010 US Census reported population value of 27,003. The FAA needs to explain: i. Why 1,514.58 Milton residents were omitted from the study and ii. Why populations are rational, not whole, numbers. These fractional number of people occurs throughout most of the population centroids. How does it happen that the study used fractions of residents and not actual counts? c. I think the yearly-DNL metric is bogus as a measurement of community noise burden. I now understand that this estimate has been used for decades and that is a predicted value – with no actual measurements used to calibrate the predictive model. There exist more valid ways to quantify noise burden. d. Even if yearly-DNL did a good job of representing aviation noise burden, the method for predicting DNL appears to be ancient. Much research has been done since the 1970's to improve prediction and estimation methods but it appears that the FAA has not kept up with this science This progress in estimation and prediction methods skyrocketed with better computing systems and the methods made available because of this. From my study of the history of DNL, it appears it was developed back in the day that I was using punch-cards to implement my statistical programs and we all did transformations of data in order to simplify and reduce computing times for the more CPU-intense methods like running regression models. e. In my world of health and medical research, no study that only provided predicted estimates would receive peer-reviewed acceptance. I don't know why the FAA should be allowed less-stringent requirements in its reports. The measure the FAA should want to know is the parameter value that represents noise burden of residents (in government census blocks). FAA uses yearly-DNL to estimate this parameter which I criticize below. Instead of measuring this parameter, the FAA has chosen to estimate it – making the estimate a statistic, not the value of the parameter of interest. All statistics have error associated with them. The only scientifically responsible way to report estimates is to include a confidence or a credible interval (former if using Frequentist methods which is what I think the FAA's INM model is based on, and the latter if using Bayesian methods, which has the potential for improving these study's reflection of the truth). I asked for the margin-of-error in my previous email. My conclusion from it not being provided to me is that it doesn't exist. If it doesn't exist, I believe the FAA is not being fully transparent and is not properly representing its findings. f. I believe the DNL metric is meant to deceive the public and decision-makers as to the true noise burden experienced by residents. One part of the report and the order that is referenced defines it as a "daily" value; another part of the report and another part of the order defines it as a "yearly" value. Both use the abbreviation (DNL) but one is daily and one is yearly, with no further use of these modifiers to clarify which is being meant when. It is sloppy and misleading to use "DNL" to mean both a daily value and a yearly value. The daily smooths out the noise burden over a 24 hour period – not measuring what disturbs people from aviation noise, that being the noise level of the planes and the number they of flights they endure during that 24 hour period. It is the intensity that is a burden, not the average! The RNAV will make the intensity greater, probably unbearable to many if it is anything like the RNAV for runways 4. The daily DNL is then further smoothed by the FAA method when it makes it a yearly value – a value that is a meaningless metric of noise burden. The public deserves better communication than this. The INM offers other metrics and the FAA allows CA to use CNEL. I think the our government must justify the requirement that these studies use DNL, a measurement created about 30 years ago, when ones that capture the true noise burden are available, have been, and recommended by others not connected to the FAA. I have heard that there are more than ten current lawsuits against the government regarding these RNAVS – I am not surprised because what folks are hearing on the ground has almost no connection to the estimated yearly DNL metric. g. In the classes I teach, I require</p>	Cindy L. Christiansen, Ph.D.	F

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	<p>students to “say in words” what the difference between 2 estimates means with respect to the application and the science. I ask the FAA the same thing. What does it mean, in words that the public can understand, for the DNL to go from, say, 50.1 to 50.2? – and you cannot use “DNL in the answer”. The answer needs to be something that the intelligent group of 27,003 residents of the Town of Milton can understand. The answer cannot be that it means no difference – the explanation must be based on what residents experience on a day-to-day basis –in terms that represent the burden: number of planes, noise that is in the background or noise that stops one’s conversation or wakes people from their sleep; it should include the duration of the noise – these are things that matter to those of us living under these flight paths. Also, there should be an explanation as to whether a change from 50.1 to 50.2 is the same increased burden for those who live anywhere in the study area? It cannot be given the way the DNL is predicted. This, too, leads to misunderstanding and miscommunication. h. I was amazed that I was able to account for over 95% of the variation in the Milton DNL predictions that were provided to me in my first request using only a linear regression model (which is not an appropriate model) that included combinations of only 3 variables: distance from the airport (that I calculated), and the provided longitude and latitude. I am able to very closely predict (the flawed) DNL estimates without any information on number of flights, type of craft, weather conditions. I realize my three variables are correlated with number of flights and even type of aircraft, and my linear model is wrong, but to be able to practically predict the FAA’s DNL value using only the variables made available and statistical assumptions that are not valid (the linearity) speaks to the uselessness of the metric and the method used to calculate it.</p>		
3/15/2013	<p>i. The study’s results don’t match personal experience; good science cares about this. I have listened to many Milton residents who can’t sleep because of air traffic noise, can’t talk to a neighbor because of air traffic noise, can’t hear their TV because of the noise, who live in areas of town that the report predicts to be under the DNL estimate of 45. A study that doesn’t pay attention to this is frivolous in my opinion.j. I was surprised to learn that the yearly-DNL estimates were not calibrated with Logan Airport noise monitors for this report. The Logan airport website information reports “On-going monitoring conducted by Massport is used to check the accuracy of these computer generated models (from the INM). Over the years, Massport has worked proactively with the FAA to make the INM better “fit” Logan.” When was this last checked? How well can the calibration work for the southbound routes when there is only 1 in Milton and only 1/3 of the monitors are set up south of Milton? If the FAA is interested in good estimates of noise burden, shouldn’t data from these monitors be used, the discrepancies reported, and the public informed about how the actual noise data differs from what the FAA predicts the noise levels are? B. The report and subsequent communication notes fuel cost as one reason for the choice of the southbound route. However, there is no cost/benefit analyses that have been done. Likely the savings in fuel cost is more than offset by the reduction in the tax base in Towns that will have the RNAV above them, the population’s health – both physical and mental. The FAA should not grab their fuel savings at the expense of towns’ fiscal health and resident’s physical and mental health. C. The report and subsequent communication notes aviation safety as the reason for RNAVs. What is the evidence of this? We are all for improved safety but when has there been a safety event or a potential safety event that was or could have been prevented if an RNAV had been in place? It is misleading to claim this as a reason for the need for this RNAV without substantiating it. Use of the word “safety” without evidence creates a volatile discussion that is non-productive and unnecessary. Use of this reason without evidence to support it makes anyone who voices legitimate concerns about quality of life, decrease in property value, concerns over health effects, concerns of environmental effects, have to justify why these legitimate concerns are as important as “safety” (or fuel cost saving, the reason I addressed in B above).</p>	Cindy L. Christiansen, Ph.D.	F



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3/15/2013	Regarding FAA's proposed changes to Boston Logan's runway 33L flight path and all other changes over the past several years which has increased inbound and outbound air traffic and noise levels 500% over the neighborhood around Sumner St. The flight path maps I've seen are basically useless since there is no way to interact with the map to understand what the 1000's of lines represent nor if they impact our actual neighborhood and at what elevation levels, ratio of noise levels of various types of planes at those elevations, frequency of those flights, etc. What I do know, is that having lived here for over 27 years, been in the area for over 34 years and my wife having lived at this same address for 42 years and in Milton for her entire life of nearly 52 years, is that we have never experienced the kind of increased air traffic over our home as we have over the past few years. In the early 80's we rarely encountered any aircraft directly over our home as all traffic seemed to fly over the uninhabited Blue Hills beyond the bottom of our street and neighborhood, but in those years since then as they have built more multi-million dollar homes in the Blue Hills on Unquity, Harland, and other new developments off those and surrounding streets, more and more air traffic now passes directly over our neighborhood and directly over my home where I can now wave to and be visible by passengers on the plane. Back in the early 80's I used to do the landscaping for my wife's elderly aunt who lived in the home right next to Fontbonne Academy and I was amazed how low the incoming flights were that I could hear them on approach even over the lawnmower and then look up and see passengers. Having grown up 30 miles south of this area, this was an unheard of event so I was quite taken aback by it and frequently expressed it to others around me. My wife's Aunt actually had difficulty selling her home because of the noise when, after several break-ins of her home and personal assault, she decided to move out to Phoenix to spend her last few years. Now it appears we are going to have the same noise pollution issues and same difficulties should we have to sell our home due to our continuing unemployment issues. There is no way to know if all the increased noise pollution we have endured over the past few years will be improved by this new flight plan or grow worse and the maps and information provided by the FAA are obviously deliberately overwhelming and confusing so as to meet their requirements and push through their agenda despite our community concerns. I suspect that much of this increased air traffic and noise pollution has more to do with mega dollar airlines saving on their fuel costs at the expense of us poor residents unable to effectively voice our concerns or effect change. And the airlines increased profits from their minute fuel savings is at the expense of the loss of our only, and lifetime, equity in the value of our homes. We appreciate your efforts in this matter, but this is a much larger and existing problem that the provided information on this new flight plan does not even make clear if it will improve or worsen, so urging the FAA to extend the public comment period is not likely to be of much use if most of the public is not even aware of the impending changes or what they will mean to their neighborhoods. However if noise pollution in this neighborhood is more adversely affected, there will be a flood of lawsuits for the increased suffering and the airlines theft of our home values.	Laurent LaFontaine	A, G
3/15/2013	Attached is a copy of a letter that I have prepared on behalf of the Board of The Cunningham Foundation of Milton. We manage the large private park and recreation facility at 75 Edge Hill Street in Milton. We wish to go on record in opposition to the FAA proposal as outlined in our attached letter. Thank you.	Anthony Will, Trustee	HH
3/15/2013	The Board of Trustees of the Cunningham Foundation in Milton wish to go on record in opposition to the FAA Proposed Action to implement a new air traffic control Area Navigation (RNAV) standard instrument departure (SID) procedure on Runway 33Left (33L) at Boston-Logan International Airport. The Board believes that Milton already bears its fair share of air traffic and that the proposed departure route would undermine the tranquil nature of the affected parts of town.	Anthony Will, Trustee	HH
3/15/2013	I am writing to you concerning the new proposed departure route off Runway 33L that will adversely affect the Town of Milton as well as the surrounding towns. Currently Milton has two EXTREMELY busy routes and adding a third route will impact the quality of life for children and adults alike. The environment currently bears a tremendous burden and eventually if this proposed departure route is passed through, it will once again be on the shoulders of Milton residents. Additionally, it will become an economical burden as well wherein the noise from the planes passing over our Town constantly will reduce our real estate values and deem our Town less desirable. The current departure route being utilized should continue and not be changed. I vehemently oppose this proposed southbound departure route on Runway 33L.	Sanjeev Forsyth	A, G

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3/15/2013	I am a Milton resident as well as a health care professional and am very concerned about the proposed RNAV southerly portion of the route for runway 33L over Milton. It is an unfair and potentially unsafe burden for residents. It also threatens to devalue our homes. We are currently bombarded by planes from runways 27 & 4. I am opposed to this proposal. I do have several questions that I hope you will be able to provide answers to. How many planes currently use runway 33L in a month, day, year? How many planes are currently using runway 33L and directly going over the southerly portion of the proposed RNAV line?-daily, monthly, yearly? What is their exact altitude over Milton at that point? How many planes will be projected to be using runway 33L southerly portion if this goes thru? -daily, monthly, yearly What are those projections for 2013, 2014, 2015 (for the next 5 years) What will be the altitude of the planes over Milton? What is the current altitude of planes over Milton? What number of planes are currently going over the "blue line" areas of the proposed southerly route, that will now be under the narrowed RNAV route over Milton? Currently, what types/sizes of airplanes are using the runway 33L and flying over Milton-more specifically the proposed southerly route-altitudes as well. What types/sizes of aircraft will be using the new proposed route? Where are the markers for places listed on the historic register in Milton identified specifically in the FAA report? Please explain why a more westerly southern route was discounted. Where is the health impact study to examine health effects for those under the proposed RNAV route, the social and economic impacts as well as other effects? What about the noise impacts? Environmental impacts-it does not look like that information was done. Where are the population markers located in west Milton? What about the noise markers?-where are they located? Where is the health study regarding the use of satellite navigation and radar systems in these airplanes? It is clear that too many questions remain. The FAA should hold a public meeting to answer these questions. At a recent Board of Selectmen meeting in Milton, two representatives of Massport attended. However, they were unable to answer any technical or specific questions related to the FAA report, as they did not prepare it. Therefore, it is only appropriate that the FAA meet with residents to answer specific questions, some of which are outlined in this letter. I hope that the FAA will do the right thing and not go forward with this proposal.	Roxanne Musto	A, G, W, H
3/15/2013	We are contacting you regarding the new FAA Fly Zone affecting Belmont. We have lived in our home for over 20 years. Over these years we have experienced some overhead activity from Logan Airport. However, the new flight pattern which started this month has created a significant increase in the noise level we hear. In addition to the increase in noise level, the frequency of overhead plane noise has increased dramatically causing constant overhead noise in our area of Belmont. We have been logging the frequency of the overhead plane noise heard this week. An example is last evening, March 14, 2013. Between 10:00 pm and 11:00 pm there were 12 flights overheard above us. The planes started this morning March 15, 2013 at 6:00 am and there were over 12 planes heard overhead in an hour. This noise is constant all day into late at night. As we sit in our home composing this email, we are surrounded by constant plane noise heard overhead. This increase in the overhead noise is disruptive to daily life in the area and to the quality of life in the area. It is unfair that this new flight pattern is causing this area to endure such an increase in the number of flights heard overhead as well as the noise created by these flights. We hope that this new FAA Flight Path can be evaluated and modified so that we do not have to endure the higher noise levels and constant sound of overhead planes all day and night. This new flight pattern has definitely changed the quality of life and the peaceful life we have appreciated living in this area. The increase in noise and volume of flights overhead will affect us even more in the coming months as we open windows and spend more time outdoors. We are sure that others in Belmont have been affected as we have. Hopefully something can be done soon to alleviate this situation. Thank you.	Pamela and Milton Yanofsky	QQ
3/15/2013	The Brush Hill Area Neighborhood Association represents hundreds of residents who live along the Brush Hill area of the western end of Milton and are underneath the proposed southerly RNAV path from runway 33L at Logan Airport. We are opposed to this proposal. This western end of Milton is more elevated than most of the town and therefore will receive a greater exposure to not only the noise from planes on this new concentrated southerly runway path but also to the visual impact that this will bring as well. Many homes in our neighborhood are situated on the southerly exposure of Brush Hill and will receive the brunt of impact from this new route. This proposal will place an unfair burden on Milton residents, who already suffer from air traffic from runways 27 & 4. By concentrating this path of airplane departures over Milton, you will be adding additional noise as well as pollutants over a very concentrated area. This is unfair, and potentially unsafe for both our residents and wildlife. In addition, our home values will diminish. This area of Milton is home to many historic areas as well including the Blue Hills,	Tim Kernan President	A, U, W, O, RR

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	the Suffolk Resolves House and Fowl Meadow, just to name a few. We have several questions regarding the FAA report. We understand that other options were discussed by the Citizens Advisory Group to Massport, and that one plan was forwarded to the FAA. Can you explain in detail why the plan that this committee forwarded to the FAA was not used? Why not fly the RNAV path more west? What is the exact location that the noise levels are evaluated from in Milton for this proposal? In the FAA report, there are no indicators for population in the west side of Milton. Please explain in detail. Why do the maps that identify historical locations in other communities not identify those locations for Milton? What are the current altitudes of airplanes that fly the exact proposed southerly RNAV path over Milton? How many airplanes fly over the exact southerly path each day and what are their altitudes? How many airplanes will fly this exact route? We strongly hope that the FAA will stop this plan before it begins. It is very clear that there are too many unanswered questions at this time and much opposition.		
3/15/2013	I am writing to ask you to not route any more flights over our town of Arlington, MA. We already get TOO MUCH air traffic and noise from TWO airports – Logan and the nearby Hanscom Air Force Base. If you want to modernize technology by using GPS that's fine, but the GPS should program varying routes and disperse them fairly over a wider area, just as the current flight paths are currently done, in order to not increase the punishing noise to a narrower segment of population below in order to give planes the shortest distance. THAT IS ABSOLUTELY NOT FAIR to anyone living under those narrower planned flight paths! PLEASE PLEASE PLEASE do not let the air traffic increase any further over Arlington!	Georgia Contes and Julie Kalustian	JJ
3/15/2013	Although I wrote to you the other day it was not clear to me that the letter was able to be delivered on the computer. Therefore I write once more in opposition to the RNAV proposal to use a GPS system to concentrate the flight tracks in a tighter fashion on Runway 33. The departures on 33 have tripled or even quadrupled since the 14-32 runway has been in use. All this additional volume over East Boston, Chelsea, Everett, Somerville and Medford is a terrible burden for all the people who live under the flight tracks. What the FAA and the MPA should be doing is to find ways to alleviate the high volume of flights on this runway and try to disperse them using different runway configurations. In addition, both agencies must find mitigation to lessen the noise impacts on the environmental justice communities. A soundproofing program for homes, schools and other buildings which house vulnerable populations should be implemented to provide some relief for these impacted neighborhoods. Perhaps an update of the PRAS system would help to disperse the noise impacts and not have these same communities bear the burden in such a concentrated way. To say that the noise impacts would not increase if this system were put in place is an insensitive remark. The issue is that the FAA should be looking for all possible ways to improve the quality of life for everyone living under flight tracks. The people making these decisions and doing these studies should live under these flight tracks and experience the noise for themselves. Sometimes I think that the agency people believe that we citizens exaggerate the noise and pollution impacts of airport operations. Because they use computer models and data gathered on computers instead of experiential knowledge, the impacts are not real or meaningful to them. So in conclusion, I say that this is not a good plan or a productive use of FAA time and resources. Put your energy and intelligence to better use by finding ways to lessen the noise and pollution of the airport operations.	Mary Ellen Welch	C, D, FF
3/15/2013	As a resident of Dedham, I am concerned about the new Logan flight plan to route a large number of planes over Dedham. I think the flights should be distributed more fairly over the broader metropolitan area. Thank you for your attention to this matter.	Elizabeth Gilbert	OO, V
3/15/2013	I write to you today regarding the proposed RNAV departure route for Runway 33L. I believe this project will have significant negative effects on the Town of Milton, its residents and environment and the adjacent Department of Conservation and Recreation Blue Hills Reservation. Additional noise and pollution from heavy departing aircraft traffic would only add to the disproportionate burden Milton already bears as it sits beneath other routes in and out of Logan International Airport. Many Milton neighborhoods are already heavily impacted by the airplane noise and pollution from airplane arrivals on Runway 4, and airplane departures from Runway 27. Planes on these routes routinely diverge from the established pathways or fly too low. No doubt, plans departing on Runway 33L would similarly find themselves off course, adding to the area that will experience the negative impacts of noise and pollution. Milton is an historic town, having just celebrated its 350th anniversary. Some homes and structures in the town date back to the 1600s and 1700s. These historic properties would face additional pollution and noise under the proposal for Runway 33L. Finally, the Blue Hills Reservation is the jewel of	Tom Goltz	A, Y, L, M

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	metropolitan Boston's regional parks. It is home to wildlife, plants and trees under threat from urbanization, pollution and environmental stress. Its 6,000-acres host walkers, hikers, swimmers, bicyclists and people seeking the peace and quiet of the outdoors. To add to the volume of air traffic that currently spoils the skies above the Blue Hills and rains particulates upon its landscape would further undermine the efforts of Milton and Massachusetts residents to preserve open space and protect our environment. The environmental study that was conducted does not sufficiently account for the proportion of the population in Milton nor the volume of natural resources that would be affected by the noise and pollution from this proposed route. This proposal should be subject to a full and far more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. I also ask you to extend the comment period to allow full community participation in this decision that will have a significant environmental impact on the Town of Milton. I appreciate your consideration and I look forward to further communications from you or your office as this review process moves forward.		
3/15/2013	I have written to the FAA in the past to complain about the noise level from planes over Arlington, MA. Now I understand that a proposed alteration in flight paths for planes in and out of Logan Airport will mean even more noise in my town. I already have triple paned windows, use earplugs and a white noise machine, and can still hear the planes quite clearly. I would like to state that in my opinion any proposal which would involve increased noise levels in Arlington is a poor choice.	Barbara Middleton	JJ
3/15/2013	Oppose	William Dicarlo	HH
3/15/2013	As a longtime resident of Waltham, MA, I am asking that the FAA reconsider its plans for changes in flight patterns for runway 33L. While I do recognize the need to switch from ground based control to satellite based control, I am concerned about noise impact to Waltham. According to a table in Chapter 4 of the impact assessment, Waltham gets stuck with the largest increase in population impacted by plane noise while the more congested and noisy cities of Boston and Cambridge benefit from reduced impacts. It is interesting to note that the impact to other communities yields much smaller population numbers. I believe that either the noise should be shifted east closer to Logan or more widely dissipated among the metro area west of Logan. I often sleep with open windows on spring and cooler summer nights and am concerned that the noise impact will cause me to close windows and use more air conditioning. Thank you for considering my comments and those of other residents of Waltham.	Bob Hachey	AAA
3/15/2013	I am writing to inform you of my disappointment and concern regarding the frequent flights of airplanes and helicopters over my hometown of Dedham. The noise pollution along with traditional pollution has made me and my family want to relocate. I love my hometown of Dedham but if I have to constantly listen to airplanes and helicopters traveling over my head, it will make trying to relax in my backyard difficult if not impossible. Please let me know what actions I need to take to change this decision of this new aviation route. My husband and I bought our home in 2004 with the knowledge that there were no aviation routes overhead. If we were to decide to sell our home the knowledge of this new airplane route could ruin a possible sale.	Isabella and Mark Bessert	OO
3/15/2013	Attached is a petition containing 1,050 signatures received to date, along with comments from residents of Milton, Hyde Park, Canton, Dedham & Randolph opposing the implementation of Runway 33L over Milton and the surrounding towns. I am also sending these documents to you via UPS overnight delivery in the event you are unable to open and print the attachment.	Beth I. Fleitman	HH
3/15/2013	Petition	Beth I. Fleitman	HH
3/15/2013	Please stop Logan Runway 33L flying over my town, we already have too many flights over Milton. Two Sundays ago I was awakened at 7:30 A.M. by flights overhead & the same on the following Monday at 6:40 in the morning. When filing a complaint, I discovered the online Logan flight tracking system and sampled the takeoffs with what was audible from our property. From 6:30 AM to 12:30 PM there were well over 100 departures in our audible zone, it worked out to be something like a flight every 3 minutes and that was just the takeoffs! In the Evenings we usually have to endure similar noise pollution with flights approaching over the Blue Hills. We should have a right to enjoy the outdoors our homes our yards and surroundings without the seemingly constant drone of jet engines. I understand a Massport official was recently quoted as saying in reference to the proposed additional flights ... we really believe the change will be imperceptible or negligible. Is Massport saying it is already so noisy that the suffering	A. Weinrebe	A

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	citizens under the proposed flight path will not be able to hear any difference? Is there such a thing as negligible noise, I don't think so, (it sort of reminds me what was said years ago about radiation!), I believe noise is additive and the proposed increase in flights will just increase our discomfort! Again, I am opposed to Logan Runway 33L flights over Milton. I do believe we are already shouldering more than our fair share of noise pollution from Logan air traffic.		
3/15/2013	I am writing to say that I would be strongly opposed to any increase in aircraft noise or activity over the Town of Belmont which forms the southern border with Arlington. The present levels can be stressful and annoying. Let the planes flight out over the ocean and cross over at higher levels. Any additional costs can be added to the cost of the air ticket.	Joseph R. DeCoursey	QQ
3/15/2013	I write to you as the responsible FAA official dealing with propped flight pattern changes as to Runway 33 CNAVE-SID at Logan Airport, Boston, Massachusetts. I am opposed totally to this proposal. My credentials are the following. I am a Catholic priest of the Jesuit Fathers, presently a resident at St. Mary of the Hills Parish, 29 Saint Mary's Road, Milton Massachusetts. Since 1969 I have been a Professor at the Carroll School of Management at Boston College in Newton, MA; teaching MBA courses in Real Estate Development and in Sustainability. For 23 of those years I was an Adjunct Professor at Boston College Law School. I am an advisor to the National Association of Realtors on Sustainability and currently writing a book on this topic. I am aware many, many residents of Milton and surrounding towns are writing to protest against the proposed flight pattern changes. I will try not to repeat their many worthwhile objections. Instead I will focus on one alone. Namely, needless added endangerment to an extraordinary large number of school age children and young adults attending schools directly under or adjacent to Runway 33's proposed new flight pathway over Milton. Enclosed for study and consideration is a recent estimate of such students [see table in letter]. It is not as if the Northeast Corridor, especially in and near Milton, has not had more than its fair share of horrific crashes in the past. Obviously adding once again to the number of planes flying over such a crowded area adds to the risk of more such crashes. Especially is this true with such high numbers of children assembled therein most days. The possibility of a disaster taking place exists that would be far more destructive than ever the recent one which took place in Newtown, Connecticut. Such destruction will constantly threaten Milton and surrounding towns. Let's look at some history. [see list in letter]. Any of these accidents could have happened in Milton and could happen in the future. I hope the FAA will discard this ill-conceived plan. Thank you for considering the contents of this letter.	Frank Parker	D
3/15/2013	Please accept this additional comment on the draft Environmental Assessment concerning the Boston Logan International Runway 33L RNAV SID proposal. Please provide me with notice of any issuance of the final Environmental Assessment and/or any finding of no significant impact (FONSI). The Environmental Assessment (EA) must consider the cumulative impact of the proposed Runway 33L RNAV SID on Milton and the sensitive Blue Hills Recreational Area and not merely the incremental or marginal difference between noise associated with the proposed action. See Grand Canyon Trust v FAA, 290 F.3d 339 (DC Cir. 2002). Currently I understand there are already two RNAV flight paths that the FAA directs over Milton. This proposal adds a third, but nowhere in the study is there an analysis of the cumulative impact of this action when considered with the other RNAV flight paths and/or with the other traffic, including propeller air traffic, that the FAA directs over Milton; and there is no graphical representation of those cumulative flight paths and their effects, but there needs to be. The draft EA reads as if there is only one runway at Logan when there are several that impact Milton and its sensitive Blue Hills Recreation Area. The EA also is arbitrary and capricious and in abuse of discretion for its failure to consider any alternatives for southern departure routes other than the "do nothing" straw-man alternative that the FAA presents. See Draft EA Sec 2.2.1 (stating No Action Alternative "does not meet the purpose and need"). Prudent and feasible alternatives that must be considered include (singularly or in combination) (1) moving the COLYN Waypoint a short distance further west southwest along the PATSS exit fix till it intersects Interstate 90/95 before turning the air traffic for southern and European destinations south, (2) moving the CBEAR Waypoint a short distance west until it intersects the Interstate Route 95, and (3) moving the COUSY Waypoint a short distance west until it intersects State Route 24. This would avoid the significant negative impact on the sensitive Blue Hills Recreation Area and direct air traffic for this "highway in the sky" (which is the apt term the FAA already uses in its marketing) over the highways already on the ground, which are not noise sensitive areas. It is irrational for the FAA to posit in its EA that no other prudent alternatives exist to study for the southern and eastern air traffic that branches	Matthew Walko	A, EEE

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Date Received	Comment	Commenter	Response Letter (See Table B-3)
	south off the PATSS exit fix when the Interstate 95 corridor already exists and is easily identifiable from the sky (especially by viewing car headlights along the highway at night) if satellite communications are interrupted (for example by solar flares). Also please correct Figure 2-6 which mislabels the BLZZR exit fix as being "to PATSS" exit fix, when it should read "to BLZZR."		
3/15/2013	I live in Dedham MA, one of the communities I recently learned will be below the proposed change to departure routes out of Logan Airport. In my previous Dedham home, there would be evenings when flights would be rerouted over my head, seemingly during inclement, foggy weather. They were frequent and pretty loud, but sporadic, so bearable. The thought of departing planes regularly roaring overhead fills me with dread. I am one who is in favor of conserving resources, yet I am also one who is aware of the effects of chronic noise on an individual's mental and physical health. I implore you to determine a more equitable distribution of noise throughout ALL the communities who enjoy the services of Logan. A follow-up study should also be done before 6 months, so no community has to wait too long to be heard.	Nancy Stolarz	OO, V, DDD
3/15/2013	I am very much against the proposed New Departure over Milton and would like to have a good discussion about the whole proposal. As a long-time flying fan with both military and civilian flying experience I am distressed by the manner in which this proposal had been handled with regard to the citizens of Milton and feel that a more productive discussion would be helpful to all concerned. I would be glad to help in any further discussion that helps us all better understand the whole proposal and its impact on our community.	Allen W Fullerton	H, BB
02/29/2013	Hi Terry: First, thank you very much for the excel data set for Milton and Quincy. I have studied it and many other aspects of the report and have some concerns, additional requests for data, and questions – all of which are contained in this message. I have talked with many residents in Milton and Hyde Park, studied some of the aviation noise literature and government documents, and attended several meetings of concerned residents over this proposed change. I, along with many others who have studied the report and the graphics it contains, cannot reconcile the information in the text and the correspondence we've had with the FAA/Massport. One resident who thoroughly studied the draft report raised the possibility that the science could be fraudulent. I now think there is substantial evidence that the analysis is flawed. Also, I'm convinced that the use of year-averaged-DNL as the metric of noise is misleading and does not represent the noise burden of individuals and communities. I think answers to the following questions will help to uncover the problems in the analysis and presentation of the results. I request that the No Action Alternative on the flight path take place and that further study be done on both the quality of the data and the scientific approach for its analysis. I request this, and the answers and data requested below because I think: 1. The science, including the metric used in the study, is seriously flawed and the results and presentation is misleading and 2. I have concerns about possible errors in the data.	Cindy L. Christiansen, Ph.D.	F
3/15/2013	No one wants to listen to airplanes overhead. We live in West Milton. We bought our home 21 years ago. We were very deliberate about where we chose to live, and purchased our house because of the serene neighborhood we live in. It was the serenity of Milton—and the schools—which were our primary reason for stretching our budget to live here. We cannot afford central air conditioning, nor do we think it is good for the environment. The heat bothers my asthma so we do our best to keep the air cool in our home by opening the windows during the summer. When planes do fly overhead as they occasionally do now, they are extremely loud when the windows are ajar. The idea that this would be happening more frequently is very troubling. We would never choose to live in South Boston because of the noise pollution there. Folks who buy homes in that community are aware of what it would mean. It is unfair to make such a change in a community such as the one you are proposing—our roots and our assets are in this house and we cannot move at this point. Please reconsider rerouting airplanes across the suburbs. Or please ensure that there will be minimal disruption if there are no alternatives. Thanks you for your consideration.	Laurie Stillman and Robert Rosofsky	A, G
3/15/2013	Please find attached my comments on the Draft EA for the Logan RNAV.	Frederick P. Salvucci	



Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
3/15/20013	<p>Please find attached my comments on the Draft EA for the Logan RNAV. I write to object to the analysis presented in the Draft EA because it ignores the very substantial increase in utilization of Runway 33L departures after construction of Runway 14/32 and the major deviation of this increased utilization from the outcomes predicted in the FAA Record of Decision on that runway. The state and federal Environmental Impact Report and Environmental Impact Statement prepared for Runway 14/32 predicted that construction of the runway, proposed to reduce aircraft delay during high northwest wind conditions, would likely result in a fourfold increase in utilization of runway 33L departures during non-high wind conditions. This quadrupling of utilization would have substantial adverse impact in the neighborhoods closest to the airport in East Boston and Chelsea, where the aircraft are at low altitude and cause extreme noise impact. In order to avoid these severe impacts, the FAA record of Decision incorporated two major provisions which were represented as avoiding the increased utilization during non-high wind conditions: 1. The use of Runway 14/32 would be restricted to be used only when high northwest winds were occurring. 2. Massport was to adopt the peak pricing of landing fees system described in the environmental documents and required in the state process. In addition, the state EIR required Massport to adopt an Air Quality Initiative, to use landing fees to create a fund to reduce air pollution in surrounding neighborhoods to offset the air pollution associated with aircraft operations. After 14/32 was constructed, FAA adopted a new takeoff and landing procedure which had never been presented in the extensive environmental process, which has had the effect of increasing the utilization of Runway 33 L takeoffs by a factor of 3 to 4, precisely the outcome the FAA Record of Decision was supposed to preclude. In addition, Massport adopted a weaker and ineffective peak pricing initiative, not the one which was a condition of the EIR/EIS approval, and has taken no action to establish the Air Quality initiative required in the EIR. The EA presented now by FAA does not describe this unfair and inappropriate history, and it treats the new substantially higher utilization of Runway 33 L takeoffs as the "new normal," presenting results from using new technology and methods to modestly reduce noise impacts from current levels, which are in fact substantially worse than the exposure prior to 14/32 construction. To make matters even more unfair, the most severely impacted neighborhoods in East Boston and Chelsea do not benefit at all from the proposed RNAV procedure, because they are too close to the runway end. The only way to redress the unfairness in this situation is for FAA to restore the use of runway 33L to the level prior to the construction of Runway 14/32, consistent with the assurances made at the time of the 2002 Record of Decision. If the FAA will restore the utilization of Runway 33L takeoffs to that prevailing before construction of Runway 14/32, and Massport would take the actions regarding landing fees committed to in the Environmental Impact Report, then the changes in technology and procedures now proposed would represent further benefit. And if the new precision capability is used to scatter and disperse aircraft, after attaining reasonable altitude, the outcome would be better still, but in the current actual context the FAA Environmental Assessment fails to even inform the public of the dramatic worsening of noise exposure since the opening of Runway 14/32, and the dramatic difference between what was promised, and what was delivered. I urge that the FAA modify the proposal to include restoration of the runway utilization prior to the construction of Runway 14/32.</p>	Frederick P. Salvucci	KK
3/12/2013	<p>As a resident of the Lower Mills area of Milton, I already live under the existing frequent path for flights arriving at Logan from the south. The noise is annoying and particularly so in foggy wet weather. I object to any further increase in noise pollution from planes departing Logan over this area.</p>	Frederick J. Doherty	A
N/A	<p>I write to you today regarding the proposed RNAV departure route for Runway 33L. I live in Canton and already suffer from significant air traffic noise on some of the days. I urge you to discard the proposal and not to add to the suffering of my family.</p>	Yana Blochstein	N

Table B-2  
Comments Received

Date Received	Comment	Commenter	Response Letter (See Table B-3)
N/A	I am deeply distressed by the proposed RNAV departure route for Runway 33L. This proposal will have significant adverse effects on my town and more specifically the area of Milton that I current reside due to the noise and environmental impacts from heavy airplane traffic. As a life-long resident of Milton, I can personally verify that this area is already heavily impacted by the airplane noise and pollution from airplane traffic. I have had a chance to briefly review the Boston Logan International Airport ....EA and feel very strongly that it does not adequately account for the population in Milton that would be affected by the noise and pollution from this proposed route. I respectfully request that the proposal undergo a full, more thorough environmental review with independent analysis to address the significant issues of noise, pollution and other nuisance factors. In addition, Milton has a local natural treasure, the Mass Audubon's Blue Hill Reservation, Museum and Trails, that are currently directly under your proposed path and I am certain would greatly suffer from this proposed air traffic. Thank you in advance for your careful consideration of my concerns and I welcome any questions or feedback you might have as a result of my correspondence.	Kerry H. Brown	A, L, M, Y
N/A	The proposal for a third flight path over Milton is so unfair. Right now outdoors I can look up from my garden and see huge planes going right over my head. They are directly over my head, and low, and loud. I see the middle of the underside of the aircraft. It is as if there is a landing beacon on our house. If a plane lands on my house I'll be dead. We live in so-called "west Milton". And sometimes there are small jet planes, slightly to the north of us, which actually seem to make more noise, probably because they fly lower. They seem to fly along the Neponset River path to Logan. At other times the planes seem to go over further to the east and they are less noisy for us. So we now have three sources of plane noise depending on the flight paths. When I worked at the Cunningham and Collicott schools it was almost impossible to continue to teach in East Milton and the singer had to stop every few minutes because the plane noise was so loud she could not continue. My husband and I use Logan airport and appreciate the problems in scheduling planes. However, we in Milton are already taking our fair share of noise, and we do not want any more. When flying home into Logan, I often remark to my fellow passengers when looking out the window: "There we are, right over my house! See there is Blue Hill, that is used as a guiding landmark." I can see the path over the Corita tanks, Marina Bay, the Neponset River, and I know I'm home!	Beth Neville and Bob Neville	A
N/A	The people listed below are against Logan Airports new flight plan via 33 with a ...the resident on short notice. A back room deal. I lived in the ...and when the plane flies over we would duck. Illegible.	illegible	HH
N/A	I am very concerned about the proposed changes in flights departing from Logan Airport Runway 33L that will impact Belmont. Quiet is the principle reason I moved here after many, many years in Boston and Brookline where among other noises were airplanes that would cause noise for 5 minutes or more as they passed. And then there'd be another. And impossible to block out with earplugs and even a sound machine. Plane noise increases would be torture.	Pam Bouvier	T

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
A	Commentors are opposed to additional overflights over Milton. The concerns of commentors include low flying aircraft, such as arrivals to Runway 04 and departures from Runway 27. Many commentors referenced specific locations within Milton.	The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable Air Traffic Control (ATC) departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Milton will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Milton based on FAA noise impact criteria, and with the Proposed Action, approximately 920 fewer residents would be exposed to noise levels above 45 DNL.
B	Commentor states that the text describing Figure 2-9 (from the Draft EA) provides altitudes for waypoint locations, but only two waypoints include altitude information.	The design of an RNAV procedure includes the location of waypoints located throughout the procedure. The specifications for each waypoint vary by location and type. In general, a waypoint can provide approximate speed and altitude to safely execute turns and avoid potential conflicts with aircraft traffic to and from other runways. Not all waypoints provide altitude requirements. For the Proposed Action, aircraft would reach the approximate location of COLYN and would be at a minimum altitude of 5,000'. Neither CBEAR nor COUSY include minimum altitudes; however departing aircraft typically climb as quickly as possible.
C	Commentors are opposed to additional overflights over the Fairmount Hill area in Hyde Park (neighborhood of Boston). Concerns include the elevation of Fairmount Hill.	The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Hyde Park will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Hyde Park based on FAA noise impact criteria, and with the Proposed Action, approximately 617 fewer residents would be exposed to noise levels above 45 DNL.
D	Commentors state that additional aircraft and the untested nature of RNAV procedures increase the risk of aviation accidents (i.e. safety). Additional concerns relate to the elevated topography and increased turbulence of the Blue Hills Reservation. Additional comments related to safety referenced the large number of schools directly under or adjacent to Runway 33's proposed new flight path over Milton.	<p>The ATC system in the United States is the safest in the world and FAA works with airlines to make sure that safety is priority one. FAA will never implement an airspace procedure that sacrifices safety. The proposed RNAV SID does not compromise safety.</p> <p>A primary tenant of NextGen is to continue to improve the safety and efficiency of the National Airspace System. RNAV procedures facilitate this improvement in the terminal area environment with SIDs and STARs. Use of RNAV procedures allows for the increased predictability of operations, reduces the amount of voice communication between the controller and pilot, and reduces the interaction between dependent flows in multiplex airspace. At Logan Airport an RNAV SID for Runway 27 has been in place since 1998, other RNAV SIDs since 2010, and RNAV STARs since 2011. As aircraft currently overfly residential areas or areas of elevated terrain such as that present at the Blue Hills Reservation, no additional risk is anticipated or expected.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
E	Commentors are opposed to additional overflights over Randolph.	<p>The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Randolph will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Randolph based on FAA noise impact criteria, although with the Proposed Action, approximately 596 additional residents would be exposed to noise levels above 45 DNL.</p>
F	<p>Commentor associated with the Town of Milton was provided noise results data and developed a report summarizing results for Milton. The commentor requested additional data and raised numerous technical questions.</p>	<p>The FAA initially provided data, via email, including information about noise levels in Quincy and Milton for 2010 Census block centroids, with latitude and longitude values on February 1<sup>st</sup>, 2013.</p> <p>The commentor provided additional questions related to the data. The FAA responded via email on 3/13/2015, as follows:</p> <ol style="list-style-type: none"> <li>1. What is the longitude and latitude of the Massport/FAA noise monitors in Dedham, Hyde Park, Milton, Canton and Randolph? I found on the Logan website the description of the locations but would like more precise measurements (the lat/long). I'm amazed that there is only 1 noise monitor in Milton and none in the Hyde Park area.</li> </ol> <p>FAA Response: The noise monitors are maintained by and under the control of Massport. Data from the noise monitors was not used in the development of this EA. This request would need to be submitted to Massport.</p> <ol style="list-style-type: none"> <li>2. We have heard 2 explanations of why the report shows no noise exposure at population centroids for half of Milton. One explanation that was reported at the Selectman's meeting is that the report does not include areas where there is no change in the estimated DNL. The other explanation is that areas with current DNL under 45 are not included in the report, this seems to be what the draft report conveys. Please clarify why there is no data reported for half of Milton.</li> </ol> <p>FAA response: Areas with 2015 No Action or 2015 Proposed Action DNL values less than 45 are not included in the report.</p> <ol style="list-style-type: none"> <li>3. Related to question #2, I was provided data of the DNL estimates and changes in the estimates under the new plan for 272 census block centroids in Milton MA with population greater than 0 and 428 total locations (156 Milton locations included in the report have 0 population), representing 15,970 Milton residents. However the 2010 census had 652 census blocks in Milton. We would like latitude and longitude and the DNL estimates and estimates of changes in DNL under the new plan for the all 652 Milton census block centroids in Milton MA, even those with 0 populations, representing approximately 10,000 of our residents. Please include the FID number so we can match these to the data we already have. Please provide this in an excel spreadsheet as you did for</li> </ol>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
		<p>my first request for data.</p> <p>FAA response: See attached table, however, note that this information is not pertinent to the analysis which is why it wasn't included in the report as stated in our response to Question #2.</p> <p>4. The data provided by the FAA, which was used in the draft report, indicates a population of zero for FID #38939, latitude 42.22282, longitude -71.0745, with a DNL estimate under the new plan of 51.034, an increase over the current plan. This location, around Brierbrook Street and Barberry Lane in Milton MA, is populated. Please give reasons for the use of zero population for this location. I only found this problem in the dataset because I used the data you provided to find street locations for the FID where there was an estimated increase in DNL (so far about 40 locations). When I work with databases, if one problem is found, there are others. I think there could be critical flaw in the quality of the database used in the analysis.</p> <p>FAA response: The analysis uses block centroids as provided by the U.S. Census (2010). Each centroid represents the center of each Block group. The location in question represents State code 25, County code 021, Tract 416101, Block 1009. It is a geographically small triangle block representing only the large paved intersection of Brierbrook Street and Barberry Lane. The population along these streets are represented by Blocks 1008, 1010, and portions of 1025. See the attached image.</p> <p>5. We would like to see a graphic where the proposed 33L flight path Figure 2-5 is overlaid onto the noise exposure at population centroids Figure 4-3.</p> <p>FAA response: See the attached image.</p> <p>6. I'm also requesting the 95% margin of error for the estimated DNL for the 652 census blocks in Milton as well as the locations with estimated DNL for reasons such as historical sites, etc. Please include this in the excel spreadsheet requested in item #3 above.</p> <p>FAA response: For a detailed discussion of model accuracy and limitations as it relates to the BLANS study and this analysis, reference Section 1.4 Model Accuracy and Limitations, of the Noise Analysis Protocol, available for review at <a href="http://www.bostonoverflightnoisestudy.com/docs/ExistingConditions_AircraftNoise_2005_Noise%20Modeling%20Protocol%20_071210.pdf">http://www.bostonoverflightnoisestudy.com/docs/ExistingConditions_AircraftNoise_2005_Noise%20Modeling%20Protocol%20_071210.pdf</a>. DNL values represent an average annual day of operations, and consider a number of variables, including the number of operations, runway use, flight track use, weather, etc. By nature DNL represents an estimated value. Additional information will be provided in the Final EA.</p> <p>7. We request an explanation as to why the noise exposure at population centroids in figure 4-3 are missing in the area of Hyde Park and the left side of Milton yet show up when the planes should be at higher altitudes further south in Randolph.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
		<p>FAA response: Put simply, noise exposure in the area of Hyde Park and the west portion of Milton is less than 45 DNL, therefore not shown in the map. Noise exposure shown in the figures represents ALL operations at Logan on an average annual day at levels of 45 DNL or above. As can be seen on Figure 4-3, noise exposure in the eastern portion of Milton follows a pattern extending from Runway 04R/22L, and represents noise from arriving and departing operations from that runway. Noise levels in western Milton tend to fall in the 40-45 DNL range, and the Proposed Action indicates that some increases would occur. However, these increases are very small (1-2 DNL, roughly) and are not likely to be noticed. They do not meet the FAA's required levels of change to be significant, and they fall below FAA reporting thresholds.</p> <p>8. We request a graph showing locations newly exposed to noise under the proposed action and the level at which they are exposed (those locations at both the under 45 and over 45 DNL levels), under the southbound route including Newton, West Roxbury, Dedham, Hyde Park, Milton, Canton.</p> <p>FAA response: This data does not presently exist in the format requested and is not something FAA would typically produce for this type of analysis, therefore, we decline to provide this data as requested. Our consultant has informed us that you should be able to prepare this graph with the data we have provided.</p> <p>9. We request the longitude and latitude of waypoints - TEKKE, COLYN, CBEAR, COUSY</p> <p>FAA response:</p> <p>TEKKE: 42 24 45.85, -71 05 55.09  COLYN: 42 21 17.92, -71 12 31.70  CBEAR: 42 15 19.94, -71 9 36.29  COUSY: 42 9 9.66, -71 2 24.39</p> <p>10. Please clarify why conditions in 2009 were used in the analysis rather than projected conditions in 2015. What conditions and values of these conditions were used to estimate DNL. For example, what is the distribution of departures and arrivals by runway, the equipment, the wind direction, etc.</p> <p>FAA response: Both 2009 and 2015 conditions were modeled in the EA. Information pertaining to the input data for the model will be included in the Final EA.</p> <p>11. Because of the concerns of several residents of Towns other than Milton, in addition, we request the latitude, longitude, estimated DNL, the 95% margin of error for the estimates in current and new plan for the entire study area affected by the southbound route. As in item #3, we would like data for all locations – those estimated to be under 45 and those estimated to be over 45 for all populated and non-populated locations. To clarify, we want DNL estimates as a continuous measure for all levels and locations, including those less than 45. Please include this in an excel spreadsheet.</p> <p>FAA response: See response to question 3, however, note that this information is not pertinent to</p>



**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
		the analysis.
G	Commentors suggest that additional overflights and implementation of an RNAV SID will have a negative impact on property values. Further, the EA did not address the potential loss of home values and the project should be considered a 'taking' and a nuisance.	<p>The property value impacts of aviation noise have been studied on multiple occasions with publication of study results beginning in the mid 1970s, to-date there is still no definitive answer. For individuals who might work at (or near) the airport or who use the airport for travel, the benefits of proximity can be reflected in residential property values. Because it is possible for an airport to have both negative and positive effects on property values, the net effect can be negative or positive.</p> <p>Separation of aviation noise from other noise emitters has always been at issue for determining a specific property value impact due to aviation noise. Some studies have found that impact due to aviation noise is negligible while others have found the impact to be upwards of 10 percent. A 2003 study by J. Nelson, Department of Economics, Pennsylvania State University entitled Meta-Analysis of Airport Noise and Hedonic Property Values: Problems and Prospects found that the “cumulative noise discount in the U. S. is about 0.5% to 0.6% per decibel at noise exposure levels of 75 dB or less”. For this study 20 hedonic property value studies are analyzed, covering 33 estimates of the noise discount for 23 airports in Canada and the United States. Specifically, at DNL above 65 dB, the effect is about 1% per additional dB; at DNL between 60 and 65 dB, the effect is about 0.5% per additional dB; below 55 dB DNL, no effect has been measured. Nelson, Jon P., “Hedonic Property Value Studies of Transportation Noise: Aircraft and Road Traffic”, Proceedings of the International Symposium on Hedonic Methods in Real Estate, Geneva, Switzerland, June 2007.</p> <p>Although property devaluation is based on circumstance (i.e. frequency of airport use, economic ties to airport) it is clear that proximity to an airport is a key component to potential devaluation with higher noise levels having the most potential for property devaluation. With respect to commercial property devaluation, it is less likely that commercial properties will be impacted by aviation noise as commercial properties are compatible with higher noise levels. Studies to-date have focused on residential property value impacts.</p>
H	Commentors request that the FAA hold a public meeting.	The FAA respectfully declined to hold a public meeting, which is not required for an EA. The FAA has, however, continued to work with the Logan Airport Community Advisory Committee (CAC), whose responsibilities include dissemination of relevant information to the broader community they represent. Further, the FAA extended the comment period from February 15th to March 15th to allow for additional comment on the Draft EA, and attended a Massport briefing on the Draft EA at the Massachusetts State House on February 5th, 2013. Slightly over 20 local, state and federal representatives were in attendance.

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
I	Commentors suggest routing aircraft over the ocean.	<p>In some situations, aircraft flights can be directed over compatible land uses when there are compatible land uses, such as the Atlantic Ocean, and adequate navigation techniques available. The FAA agrees that flying over water is a way to reduce noise exposure for some communities. Because Logan Airport is located in a densely populated area, it is impossible to fly solely over compatible land use. Therefore, it would be impossible to route aircraft to avoid densely populated areas.</p> <p>Aircraft procedures at Logan Airport take advantage of compatible land uses as frequently as possible. The commentors are encouraged to explore the resources available regarding the extensive study of potential noise abatement measures evaluated under the BLANS (<a href="http://www.bostonoverflight.com/index.aspx">http://www.bostonoverflight.com/index.aspx</a>), as well as Massport's noise abatement web site (<a href="http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx">http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx</a>).</p>
J	Commentors are concerned with the potential health impacts of aircraft overflights; including asthma, sleep deprivation, memory and cognitive impairments, and occupational or physical injury.	<p>There is currently no consensus within or among the scientific, medical, and government communities regarding the health effects of aircraft noise. As the commenter indicates, there are some studies that indicate a possible relationship between aircraft noise and nonauditory health effects. However, these relationships tend to be weak at best, and thus far are insufficient for either the scientific or medical communities to reach a conclusion. In fact, there are other studies that conclude no relationship between increased aircraft noise and detrimental nonauditory health effects occur.</p> <p>In 1974, the EPA "Levels" document identified a level below 65 DNL that it believed would "protect public health and welfare with an adequate margin of safety". There are two important points to note regarding the level that EPA identified in this document. First, a careful reading of the document reveals that EPA actually identified a separate level that it believed would specifically protect against health effects. That level was a 24-hr average level of 70 dB, or approximately 75 DNL. Secondly, the lower level identified to protect against both health effects and to protect the public welfare included a margin of safety. In other words, that level is lower than the level that actually would protect the public welfare as EPA saw it at the time.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
K	Commentor makes numerous technical comments related to noise modeling.	<p>The noise values presented in the EA are those reported by INM. Reporting noise model results to 0.1 dB is consistent with FAA Order 1050.1E, under which the criterion for significant noise impact is expressed to units of 0.1 dB (see FAA Order 1050.1E, Appendix A, Section 14.3).</p> <p>FAA noise models do not provide confidence interval information.</p> <p>The Aviation Environmental Design Tool (AEDT) uncertainty quantification, still under preparation, is not an applicable guide for previous noise models. The AEDT uncertainty quantification will not provide confidence interval information for noise.</p> <p>The reference to Table 23 is not applicable to this EA. The presentation of the significant impact threshold and the reportable increase criteria is consistent with FAA Order 1050.1E, Appendix A, Section 14. The fact that some numbers in the Order are presented as whole numbers is a matter of formatting and stylistic convention. The EA presents the noise values as reported by INM, which rounds to the nearest 1/10th of a dB. For comparison to noise criteria, FAA applied the criteria to the nearest 1/10th of a dB (consistent with the above reference Appendix A, section 14.3). FAA consistently applied this methodology throughout the analysis.</p> <p>A load factor of near 100% is not realistic when computing average annual day conditions. The average weight calculation includes more than passenger load factor. It also includes the weight of the aircraft, cargo, and fuel. Noise calculations are sensitive to many noise modeling input variables. It is not technically sound to look at one variable, e.g., takeoff weight, in isolation. The commenter has misstated the data in the referenced study. The study reports in Table 8 that a 10 percent weight increase can result in a SEL (not DNL) variation of +0.70 decibels to +2.20 decibels. The commenter's assumption that calculated DNLs are significantly underestimated is not accurate and appears to be based on his assumption that the passenger load factor is the prevailing variable in the noise model. Noise calculations are sensitive to many noise modeling input variables. For example, the noise model uses a conservative value of 100% thrust for departure procedures, although airlines typically do not use 100% power in takeoff. Thrust reduction at takeoff varies. Therefore, the 100% thrust assumption will result in higher noise calculations than may occur for particular departures. The goal of the noise analysis is to capture the average annual conditions at the airport.</p> <p>Noise calculations are sensitive to many noise modeling input variables. The goal of the noise analysis is to capture the average annual conditions at the airport. The FAA has determined that the DNL results do not exceed the FAA's threshold for a significant noise impact.</p> <p>Mitigation may be warranted if the Proposed Action would have resulted in significant impacts, which it has not. The FAA is limited to offering mitigation to areas that exceed 65 DNL, which is the threshold that the FAA identifies as the boundary for incompatibility with aircraft operations. Even when significant impacts are present, mitigation is not assured. In the case of the Proposed Action, mitigation is not required and is therefore is not included in the EA.</p>

**Table B-3**  
**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
L	Commentors state that the EA should "undergo a full and thorough environmental review with independent analysis to address the significant issues of noise, pollution, and other nuisance factors."	For any Federal action, a NEPA analysis is required. Section 1.1 of the Final EA outlines the FAA's approach to the level of NEPA analysis undertaken for this project. The EA addresses and evaluated any and all potentially affected resource categories according to FAA-required guidelines outlined in FAA Order 1050.1E. Further, the EA uses data that has been developed as part of the ongoing BLANS study, which includes review by the CAC and its independent consultant, who continues to evaluate and advise the CAC.
M	Commentors request that the FAA extend the comment period beyond February 15th, 2013.	The FAA extended the comment period from February 15th to March 15th, 2013 to allow for additional public comment.
N	Commentors are opposed to additional overflights over Canton.	The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Canton will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Canton based on FAA noise impact criteria, although with the Proposed Action, approximately 72 additional residents would be exposed to noise levels above 45 DNL.
O	Commentor asks if there are ways to mitigate the impact of this change, such as increasing the climb-out altitude for aircraft departures. The commentor also suggests that the RNAV corridors could be varied on a weekly basis.	The RNAV SID was developed to overlay the existing flight track departure corridor as much as possible, specifically upon the initial departure. The course defined by the waypoints, which specify a range of altitudes and speeds aircraft should be attaining, must account for the varying performance characteristics of the aircraft fleet mix. In practice, this means that the procedure itself must designate speeds, turning radii, and climb angles that a variety of aircraft must be able to accomplish. Further, the flight tracks from the runway to the multiple exit fixes must take into consideration concurrent flows of arrivals and departures to other active runways at Logan Airport. As such, additional changes to the RNAV SID are not anticipated to be feasible at this time.
P	Commentors are opposed to additional overflights over Winchester.	The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Winchester will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Winchester based on FAA noise impact criteria, although with the Proposed Action, approximately 5,809 additional residents would be exposed to noise levels above 45 DNL.

**Table B-3  
Response to Comments – General Public**

Key	Summary Comment	Comment Response
Q	<p>Commentors state that the "environmental study does not fully account for the populations that would be affected by the noise and pollution produced."</p>	<p>The noise exposure graphics depicted noise exposure at levels of 45 DNL or above for populated Census block centroids. Where noise exposure is below 45 DNL (in either the 2009, 2015 No Action, or 2015 Proposed Action condition), no census block centroid is shown. Thus, where noise levels are below 45 DNL, it may appear that no aircraft noise exists. This is not the case, as the Draft EA states on page 4-2 "The FAA determined that 45 DNL is the minimum level at which noise needed to be considered because "even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this [45 DNL] value."" The Draft EA published a table of population impacts by community. Table 4.5 (page 4-5) depicts the Population Exposed to Noise Levels by Community between 45 and 65 DNL. This table reports only the population exposed to noise levels above 45 DNL in either 2015 No Action or 2015 Proposed Action condition. The remainder of the population of any town in the Study Area not included in the table is forecast to be exposed to aircraft noise less than 45 DNL.</p> <p>By public request following the CAC meeting on January 24, 2013, the FAA modified Table 4.5. The project website (<a href="http://www.bostonrnavea.com">www.bostonrnavea.com</a>) was updated with two tables (Noise Results by Study Area Town – DNL Values and Noise Results by Study Area Town – Population). The population table added the total population of each town as well as a breakdown of neighborhoods within the City of Boston.</p> <p>Commentors suggested that noise was not calculated or reported in one specific location, for which the FAA provided the clarification that the geography of that census block indeed included no population, and that the Census reports a higher population than that provided in the Draft EA for Milton. This difference that is attributable to the number of persons residing in group quarters and is addressed in the Final EA.</p> <p>Overall, the Draft EA indicates that there is no significant noise impact anywhere within the Study Area, and that the number of persons that would be exposed to noise levels above 45 DNL is forecast to decrease with implementation of the Proposed Action.</p>
R	<p>Commentors are concerned about the potential impact of noise, including existing environmental noise and the Proposed Action, on children's health and learning.</p>	<p>Please see Table B-1, Response to Judy Kennedy, Milton CAC Representative. Due to the lack of significant noise impacts, it is not expected that implementation of the Proposed Action would result in impacts to children's health or learning.</p>
S	<p>Commentors state there is no reason to change the existing procedures.</p>	<p>Section 1.5 of the Final EA outlines the Purpose and Need for the Proposed Action. The purpose of implementing an RNAV SID from Runway 33L is to increase the efficiency of ATC procedures at Logan Airport and the surrounding airspace by using NextGen technology. Further, Runway 33L is the only major runway at Logan without an RNAV SID. Operating with one runway that requires a different procedure could have the potential to cause flight deck confusion.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
T	Commentors questioned the procedure for public notification of the project.	Chapter 5 of the Final EA provides a summary of the public and agency involvement for the EA. Following the conclusion of Phase 2 of the BLANS, the FAA stated its intent to develop an RNAV SID from Runway 33L. The FAA held meetings with the CAC and Massport in October 2012 to introduce the project, kept the CAC and Massport informed on the status of the project, and announced the intent for the release of the Draft EA in January 2013. Further, availability of the Draft EA was made via a public notification in the Boston Globe, Boston Herald, and MetroWest Daily papers (January 14th-15th). The Draft EA was made available on the project website ( <a href="http://www.bostonmavea.com">www.bostonmavea.com</a> ) and at three public libraries. Additionally, numerous news outlets provided coverage of the project throughout the duration of the comment period.
U	The commentor, while acknowledging the beneficial aspects of programs such as VALE and air quality initiatives such as the installation of preconditioned air and 400 Hz power at aircraft gates, is concerned that pollution from aircraft emissions over residential areas would not be eliminated and would be a health hazard.	Section 4.7 addresses air quality impacts in the Final EA.  Air quality studies focused on particulate matter (commonly referred to as soot) have been conducted at Chicago O'Hare International Airport, Logan Airport, and Cincinnati/Northern Kentucky International Airport. The referenced studies have found that soot and other deposits under flight paths are more closely related to general urban pollutants, motor vehicle exhaust, and soot from burning non-aviation heavier fuels, such as fuel oil. Specifically, the studies concluded that components of soot are more the result of regional background pollution rather than jet fuel or aircraft engine exhaust. The underlying data base for aircraft particulates is not extensive and the FAA is working with the aviation community, including the Society of Automotive Engineers, the International Civil Aviation Organization, and NASA to develop methods and procedures for measuring aircraft engine particulate emissions. The primary exhaust emissions from jet aircraft engines are oxides of nitrogen, hydrocarbons, carbon monoxides, and smoke, all of which are measured during the FAA's engine certification process. Aircraft engines emit pollutants on the ground and in the air. On the ground, engines emit more volatile organic molecules and carbon monoxide, while in the air, they emit more nitrogen oxides. (See, for example, Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft, EPA420-R-99-013, April 1999).
V	Commentors state that aviation noise should be distributed equitably over the Study Area (i.e. Fair Share).	It has been a longstanding policy of FAA to avoid shifting noise from one community to another solely for noise abatement purposes. In cases where aircraft flight trajectories may add or introduce additional overflights in a new community, because of aviation operational needs, then an environmental review must be done to disclose the impacts to the public of the necessity of such shifts in noise.



**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
W	<p>Commentors request additional operational data, including the number of aircraft that use Runway 33L per month/day/year, how many Runway 33L departures use the southerly route, altitude of aircraft departures over Milton versus current departures over Milton. Also, what are forecast operations in 2013, 2014, and 2015? What types and sizes of aircraft use Runway 33L?</p>	<p>In 2010, Runway 33L jet departures totaled 22,202 out of 298,000 total jet flights (arrivals and departures) or 7%. In 2010, Runway 33L was used as the primary departure runway over a persistent period (55 days with an average of 246 jet departures/day, of which 44 overflowed Milton). Of Runway 33L jet departures, about 4,000 or 18% overflowed Milton (or 1% of all jet activity). The average altitude of these departures was about 10,000 ft. It should be noted that in 2011 and 2012, Runway 33L was closed for extended periods of time for construction, and that Massport considers "a persistent period" as 3 or more hours of activity.</p> <p>The EA modeled conditions in 2015, as provided in Section 4. There is no change to the number of aircraft operations or types of operations, nor does overall runway use change with implementation of the RNAV SID. In 2015, Runway 33L departures are forecast to account for approximately 17% of all BOS departures (approximately 88.7 on an average annual day). Certain areas in Milton may experience an additional two flights on an average annual day due to the consolidation of the flight path. No forecasts of operations for 2013 or 2014 were considered in the preparation of this EA. There are no restrictions to the size or type of aircraft that use Runway 33L - all types and sizes of aircraft that operate at Logan Airport can be expected to use Runway 33L. Appendix A of the Final EA includes a list of aircraft types anticipated to be in use in 2015.</p>
X	<p>Commentors requested that the FAA attend the Milton Board of Selectmen meeting scheduled on February 7th, 2013.</p>	<p>The FAA declined to attend this meeting. The FAA's policy for many years has been to work through the CAC and Massport rather than to meet with individual communities. FAA has encouraged communities to participate in the BLANS by joining the CAC via certified letters sent to elected officials over the last several years.</p>
Y	<p>Commentors state that the Blue Hills Reservation would be adversely impacted by the RNAV SID, and that the park should be given special protections and consideration, specifically as it may qualify as a Section 4(f) location. Additional commentors were concerned with Powers Farm Reservation.</p>	<p>The Blue Hills Reservation is a state park managed by the Massachusetts Department of Conservation and Recreation, and encompasses approximately 7,000 acres in portions of Milton, Quincy, Braintree, Canton, Randolph, and Dedham. The location of the Blue Hills Reservation is shown on Figure 3-6. Recreation activities include fishing, camping, athletic fields, hiking, biking, skiing, rock climbing, and swimming. 125 miles of trails are available, and the grounds include 13 sites located on the NRHP. The reservation is open from dawn until dusk. The highest point of elevation is the Great Blue Hill, with an elevation of 635'.</p> <p>The Draft EA process included the calculation of noise exposure at 307 location points across the Blue Hills Reservation, including properties listed in the NRHP located within the park boundaries. Aircraft departing Runway 33L and turning towards southerly destinations currently overfly the Blue Hills Reservation. Under the Proposed Action, DNL values ranged from less than 45 DNL to 52.9 DNL, and the greatest increase and decrease remaining below 1 DNL. Under the Proposed Action, DNL values ranged from less than 45 DNL to 52.9 DNL, and the greatest increase and decrease remaining below 1 DNL, therefore there is no significant noise impact. Additionally based on the location of the park and/or the activities conducted in the park, the park is not located in quiet setting where the setting is a generally recognized feature or attribute of the park's significance. Consequently, a determination under 4(f) of the Department of Transportation Act is not necessary. In addition, the Massachusetts State Historic Preservation Officer concurred with FAA's finding of "No Adverse Effect" to historic properties within the study area by letter dated May 1<sup>st</sup>, 2013.</p> <p>The Powers Farm conservation area is comprised of 14 acres off of North Main Street in the Town of Randolph, and was acquired by the Town of Randolph in 2009. The land is a combination of fields, forest and wetland and is protected open space. Portions of the property are used for passive recreation and the</p>

**Table B-3**  
**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
		property maintains a working farm. Noise exposure under the Proposed Action ranges from 42 to 43 DNL. Based on the location of the park and/or the activities conducted in the park, the park is not located in quiet setting where the setting is a generally recognized feature or attribute of the park's significance. Consequently, a determination under 4(f) of the Department of Transportation Act is not necessary.
Z	Commentors state that existing aircraft noise should be addressed prior to implementation of RNAV procedures.	Logan Airport and the FAA have a long history of cooperation and coordination on noise issues, including the ongoing BLANS study. The scope of work for the ongoing BLANS study states "the purpose of the Boston Logan Airport Noise Study is to identify and implement measures to reduce noise impacts to communities surrounding Boston Logan International Airport." The commentors are encouraged to explore the resources available regarding the extensive study of potential noise abatement measures evaluated under the BLANS ( <a href="http://www.bostonoverflight.com/index.aspx">http://www.bostonoverflight.com/index.aspx</a> ), as well as Massport's noise abatement web site ( <a href="http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx">http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/overview.aspx</a> ). Specifically, the Level 2 Screening Analysis provides a summary of 53 noise abatement alternatives that were evaluated during Phase 2.
AA	Commentors questioned the purpose and need for the project and questioned who benefits (airlines, FAA) from the Proposed Action. Further, commentors asked why the FAA has decided to pursue implementation of an RNAV procedure, and why would it benefit the general public.	The purpose of implementing an RNAV SID from Runway 33L is to increase the efficiency of ATC procedures at Logan Airport and the surrounding airspace by using NextGen technology. Further, Runway 33L is the only major runway at Logan without an RNAV SID. Section 1.5 of the Final EA outlines the Purpose and Need for the Proposed Action.
BB	Commentors suggest that the NEPA document does not adequately consider alternatives to the Proposed Action, including specific alternatives to the south-bound routing of aircraft as they overfly areas in Boston, Canton, Milton, and Randolph. Commentors further make specific suggestions for the locations of waypoints. Additional comments state that the other routes (i.e. previous iterations of Measure F-HH(v4) were optimal, while the Milton route (i.e. the Proposed Action) was less advantageous.	<p>Section 1.3.2 of the Final EA provides a history of the analysis of Runway 33L RNAV SID measures in the BLANS. Each RNAV SID Measure proposed by CAC was evaluated based on safety, ATC controller workload, delay, efficiency and flexibility changes, and capacity. Each of the previous measures were dismissed from further analysis because they either compromised the goals and mission of the FAA (based on the previously listed criteria) or increased noise impacts, which was inconsistent with the goals and objectives of the BLANS study process.</p> <p>See Table B-1 response to Robert W. Healy, City of Cambridge City Manager.</p>

**Table B-3**  
**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
CC	Commentors are concerned about the potential impact of the Proposed Action on agricultural and farm animals, specifically horses.	The Proposed Action is not anticipated to impact agriculture or farm animals. NEPA guidance does not establish guidance for significant impacts to farm or domesticated animals. Aviation noise and its effect on livestock and domestic animals has been subject to much research. In general, the degrees of effects of aviation noise on animals can be highly species dependent. The commentor is directed to ACRP Synthesis 9: Effects of Aircraft Noise: Research Update on Select Topics, Chapter 9 for additional information.
DD	Commentor has concerns about the location of the noise monitor in Milton.	Logan Airport's noise monitoring system was installed and is maintained by Massport. Comments related to the siting of existing noise monitors should be provided to Massport. Per FAA Order 1050.1E (Appendix A, 14.2b), all detailed noise analysis must be performed using the most current version of FAA's approved noise models.
EE	Commentor is concerned about low frequency noise.	Generally, low-frequency noise refers to noise below a frequency of 100 to 150 hertz, levels at which the human ear is not very sensitive. Typically, surrounding an airport, low frequency noise is a result of aircraft ground operations, operation of thrust reversers upon landing, and during the takeoff roll. DNL, because it is based on the A-weighted scale that de-emphasizes low frequency noises, does not account for low frequency noise. However, the likelihood of low frequency noise as an issue of community annoyance greatly diminishes with distance from the airport. Additional information on low frequency noise studies and airports can be accessed at <a href="http://web.mit.edu/aeroastro/partner/projects/project1.html">http://web.mit.edu/aeroastro/partner/projects/project1.html</a> .
FF	Commentors are concerned about the possibility of mitigation, specifically sound insulation (soundproofing), and whether residents would receive a tax break for these improvements.	Mitigation may be warranted if the Proposed Action would have resulted in significant impacts, which it has not. The FAA is limited to offering mitigation to areas that exceed 65 DNL, which is the threshold that the FAA identifies as the boundary for residential incompatibility with aircraft operations. Even when significant impacts are present, mitigation is not assured. In the case of the Proposed Action, mitigation is not required and is therefore is not included in the EA.

**Table B-3  
Response to Comments – General Public**

Key	Summary Comment	Comment Response
GG	Commentor raised questions regarding the comment procedure.	<p>Following publication of the Draft EA, instructions for submitting public comments were published as part of the public notice and on the project website. The following text provides the initial comment instructions:</p> <p>The FAA encourages interested parties to review the Draft EA and provide comments during the public comment period. Written comments will be accepted by the FAA until February 15, 2013. The public is invited to comment by mail or email to the following address:</p> <p>Ms. Terry English Project Manager Federal Aviation Administration 11 Murphy Drive Nashua, NH 03062 Terry.English@faa.gov</p> <p>The comment period was extended until March 15, 2013.</p>
HH	Commentors are generally opposed to the Proposed Action.	Comment noted.
II	Commentors state that noise levels are higher than 45 dB.	<p>The FAA acknowledges that individual aircraft overflights can and do exceed 45 dB in many areas throughout the Study Area. However, the FAA is required to use the Day-Night Average Sound Level (DNL) to describe noise exposure and to identify significant impacts. DNL is described in detail in Section 3.3.1.1 of the Final EA.</p> <p>As stated in Section 4.1 of the Final EA, there is no significant noise impact on any community as a result of the Proposed Action. FAA Order 1050.1E states that there is no significant noise impact when there is less than a 1.5 dB increase at the 65 DNL noise contour or above.</p>
JJ	Commentors are opposed to additional overflights over Arlington.	<p>The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Arlington will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Arlington based on FAA noise impact criteria, although with the Proposed Action, approximately 4,079 additional residents would be exposed to noise levels above 45 DNL.</p>

**Table B-3**  
**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
KK	Commentor raises concerns related to an increase in the number of aircraft arrivals over a residence in Milton, and the choice of arrival runway used based on wind conditions.	Comment noted. This comment references existing arrival runway use, and is not within the scope of the EA. It should be noted that Phase III of the BLANS study will evaluate runway use measures for potential noise reduction on surrounding communities.
LL	Commentor supports the Proposed Action.	Comment noted.
MM	Commentors states that although the Proposed Action moves a portion of the flight track (southerly departures) over less densely populated areas in Milton, those residing beneath the flight track will be adversely impacted and experience more air traffic noise. Additionally, a commentor states that a large swath of aircraft departures is more fair than concentrating flights - RNAV technology should accommodate a larger swath than what is included in the Proposed Action.	<p>Those residents directly beneath the RNAV SID flight track may experience more aircraft overflights as a result of implementation of the Proposed Action. However, the noise analysis performed for this EA indicates that there would be no significant impact (an increase of 1.5 DNL in areas of 65 DNL or greater exposure), nor would there be increases of 3 DNL or 5 DNL in areas exposed to 60-65 DNL or 45-60 DNL, respectively. As reported in Table 4-5 in the Final EA, noise levels in Milton under the No Action and Proposed Action would range from less than 45 DNL to approximately 57 DNL, with any increases in noise level remaining below 1 DNL.</p> <p>RNAV technology is designed to allow point to point navigation between a series of waypoints. The addition of multiple routes leading to the same destination has the potential to decrease the margin of safety, as sequencing aircraft traffic would need to be coordinated.</p>
NN	Commentors are concerned about the impact of noise exposure over specific historic resources (President George H.W. Bush's birthplace, Governor Hutchinson's field).	<p>The EA evaluated noise exposure for 2,167 properties listed on the NRHP. The analysis indicated that no historic resource would be subject to a significant impact. Consultation with the Massachusetts Historical Commission was undertaken and is discussed in Section 4.4 of the Final EA. The Massachusetts State Historic Preservation Officer concurred with FAA's finding of "No Adverse Effect" to historic properties within the study area by letter dated May 1<sup>st</sup>, 2013.</p> <p>Governor Hutchinson's Field is listed on the NRHP, and is a nature reserve located in Milton managed by the Trustees of Reservations. Noise exposure with implementation of the Proposed Action is forecast to decrease from 50.7 to 50.6 DNL. The birthplace of President George H. W. Bush is located at 173 Adams Street in Milton and is a private residence. There are no significant impacts to these resources.</p>

**Table B-3**  
**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
OO	Commentors are opposed to additional overflights over Dedham.	The Proposed Action does not increase the number of aircraft departures from Runway 33L. The purpose of the Proposed Action to increase the efficiency and safety of the existing aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Dedham will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Dedham based on FAA noise impact criteria, and noise exposure as a result of aircraft activity from Logan Airport in Dedham remains below 45 DNL.
PP	Commentors are opposed to additional overflights over Belmont, specifically referencing a recent increase in the frequency of overflights in their neighborhood.	<p>The Proposed Action (an RNAV SID from Runway 33L) would not be implemented until the Final EA has been issued, the Finding of No Significant Impact (FONSI) has been signed, and appropriate ATC requirements (including training and publication of the availability of the procedure) have been completed.</p> <p>Aircraft departing from Runway 33L typically could overfly Belmont, as could arrivals to and departures from other active runways. It is unclear (and beyond the scope of this EA) as to the specific issue the commentor references. Questions about current aircraft activity and noise complaints may be directed to Massport at <a href="http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/NoiseComplaints.aspx">http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/NoiseComplaints.aspx</a>.</p>
QQ	Commentor states that the Draft EA is inconsistent in its use of Census data, as the Proposed Action and No Action Alternatives are evaluated based on 2010 Census data, while the Alternatives in Chapter 2 reference Census data from 2000.	Chapter 1 of the Final EA provides a historical summary of the previous measures evaluated in the BLANS, due to requests from CAC members to compare CAC BLANS measures to the FAA's independent proposal. For purposes of NEPA, however, the BLANS measures were not carried forward as FAA alternatives, and therefore were not reevaluated using the recently updated census data (i.e. not available at during the BLANS analysis). The purpose of FAA's Proposed Action is to increase the efficiency of ATC procedures at Logan Airport and in Boston TRACON's adjoining / overlying airspace by using NextGen technology – defined procedures instead of less efficient ground-based and/or radar vector procedures. The purpose of the BLANS measures was to reduce noise based on specific CAC noise abatement criteria.
RR	Commentor states a preference for Measure F-HH(v4), and requests further justification as to the reason for its dismissal.	See Table B-1 response to Robert W. Healy, City of Cambridge City Manager.
SS	Commentor suggests that the Proposed Action be implemented on a trial 1-2 week period and measured with noise monitors.	The FAA does not typically perform temporary noise monitoring for flight procedures; however, Massport maintains a system of noise monitors throughout the Study Area. There is currently no plan to perform noise monitoring following implementation of the Proposed Action. FAA Order 1050.1E requires that all detailed noise analysis must be performed using FAA approved noise models, such as the INM which was used for the Proposed Action and is being used for the ongoing BLANS.



**Table B-3**  
**Response to Comments – General Public**

Response to Comments - General Public										
Key	Summary Comment	Comment Response								
TT	Commentor states that a new flight pattern has recently been implemented in Roslindale.	The Proposed Action (an RNAV SID from Runway 33L) has not been implemented. Aircraft departing from Runway 33L typically could overfly Roslindale, as could arrivals to and departures from other active runways. It is unclear (and beyond the scope of this EA) as to the specific issue the commentor references. Questions about current aircraft activity and noise complaints may be directed to Massport at <a href="http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/NoiseComplaints.aspx">http://www.massport.com/environment/environmental_reporting/Noise%20Abatement/NoiseComplaints.aspx</a> .								
UU	The commentor wrote on behalf of the Readville/Camp Meigs neighborhood watch group, requesting the coordinates and altitudes of the flights along the proposed route from CBEAR to COUSY. The commentor also requested information pertaining to all Runway 33L southbound flights that occurred in the 30 days prior to March 6, 2013, including the coordinates, the altitude, and the time of day. Finally, the commentor requested why no Environmental Impact Statement was completed when Hyde Park would be a newly impacted community.	<p>The FAA provided a written response on 3/14/2013 that stated in part:</p> <p>The lat/long of the waypoints as shown in Figure 2-5 of the Draft EA are as follows. Altitudes are expected to be the same or higher than the existing altitudes as shown in Figure 2-9 of the Draft EA.</p> <table><tr><td>TEKKK:</td><td>42 24 45.85, -71 05 55.09</td></tr><tr><td>COLYN:</td><td>42 21 17.92, -71 12 31.70</td></tr><tr><td>CBEAR:</td><td>42 15 19.94, -71 9 36.29</td></tr><tr><td>COUSY:</td><td>42 9 9.66, -71 2 24.39</td></tr></table> <p>In response to the request to provide historic radar data of flights over Hyde Park/Readville, FAA responded that this information is not readily available in the format requested or easily transmittable. A sample of radar data is provided in multiple figures throughout the Final EA.</p> <p>Regarding the inquiry as to why no EIS was completed specific to Hyde Park/Readville, the FAA responded that the Draft EA included a Study Area encompassing 1,500 square miles, including the areas of Hyde Park and Readville. An analysis of population and noise impacts for Hyde Park can be viewed at <a href="http://www.bostonrnavea.com">www.bostonrnavea.com</a> (Summary Table – Noise Results by Study Area Town – DNL Values (Updated February 6, 2013), Summary Table – Noise Results by Study Area Town – Population (Updated February 6, 2013)).</p>	TEKKK:	42 24 45.85, -71 05 55.09	COLYN:	42 21 17.92, -71 12 31.70	CBEAR:	42 15 19.94, -71 9 36.29	COUSY:	42 9 9.66, -71 2 24.39
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COUSY:	42 9 9.66, -71 2 24.39									

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
VV	The commentor summarizes a report by the Boston Globe that states that RNAV procedures would save "millions of barrels" of aviation fuel, but requests additional information on the potential fuel savings of the Proposed Action.	<p>Performance based navigation procedures such as RNAV allow an aircraft to fly to predetermined locations in space (i.e. waypoints) rather than ground based navigation aids. This "point-to-point" navigation shortens the overall flight distance and can result in fuel savings. Within the terminal environment, RNAV standard terminal arrival routes (STAR) and optimized profile descents can reduce the level-off step-down arrival procedure commonly used to safely sequence multiple arriving aircraft. Like en route navigation and RNAV STARs, RNAV SID procedures allow the use of flight management systems that reliably provide navigation on a pre-determined course, which can result in efficiency and potential fuel savings.</p> <p>Measuring fuel savings in the terminal environment (or similar small geographic area, such as the Study Area), can be difficult. As shown by the wide swath of Runway 33L departures on Figure 2-9, and compared to the narrow flight corridor associated with the RNAV SID, some flights may fly a shorter trajectory towards the exit fix, while others may fly a longer trajectory. However, typically, the conventional navigation environment means an aircraft must plan to follow ATC instruction and be prepared to fly a longer trajectory. RNAV navigation allows for more reliable planning.</p>
WW	Commentors inquire as to how implementation of the RNAV SID would result in higher elevations over certain areas, and change in DNL levels in Milton.	In Milton, aircraft may overfly areas at a higher altitude as a result of the additional distance flown in the initial stages of the departure procedure, prior to commencing the turn towards the south and southeast. Because of this additional distance, aircraft would have additional time to climb to higher altitudes. Noise levels in Milton are reported in Table 4.5 of the Final EA.
XX	The commentors suggest that the Proposed Action be adjusted such that the southbound turning movement of aircraft occurs as far west of the Hyde Park neighborhood as possible and that the turning movement be required to occur at the highest practical elevation.	<p>With the Proposed Action, the location of the RNAV SID from the TEKKE waypoint to the exit fixes (including the southbound route via CBEAR and COUSY), is based on current RNAV design criteria and interaction and avoidance of other existing RNAV and conventional flight procedures, including the Runway 27 RNAV SID.</p> <p>TEKKE is located precisely where it is in part based on requests (under the BLANS process) by the communities to avoid certain areas directly off the end of Runway 33L and to ensure that no automatic turns would commence before aircraft were less than 5 NM from the BOS VOR. Several factors came into determining where COUSY should be placed: separation from two other westbound routes (the REVSS and the BLZZR), separation from departures off Runway 27, and the distance needed to stabilize the aircraft after making the 63 degree turn at TEKKE. CBEAR is on the western edge of historical radar tracks and its location also allows for crossovers of conflicting traffic within 10 NM of the BOS VOR, something that is required for safety and efficiency in this complex departure flow.</p> <p>The location of the CBEAR waypoint is east of Hyde Park and the RNAV SID overflies only the southern portion of the Hyde Park neighborhood. No further adjustments to the waypoint locations or RNAV SID procedure is anticipated at this time, as there are no significant impacts associated with the Proposed Action.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
YY	<p>Commentor states that recent changes to departing aircraft have caused intrusive and irritating noise. The commentor further states that a Massport representative indicated that departure patterns for Runway 33L are adjusted occasionally during colder weather for wind direction issues, and that further, these changes had not been approved by the FAA.</p>	<p>Comment noted. The RNAV SID proposed for Runway 33L has not been implemented. Under the current conventional departure environment for Runway 33L departures, aircraft may overfly multiple areas, as a result of both wind and weather conditions and ATC instruction issued for safety and to maintain the safe separation of aircraft. No changes that the commentor references would be subject to NEPA or FAA approval.</p>
ZZ	<p>Commentor states that the Proposed Action represents the FAA trivializing states' rights regarding the establishment of the Blue Hills Reservation.</p>	<p>The Blue Hills Reservation is a state park managed by the Massachusetts Department of Conservation and Recreation. FAA calculated noise exposure at all Federal and State park facilities within the Study Area. The Blue Hills Reservation is currently overflown by Runway 33L departures, and the noise analysis indicates that noise levels within the Park do not meet the criteria for significant or reportable changes.</p> <p>The Draft EA process included the calculation of noise exposure at 307 location points across the Blue Hills Reservation, including properties listed in the NRHP located within the park boundaries. Aircraft departing Runway 33L and turning towards southerly destinations currently overfly the Blue Hills Reservation. Under the Proposed Action, DNL values ranged from less than 45 DNL to 52.9 DNL, and the greatest increase and decrease remaining below 1 DNL. Under the Proposed Action, DNL values ranged from less than 45 DNL to 52.9 DNL, and the greatest increase and decrease remaining below 1 DNL, therefore there is no significant noise impact. Additionally based on the location of the park and/or the activities conducted in the park, the park is not located in quiet setting where the setting is a generally recognized feature or attribute of the park's significance. Consequently, a determination under 4(f) of the Department of Transportation Act is not necessary. In addition, the Massachusetts State Historic Preservation Officer concurred with FAA's finding of "No Adverse Effect" to historic properties within the study area by letter dated May 1st, 2013.</p>
AAA	<p>Commentors are opposed to additional overflights over Waltham.</p>	<p>The intent of the Proposed Action is not to increase the number of aircraft departures from Runway 33L. Rather, the intent is to increase the efficiency and safety of aircraft departures by providing a predictable ATC departure procedure that provides direct navigation to aircraft. Due to the nature of RNAV procedures, portions of Waltham will experience less overflights, while those residing beneath the flight track may experience additional overflights; however those overflights would be at an altitude higher than that flown today. There are no significant impacts to residential land uses in Waltham, although with the Proposed Action, approximately 6,584 additional residents would be exposed to noise levels above 45 DNL. The total population in Waltham forecast to be exposed to noise levels above 45 DNL is approximately 12% of all residents.</p>
BBB	<p>The commentor inquires as to whether any recent budget cuts would affect this project.</p>	<p>It is not anticipated that any cuts to FAA's current budget will impact the assessment of or the implementation of the Runway 33L RNAV SID.</p>

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CCC	The commentor inquires as to whether RNP has been or will be considered at Logan Airport.	<p>RNP is RNAV with on-board navigation monitoring and alerting, and is also a statement of navigation performance necessary for operation within a defined airspace. A critical component of RNP is the ability of the aircraft navigation system to monitor its achieved navigation performance, and to identify for the pilot whether the operational requirement is, or is not being met during an operation. This on-board performance monitoring and alerting capability therefore allows a lessened reliance on ATC intervention (via radar monitoring, automatic dependent surveillance (ADS), multilateration, communications), and/or route separation to achieve the overall safety of the operation. RNP capability of the aircraft is a major component in determining the separation criteria to ensure that the overall containment of the operation is met.</p> <p>RNP procedures are not part of the Proposed Action, and there are no current plans for implementation at this time at Logan Airport. It is anticipated that as RNAV use becomes more widespread, the use of RNP procedures will also increase.</p>
DDD	Commentors ask if there will be accountability and performance metrics following implementation of the Proposed Action, or whether some type of follow up study can be done to determine noise impacts.	<p>The FAA regularly monitors aircraft operations for safety and efficiency. Immediately upon implementation of the RNAV SID from Runway 33L, the FAA will evaluate the use of the procedure. This evaluation will focus on the performance of individual aircraft and their ability to safely fly the procedure within the required parameters (such as the ability to make turns based on the waypoint locations and to remain within the identified flight corridor). The FAA will also evaluate the interaction of Runway 33L departures with arriving and departing traffic from other runways at Logan Airport. The duration of the post flight analysis is dependent on ensuring that sufficient flight data by all aircraft can be obtained, which is influenced by both the number of aircraft operations, and how frequently Runway 33L is used (driven by wind and weather conditions).</p> <p>Should issues arise, changes such as the movement of a waypoint or adjustment of performance specifications may need to be made. Any potential changes will be evaluated in the context of this EA to ensure that the procedure remains consistent with that analysis. No specific metrics beyond those already in use by the FAA will be created. The FAA does not anticipate the installation of temporary or permanent noise monitors following implementation of the Proposed Action. At a minimum, FAA will share the outcome of the post-implementation review with Massport and the CAC. The need for any additional public coordination will be discussed at the completion of the post-implementation review.</p>
EEE	Commentor states that the EA must consider cumulative impacts and Blue Hills Reservation, referencing Grand Canyon Trust v FAA, 290 F.3d 339 (DC Cir. 2002). The commentor further states that the EA implies that no analysis of the cumulative impacts of other overflights over specific towns is included.	<p>The noise modeling is required to utilize an average annual day of operations, which averages the number of operations, runway use, flight track use, and other model input. As such, the DNL noise values reported in the EA reflect all operations on all runways with and without the Proposed Action. The Proposed Action is evaluated against the No Action with the only change being implementation of the Runway 33L RNAV SID. DNL noise results include all operations from all runways at Logan Airport.</p> <p>Further, the FAA has independently evaluated a change to the Runway 27 RNAV SID already in place, and a cumulative impact analysis of both procedures yields no significant impact.</p>

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FFF	Commentor requests a more specific location of the Proposed Action over Canton.	As the procedure is designed, the backbone track does not overfly Canton directly; however, it is expected that aircraft would fly within one nautical mile of the center of the track. As such, the areas of overflight in Canton coincide with the town boundary to the northeast, as Canton borders Randolph and Milton.
GGG	The commentor, a representative of the Hyde Park (Fairmount Hill) community, inquired about multiple topics, including: why the CAC did not include representation from Hyde Park, why the FAA did not include a public meeting; a data request including RNAV SIDs and STARs Runways 4R, 4L, 9, 22R, 22L, and 27; the availability of the FAA to participate in a public meeting with the Fairmount Hills Neighborhood Association; the maximum route width (nm) that can be accommodated for planes in the RNAV system; the location of the CBEAR waypoint and whether it can be moved consistent with the location of the southern route in Measure F-HH(version 4); and a request for a more detailed map showing the Proposed Action over these areas. The commentor further asks why there are no centroids showing actual noise measurement data; why no DNL values of 45 or above are shown over Hyde Park; DNL levels at those specific locations; and information pertaining to the accuracy, reproducibility, standard deviation and standard error of the DNL data that is generated	<p>The FAA responded to these comments on March 15th, 2013, as follows:</p> <p>As it pertains to CAC representation, FAA provided contact information for the President of the Logan Airport CAC.</p> <p>A large portion of the Study Area currently experiences aircraft overflights, especially those in close proximity to Logan Airport. The area of Hyde Park experiences aircraft overflights from arrivals to Runway 04R, Runway 22 (from the south), Runway 09, and Runway 27, and from departures from Runway 27, Runway 22L, Runway 22R, and Runway 33L. The Proposed Action (RNAV SID from Runway 33L) has not yet been implemented, thus it is unclear why residents would be experiencing an increase in air traffic and noise as compared to recent operating conditions. It should be noted that the runways in use at Logan Airport depend on wind and weather conditions, thus an area may experience overflights from some, but not all, of the above-mentioned runways at any one time.</p> <p>A public meeting is not required for an EA, based on FAA environmental regulations. Due to the minimal nature of the noise increases and an overall reduction in noise between the 45 and 65DNL levels, the FAA determined public notification and solicitation of public comment in writing was appropriate.</p> <p>The FAA provided a map of the Boston RNAV STARs and a link to the FAA's 2007 Categorical Exclusion/Record of Decision that shows the intended flight paths of the RNAV SIDs recommended by CAC in Phase 1 of the BLANS. Additional information is available at <a href="http://www.bostonoverflightnoisestudy.com/docs/BONS_Phase1_Catex_ROD_full_document.pdf">http://www.bostonoverflightnoisestudy.com/docs/BONS_Phase1_Catex_ROD_full_document.pdf</a>.</p> <p>The procedure is designated as RNAV 1, which requires a total system error of no more than 1 NM (between the centerline and boundary of 1 NM) for 95% of the total flight time. Typically, the intent is to follow the centerline as close as possible, however this varies based on the flight track geometry (i.e. turns). Each fix along the proposed SIDs are required to be "fly by" fixes by RNAV criteria design. The flight management system computer logic of each aircraft will determine where that aircraft has to leave the centerline of the procedure in order to join the next straight leg segment of the procedure. Where this turn commences and how far the aircraft will be from the "fly by" fix depends on several factors: aircraft type and weight, aircraft performance, winds aloft and the degree of the turn. The TARGETS model that was used to design these procedures indicates that most turns in A90 airspace will result in aircraft remaining within about 0.50 NM of the fix and then return to the centerline of the procedure.</p>

**Table B-3**  
**Response to Comments – General Public**

Key	Summary Comment	Comment Response
GGG		<p>The CBEAR waypoint is located at 42°15'19.94", -71°9' 36.29". The location of CBEAR was determined by the locations of TEKKE and COUSY and the historical track data of radar vectored departures. TEKKE is located precisely where it is in part based on requests (under the BLANS process) by the communities to avoid certain areas directly off the end of Runway 33L and to ensure that no automatic turns would commence before aircraft were less than 5 NM from the BOS VOR. Several factors came into determining where COUSY should be placed: separation from two other westbound routes (the REVSS and the BLZZR), separation from departures off Runway 27, and the distance needed to stabilize the aircraft after making the 63 degree turn at TEKKE. CBEAR is on the western edge of historical radar tracks and its location also allows for crossovers of conflicting traffic within 10 NM of the BOS VOR, something that is required for safety and efficiency in this complex departure flow.</p> <p>The FAA did not conduct noise measurements in the preparation of this EA. There are two means of evaluating the effects of aircraft on the overall noise environment: noise modeling and noise measurements. At first glance, the ideal solution would seem to be the deployment of a vast array of microphones across the communities surrounding an airport to measure noise. However, a large noise measurement system like this has the two significant limitations of cost and complexity. In addition, it does not allow planners and engineers the ability to evaluate future growth and "what-if" scenarios at an airport. Massport maintains permanent noise monitors within the Study Area; however, this data does not assist with the analysis of the Proposed Action.</p> <p>Noise exposure in the area of Fairmount Hill/Hyde Park is generally less than 45 DNL, therefore not shown in the map. Noise exposure shown in the figures represents ALL operations at Logan on an average annual day at levels of 45 DNL or above. Modeled noise levels in Fairmount Hill/Hyde Park tend to fall in the 40-45 DNL range (with the northwest portion falling slightly above 45 DNL). Analysis of the Proposed Action indicates that less population would be exposed to noise levels above 45 DNL. In areas directly underneath the Proposed Action RNAV SID from Runway 33L (currently less than 45 DNL), noise exposure would increase by 1 to 2 DNL, levels which are not likely to be noticed. They do not meet the FAA's required levels of change to be significant, and they fall below FAA reporting thresholds.</p> <p>The FAA provided the results of the noise analysis by centroid.</p> <p>For a detailed discussion of model accuracy and limitations as it relates to the BLANS study and this analysis, reference Section 1.4 Model Accuracy and Limitations, of the Noise Analysis Protocol, available for review at <a href="http://www.bostonoverflightnoisestudy.com/docs/ExistingConditions_AircraftNoise_2005_Noise%20Modeling%20Protocol%20_071210.pdf">http://www.bostonoverflightnoisestudy.com/docs/ExistingConditions_AircraftNoise_2005_Noise%20Modeling%20Protocol%20_071210.pdf</a>. DNL values represent an average annual day of operations, and consider a number of variables, including the number of operations, runway use, flight track use, weather, etc. By nature DNL represents an estimated value.</p>



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**Response to Comments – General Public**

<b>Key</b>	<b>Summary Comment</b>	<b>Comment Response</b>
HHH	Commentor questions whether benefits such as safer landings and smoother rides, as mentioned in a Boston Globe article, are included in the Proposed Action.	One benefit to RNAV procedures, as they relate to arrivals, is the use of optimized descents. These procedures reduce the need for arriving aircraft to perform a traditional step-down approach, required for the safe separation of traffic. However, use of these procedures is often constrained by the amount of air traffic within the airspace, and the varying performance characteristics of different aircraft. The Proposed Action relates to an RNAV SID, rather than an RNAV STAR, therefore this comment is not applicable.
III	Commentor requests that the FAA consider the altitude of aircraft approaches over Milton; suggests moving the point at which aircraft converge to align with the runway be moved.	Comment noted. The Proposed Action relates to the implementation of an RNAV SID for Runway 33L at Logan Airport. The comments refer to arrival aircraft which are beyond the scope of this EA.
JJJ	Commentor states that the FAA's consultant for this EA also worked on previous runway projects at Logan Airport, which constitutes a conflict of interest.	The FAA's consultant for this EA has performed work for the FAA and Logan Airport in the past. No past projects or current assignments pose any conflict of interest as it relates to this EA.
KKK	Commentor states that the EA should limit the use of the procedure to only those aircraft that meet the highest standards for noise attenuation, and that louder aircraft take greater measures to avoid overflying Hyde Park.	The FAA has progressively phased out louder jet aircraft over time. The Airport Noise and Capacity Act of 1990 (ANCA) included the provision that no civil subsonic turbo aircraft weighing more than 75,000 pounds may be operated within the 48 contiguous states after January 1, 2000, unless it was shown to comply with the Stage 3 noise standards of CFR Part 36. All jet aircraft weighing more than 75,000 pounds comply with Stage 3 certification. The FAA generally does not assign runway use or flight track use based on noise level of a specific aircraft.
LLL	Commentor suggests that the noise analysis does not consider noise from non-aviation sources, such as road and train activity.	The EA discloses noise exposure from aircraft activity only.