



# Board of Selectmen

Town of Belmont, Massachusetts

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## Public Information Meeting

Airplane Noise Over Belmont

December 11, 2013

[logancac@belmont-ma.gov](mailto:logancac@belmont-ma.gov)



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## **Meeting Objectives and Agenda:**

- Objective: To inform Belmont Residents about the work and current findings of matters related to increased airplane noise experienced since the implementation of Runway 33L RNAV in June 2013.
- Agenda:
  - Presentation by Belmont Representatives to the Logan Community Advisory Committee (CAC)
  - Questions from Residents
  - Discussion of options and next steps



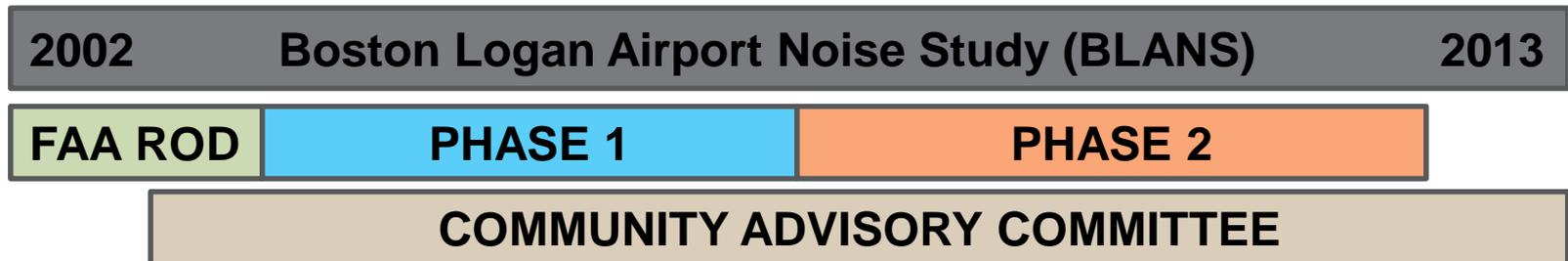
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## BOSTON LOGAN AIRPORT NOISE STUDY (BLANS)

The Boston Logan Airport Noise Study (BLANS) is the result of a mitigation requirement contained in the Federal Aviation Administration's (FAA) 2002 environmental Record of Decision (ROD) for the Boston Logan Airside Improvements Planning Project. The ROD requires that the FAA, Massport and the Community Advisory Committee (CAC) work jointly to develop a scope of a noise study that will include enhancing existing and/or developing new noise abatement measures applicable to aircraft overflights which do not diminish safety and efficiency, and/or cause adverse impacts to other communities

### TIMELINE





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## Logan CAC:

- Committee formed to work with FAA and Massport on issues related to noise and air traffic from Logan
- CAC Objective: “Safely reduce the aircraft flight and ground noise exposure from BOS (Logan) related operations on as many residents of communities in the Boston area as practicable”
- Made up of representatives from over 30 communities in Greater Boston
- In September, 2013 - Belmont Selectmen appointed Myron Kassaraba & Bob Reardon (alternate) to represent Belmont on the CAC.





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## Northwest Flow Operating Configuration



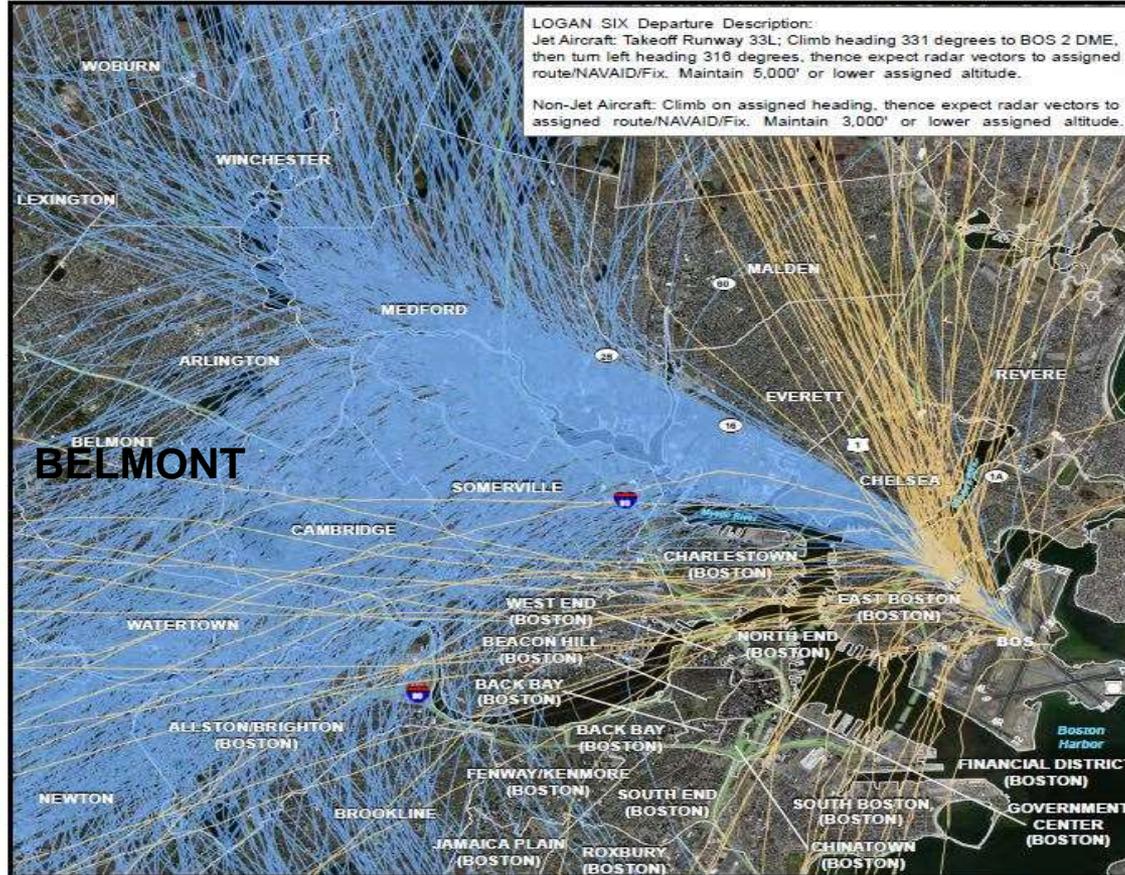


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### Pre-May 2013 Flight Operations – ATC Random Distribution

**Boston Logan International Airport**



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

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

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

0 0.2 0.4 0.8 Nautical Miles

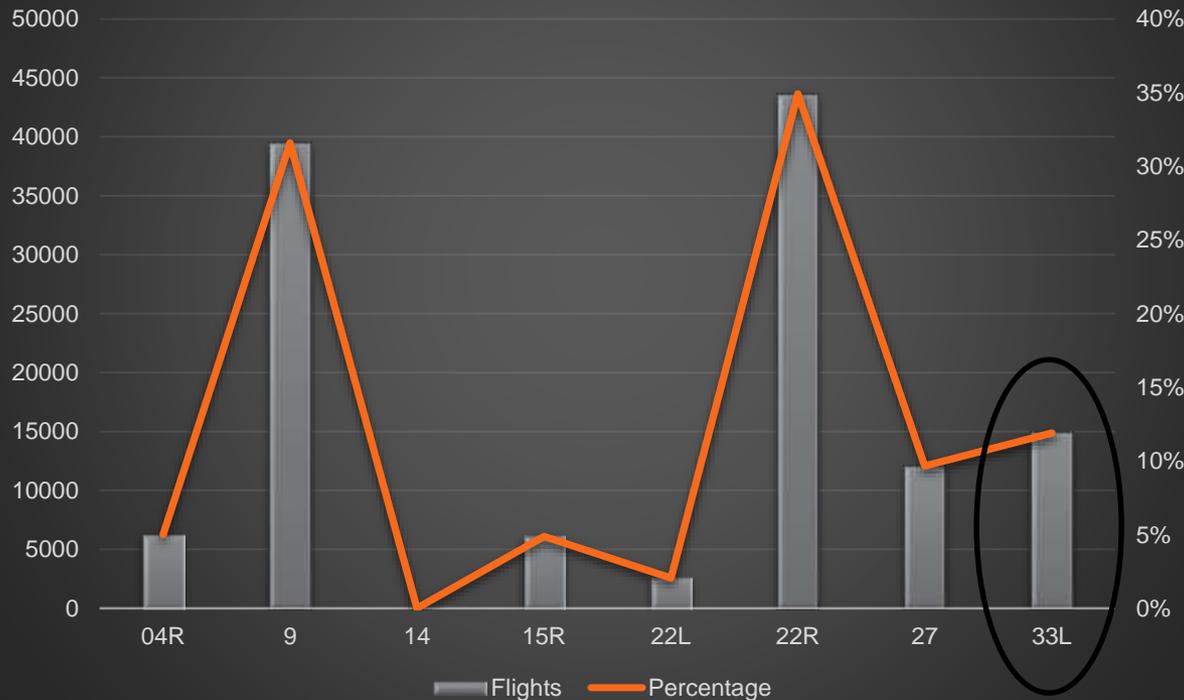
Source:  
 Radar Data Source: FAA PDAIS ©2012  
 520712, 427114, 430612, 421014, 5212101  
 Office of Geographic Information (MassGIS), ESRI



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## 2013 YTD LOGAN AIRPORT DEPARTURES RUNWAY USE



**Runway 33L Use**  
YTD 2013:  
**14,836 Departures**  
**12% of Total**  
**(124,796)**

**NW (Includes R27)**  
**26,886 Departures**  
**22% of Total for**  
**Logan**

**Runway use is**  
**dependent on many**  
**factors in addition to**  
**wind direction**



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## Runway 33L RNAV:

- The FAA has been mandated by Congress to increase the operational efficiency and decrease the environmental impact of the nation's air transportation system.
- The FAA's decade-long strategic effort to modernize the air traffic system called **NextGen**.
- The movement to the next generation of aviation is being enabled by a shift to smarter, satellite-based and digital technologies and new procedures that combine to make air travel more convenient, predictable and environmentally friendly.
- Several of the proposed actions make adjustments to takeoff and landing patterns and incorporate new "performance-based navigation" technology. These new "area navigation" flight paths are called **RNAV**.

# Explanation of RNAV



Direct Link to Video: <http://www.youtube.com/watch?v=gSqmLDEaqBA>



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## **Runway 33L RNAV Process:**

- Starting in 2008 several alternative RNAV options for runway 33L were evaluated.
- Runway operational changes follow a prescribed Environmental Assessment (EA) process.
- Noise models and other environmental impacts were studied
- Communities and Officials were informed of this activity
- In January 14, 2013 – the FAA issued a Draft EA for their proposed RNAV procedures for 33L were presented to the CAC and a request for public comment was made (ads in papers, articles in Globe, etc.)
- Public comment period was open until March 15<sup>th</sup>, 2013.
- Meeting with State and Federal representatives was held on Feb. 5<sup>th</sup>.
- The FAA issued a Finding of No Significant Impact/Record of Decision (FONSI/ROD) for the Runway 33L RNAV SID Final EA on June 4, 2013.
- Runway 33L RNAV was implemented in mid-June



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### May 2013 FONSI (Finding of No Significant Impact):

- A comparison of the 2015 No Action and 2015 Proposed Action Alternatives noise exposure for populated centroids indicates there are no significant impacts (increases of 1.5 decibels (dB) in areas that would experience DNL noise levels of 65 or above). Although not required to be evaluated (when no significant impact is found), the Proposed Action does not result in increases of 3 DNL in population centroids between 60 and 65 DNL. In addition, the Proposed Action does not result in increases of 5 DNL for population centroids between 45 and 60 DNL. **Figure 4-3** and **Figure 4-4** in the attached Final EA depict noise exposure greater than 45 DNL at population centroids due to the implementation of the Proposed Action. In addition, as shown in **Table 4-6** in the attached Final EA, 67,846 fewer people will be exposed to noise above 45 DNL with the Proposed Action. Thus, the Proposed Action will not cause significant noise impacts as the change in noise exposure does not exceed the threshold of significance. Accordingly, no mitigation is warranted per 1050.1E, Appendix A, paragraph 14.4c.
- During the preparation of the Draft EA, the final noise modeling results using 2010 U.S. Census data showed no populations were being added to the 65 DNL and 67,846 fewer people would be exposed to noise levels above 45 DNL.

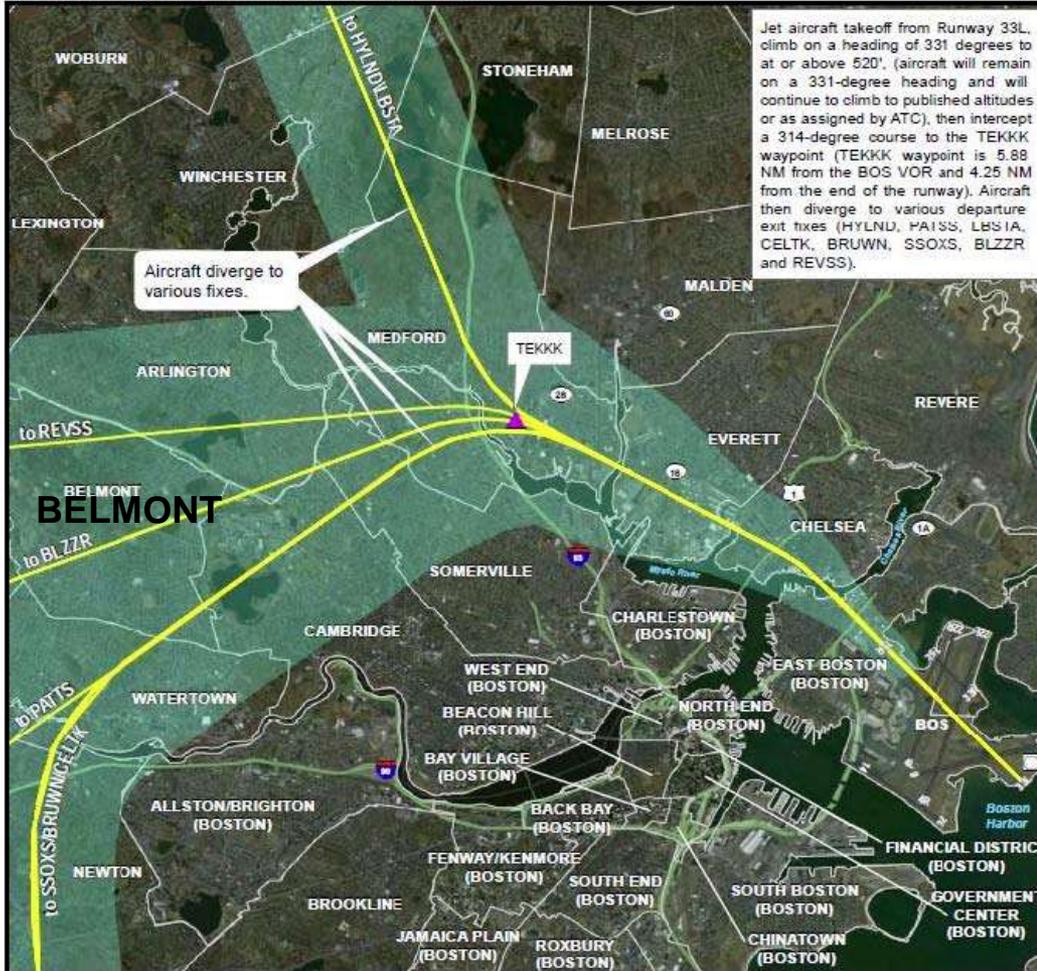
**Source:** [http://www.bostonrnavea.com/BOS\\_RNAV\\_EA\\_Cover\\_FONSI-ROD\\_TOC.pdf](http://www.bostonrnavea.com/BOS_RNAV_EA_Cover_FONSI-ROD_TOC.pdf)



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### Boston Logan International Airport



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

#### LEGEND

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

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



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

0 0.2 0.4 0.6  
Miles

Source: RNAV: TARGETS (FAA PEN Integration Office)  
Office of Geographic Information Management, ESRI



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## What does 33L RNAV mean to Belmont?:

- On days when there is a NW wind, Belmont is seeing an increase in overflights from runway 33L departures
- All 33L departures travel to a waypoint in Malden and then diverge to one of four flight paths.
- Two of the paths traverse Arlington & then Belmont, one flies over Cambridge and a corner of Belmont and Watertown the other travels over Medford & Winchester.
- Depending on routing path, there could be 100+ departing flights on a day when 33L is in use (runway 27 is also used for NW departures).
- Runway 33L use for departures has increased by 60-65% in 2013 over previous two years when runway 33L was closed for safety improvements part of the year.



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## How is Noise Measured?:

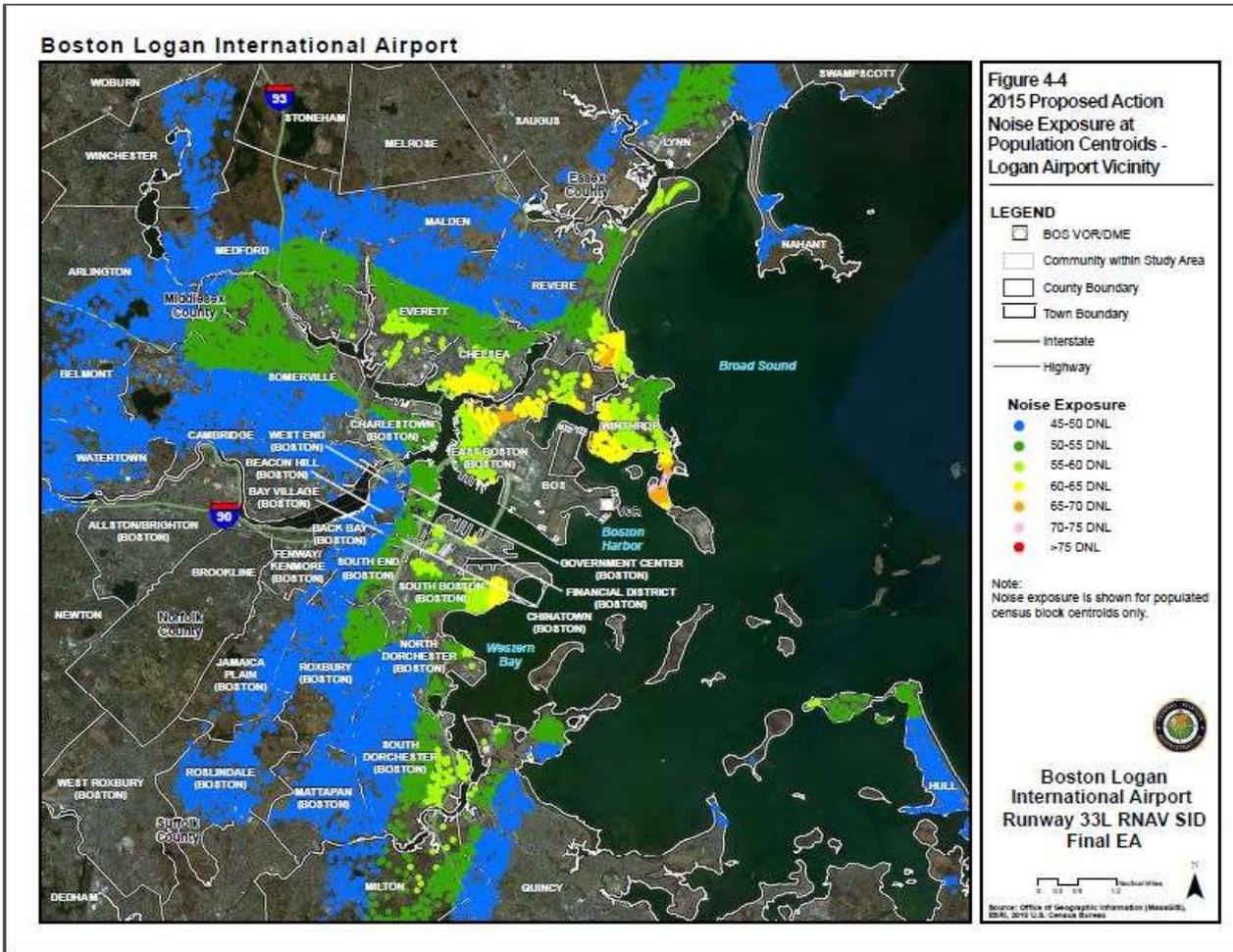
- Massport has installed 30 permanent noise monitoring stations in and around Logan. None are in Arlington, Belmont, Watertown, Winchester
- All other noise measurements are estimates based on a FAA developed noise model and are software simulations based on aircraft types and expected use patterns.
- Day Night Average Sound Level (DNL). DNL is the standard Federal metric for determining cumulative exposure of individuals to noise.
- FAA uses the following criteria in evaluating the impact of changes to operations: The number of people exposed to DNL 65 and higher and whether an increase or decrease would occur with implementation of a specific measure. DNL 65 and higher is considered by FAA to be significant aircraft noise exposure.



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## Noise Exposure Map with 33L RNAV:



**Belmont in  
45-50 DNL Range**



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## **Where are we today?:**

- Runway 33L RNAV has been implemented
- A Resident's Group from Milton & Readville filed a Petition for Review of the May FONSI/ROD with the US Court of Appeals. Had to be filed w/in 60 days of order. This action has not been docketed.
- Milton's issues are not only with runway 33L but also changes made to runway 27 at the same time.
- The FAA will conduct a mandatory 6 month administrative post implementation review. There is no formal CAC or community feedback opportunity.
- As a result of resident noise complaints and pressure from Milton's State and Federal representatives – the FAA has agreed to have an additional post-implementation review after 12 months.
- Noise complaints continue to be monitored by Massport.



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## Resident Feedback & Complaints:

- Massport actively monitors noise complaints submitted by telephone or via a web form.
- This is the single most effective way to communicate your concerns with noise at a specific time and day.
- Complaints from Belmont residents have increased since June but are still small in number.

Town	Belmont	Milton	Watertown
October #/callers	231/22	392/105	22/14
2013 YTD	277/35	1,646/208	146/34

- In 2012, Belmont had no noise complaints

Source: <http://bit.ly/19fqQtH>



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### Massport Online Airport Monitor Application

**AirportMonitor™** **Boston Logan International Airport**  
(back to massport.com/logan)

POWERED BY **PASSUR.com**

**Current Mode** **CURRENT** **RESTART** **Replay Mode** Enter date & time(eastern) Hour Minute Select speed & click start: **START** **RESTART** Help ?

December 10 2013 18 20 **NORMAL** **2x** **5x** **10x**

**MAP RANGE** (from center)  
 4 MILES  
 10 MILES  
 20 MILES  
 40 MILES  
 90 MILES

**Flight Information**  
*Click on any airplane at left for details*

Date/Time	12/10/2013 18:27:01
Flight ID	*
Aircraft Type	B744
Altitude	4900 ft
Origin	*
Destination	*

**Legend**

- General E.L. Logan Intl Airport (BOS)
- Departures
- Arrivals
- Helicopter
- Selected
- In Transit

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Direct Link: <http://www.massport.com/environment/environmental-reporting/noise-abatement/airport-monitor/>



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## **What have we been doing?:**

- Collected and reviewed relevant information
- Reported status to Belmont Selectmen on Oct. 28, 2013
- Have been in contact with CAC Reps from Arlington & Milton – encouraged Watertown to join the CAC (which they have voted to do)
- Have been in active contact with Sen. Brownsberger and his office, Rep. Jon Hecht (Watertown), Rep. Dave Rogers regarding this issue and discussing options and coordination of efforts.
- Holding this Public Information Meeting



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# QUESTIONS



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## Options:

- Communicate the impact of this increase in noise on Belmont and Belmont residents to the FAA directly and through our elected Officials
- Push for more extensive post-implementation review by the FAA of R33L RNAV that would include resident & community feedback
- Strongly advocate for a more equitable distribution of noise across communities through greater dispersion of flight paths



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## **Options & Next Steps:**

- Collect feedback from Belmont residents (email to: [logancac@belmont-ma.gov](mailto:logancac@belmont-ma.gov)) and send comments with an Official letter from the Town to the FAA expressing our concerns about the concentrated nature of the new RNAV flight paths over Belmont.
- Continue to encourage residents to submit noise complaints to Massport.
- Continue to work with our State & Federal Representatives and neighboring communities to communicate our concerns with R33L RNAV to the FAA.