



MICHAEL D. DENNEHY
TOWN ADMINISTRATOR

COMMONWEALTH OF MASSACHUSETTS
TOWN OF MILTON
OFFICE OF SELECTMEN

525 CANTON AVENUE, MILTON, MA 02186

TEL. 617-898-4843
FAX 617-698-6741

SELECTMEN

RICHARD G. WELLS JR.
CHAIRMAN

MICHAEL F. ZULLAS
VICE CHAIR

MELINDA COLLINS
SECRETARY

KATHLEEN M. CONLON
MEMBER

ANTHONY J. FARRINGTON
MEMBER

The Honorable Matthew Beaton, Secretary
Executive Office of Energy and Environmental Affairs
Attn: Massachusetts Environmental Policy Act ("MEPA") Office
EEA No. 3247
100 Cambridge Street, Suite 900
Boston, MA 02114

July 23, 2018

Re: Comments of the Town of Milton on the Boston-Logan International Airport 2016 Environmental Data Report (2016 EDR)

Dear Secretary Beaton,

The Board of Selectmen of the Town of Milton ("Milton") is pleased to provide the following comments¹ in response to the Boston-Logan International Airport 2016 Environmental Data Report ("2016 EDR"):

1. Overall Themes of the 2016 EDR

The 2016 EDR and prior EDRs begin with a discussion of the economic contributions Logan International Airport makes to the Boston, the Massachusetts, and the New England economies.² While Milton acknowledges and appreciates these contributions, we believe the 2016 Environmental Data Report should begin and end with the important *environmental* impacts of

¹ In Milton's comments on the 2014 and 2015 EDRs, we provided some background on the demographics of Milton, which we repeat here for context. Milton is a predominantly residential community with a population of 27,000, which is racially diverse (71% white, 20% African American). Comprised of only 13.3 square miles, Milton bears a significant burden of heavy air traffic arriving and departing Boston-Logan International Airport through three (3) RNAVs (designated as 4R, 27, and 33L), with two more RNAVs recently proposed by the FAA and undergoing environmental review (4L visual and 4L instrument). Because Milton is mostly comprised of single-family homes with backyards, people often choose to live in Milton to raise their families. Thus, the tremendous amount of aircraft noise imposed on the town severely diminishes the quality and standard of living, as residents report severe sleep deprivation and other impacts, such that they are unable to enjoy either their homes and properties, or Milton's recreational areas and open spaces, particularly during periods of unbroken and intensive use of the 4s.

² However, we note that while passenger volumes have increased, many of these passengers never leave the airport grounds. Boston is a significant hub for national and international travel, not necessarily a destination. This is an important distinction that is lacking in the discussion of the economic import of the airport.

the presence of the airport on all its surrounding communities and residents, i.e., the “Boston catchment” communities, to utilize the language of the 2016 EDR. We do not believe enough emphasis is placed on the impacts to the communities outside the immediate boundaries of the airport.³

Milton was also surprised that Massport’s 2016 environmental publication was an EDR as opposed to the planned Environmental Status and Planning Report (ESPR). The rationale for this change is that the “passenger demands for air travel have been rapidly increasing, and the air carrier landscape is changing.” Massport further states that “2016 does not serve as a reasonable baseline for prediction of long-range impact assessment.” EDR p. 1-1. While we agree that the landscape is changing rapidly, we are frustrated because Milton has repeatedly made this point to Massport in our comments on the 2014 and 2015 EDRs and in our comments on the Terminal E Expansion project. We believe Massport has downplayed the speed and intensity of these changes over the last several years, and we emphasize the necessity of considering the impact these changes have on both airport operations and on the residents impacted by airport operations throughout the Boston catchment area.

Finally, we disagree with Massport’s statement, featured in the second paragraph of the Introduction/Executive Summary that “[o]ver the long-term, environmental impacts associated with Logan Airport have been decreasing.” EDR p. 1-1. Neither the data presented in the 2016 EDR, nor the experiences of the resident of the Town of Milton, and residents of many other surrounding communities impacted by airport operations, supports this statement. As in the 2015 EDR, Massport continues to refuse take into account the increased number of complaints from Milton and other surrounding communities that are overflowed by certain RNAVs. The fact that disruption caused by Logan Airport is growing should be acknowledged within the 2016 EDR and Massport should have a plan to provide relief from this disruption to the affected communities. To date, after almost four years of attempting to get Massport’s attention on this issue, and despite participation in the LCAC and the MCAC, there has been no substantive progress by Massport that provides relief to the impacted Milton residents or the residents of other communities.

2. Increased Noise Complaints Reported

Table 6-16 demonstrates that no single community makes as many complaints on the Noise Complaint Line as Milton, and both the number of complaints and the number of callers has increased. In Milton, the number of complaints increased from 4,991 reported in the 2015 EDR to 21,796 reported in the 2016 EDR – a more than a 4-fold increase in the number of complaints filed. The number of callers similarly increased from 343 to 466, a 35% increase in the number of callers. Complaints on the Massport complaint line from Milton have increased from an average of 9 per month in 2012, to an average of 416 per month in 2014, to an average of 1816 per month in 2016. That represents a *200-fold increase in total noise complaints in the last 6 years.*

³ For example, in the Introduction/Executive Summary, noise impacts are not discussed until page 28, and air pollution is not discussed until page 34.

As the report indicates, “noise annoyance is growing among a concentrated population.” Milton is one of those concentrated populations where noise annoyance -- which includes lack of sleep, disrupted and interrupted sleep, interrupted conversation, and impacts on use of outside spaces such as decks and yards – is growing. This noise annoyance is not simple NIMBYism, or the complaints of a few people, as Massport seems to imply. These are real impacts, suffered by real people, who live in nearby communities. It is outrageous that Massport still has no plan in place to address impacts on these citizens. We request that the Secretary direct Massport and the MCAC to immediately prepare a plan to address and mitigate the noise impacts from RNAVs within Milton, and to share it with Milton.

3. Faster than Expected Growth in Airport Operations at Logan

In our 2015 EDR comments concerning Massport statements about aircraft activity compared to 2000, Milton stated: *“We submit that comparison [with 2000] is no longer valid, as airlines have significantly changed their modes of operation in the intervening 15 years, by relying on progressively larger airplanes, with progressively larger, more powerful, and louder jet engines. Further, the implementation of the FAA’s RNAV systems has also changed how aircraft arrive and depart over surrounding communities.”* We note that Massport continues to utilize this inaccurate and misleading data point for comparison purposes, which has the impact of downplaying the significant increase in airport operations at Logan over the past 5-10 years, particularly since the implementation of the RNAVs.

As reported by Massport, the 2016 Logan catchment area is growing faster than the Boston metropolitan area and New England generally. This increased pressure on Logan is reflected in the increased flights and increased noise complaints. As stated in the Executive Summary: the role of Logan Airport is expected to continue its dominance since the population of the catchment area has grown faster (0.9 percent) than the population of the United States (0.8 percent), Massachusetts (0.6 percent), and New England (0.4 percent) since 2010 (see Table 1-1). The catchment area population is projected to increase at an average rate of 0.5 percent each year over the next 19 years (see Figure 1-4).” 2016 EDR p. 1-7

According to the 2016 EDR, in 2016, U.S. passenger traffic grew by **3.8 percent**, whereas Logan Airport experienced a passenger growth of **8.5 percent**, more than double during the same period. Overall, Logan Airport served 55 non-stop international destinations in 2016, compared to 47 in 2015. From 2000 to 2016, the annual number of passengers at Logan Airport increased by 30.9 percent, while the annual number of aircraft operations decreased by 19.8 percent (see Figure 1-9). The total number of air passengers increased by 8.5 percent to 36.3 million in 2016, compared to 33.4 million in 2015 (see Figure 1-10). The 2016 passenger level represents a new record high for Logan Airport.

We are not surprised by this rapid growth, only that Massport has continued to downplay its impact on overall airport operations and overall impacts of airport operations on the surrounding communities. As we noted in our comments on the 2015 EDR:

We think it unlikely this demand will cease in the near future. We note that the entire New England region has a record high in passenger traffic (however that is defined). The impacts to Milton and other communities will only increase. While we understand and support Logan's role in the economic development of New England, we believe that development cannot come at the price of the right of citizens to peacefully co-exist within their homes. There needs to be a better balance, such that the economic success of the region, and of Logan and Massport, is not based on continuing impacts to its neighbors. Massport and the airline community have a duty and responsibility to protect the neighbors and communities underneath the publically owned airspace through which they travel.

Unless and until this situation is rectified, and Massport either provides a community by community analysis, or the RNAVs and overflights are distributed more fairly, the EDRs will continue to provide an inaccurate accounting of the real impacts of Logan operations on Milton and other communities.

4. Increased Nighttime Operations

As in the 2014 and 2015 EDRs, the 2016 EDR acknowledges that nighttime operations at Logan – defined as from 10:00 P.M. to 7:00 A.M. – continues to increase. Total use during nighttime hours increased again, by almost 13% in 2016 compared to 2015, and has increased by over 20% since 2010 (Table 6-3).

Although the noise complaint data is not broken down by time of day (either when the complaint was filed, or that the complaint concerned nighttime operations), it follows that some portion of the increase in complaints in Milton is driven by increased nighttime operations. Data continues to be developed which indicates airplane noise in overflowed communities disrupts sleep patterns, which has been shown to result in adverse human health impacts.

Anecdotal data from Milton residents indicate that the noise from airplanes in Milton is clearly heard above background noise in both commercial and residential areas. As elected officials, we hear frequently from Milton residents who suffer from interrupted sleep, anxiety, and a reduced quality of life because of the noise pollution caused by very frequent – and some days continuous – flights over Milton at low altitudes. These impacts are exacerbated by the increasing volume of late night and early morning RNAV-based traffic. We cannot overstate the seriousness of the health problems that these RNAVs cumulatively pose for Milton residents, and the adverse cumulative environmental impact that the RNAVs and the low flying planes have on our entire community.

The FAA has recently reported to the MCAC that a refinement of the curved nighttime approach to 33L is likely to result in increased use during the hours of 12AM to 6AM. Massport reports that typically, there are 55 arrival operations between 11PM and 6AM, 20 between 11PM and 12AM, and 12 between 5AM and 6AM. We took a count of arrivals to Logan on Tuesday June 19th to 20, 2018 between the hours of 11PM and 5AM, and counted 80 arrivals (45 % more arrivals than reported by Massport), as follows:

11PM – 26 arrivals
12AM – 27 arrivals
1AM – 4 arrivals
2AM – 5 arrivals
3AM – 1 arrival
4AM – 2 arrivals
5AM – 15 arrivals

Additional nighttime operations are simply not sustainable because of the significant health impacts on the overflowed populations. We request that the Secretary work with Massport, the MCAC, and Milton to implement additional late night aircraft restrictions, similar to those set forth in 740 CMR 24.04, which are more protective of Milton and its residents. In particular, it is important to discuss restrictions on RNAV usage and routes that overfly residential neighborhoods, including spreading the routes further so that the nighttime noise is less concentrated in residential neighborhoods, or moving routes over the ocean during certain periods of time. Specifically, as there are already nighttime restrictions on arrivals to runway 22 and departures for runway 4L, we request similar restrictions (no arrivals between 11:00 PM and 6:00 AM) for on runway 4R. See Massachusetts Port Authority (“Massport”) Noise Rules and Regulations I.1(b), Summary of Runway Use Restrictions, Boston Logan International Airport (May 2, 2016) (also referenced in FAA BOS ATCT Noise Abatement Order 7040.1H).

5. Logan Community Advisory Committee (“LCAC”) and Abandonment of the PRAS Goals

Ultimately, Milton seeks fairness and equity in the distribution of airplane operations and the impacts of those operations. It is undisputed that Milton receives a disproportionate impact of airplane operations in the Boston-Logan area. The skies over Milton are already saturated with airplanes, often from very early morning until very late at night. Implementation of two new RNAVs over Milton (4L visual and 4L instrument), plus the increasing volume of airplane activities at Logan, will increase the existing inequity.

We are very disappointed that the FAA, with Massport’s concurrence, has discontinued funding the LCAC, and appears to have abandoned developing a replacement for the PRAS goals as required by the 2002 Record of Decision (“ROD”). The Preferential Runway Advisory System (“PRAS”) was established “to provide an **equitable distribution** of Logan Airport’s noise impacts on surrounding communities.” The two primary objectives of the PRAS goals are: (1) to distribute noise on an annual basis; and (2) to provide short-term relief from continuous operations over the same neighborhoods at the ends of the runways. 2016 EDR, page 6-27 (emphasis added).

The LCAC voted to abandon the PRAS goals in 2012. However, no other guidelines were put in its place, and Massport still reports runway usage with respect to the PRAS goals (Table 6-5). The PRAS goals offer at least some picture of what a fair distribution of aircraft traffic might look like using one particular tool, i.e., differential runways (being mindful that these PRAS goals were created well before RNAV concentrated flight routes were implemented). Thus, at this stage, only achieving balanced runway usage would not be sufficient to relieve those under

the RNAVs, although it would be a step in the right direction. Ultimately, a fair resolution of these ongoing noise issues in Milton will require further dispersion of the aircraft traffic from the concentrated RNAVs.

We note that while the PRAS goal for arrivals on runways 4R/4L is 21.1%, the 2016 effective usage is reported at 26.4%, an increase over the 25.1% reported for 2015 – despite the fact that Runway 4L was shut down for improvements during a portion of the reporting period. When added to the impacts from the southbound 27 departures (27% of all 27 departures and 3.5% of all jet departures) and southbound 33L departures (15% of all 33L departures and 2.7% of all jet departures), Milton is impacted by much of the daily airline traffic moving in and out of Logan, and in a greater proportion than was initially planned or expected, based on the PRAS goals. In total, Milton received 6.2% of all jet departures in 2016, and 34.8% of all jet arrivals.⁴

Milton continues to be ready to work on these equity issues, either via the MCAC, or directly with Massport and the EEA agencies. We again request that the Secretary direct Massport and the MCAC to promptly develop a system for the fair and equitable distribution of aircraft overflights that provides real relief to the highly impacted surrounding communities

6. Public Health Concerns Related to Airplane Overflights.

Once again, the 2016 EDR only discussed air pollution from airport operations in the context of the actual operations of Logan Airport, on Logan property. We repeat our earlier comments that this perspective is overly narrow. There are much scientific data and studies, which demonstrate that airplane overflights are a well-established public health hazard. A recent consensus paper prepared by the Impacts of Science Group of the Committee for Aviation Environmental Protection of International Civil Aviation Organization summarized the state of the science of noise effects research as related to airplane overflights. Basner, et al, March-April 2017 found impacts including: community annoyance, children's learning, sleep disturbance, and health effects (cardiovascular disease and psychological health). Further, recent studies at LAX (Hudda, et al., May 2014) found ultrafine particle counts as far as ten miles from heavily used arrival runways. A recent Logan-specific study (Hudda, et al., February 2018) presents strong evidence demonstrating the infiltration of Logan-related ultrafine particles into Chelsea homes, during times when winds blow from Logan toward Chelsea homes that were monitored, indoors and outdoors, by a Tufts-based research team with high quality air pollution instruments over extended periods. Ultrafine particles continue to be a global environmental health concern and have been related to cardiovascular risk as well as other serious public health outcomes. It is clear that between the infiltration of ultra-fine particles, and the ongoing noise problems, not even our homes are safe from the impact of Logan Airport and its operations.

We request that the Secretary direct Massport, in conjunction with the Department of Public Health (“DPH”) and the Department of Environmental Protection (“DEP”), to conduct noise and air pollution studies in Milton and other communities which receive a substantial number of low-flying arrival aircraft. This work would be consistent with the evolving science on this point, and protective of the residents in these communities. We further request that the scope of the

⁴ Milton also receives overflights by prop planes to 4L, 4R, 22L, and 27.

future EDRs (and ESPRs), beginning with the next EDR and ESPR, be expanded to consider the health impacts from increased and concentrated arrival and departure operations due to RNAVs, and that pollution data be measured for every community under any of the many Logan RNAVs.

7. Scope of the 2017 ESPR

First, we believe it is important to consider the off-airport impacts of the growth of Logan itself and the increased passenger throughput and increased aircraft operations at Logan. The increased demand for airport services impacts the surrounding communities by increasing the volume and concentration of overflights, and by increasing the amount of nighttime operations and nighttime overflights. Each of these impacts must be studied – from noise to pollution and more, to have a true assessment of the environmental impacts resulting from operations at Logan. The current approach, which only assesses on-airport pollution is wrong-headed and ineffectual. It ignores the robust science that demonstrates that airport operations can impact communities as far as 10 miles beyond the airport location, particularly where those communities are overflowed by multiple RNAVs and the aircraft traffic is concentrated and persistent.

Second, the scope must include analysis of the cumulative impacts from increasing numbers of RNAVs flown over surrounding communities. As noted, there are three RNAVs that overfly Milton, with two others proposed. Looking at these impacts in isolation does not provide an actual assessment of on-the-ground impacts – some of which are reflected in the increasing number of noise complaints filed in these communities.

Third, we urge Massport and the Secretary to move to a more updated method for noise assessment, and either discontinue using the DNL standard, or reduce the threshold at which noise impacts are considered significant. The DNL standard “masks” the acute impacts a succession of aircraft flying over a home has on the sleeping residents within, and also masks the acute impacts felt in a community when it is overflowed for hours on end, with little break in the incoming or departing aircraft.

Finally, we urge Massport and the Secretary to collaborate with the impacted communities, and to work with them directly, rather than just giving lip service to working with them. It is appropriate to acknowledge that multiple communities surrounding Logan (not just Milton) take the brunt of the impact of the operations of Logan. These communities should have direct and regular access to Massport and the Secretary, and both agencies should be willing to work on real and meaningful solutions to address the problems from airport operations – especially noise and pollution -- occurring in those communities. While we understand some of that work must be done via the MCAC, the large size and the organization of the MCAC has the unintentional effect of diluting the voices of the most affected communities.

8. Conclusion and Request for Assistance.

Thank you for your attention to and consideration of our comments on the 2016 EDR. We believe that there are solutions available to remedy and mitigate the ongoing impact of Logan operations on the residents of Milton, and throughout the Logan Airport overflight area. We note that many of these comments have been made before, because despite continued efforts to

work closely with Massport, both directly, and through the MCAC, Milton has yet to receive any relief from the continuing significant annoyance and public health impacts posed by these overflights.⁵ Therefore, again, we request that the Secretary work with Massport, Milton, the MCAC, and other effected communities to help remedy the multiple impacts discussed above.⁶ Specifically, Milton requests the following actions be taken:

- a. Direct Massport to prepare a plan to address and mitigate the noise impacts from the RNAVs overflying Milton, and to share it with Milton, within the next three (3) months;
- b. Work with Massport, the MCAC, and Milton to develop and implement additional late night/early morning aircraft overflight restrictions which are more protective of Milton and its residents, including consideration of an 11:00 PM to 6:00 AM landing prohibition on runway 4R;
- c. Direct Massport and the MCAC to promptly develop a system for the fair and equitable distribution of aircraft overflights that provides real relief to the highly impacted surrounding communities, especially those that are under multiple RNAVs;
- d. Direct Massport to collaborate with DPH and DEP to develop and conduct noise and air pollution studies in highly impacted surrounding communities, especially those that are under multiple RNAVs;
- e. Direct Massport to consider off-airport noise and pollution impacts, including but not limited to the health impacts from increased and concentrated arrival and departure operations due to RNAVs, in all communities under any RNAV, in all future EDRs
- f. Direct Massport to include all of the points made above in the scope of the 2016 ESPR. This includes impacts to health from noise and pollution from: off-airport impacts of growth, cumulative impacts of RNAV overflights, increased nighttime operations, moving to updated noise measurements which are more protective of human health and which account for acute impacts more realistically than the DNL standard; and working directly with impacted communities to more fully understand and evaluate the human health effects from Logan operations.


We would appreciate a time to meet with you and your staff to personally discuss the concerns we have outlined here, as well as our specific requests for assistance.

⁵On average, 1,816 complaint calls per month indicate that Milton residents are experiencing significant annoyance from the airplane overflights.

⁶ We also note that Massport did not sufficiently respond to these specific requests in its response to comments to the 2015 EDR, despite being required to address all comments filed on that document.

Sincerely,

Board of Selectmen of the Town of Milton


Richard G. Wells, Jr., Chair
Kathleen M. Conlon
Melinda A. Collins
Michael F. Zullas
Anthony J. Farrington

cc: Congressman Stephen F. Lynch
Congressman Michael E. Capuano
U.S. Senator Elizabeth A. Warren
U.S. Senator Edward J. Markey
State Senator Walter F. Timilty
State Representative William Driscoll
State Representative Daniel R. Cullinane
Governor Charlie Baker
Attorney General Maura Healy
Milton Board of Health
Milton Airplane Noise Advisory Committee Chair Andrew Schmidt
MCAC Representative Cindy L. Christiansen
Town Counsel Karis L. North