

## **4. Responses to Comments**

For most letters, the responses are given by topic for each letter. Please see the individual comment letter for the full context of each comment response. Letters 8, 12 and 16 are lengthy, with numerous specific comments, many of them technical. For these letters, separate comments have been identified with a code on the comment letter itself. The responses to comments have been similarly coded.

### ***Letter 1 – Jerome Falbo, Town of Winthrop, Noise, Air Pollution & Airport Hazards Committee***

#### **Community Involvement**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials, and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

#### **Air Quality – Massport Monitoring Study**

An air quality study (called the Logan Air Quality Study) is called for by the Massachusetts Secretary of Environmental Affairs (MEPA) in the Certificate on the Final Environmental Impact report (EIR) for Logan Airside Improvement Project (LAIP). Presently, this study is in various stages of planning, development and implementation. Massport is conducting the study and has selected a contractor to assist them with the technical aspects (i.e., monitoring locations, methods and parameters). A detailed Work Plan is in draft form and has been provided to the Massachusetts Department of Public Health (MDPH) and the Massachusetts Department of Environmental Protection (MDEP) in January 2007 for their review. Massport continues to coordinate with the state agencies and is on schedule to begin the monitoring in 2007.

In accordance with the MEPA certificate, the monitoring program is designed to measure specific emissions in the surrounding neighborhood (including areas of East Boston and Winthrop) before the Centerfield Taxiway becomes operational. Follow-up monitoring will be conducted after the new taxiway is in place. The progress of the study will be reported in the annual Environmental Data Reports (EDR) for Logan filed by Massport with MEPA and a public meeting will be conducted to present and discuss the results.

In accordance with the MEPA Certificate, the study will focus on air toxics but will also include measurements of particulate matter (PM) and soot (as black carbon).

#### **Air Quality – Reevaluation Results**

The differences in the total amounts of emissions between the Limit All Jets and Free Flow Alternatives on Taxiway November are considered negligible. This is consistent with the forecasts of ground-based aircraft taxi-in, taxi-out and delay times, which are estimated to be the same under both alternatives. These findings do not conclude that “measurably less” (toxic) emissions are generated under either alternative.

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are not NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new Taxiway.

### **Massport Mitigation Commitments**

This Record of Decision (ROD) is related to FAA's federal actions and mitigation commitments as detailed in the 2002 LAIP ROD. FAA was not a participant with the Massachusetts Environmental Policy Act Office and Massport in Massport's mitigation commitments (Section 61 Findings). The status of implementation of various mitigation requirements set out in the Section 61 Findings, and the 2002 ROD is reported to the Citizen Advisory Committee by FAA and Massport on a quarterly basis. The reports submitted to date confirm a substantial level of compliance with federal and state imposed mitigation requirements.

### ***Letter 2 – Michael Morrissey, Senator, Norfolk & Plymouth Districts, Boston, MA***

#### **Air Traffic**

The Centerfield Taxiway would not increase air traffic over Quincy, Braintree, and the South Shore. The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. The Centerfield Taxiway will not independently affect the total number of aircraft flight operations at Logan.

### ***Letter 3 – Robert Travaglini, Senate President, Anthony Petrucelli, State Representative, Boston, MA***

#### **Aircraft Ground Noise – East Boston/Winthrop**

The *Logan Airside Improvements Planning Project Final EIS* analysis (Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease at each of the three noise monitoring stations evaluated in the communities at the north end of the airfield, NMS #7 at Loring Road near Court Road in Winthrop, NMS #10 at Bayswater and Shawsheen Streets in East Boston, and NMS #12 at the East Boston Yacht Club. This reduction occurs primarily because aircraft will spend less total time in holding positions at the northern end of the airfield, due to the increased operational efficiency afforded by the Centerfield Taxiway (See Table 3.10-2 in the FEIS). The analysis and conclusions of the Additional Taxiway Evaluation are consistent with the FEIS findings.

## **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

As required in the Section 61 findings, the Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Airport Capacity**

The Centerfield Taxiway would not increase airport capacity, which is a function of runway capacity. Runway capacity varies from different configurations that may be in use depending upon overall demand, weather and winds. The Centerfield Taxiway will remove inefficiencies in aircraft ground movements, thereby providing safety benefits. Centerfield Taxiway will not independently affect the total number of aircraft operations at Logan.

## **Community Involvement**

In its 2002 LAIP ROD, FAA specified that it would conduct community involvement for the Centerfield Taxiway through advisory representatives from East Boston and Winthrop. Additionally, FAA coordinated its draft Written Reevaluation of the Centerfield Taxiway with a mailing to over 1,000 affected individuals. The comment period was extended by one month to permit additional participation.

## ***Letter 4 – Thomas Menino, Mayor of Boston, Boston, MA***

### **Alternatives**

Based upon the additional study process specified in the 2002 LAIP ROD, FAA found no appropriate actions for improving taxiway operations on Taxiway November or for the operations plan for Centerfield Taxiway. As indicated in the LAIP EIS/EIR analysis and the further study reflected in the Taxiway Evaluation Report, the Centerfield Taxiway will provide important operational benefits that are not available through any other feasible alternative. FAA has recently completed a major study of the New England Regional Airport System in order to identify and promote infrastructure improvements at various New England Airports to achieve an appropriate service balance to better accommodate demand within each of their primary service areas and thereby alleviate some of the burden on Logan. Certain initiatives identified in this study are currently underway including, for example, an EIS process for significant airfield improvements at T.F. Green in Rhode Island.

### **Aircraft Ground Noise – Constitution Beach**

The presence of the Centerfield Taxiway will provide aircraft taxiing to the end of Runway 22L with an alternative access route that is further away from Constitution Beach. Currently all taxiing operations to the end of Runway 22L and 22R use Taxiway November, which is nearer to Constitution Beach than the Centerfield Taxiway. Therefore, the Centerfield Taxiway, in effect,

moves those sources of noise and air emissions that use it farther from the Beach. The LAIP Final EIS (Section 3.10.1.2) documents this environmental benefit at the noise monitoring station #12 located at the East Boston Yacht Club. As indicated in Table 3.10-2, ground operations noise levels at NMS #12 for the Preferred Alternative with the Centerfield Taxiway are projected to be an average of 1.4 dBA less than with the No-Action Alternative (37.5M High fleet).

The LAIP EIS analysis (FEIS p. 3-150-151) further concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. The results of the Additional Taxiway Evaluation are consistent with this finding. See also Noise response to Letter 3.

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

Massport is conducting the *Logan Air Quality Study* called for in the MEPA Certificate. A Work Plan has been developed and is presently under review by MDPH and MDEP. The first phase of the Study which will commence in 2007 is designed to monitor air quality in the surrounding neighborhoods and will focus on air toxics, particulate matter (PM) and soot. See also Air Quality response to Letter 1.

### **Safety**

The proposed Centerfield Taxiway would not adversely affect the incidence of runway incursions. In fact, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation resulting from the work of this team to date is the construction of the Centerfield Taxiway.

### ***Letter 5 – Karen Maddalena, Co-Chair, on behalf of Jeffries Point Neighborhood Association (JPNA), East Boston, MA***

#### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Safety**

The proposed Centerfield Taxiway would not adversely affect safety. As detailed in the LAIP Final EIS (p. 3-135-147) and summarized in the additional Taxiway Evaluation Report, the Centerfield Taxiway will provide the following safety operational benefits:

- Provides multiple paths for routing aircraft to and from the ends of Runways 4L/22R and 4R/22L
- Reduces the number and frequency of crossings of Runway 4L/22R
- Enhances the efficiency of runway configuration changes
- Avoids closing an active runway for use as a taxiway when other taxiways are temporarily unavailable
- Enables controllers to position ground-delayed aircraft in locations other than the runway end areas
- Facilitates the return of departing aircraft to the terminal area when required by equipment malfunction or de-icing, without delaying other aircraft
- Increases the margin of safety by providing opportunities to move crossings away from areas where aircraft are operating at higher speeds

In summary, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation of the work of this team to date is the construction of the Centerfield Taxiway.

***Letter 6 – John Bertucci, James Regan and Christopher Anderson, on behalf of the Officers of the Massachusetts High Technology Council (MHTC) – Waltham, MA***

**Support for Centerfield Taxiway**

Comments noted.

***Letter 7 – Harvey Maibor, Town of Winthrop, Citizen Rep, Centerfield Taxiway Committee – Winthrop, MA***

**Participation of the Advisory Committee & Community Involvement**

These comments from a Winthrop member of the Advisory Committee were previously considered prior to FAA coordinating its Draft Written Reevaluation of the Centerfield Taxiway with the public. FAA's participation with the Advisory Committee was conducted in accordance with the 2002 LAIP ROD, which specified conditions for the Scope of Work of additional study, as well as public participation and coordination. With regard to the meeting minutes, two members of the study team were charged with keeping minutes of the Advisory Committee Meetings, so that entire discussions could be captured, while allowing participation of all study team members. Both team members contributed to the preparation of the minutes of each meeting, and both reviewed the final minutes document prior to its distribution. See also Community Involvement response to Letter 1.

**Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

**Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Noise Level Increases**

Section 3.3 of the Additional Taxiway Evaluation Report (pp. 26 and 27) discusses the projected differences in noise between the two taxiway operational alternatives evaluated in the study. The report states that the FAA's level of significance for changes in annual average DNL is 1.5 dB where DNL values exceed 65 dBA. While Table 6 shows a difference in projected DNL noise levels between the two operational alternatives of 1.6 dBA at one location, the DNL values in this table are representative of worst-case downwind sound propagation conditions and for a 24-hour period with continuous departures on Runways 22R and 22L, which represents a worst-case 24-hour operational scenario. As the Report states, the differences between the two operational scenarios on an *annual average* basis is only 0.5 dBA, well below the FAA's level of significance for changes in DNL.

## **Letter 8 – Suzanne Condon, Associate Commissioner, Center for Environmental Health, Boston, MA**

### **Air Quality/Health**

- A. Comment noted that the MDPH/CEH is conducting a health study of Logan Airport.
- B. The Logan Airside Improvements Planning (LAIP) Project Supplemental DEIS/FEIR Air Quality Assessment included analyses of air monitoring data collected by MDEP and Massport, emissions inventories of Logan Airport and the results of dispersion modeling of the LAIP alternatives. The findings were compared to appropriate regulatory criteria for air quality. This level and these types of analyses comply with applicable requirements for state and federal environmental assessment documents, as confirmed by the Mass. Secretary of Environmental Affairs in his certificates approving the EIR documents and by FAA through issuance of its 2002 ROD. Additional studies are now underway or planned including the MDEP Health Study (See Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006) and the Logan Air Quality Study (see Letter 1).
- C. Comment noted in connection with Massport providing air quality model input files of Logan to the MDPH/CEH. Massport has provided all critical technical data requested by the MDPH as well as in-kind support to facilitate the ongoing MDPH Study.
- D. Further air quality information will be provided as part of the monitoring program required by the Massachusetts Secretary of Environmental Affairs.
- E. The Draft Written Reevaluation utilized the results of emissions inventories and the evaluation of the findings to assess the potential air quality impacts of alternate operational configurations for Taxiway November and the Centerfield Taxiway. The Logan Airside Improvements Planning Project Supplemental DEIS/FEIR Air Quality Assessment contained the results of dispersion modeling of the LAIP alternatives (including the Centerfield Taxiway); the dispersion modeling is a form of an exposure assessment. The results of the dispersion modeling were compared to the NAAQS levels of outdoor air pollutants promulgated by the U.S. EPA as being protective of human health and the environment with a margin of safety.
- F. See response to Comment E, above.

- G. Emissions of NO<sub>2</sub> occur during all modes of aircraft operation (i.e., landing, take-off, taxi, climbout), with the greatest amounts being generated during take-off. Because the measured NO<sub>2</sub> levels decrease with distance from Logan, it appears that the monitoring program is sensitive to airport-related activities, including the north end.
- H. Comment noted. See response to Comment G, above.
- I. See Air Quality response to Letter 1.
- J. The dispersion modeling from the LAIP Supplemental DEIS/FEIR Air Quality Assessment predicted compliance with the NAAQS and addresses local impacts from airport-related emission sources. Compliance with regional air quality plans are similarly mandated by the federal Clean Air Act under the General conformity Rule. See response to Letter 12 Comment F.
- K. Comment noted. See response to Letter 12 Comment F.
- L. The Logan Airside Improvements Planning Project Supplemental DEIS/FEIR Air Quality Assessment contained the results of dispersion modeling of the LAIP improvement concepts under review (including the Centerfield Taxiway). The results of the dispersion modeling were compared to the NAAQS levels of outdoor air pollutants promulgated by the U.S. EPA as being protective of human health and the environment with a margin of safety. The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on concentrations of particulate matter (PM) and VOCs as called for by the Mass. Secretary of Environmental Affairs in the MEPA Certificate. See Air Quality response to Letter 1.
- The U.S. EPA, FAA, NASA and others are currently involved in a multi-year, multi-discipline effort to measure emissions from modern-day aircraft engines. This work, which is still in progress, includes research into ultra-fine PM. The FAA is also sponsoring research into the potential health effects of PM emitted from aircraft engines.
- M. Comment noted. See responses to Letter 8 Comments A through L.

### ***Letter 9 – Robert DeLeo, State Representative, Boston, MA***

#### **Alternatives**

Air quality and noise impacts from the proposed Centerfield Taxiway do not differ significantly from the No Action Alternative evaluated in the LAIP FEIS. The scope of the additional Taxiway Evaluation Report was specified in the 2002 ROD to examine operational changes to Taxiway November and the Centerfield Taxiway to provide further context to the FAA's deliberation on Centerfield Taxiway.

#### **Operations**

There is no cap on operations at Logan Airport. However, Massport does have in place certain regulatory and planning initiatives to address the impacts of overall aircraft operations including the Logan Noise Rules, the Air Quality Initiative, the Peak Period Pricing program and ongoing collaboration with the FAA and regional airports on further developing the regional airport system.



## **Air Quality/Health**

The potential air quality impacts associated with the Centerfield Taxiway were estimated as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also response to Letter 1.

See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services, dated September 20, 2006.

## **Noise**

The No Action Alternative was evaluated in the LAIP Final EIS. See also Noise response to Letter 5.

## ***Letter 10 – Thomas Reilly, Council President, Town of Winthrop, Town Council, Winthrop, MA***

### **Massport Mitigation Commitments**

This Record of Decision (ROD) is related to FAA's federal actions and mitigation commitments as detailed in the 2002 LAIP ROD. FAA was not a participant with the Massachusetts Environmental Policy Act Office and Massport in Massport's mitigation commitments in their Section 61 Findings. The status of implementation of various mitigation requirements set out in the Section 61 Findings and the 2002 ROD is reported to the Citizen Advisory Committee by FAA and Massport on a quarterly basis. The reports submitted to date confirm a substantial level of compliance with federal and state imposed mitigation requirements.

## **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway. See also Air Quality response to Letter 8.

The Logan Air Quality Study will further monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Noise**

The annual average DNL is the FAA's identified metric for noise impact and determination of eligibility for federal funding. A major reason that impact criteria were developed based on annual average exposure is that studies show human response to noise correlates better to long-term exposure than to short-term exposure.

The two alternatives were developed with sufficiently different operational characteristics such that they would bracket the range of operational characteristics that would be expected for the taxiways between high and low utilization factors, thereby bracketing the range of potential environmental effects.

Noise analysis was performed at the one location in Winthrop closest to the taxiways where long-term noise data are collected, Massport's noise monitor NMS 7. It is located near the intersection of Court Road and Loring Road.

### **Community Involvement**

FAA gave substantial consideration to input from Winthrop advisory representatives. FAA committed to this form of community involvement in the 2002 LAIP ROD.

### ***Letter 11 – Congressman Michael Capuano, U.S. Representative, Cambridge, MA***

#### **Air Quality/Health**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

The Massachusetts Department of Public Health is currently conducting a comprehensive study of the relationship between Logan Airport and community health. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

#### **Capacity**

The Centerfield Taxiway would have no effect on airport capacity, which is a function of runway layout and weather. Runway capacity varies from different configurations that may be in use depending upon overall demand, weather and winds. The Centerfield Taxiway would remove inefficiencies in aircraft ground movements, thereby providing safety benefits. It would not independently affect the total number of aircraft operations at Logan.

#### **Safety**

The purpose of the Centerfield Taxiway is to reduce aircraft delays and enhance safety. Reducing taxiway delays would not affect the capacity of the airport, which is fixed by the runway layout and weather. See response to Capacity above.

**Letter 12 – Bryan Glascock, City of Boston Environment Department, Boston, MA**

**Air Quality/Health/Pollution**

- A. Comment noted. See Air Quality response to Letter 3.
- B. Comment noted. See Air Quality response to Letter 3.
- C. See Noise section below.
- D. Comment noted.
- E. See Noise section below.
- F. The quote from the Additional Taxiway Evaluation Report “areas of East Boston and Winthrop, which are closest to Taxiway November, will also likely [emphasis added] experience any measurable effects ...” is inaccurate. The actual language from the Report is “... areas of East Boston and Winthrop, which are closest to Taxiway November, will also not likely experience any measurable effects ...” This statement takes into account the combined effects of emissions on Taxiway November and the Centerfield Taxiway. The term “likely” is used in this application because the findings are based upon computer modeling of the best available data and assumptions combined with best professional judgment of future-year conditions. Real world conditions will be monitored as part of the Logan Air Quality Study (see Air Quality response to Letter 1 regarding the Logan Air Quality Study) which will provide data from actual operations that will be reported as part of Massport’s annual Logan Environmental Data Report filed with the Massachusetts Executive Office of Environmental Affairs.
- G. See Air Quality response to Letter 1.
- H. Under the General Conformity Rule of the federal Clean Air Act (CAA), compliance with the SIP is an indication that the project (or action) will not (a.) cause or contribute to a new violation of the NAAQS, (b.) worsen (or exacerbate) an existing violation (c.) or delay the timely attainment of any NAAQS in any areas. This applies to ambient (outdoor) air quality conditions throughout the entire airshed, both regional and local.
- I. See Air Quality response to Letter 1 regarding the Logan Air Quality Study and response Letter 8 Comment A regarding the MDPH Logan Health Study.
- J. See response to Letter 8 Comment E regarding emission inventory data and exposure assessment.
- K. Massport promotes a number of air quality management and emission reduction initiatives at Logan that are reported upon annually in the Logan Environmental Data Report (EDR). The national stakeholder process that focused on GSE emissions has disbanded.
- L. There are several programs that have been completed or are underway to better identify the possible air quality impacts of Logan’s operations at its perimeter and in the surrounding neighborhood. In addition to the assessment of potential alternative operational plans for Taxiway November and the Centerfield Taxiway documented in the Additional Taxiway Evaluation Report, the following additional analysis were undertaken (or programs put into place): the Logan Airside Improvements Planning Project Supplemental DEIS/FEIR Air

Quality Assessment that comprised emissions inventories and dispersion modeling, the Logan NO<sub>2</sub> Air Monitoring Program that has been in-place for over 12 years, the Logan Air Quality Initiative (AQI) designed to manage NO<sub>x</sub> emissions at Logan, the Logan Health Study by the MDPH (see response to Letter 8 Comment A), and the Logan Air Quality Study (see Air Quality response to Letter 1).

- M. The Logan Air Quality Study will include further analyses of atmospheric soot levels (in the form of PM<sub>2.5</sub> and Black Carbon) in the vicinity of Logan. See also Air Quality response to Letter 1.
- N. The follow-up air monitoring study (the Logan Air Quality Study) called for in the MEPA Certificate is being organized and expected to be operational in 2007 (see Air Quality response to Letter 1). The Air Quality Initiative (AQI) has been developed, is in place and is reported upon annually in the Logan EDR. Single engine taxiing is up to the discretion of the airplane pilot, but Massport encourages and monitors its use and has contacted the airlines regarding this matter.
- O. The Logan Airport AQI is in place and no litigation has been initiated by the ATA or any other party.
- P. The several issues raised in this comment are addressed separately as follows:
- The use of passive and active monitoring methods is addressed in the Logan Draft Air Quality Study Work Plan. See also Air Quality response to Letter 1.
  - A database of emission factors for aircraft that typically fly into Logan are contained in the FAA Emissions & Dispersion Modeling (EDMS) program, are utilized in support of the annual EDR air quality assessments and have been provided to the MDPH as part of their ongoing study of health effects.
  - Monitoring of NO<sub>2</sub> has been conducted at Logan and in the adjoining neighborhoods for over 12 years. The results are reported upon in the annual EDR for Logan. Monitoring of VOCs and PM<sub>10/2.5</sub> is planned as part of the Logan Air Quality Study (see also Air Quality response to Letter 1). The technology and methods for monitoring ultra-fine PM is considered to be emerging and is still under development by the U.S. EPA and others (see also response to Letter 8 Comment L).
  - The measuring of actual aircraft engine emissions (including PM) is under way by the U.S. EPA, FAA, NASA and others (see also response to Letter 8 Comment L).
  - Further monitoring of air quality in the vicinity of Logan (including particle deposition) is planned as part of the Logan Air Quality Study (see also Air Quality response to Letter 1).
  - The identification of all significant sources of emissions affecting air quality in the vicinity of Logan is multifaceted and goes beyond the FAA's jurisdiction and authority.
  - The apportionment of air pollutants from all sources of emissions in the vicinity of Logan is multifaceted and goes beyond the FAA's jurisdiction and authority.
  - Massport has implemented an NO<sub>2</sub> monitoring program with over 20 monitoring sites on, along the perimeter and in the neighborhoods around Logan. This program

has been in place for over 12 years. Additional air monitoring will be conducted as part of the Logan Air Quality Study. See also Air Quality response to Letter 1.

- The Logan Air Quality Study will be reported upon annually in the EDR. See also Air Quality response to Letter 1.
- The Logan Air Quality Initiative (AQI) included an assessment of alternative measures for reducing NOx emissions at Logan.
- The Logan Air Quality Study Work Plan is being coordinated with the MDEP and MDPH.

## Noise

- C. The noise modeling discussed in the *Additional Taxiway Evaluation Report* accounted for the high-frequency noise from high-bypass engines, as shown in detail in the two noise-related attachments of the report: *Attachment B: Noise Analysis of Taxi Queuing Alternatives for Taxiway November at Logan International Airport* and *Attachment E: Noise Analysis of Taxi Queuing Alternatives for the Centerfield Taxiway at Logan International Airport*. See also Noise response to Letter 4.

The Centerfield Taxiway is not expected, nor is it intended to change the usage of runways; its purpose is to improve the efficiency of aircraft movements while they are on the ground. The factors that affect runway usage, such as wind and air traffic, will not change as a result of the construction of the Centerfield Taxiway.

- E. The noise model was specified in the two noise-related attachments to the *Additional Taxiway Evaluation Report, Attachments B and E*. The SoundPLAN model was used with the ISO 9613-2 acoustical propagation standard.

The day in 2003 that the FAA was able to conduct the logging of operations on Taxiway November was a typical summer day when Runways 22R and 22L were in continuous use for departures. However, in the controllers' experience, some particularly busy days have more operations. Therefore, to evaluate the environmental effects of a worst-case busy day, the decision was made to scale up the level of activity to represent the highest levels of activity in the controllers' experience. Whether this had been done or not, a noise model was needed to address the differences between operational scenarios.

The taxi noise emissions of some of the aircraft were measured from aircraft in normal service, and others were measured under special controlled conditions. The controlled measurements were conducted to obtain directivity information -- i.e., noise emissions at different angles from the engines. Details are given in Section 3.3.2 of both Attachments B and E. In all cases, the engines were at an idle power setting that is used for taxi operations. To verify the model's accuracy, a direct comparison with measurements was conducted, and the noise model was shown to be appropriately conservative (predicts higher than measured noise levels). Details are given in Section 4 of both Attachments entitled "Noise Model Validation – Comparisons with Measurements."

Section 3.3.2 of the Attachments mentioned above shows how the directivity information was used to model the noise effects of aircraft turning on the taxiways up to the runway. Many times, aircraft turn onto the runway with taxi/idle power, then hold for clearance to depart. Occasionally, aircraft may turn onto the runway with increasing power, but only if

they have been given clearance to depart. The INM modeling of the flight operations noise at Logan Airport accounts for the high power aircraft take-off roll.

The final comment on noise suggests that the model underestimates noise due to a greater frequency of departures. However, as the Additional Taxiway Evaluation Report states in Section 3.2, the TAAM simulation model was used to develop a high-activity day in 2010 to approximate worst-case noise impacts. And, as stated above, the SoundPLAN noise prediction model was shown to be appropriately conservative.

### ***Letter 13 – Salvatore LaMattina, Boston City Council – District 1, Boston, MA***

#### **Air Quality/Health**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

The Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See responses to Letter 8 from the MDPH Office of Health and Human Services dated September 20, 2006.

Also, see Health response to Letter 7.

#### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 14 – Congressman Edward J. Markey, U.S. Representative, Washington, D.C.***

#### **Community Involvement**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

## **Regionalization**

Placing increased emphasis on regional airports such as Manchester and Providence would not solve taxiway delay problems at Logan, although it could address regional airport system capacity needs. FAA has recognized this for some time and has recently completed a major study of the New England Regional Airport System in order to identify and promote infrastructure improvements at various New England Airports to achieve an appropriate service balance to better accommodate demand within each of their primary service areas and thereby alleviate some of the burden on Logan. Certain initiatives identified in this study are currently underway including, for example, an EIS process for significant airfield improvements at T.F. Green in Rhode Island.

## **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

## **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 15 – Thomas Menino, Mayor of Boston, Boston, MA***

### **Community Involvement**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

### **Health**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See Air Quality response to Letter 1. The Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is also conducting a study of the health impacts of Logan Airport. See Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### **Letter 16 – John Shea, City of Boston, C32, Environmental Hazards Program, Boston, MA**

#### **Air Quality/Health**

- A. See Air Quality responses to Letters 1 and 3.
- B. See responses to Letters 8 Comment J, 12 Comment J and 16 Comment D.
- C. There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.
- D. Designations of compliance or non-compliance with the NAAQS are determined by the U.S. EPA and provide an overall indication of air quality conditions for the area in which they apply. See also Air Quality response to Letter 1 and response to Letter 8 Comment C regarding the assessment of local air quality in the vicinity of Logan.
- E. See response to Comment D.
- F. See Air Quality response to Letter 1. Comment regarding ultra-fine PM is also noted. The U.S. EPA, FAA, NASA and others are currently involved in a multi-year, multi-discipline effort to measure emissions from modern-day aircraft engines. This work, which is still in progress, includes research into ultra-fine PM.
- G. See response to Comment F.
- H. See Air Quality response to Letter 1.
- I. See Noise section below.
- J. See response to Comment C. Annual emission inventories for Logan are contained in the Logan EDR and extend back to 1990.



K. The Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. (See Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006). The Air Quality Initiative (AQI) has been developed, is in place and is reported upon annually in the Logan EDR.

## **Noise**

I. The comment suggests that single event noise metrics should also be addressed. However, the FAA and the Federal Interagency Committee on Noise (FICON) confirm that the annual average Day Night Noise Level (DNL) is the most appropriate metric for evaluating the impact of aircraft noise on people. Further, operations on taxiways do not represent the most significant single noise events associated with Logan Airport, nor do they represent the most significant contributor to overall noise exposure (see Additional Taxiway Evaluation Report Table 8). The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 17 – Thomas Tinlin, Boston Transportation Dept., Boston, MA***

### **Safety**

As documented in the LAIP Final EIS (p. 3-135-147) and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. See also Safety responses to Letters 4 and 5.

### **Health**

See response to Letter 16 Comment C regarding health effects.

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 18 – Stephanie Pyne, Winthrop, MA***

### **Air Quality/Health**

In accordance with the MEPA Certificate for the Centerfield Taxiway, an air quality study is being developed to monitor air emissions in the neighborhood surrounding Logan. Soot (in the form of black carbon) and other forms of particulate matter will be measured as part of the Study. See also Air Quality response to Letter 1.

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public

exposures are high and long enough. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Noise**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 19 – Laura Hansen, Revere, MA***

### **Air Quality**

In accordance with the MEPA Certificate for the LAIP Final EIR, an air quality study is being developed to monitor air emissions in the neighborhood surrounding Logan (see response to Letter 1 on the Logan Air Quality Study). Another study is underway by the MDPH to evaluate the health effects of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Noise – Beachmont Area of Revere**

The introduction of the Centerfield Taxiway is not expected to have any effects on aircraft noise levels in the Beachmont area of Revere.

Jet aircraft engines have become significantly quieter since they were introduced over 50 years ago. The Federal government (FAA and U.S. EPA) and international agencies (ICAO) are actively pursuing and mandating quieter and lower-emission aircraft engines. These developments are occurring on a global level, resulting from national and international agreements, and involving engine manufacturers, NASA and many other stakeholders. For example, as of 2000, the FAA no longer allows noisy Stage 2 aircraft with maximum gross takeoff weights greater than 75,000 pounds, such as the old-style Boeing 727s, to operate at U.S. airports. Massport and FAA have and will continue to support efforts in quiet engine technology.

### **Additional Air Traffic**

The Centerfield Taxiway will not cause additional aircraft traffic over residential neighborhoods. The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. The Centerfield Taxiway will not independently affect the total number of aircraft flight operations at Logan.

## ***Letter 20 – Joseph Felzani, Revere, MA***

### **Runway vs Taxiway**

The Centerfield Taxiway would have dimensions of and be marked and lit as a taxiway, which is significantly different from dimensions, markings and lighting of a runway. Airfield facilities such as runways and taxiways are clearly marked and designed on airfield charts and notices to airmen (NOTAMS) that are used by pilots in their pre-flight planning activity. Furthermore, electronic navigational guidance is provided that directs aircraft to the runway end, helping to ensure that they do not land on taxiways.

## ***Letter 21 – Ellen Baird, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were estimated as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Health**

In accordance with the MEPA Certificate for the LAIP Final EIR, an air quality study is being developed to monitor air emissions in the neighborhood surrounding Logan. Soot (in the form of black carbon) and other forms of particulate matter will be measured as part of the Study. See also Air Quality response to Letter 1. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Noise**

The additional taxiway (not runway as stated in the comment) at the northern end of the airfield is not expected to have a significant effect on noise levels. Also, The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### **Regionalization**

While placing increased emphasis on regional airports such as Manchester and Providence would not solve taxiway delay problems at Logan, it would address airport system capacity needs. FAA has recognized this for some time and has recently completed a major study of the New England Regional Airport System in order to identify and promote infrastructure improvements at various New England Airports to achieve an appropriate service balance to better accommodate demand within each of their primary service areas and thereby alleviate some of

the burden on Logan. Certain initiatives identified in this study are currently underway including, for example, an EIS process for significant airfield improvements at T.F. Green in Rhode Island.

## ***Letter 22 – George Barisano, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See Air Quality response to Letter 1.

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### **Safety**

As documented in the LAIP Final EIS (p. 3-135-147), 2002 ROD and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. See also Safety responses to Letters 4 and 5.

### **Wildlife**

As documented in the LAIP Final EIS (sec. 2.2.6, p. 2-24), the Centerfield Taxiway would have no significant adverse effect on wildlife.

## ***Letter 23 – Joanne O’Hara, East Boston, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See Air Quality response to Letter 1.

## **Health**

In accordance with the MEPA Certificate for the LAIP Final EIR, an air quality study is being developed to monitor air emissions in the neighborhood surrounding Logan. Soot (in the form of black carbon) and other forms of particulate matter will be measured as part of the Study. See also Air Quality response to Letter 1. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## **Vibrations**

Noise-induced vibrations are not expected to increase in East Boston and Winthrop associated with the construction of the Centerfield Taxiway.

## ***Letter 24 – Donna Segreti Reilly, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See Air Quality response to Letter 1.

## **Health**

The Massachusetts Department of Public Health is currently conducting a comprehensive study of the relationship between Logan Airport and community health. In accordance with the MEPA Certificate for the LAIP Final EIR, an air quality study is being developed to monitor air emissions in the neighborhood surrounding Logan. Soot (in the form of black carbon) and other forms of particulate matter will be measured as part of the Study. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## ***Letter 25 – John Vitagliano, Winthrop, MA***

### **Community Involvement**

The deadline for public comment on FAA's Draft Written Reevaluation was extended by one month in response to several requests.

## **Air Quality**

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 26 – Joseph Pike, Winthrop, MA***

## **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

Airport noise data are measured on a continuous basis at 30 permanent noise monitoring stations located in communities surrounding the airport. Massport prepares annual Environmental Data Reports that document these measured levels and compare them to computed levels of noise, which illustrate a more complete picture of noise levels in communities surrounding Logan. The EDRs also document estimated numbers of people, by community, that are affected by different levels of noise exposure and compare these counts from one year to the next. Each EDR also summarizes the status of various noise abatement measures and mitigation initiatives, including such measures as Massport's Residential Sound Insulation Program. These reports are filed with the MEPA unit of the Massachusetts Executive Office of Environmental Affairs and are available to the public at local public libraries, Massport offices, and at various sites online.

## **Air Quality**

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Water Quality**

The LAIP Final EIS addressed water quality issues (FEIS p. 2-23), and concluded that the additional pavement would not result an adverse effect on water quality. Massport routinely employs Best Management Practices in accounting for increased runoff.

## **Safety**

The proposed Centerfield Taxiway would not adversely affect safety. Air traffic crossing points would be moved to preferable locations. Overpasses or underpasses at Logan are impractical for air traffic. See also Safety responses to Letters 4 and 5.

## **Letter 27 – Mary Berninger, East Boston, MA**

### **Neighborhood Concerns**

The Additional Taxiway Report Evaluation Process was required and implemented specifically to address community concerns as stated in the 2002 LAIP ROD. The LAIP Final EIS also addressed a significant number of specific comments.

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were estimated as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Safety**

As documented in the LAIP EIS and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. See also Safety responses to Letters 4 and 5.

### **Community Involvement**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

## **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

### ***Letter 28 – Ron Hardaway, East Boston, MA***

#### **Safety**

The Centerfield Taxiway would not adversely affect safety. Air traffic crossing points would be moved to preferable locations. See also Safety responses to Letters 4 and 5.

#### **Health**

The Massachusetts Department of Public Health is currently conducting a comprehensive study of the relationship between Logan Airport and community health. See Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006. See also Air Quality responses to Letter 1 (regarding the Logan Air Quality Study) and Letter 3 (regarding the LAIPDEIS/FEIR Air Quality Assessment).

#### **Participation of the Advisory Committee**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

#### **Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 29 – George Hrono, East Boston, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.



The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Noise**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 30 – Joseph Nucci, Jamaica Plain, MA***

#### **Air Traffic**

The Centerfield Taxiway will not cause additional air traffic over Jamaica Plain. The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. It will not independently affect the total number of aircraft flight operations at Logan.

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

#### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Noise**

The addition of the Centerfield Taxiway will not affect aircraft noise levels in Jamaica Plain. See response to Air Traffic comment above.

## ***Letter 31 – Brenda Curry, Winthrop, MA***

### **Air Quality**

Soot (in the form of black carbon) will be measured as part of the air monitoring study. See also Air Quality response to Letter 1.

### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## ***Letter 32 – Form Letters, Deadline for Comments 8/21/06***

### **Aircraft Ground Noise**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Extension of Comment Period**

The comment period on the Draft Written Reevaluation was extended to September 22, 2006, as requested.

### ***Letter 33 – Roberta Horn, East Boston, MA***

#### **Safety**

As documented in the LAIP EIS (p. 3-135-147) and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. See also Safety responses to Letter 4 and Letter 5.

#### **Air Quality**

Soot (in the form of black carbon) will be measured as part of the air monitoring study. See also Air Quality response to Letter 1.

#### **Runway Incursions**

The proposed Centerfield Taxiway would not adversely affect safety. Air traffic crossing points would be moved to preferable locations. Overpasses or underpasses at Logan are impractical for air traffic. See also Safety responses to Letters 4 and 5.

### ***Letter 34 – John Cramer, Winthrop, MA***

#### **Appreciation for Extension of Comment Period**

Comment noted.

### ***Letter 35 – Robert Strelitz, East Boston, MA***

#### **Air Traffic**

The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. It will not independently affect the total number of aircraft flight operations at Logan.

#### **Alternatives**

While placing increased emphasis on regional airports such as Manchester and Providence would not solve taxiway delay problems at Logan, it would address airport system capacity needs. FAA has recently completed a major study of the New England Regional Airport System in order to identify and promote infrastructure improvements at various New England Airports to achieve an appropriate service balance to better accommodate demand within each of their primary service areas and thereby alleviate some of the burden on Logan. Certain initiatives identified in this study are currently underway including, for example, an EIS process for significant airfield improvements at T.F. Green in Rhode Island.

## ***Letter 36 – John & Judith Silek, Winthrop, MA***

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Extension of Comment Period**

The comment period for the Draft Written Reevaluation was extended to September 22, 2006, as requested.

## ***Letter 37 – Form Letters, Deadline for Comments 9/22/06***

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Extension of Comment Period**

The comment period on the Draft Written Reevaluation was extended to September 22, 2006, as requested.

## ***Letter 38 – Stephen Nichols, Winthrop, MA***

### **General Opposition**

Comment noted.

## ***Letter 39 – Patricia Bosco, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

## **Aircraft Ground Noise - East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 40 – Ralph Bosco, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

### **Aircraft Ground Noise – East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 41 – Cheryl DeMarco, Winthrop, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

#### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

#### **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

### **Aircraft Ground Noise – East Boston/Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 42 – Romeo Rodrigues***

### **General Opposition to Centerfield Taxiway**

Comment noted.

## ***Letter 43 – Ivan & Nancy Blecher, Revere, MA***

### **General Opposition to Centerfield Taxiway**

Comment noted.

### **Noise - Revere**

The Centerfield Taxiway is not expected to have any effects on aircraft noise levels in Revere.

## ***Letter 44 – Carol Burns, Winthrop, MA***

### **Noise - Winthrop**

The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3. Furthermore, the Centerfield Taxiway will not increase or have any affect on the number of flight operations over Winthrop. The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. It will not independently affect the total number of aircraft flight operations at Logan.

### **Air Quality – Aircraft Fumes**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### **Air Traffic**

The Centerfield Taxiway does not affect air traffic levels or the selection of runway configurations. The assignment of air traffic that will result in flight activity over a particular community varies according to the runway configuration in use. Runway configuration use is, in turn, a function of overall demand, weather/winds, and runway capacity, all of which would be



unaffected by the proposed Centerfield Taxiway. The benefit of Centerfield Taxiway is to remove inefficiencies in aircraft ground movements, thereby providing safety benefits. It will not independently affect the total number of aircraft flight operations at Logan.

### ***Letter 45 – Renato D’Amico, East Boston, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

### ***Letter 46 – Thomas McNiff, Winthrop, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. PM will be monitored as part of the Study. See also Air Quality response to Letter 1.

With respect to ultra-fine PM, the U.S. EPA, FAA, NASA and others are currently involved in a multi-year, multi-discipline effort to measure emissions from modern-day aircraft engines. This work, which is still in progress, includes research into ultra-fine PM.

With respect to shorter timeframes, the LAIPDEIS/FEIR Air Quality Assessment included a dispersion analysis of the planned improvements to Logan (including the Centerfield Taxiway) over timeframes ranging from 1-hour (in the case of CO) to 24-hours (in the case of PM) as well as annual conditions (see Air Quality response to Letter 3). The planned Logan Air Quality Study will measure pollutants in similar time increments.

#### **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest

potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006. and response to Letter 16 Comment C.

### **Safety**

The proposed Centerfield Taxiway would not adversely affect the incidence of runway incursions. Crossing points would be moved to preferable locations. In fact, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation resulting from the work of this team to date is the construction of the Centerfield Taxiway. See also Safety responses to Letters 4 and 5.

### **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

### **Community Involvement**

The August 2, 2002 Record of Decision (“2002 ROD”) for the LAIP set out the details of the community involvement process in connection with FAA’s additional deliberations on the Centerfield Taxiway. Representatives from the affected communities of East Boston and Winthrop were selected by their respective municipal officials and meetings were held and opportunity for comment provided as contemplated in the 2002 ROD. The Scope of Work was also specified in the 2002 ROD. FAA gave substantial consideration to input from Winthrop and East Boston advisory representatives.

### **Aircraft Ground Noise - East Boston/Winthrop**

No U.S. EPA standards are applicable to the idling aircraft on Logan Airport’s taxiways. Also, The LAIP Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 47 – Richard Gill, Winthrop, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the LAIP Supplemental DEIS/FEIR. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and

PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will monitor the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Safety**

As documented in the LAIP Final EIS and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. In fact, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation resulting from the work of this team to date is the construction of the Centerfield Taxiway. See also Safety responses to Letters 4 and 5.

## **Aircraft Ground Noise – East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 48 – Peter Koff, Attorney for Ronald Hardaway, Thomas Bruno, Gail Miller, East Boston, MA***

### **Review Process**

FAA's 2002 LAIP ROD specifies, as an EIS mitigation measure, the community involvement process that FAA would utilize to "conduct an additional evaluation of taxiway operations in the northern portion of the airfield to assess potential beneficial operational procedures that would preserve or improve the operational and environmental benefits of the Centerfield Taxiway as shown in the EIS." (ROD, page 25) This process included an advisory committee of "representatives from neighborhoods surrounding the north end of the airport." (ROD, page 25). Additionally, FAA coordinated its draft Written Reevaluation of the Centerfield Taxiway with a mailing to over 1,000 affected individuals. The comment period was extended to permit additional participation. The term "visual impacts," as used in FAA's 2002 ROD, applies to the identification and review of "federal and state policies, regulations, and directives." (ROD, page 25) FAA did not commit to evaluate the visual impacts of the proposed Centerfield Taxiway in its 2002 ROD. Finally, FAA thoroughly evaluated community suggestions and documented reasons why they did not meet the objective quoted above.

## **Air Quality/Health**

With respect to field monitoring and field studies, see Air Quality response to Letter 1. For air quality mitigation measures, the Logan EDR published annually contains information and data pertaining to mitigation measures currently in place or planned at the airport.

With respect to air quality, the findings from the DWE are considered accurate.

See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Airport Ground Noise – East Boston/Winthrop**

Additional field monitoring of noise was conducted for the Additional Taxiway Evaluation for purposes of validating the noise prediction model and determining taxiway noise emissions as separate from other noise sources in the area. These measurements are described in Section 4 of both Attachments B and E to the Additional Taxiway Evaluation Report.

The comment suggests that “annualized averaging” does not represent a fair measure of how single events and nighttime noise are experienced. However, the FAA and the Federal Interagency Committee on Noise (FICON) confirm that the annual average Day Night Noise Level (DNL) is the most appropriate metric for evaluating the overall impact of aircraft noise on people. Further, operations on taxiways do not represent the most significant single noise events associated with Logan Airport, nor do they represent the most significant contributor to overall noise exposure (see Additional Taxiway Evaluation Report Table 8). See also Noise responses to Letters 3 and 4.

## ***Letter 49 – Carole Bourne, Revere, MA***

### **Operations**

The Centerfield Taxiway would not increase aircraft operations. See Additional Air Traffic response to Letter 19.

### **Noise - Revere**

The introduction of the Centerfield Taxiway is not expected to have any effects on aircraft noise levels in Revere. See also Noise response to Letter 19. Comment about overflight noise and vibration noted.

## ***Letter 50 – Anna Brogna, Orient Heights, MA***

### **Air Quality/Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan

Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

With respect to particulate matter (PM), the U.S. EPA, FAA, NASA and others are currently involved in a multi-year, multi-discipline effort to measure emissions from modern-day aircraft engines. This work, which is still in progress, includes research into PM. PM will be monitored as part of the Logan Air Quality Study. See also Air Quality response to Letter 1.

### ***Letter 51 – Allyn Christopher, East Boston, MA***

#### **Air Quality/Health**

Massport is conducting the Logan Air Quality Study called for in the MEPA Certificate. A Work Plan has been developed and is presently under review by MDPH and MDEP. The first phase of the Study will commence in 2007. It is designed to monitor air quality in the surrounding neighborhoods, and will focus on air toxics, particulate matter (PM) and soot. (See also Air Quality response to Letter 1.)

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

#### **Vibrations**

Comment about vibrations noted.

#### **Alternatives**

FAA believes that constructing a major new airport to replace Logan is not a realistic alternative to the proposed Centerfield Taxiway.

### ***Letter 52 – Peter Koff, Attorney for: Ronald Hardaway, Thomas Bruno, Gail Miller, East Boston, MA***

#### **Safety**

As documented in the LAIP Final EIS (p. 3-135-147) and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. In fact, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan.

One critical recommendation resulting from the work of this team to date is the construction of the Centerfield Taxiway.

As detailed in the LAIP Final EIS and summarized in the additional Taxiway Evaluation Report the Centerfield Taxiway will provide the following safety operational benefits:

- Provides multiple paths for routing aircraft to and from the ends of Runways 4L/22R and 4R/22L
- Reduces the number and frequency of crossings of Runway 4L/22R
- Enhances the efficiency of runway configuration changes
- Avoids closing an active runway for use as a taxiway when other taxiways are temporarily unavailable
- Enables controllers to position ground-delayed aircraft in locations other than the runway end areas
- Facilitates the return of departing aircraft to the terminal area when required by equipment malfunction or de-icing, without delaying other aircraft
- Increases the margin of safety by providing opportunities to move crossings away from areas where aircraft are operating at higher speeds

In summary, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation of the work of this team to date is the construction of the Centerfield Taxiway.

### ***Letter 53 – Mary Mitchell, Winthrop, MA***

#### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.

## **Water Quality**

FAA does not monitor water quality at Logan, however, Massport does. The LAIP Final EIS addressed water quality issues (p. 2-23), and concluded that the additional pavement would not result in an adverse effect on water quality. Massport routinely employs Best Management Practices in accounting for increased runoff.

## **Natural Resources**

The effect of the Centerfield Taxiway on natural resources, including Coastal Zone and wildlife was assessed as part of the LAIP Final EIS (sec. 2.2.6, 2.2.7, p. 2-24). No significant adverse effects are anticipated.

## **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

## **Aircraft Ground Noise – East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 54 – Jack Nee, Lincoln, RI***

### **General Opposition to Centerfield Taxiway**

Comment noted.

## ***Letter 55 – Richard Salini, East Boston, MA***

### **Air Quality**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan

Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

The trade-offs between quieter jet engines and NO<sub>x</sub> emissions apply to some, but not all aircraft. Moreover, newer jet engines are designed to emit less NO<sub>x</sub> than their predecessors and international regulations require these reductions to continue into the future. With respect to fine particulate matter (PM), the U.S. EPA, FAA, NASA and others are currently involved in a multi-year, multi-discipline effort to measure emissions from modern-day aircraft engines. This work, which is still in progress, includes research into PM.

## **Safety**

As documented in the LAIP Final EIS (p. 3-135-147) and subsequent Written Reevaluation, FAA believes that aircraft can safely operate on the runways and taxiways with the addition of the proposed Centerfield Taxiway. In fact, the Taxiway will allow the FAA to place aircraft on the airfield away from areas of congestion. The new Taxiway will reduce the number of crossing events (the amount of time the FAA directs aircraft to cross active runways). The avoidance of congestion points and reduction of crossing events will reduce the likelihood of runway incursions and enhance overall ground safety on the airfield. The FAA has organized a special study team to study and make recommendations to reduce runway incursions at Logan. One critical recommendation resulting from the work of this team to date is the construction of the Centerfield Taxiway. See also Safety response to Letter 52.

## ***Letter 56 –Cindy & Jay Silva, Winthrop, MA***

### **General Opposition to Centerfield Taxiway**

Comment noted.

### **Air Quality**

The referenced values represent percent reductions (i.e., -2.1%).

The referenced statement says that the changes in NO<sub>2</sub> values range from being lower by 2% to an increase of 0.9% (i.e., -2 to +0.9%) compared to baseline conditions.

## ***Letter 57 – Pat Sullivan, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

The Logan Air Quality Study will further assess the effects of the Centerfield Taxiway on air quality (with an emphasis on air toxics) using air monitoring data. See also Air Quality response to Letter 1.



## **Health**

There are numerous and varied sources of air emissions that can contribute to adverse health effects in an urban environment when the ambient concentrations of pollutants and the public exposures are high and long enough, respectively. Additional contributors to adverse health also include indoor or occupational exposures, personal lifestyle and a host of other factors. For this reason, it is difficult to identify single or multiple emission sources that contribute the greatest potential impacts. Notably, the Massachusetts Department of Public Health, Center for Environmental Health (MDPH/CEH) is conducting a study of the health impacts of Logan Airport.

## **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

## **Aircraft Ground Noise – East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

## ***Letter 58 – Terry Vazquez, Winthrop, MA***

### **Air Quality**

The potential air quality impacts associated with the Centerfield Taxiway were assessed as part of the Supplemental DEIS/FEIR for the LAIP. The results of this analysis did not predict any violations of the National Ambient Air Quality Standards (NAAQS) for pollutants such as CO, NO<sub>2</sub> and PM. For emissions of VOCs (for which there are no NAAQS), the analysis similarly predicts that there will be no substantial increase in ambient (i.e., outdoor) levels of this pollutant with the new taxiway.

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## **Health**

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Airport. See also Letter 8 in Section 3 from the MDPH Office of Health and Human Services dated September 20, 2006.

### **Water Quality**

FAA does not monitor water quality at Logan, however, Massport does. The LAIP Final EIS addressed water quality issues (p. 2-23), and concluded that the additional pavement would not result in an adverse effect on water quality. Massport routinely employs Best Management Practices in accounting for increased runoff.

### **Property Values**

The Centerfield Taxiway would be located between two major runways and would not significantly change the dominant land use that the airport currently presents. As such, the construction of the Centerfield Taxiway should have no significant effect on off-airport residential property values. See also responses to comments related to noise and air quality.

### **Aircraft Ground Noise – East Boston/Winthrop**

The Final EIS analysis (FEIS Section 3.10.1.2, p. 3-150-151) concludes that, compared with the No-Action Alternative, there are no projected increases in ground operations noise in East Boston and Winthrop associated with the Centerfield Taxiway. In fact, average ground noise levels are projected to decrease due to reduced aircraft taxi and hold time. See also Noise response to Letter 3.

### ***Letter 59 – Annmarie Silva, Winthrop, MA***

#### **General Opposition to Centerfield Taxiway**

Comment noted.

***Letter 60 – 23 East Boston; 4 Chelsea; 2 Winthrop; 2 Revere; 3 Jamaica Plain; 1 Everett; 1 Mattapan; 2 Gloucester; 1 Framingham; 1 Weston; 1 Unknown***

#### **General Opposition to Centerfield Taxiway**

Comment noted.