ANAC Presentation to Milton Select Board

September 11, 2019

ROADMAP

RECENT HEADLINES DO NOT BODE WELL FOR AIRPORT COMMUNITIES

Logan poised to become one of the 10 busiest airports in the country

By Christopher Muther Globe Staff, Updated September 4, 2019, 8:00 a.m.

92

SUSTAINABLE BUSINESS JUNE 17, 2019 / 3:16 PM / 3 MONTHS AGO

FAA moves to support growth of civil supersonic air industry

3 MIN READ

WASHINGTON (Reuters) - The U.S. Federal Aviation Administration (FAA) said on Monday it is moving to rewrite testing rules to allow for the eventual return of civil supersonic air travel.

13,915 views | Jul 23, 2019, 12:01pm

JetBlue To Delta At Boston Logan: Come And Get Us

Ted Reed Senior Contributor
Aerospace & Defense

By Scott Dylan, on Feb 12 2019

It was a record year for Boston's Logan International Airport in 2018. The New England hub handled more than 40 million passengers last year. That's the first time in the airport's history that such a high volume of passenger traffic has been seen. Officials at the airport are now looking at expansion options.

Logan's very busy 2018 placed the airport ahead of hubs like Philadelphia and Minneapolis-St. Paul. Much of the increase seen by Logan in 2018 was thanks to Delta and JetBlue. This has been the case consistently since 2010. Of course, all of the other carriers that fly out of the Boston hub contributed to a record-breaking 2018. Passenger departures at Logan grew by 41 percent during the period between 2010 and 2017. Only Seattle-Tacoma International Airport and Fort Lauderdale International Airport saw more growth during the same period.

Most of the growth happening at Logan is due to international traffic. More than 18 percent of all traffic at the airport in 2018 was international. International traffic accounted for just 13 percent of all traffic at Logan in 2010. What's more, Logan grew from offering flights to 30 international destinations in 2010 to offering flights to 55 international destinations in 2018. The new additions include places like Tokyo, Hong Kong, Dubai, São Paulo and Morocco.

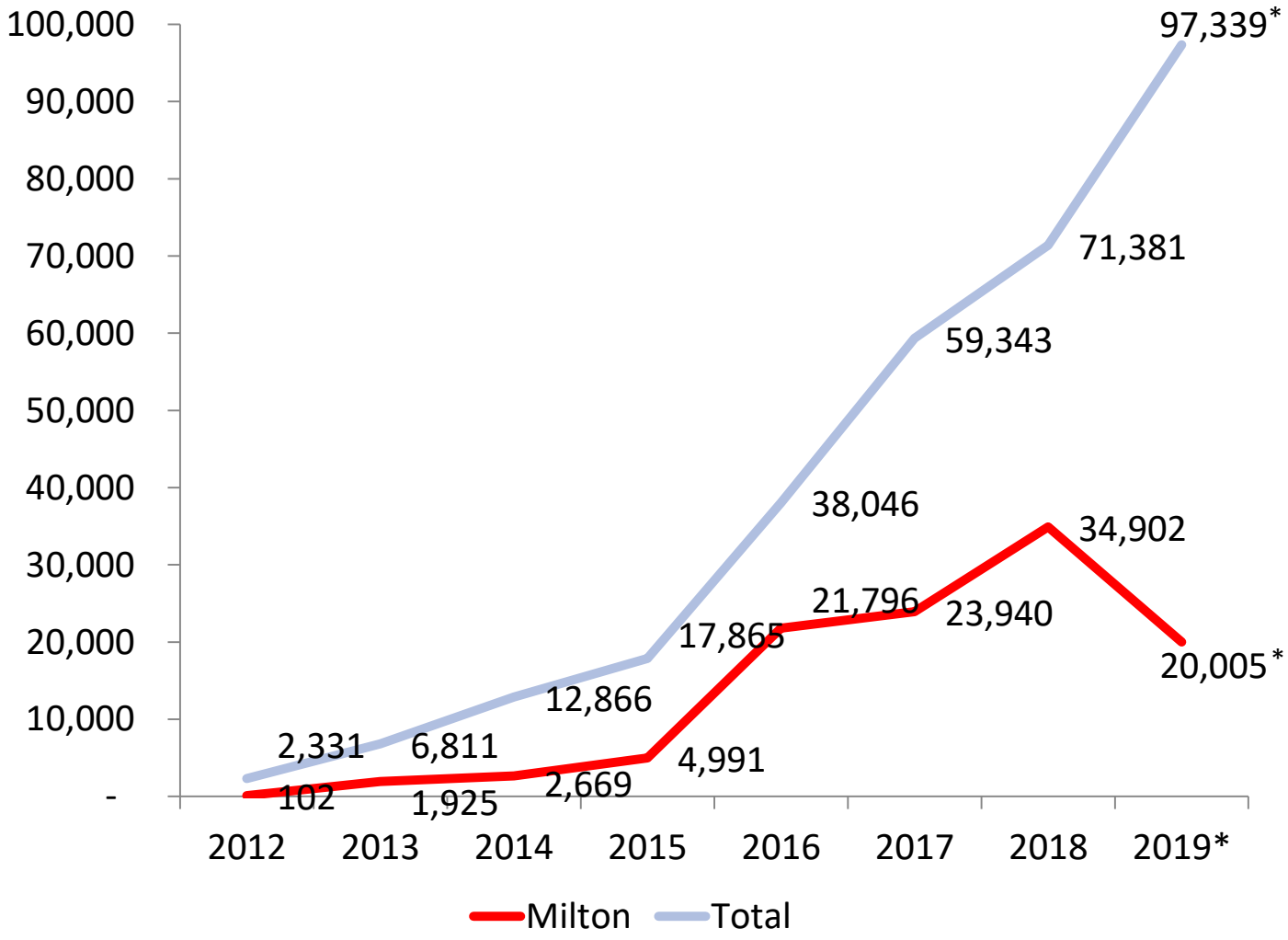
What's in store for the future at Logan? We know that Terminal E will be getting an additional 400,000 square feet of space. Terminal B and Terminal C will be getting makeovers that will allow for better flow. In addition, $1.5 billion will be spent to build an automatic people mover that will bring passengers to terminals, rental car areas and a Blue Line station.

Noise complaint increases coincide with NextGen & RNAV implementations.

- Noise complaints have been rising steadily since 2012.
- This time period coincides with the implementation of RNAVs within Milton and other cities and towns in the Commonwealth.
- The total number of noise complaints filed at Logan has increased by over 40x since 2012.
- The total number of noise complaints filed by Milton citizens has increased over 340x through 2018.

LOGAN NOISE COMPLAINTS ARE RISING SHARPLY

Airplane Noise Complaints: Boston Logan Airport – January 2012 through July 2019
Number of Noise Complaints



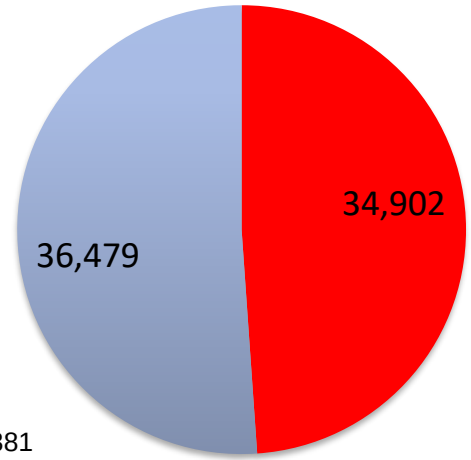
Source: Massport. *2019 numbers are through July 31st.

MILTON HAS FILED THE MOST NOISE COMPLAINTS OF ANY LOGAN AREA COMMUNITY FOR THE LAST SIX YEARS

Milton residents have filed over 110 thousand noise complaints since 2012.

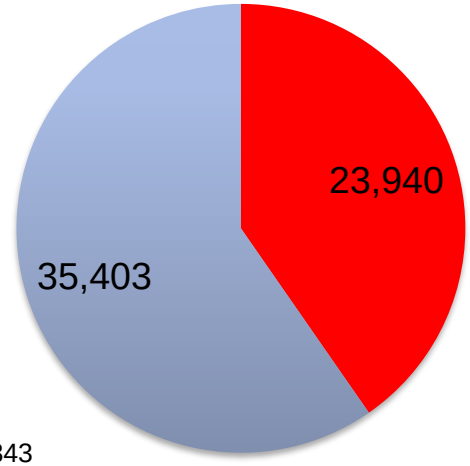
- Medford, which has twice the number of residents as Milton, is poised to take the crown for most complaints in 2019.
- Milton has filed 20,005 complaints through July 31; Medford – 24,714.

2018 – Total
Number of Complaints Filed



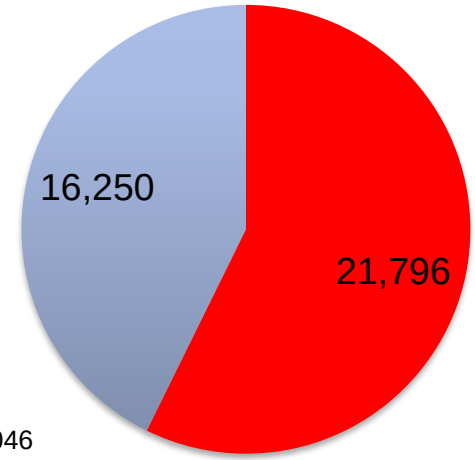
n = 71,381

2017 – Total
Number of Complaints Filed



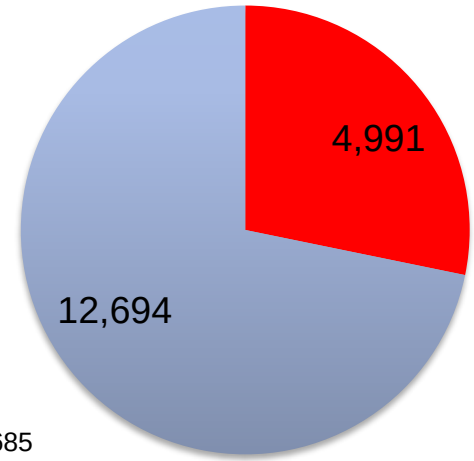
n = 59,343

2016 – Total
Number of Complaints Filed



n = 38,046

2015 – Total
Number of Complaints Filed



n = 17,685

Milton All Other Cities and Towns (Combined)

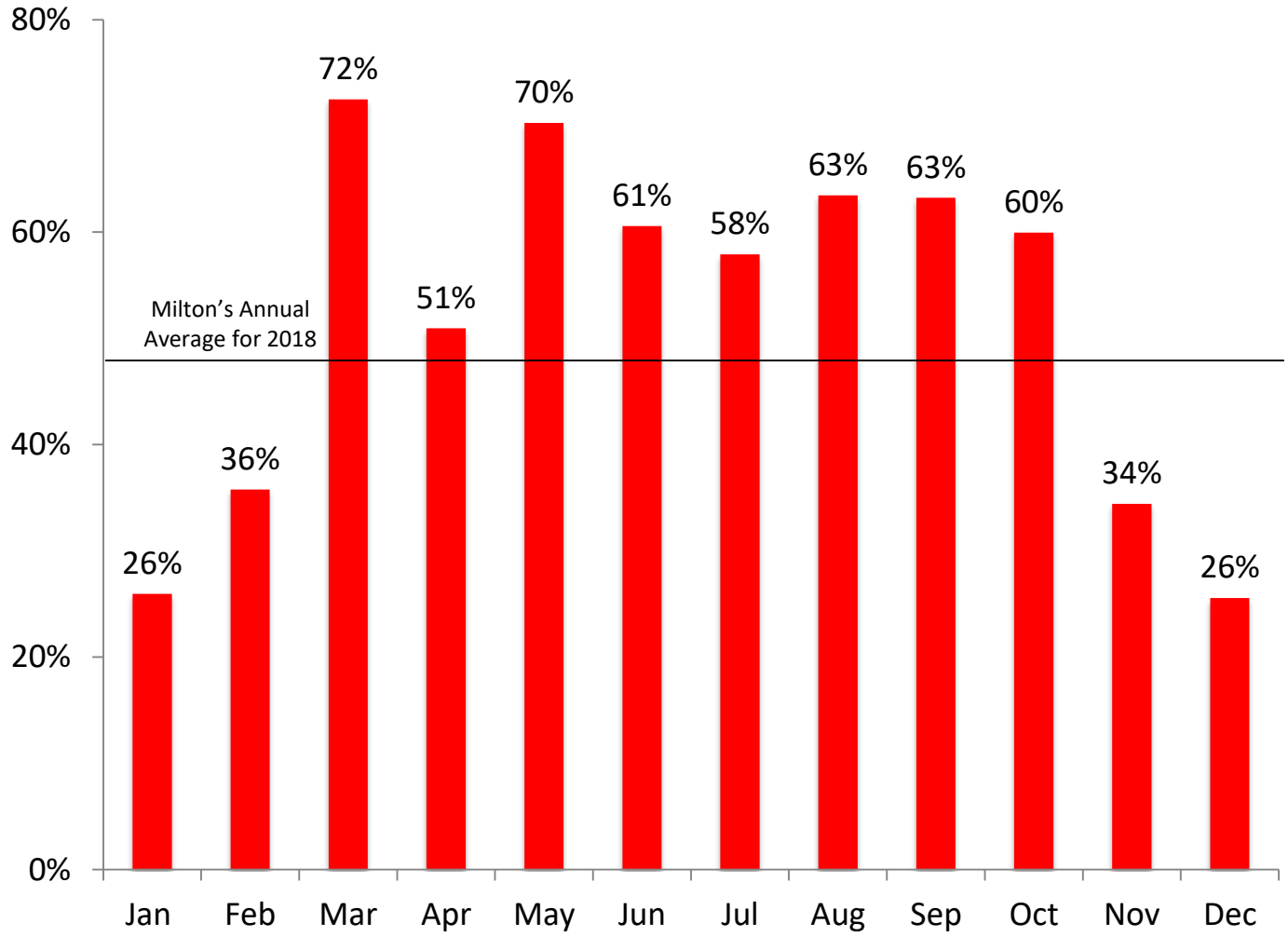
Source: Massport

Over the course of 2018, Milton's percentage of noise complaints by month varied from 26% to 72%.

- Overall, Milton's noise complaint percentage is highest during the months when people want to be outside or have their windows open.

MILTON'S PERCENTAGE OF MASSPORT NOISE COMPLAINTS VARIES BY MONTH

Percentage of Noise Complaints Filed for 2018



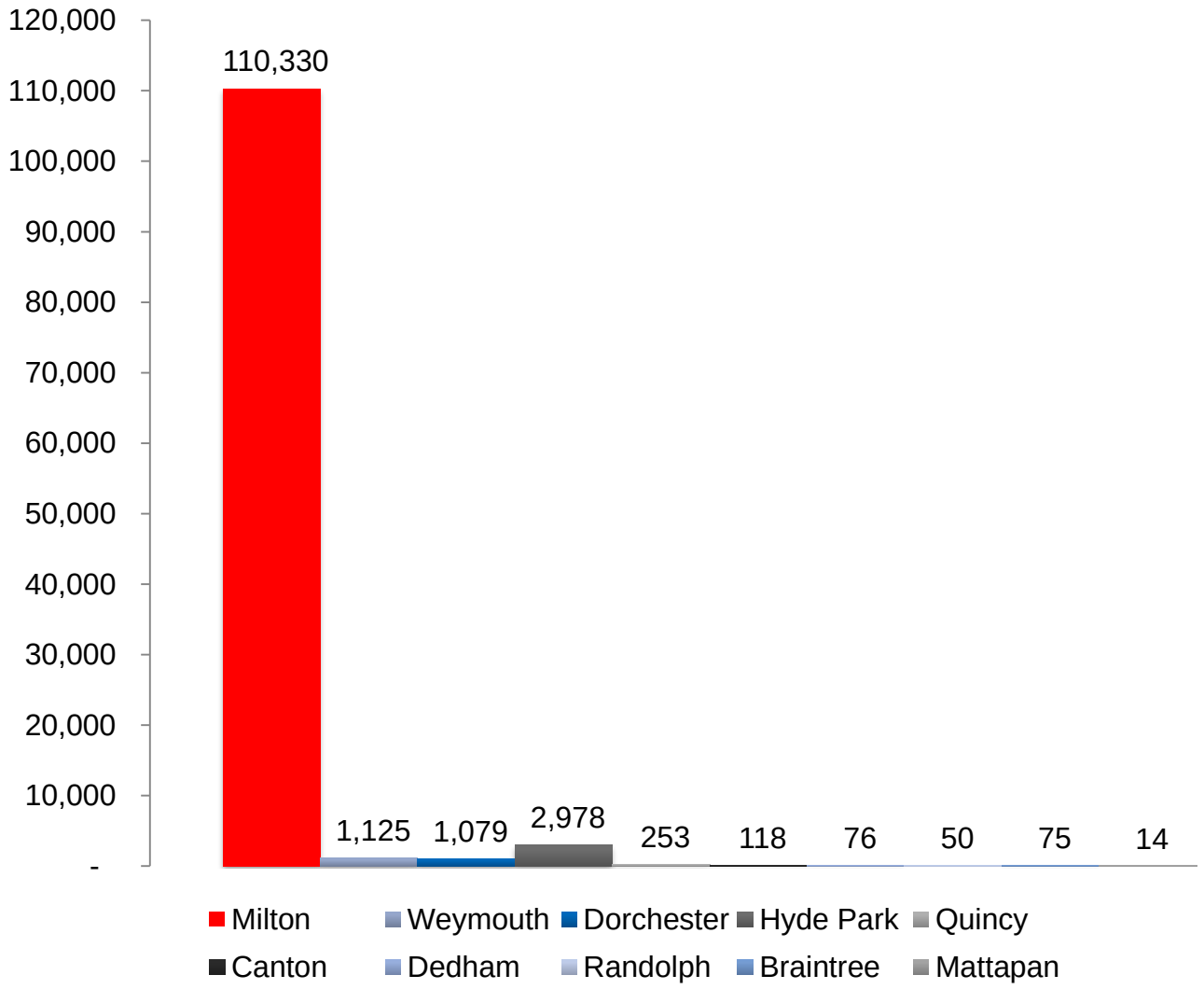
Source: Massport

The skies around Milton are demonstrably quieter than the skies over Milton.

- Milton filed more than twice as many noise complaints in the first 5 months of 2019 than its neighbors have filed since 2012.
- Given this uneven distribution, it is highly unlikely that Milton will receive support from its neighbors regarding airplane traffic redistribution.
- This dynamic, and the imbalance around it, should have been foreseeable by Massport when the CACs were created.

MILTON HAS FILED MORE NEARLY **NINETEEN TIMES** AS MANY NOISE COMPLAINTS AS ITS NEIGHBORS SINCE 2012

Number of Noise Complaints Filed by Milton's Immediate Neighbors – January 1, 2012 to July 31, 2019
Total Number of Complaints



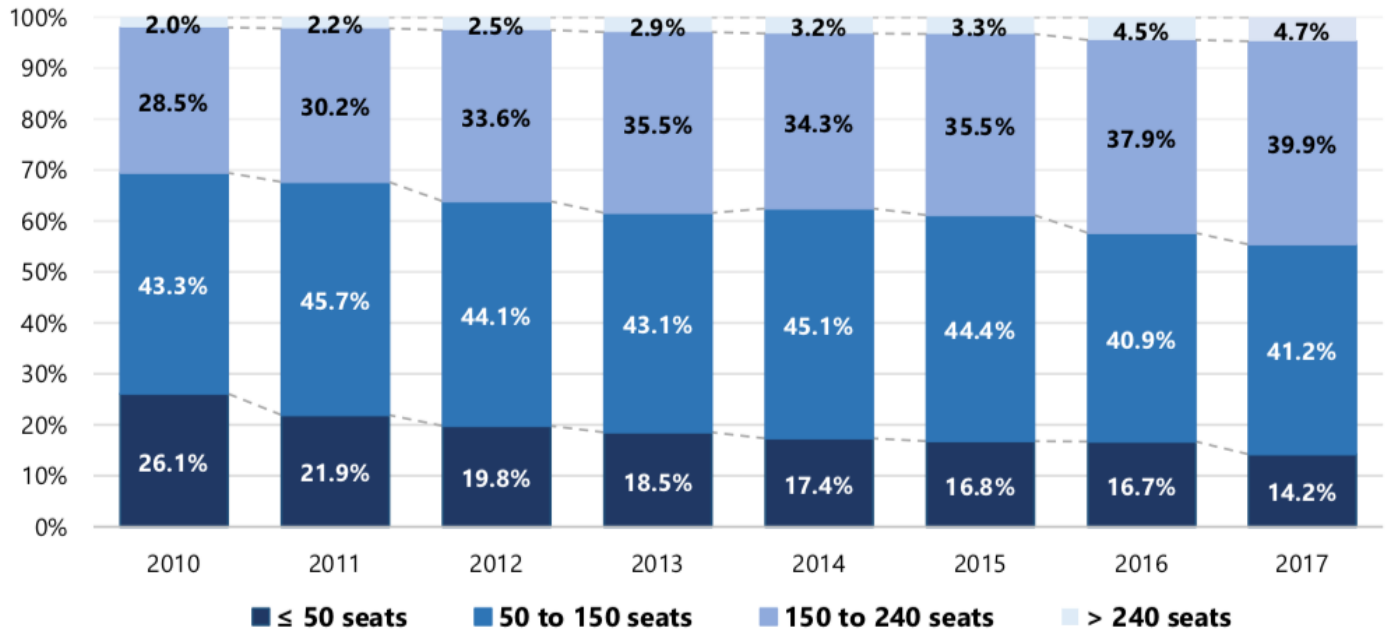
Source: Massport

Bigger planes means more passengers, and more noise.

LOGAN'S FLEET MIX TRENDING TOWARDS EVER-LARGER AIRCRAFT

- This mix – combined with the overall increase in passenger capacity – means that the planes passing over the Logan community are larger than ever before.
- These larger jets – including the A380 – require longer runways.
- Given the desire to use parallel runways for arrivals, these jets will choose, or be directed to, the 4s and the 22s.
- Additionally, given the restrictions on 22R despite the 4/22 runways being identical, means that the 4s will be the primary arrival runway pair, especially in times of peak traffic or bad weather.
- This dynamic all but guarantees that towns like Milton will see an increase in jet traffic.
- It remains unclear how Block 2 will address this issue

Figure E-1 Evolution of Aircraft Fleet Mix at Logan Airport, 2010-2017



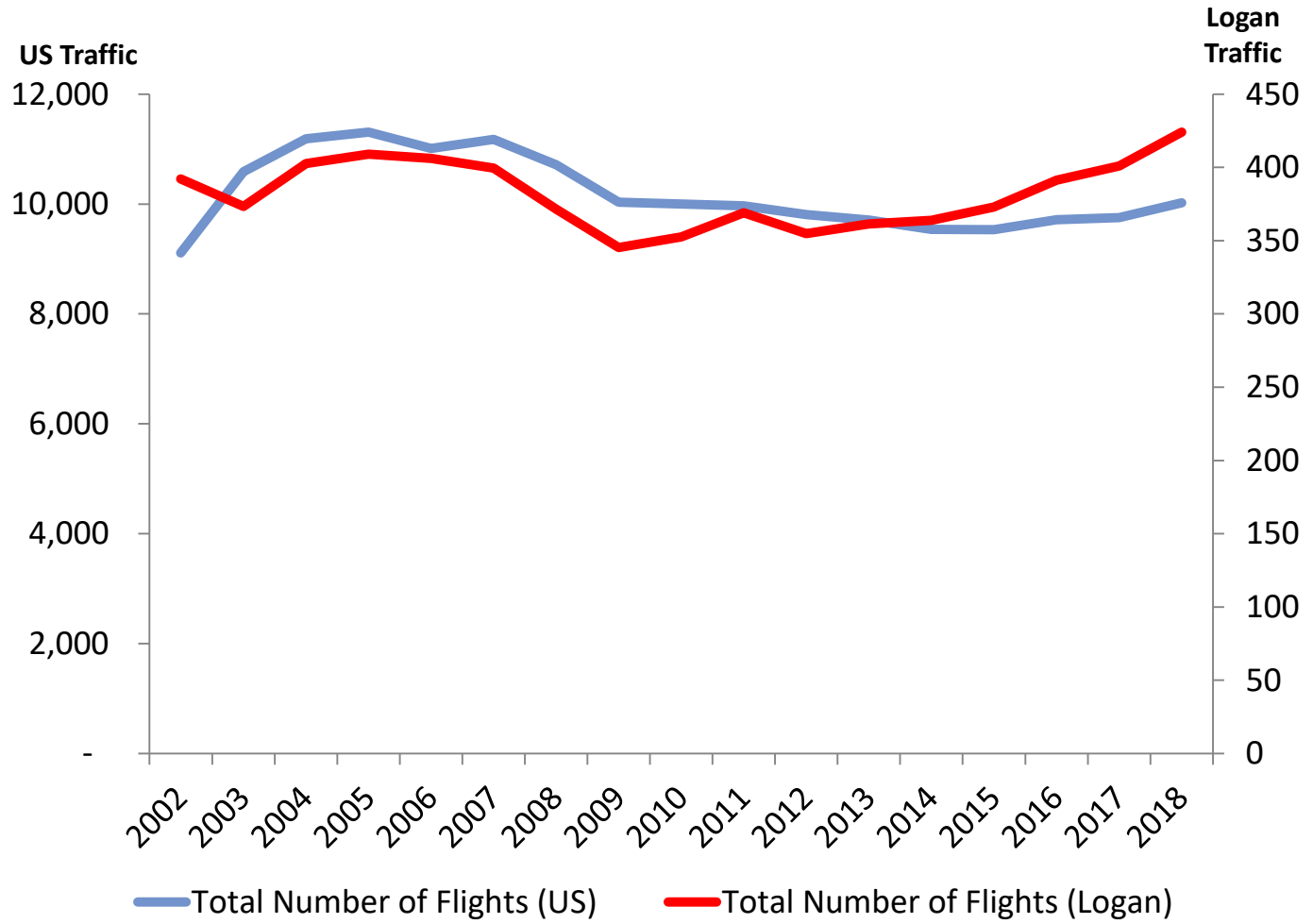
Source: Inter*VISTAS* 2017.

US flight volume has been in decline since 2005; Logan's volume has been rising since 2009.

- In 2018, US flight volume rose **2.8%**, while Logan's volume increased **5.7%** - far in advance of Massport's projections submitted to the Commonwealth the prior year.
- In 2018, Logan also saw the most passengers **in its history**.
- The fact that Logan is turning into a hub rather than a destination means that an ever-greater percentage of passengers never leave the airport, weakening the "economic engine" argument.

FLIGHT VOLUME IS DOWN IN THE US, BUT UP AT LOGAN

US and Logan Airport Flight Volume (2002-2018)
Total Number of Flights per Year (Thousands)



Source: https://www.transtats.bts.gov/Data_Elements.aspx?Data=2

ESPR stands for Environmental Status and Planning and is filed every 5 years.

MASSPORT FORECASTED ONLY MODEST GROWTH IN THE 2017 ESPR

- The report is submitted to the Commonwealth of Massachusetts Secretary of Energy and Environmental Affairs, and "discusses current and projected future airport operations and environmental conditions, project updates and Massport mitigation programs."
- Comments on the 2017 ESPR are due October 17th.

Table E-9 Actual and Forecast Logan Airport Operations, 2017 and Future Planning Horizon[1]

Operations	2017	Future Planning Horizon	Difference (2017-Future Planning Horizon)	Compound Annual Growth (2017-Future Planning Horizon)
Passenger				
Jet	279,464	339,365	59,901	1.1%
Regional Jet	39,279	62,857	23,578	2.7%
Non-Jet	44,764	45,079	315	0.1%
Subtotal	363,507	447,302	83,795	1.2%
All-Cargo	6,744	7,377	633	0.5%
General Aviation	31,120	31,685	565	0.1%
Total Operations	401,371	486,364	84,993	1.1%

Source: Massport and Inter*VISTAS*, U.S. Department of Transportation T-100 Database.
Notes: Totals may not add exactly due to rounding
1 Represents the 10- to 15-year planning horizon.

ROADMAP

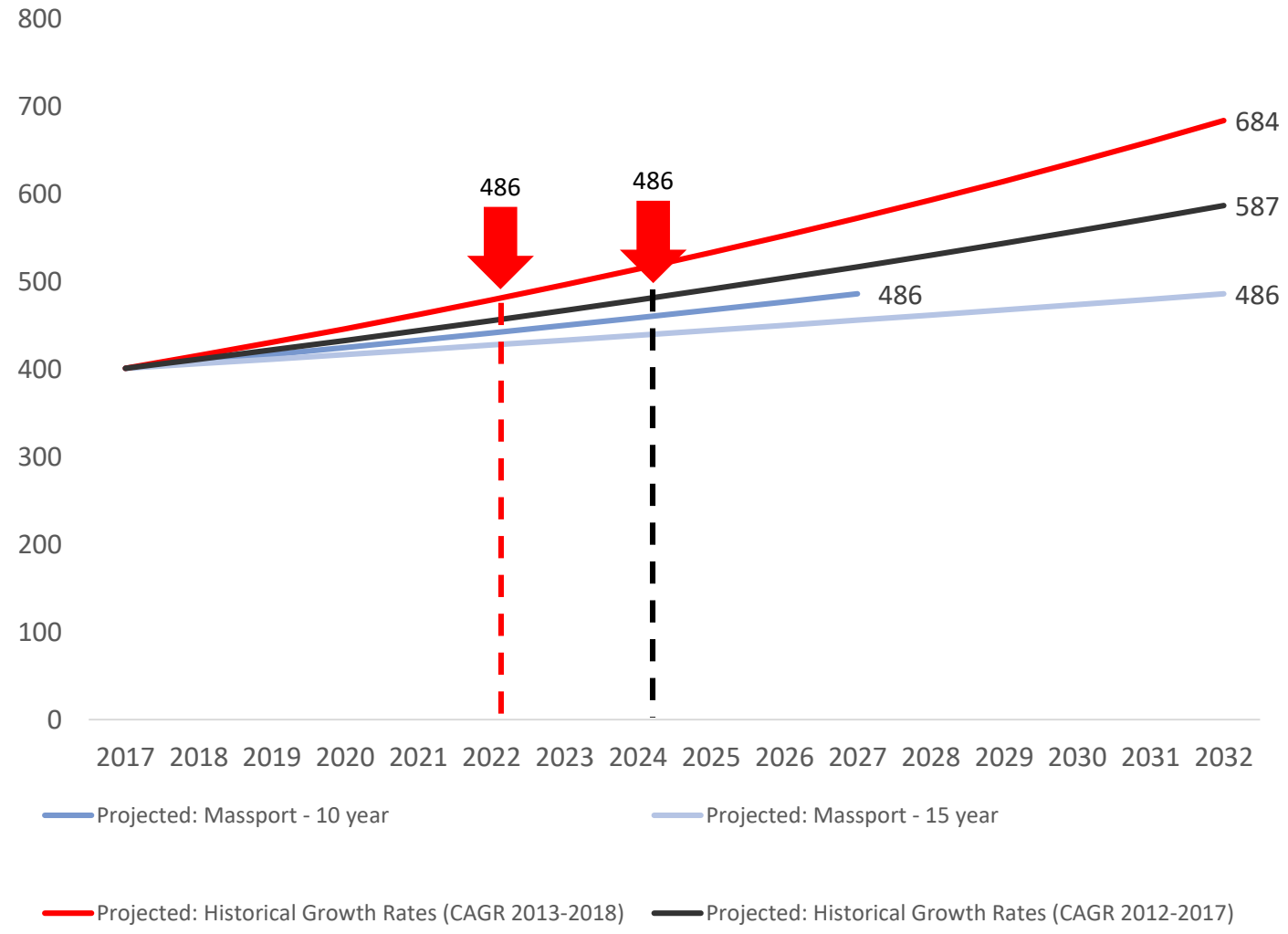
THE 2017 ESPR PROJECTIONS WERE MISLEADING AT BEST

Massport's 2017 ESPR dramatically underestimates Logan's growth trajectory. This appears to be by design.

- Massport projected a 1.1% CAGR over a 10-15 year period, however, these calculations are incorrect given the start and end dates.
- Increasing operations from 401 thousand to 486 thousand over ten years yields a CAGR of 1.94%. Doing the same over a 15 year period yields a CAGR of 1.29%.
- Using the growth rates from the 5 year period prior to the report's completion and the 5 year period from the most recent calendar year yield dramatically different results.
- Both CAGRs hit the 486 thousand operation mark in the report as many as ten years earlier than the report suggests.
- Taken out to the 15 year mark, these projections indicate there will be between 100 and 200 **thousand** more flights per year than Massport is currently projecting.
- **These obvious flaws in projecting future outcomes bring into question the overall accuracy of Massport's data.**

ESPR Growth Projections vs. Historical Growth Rates

Total Number of Flights per Year (Thousands)



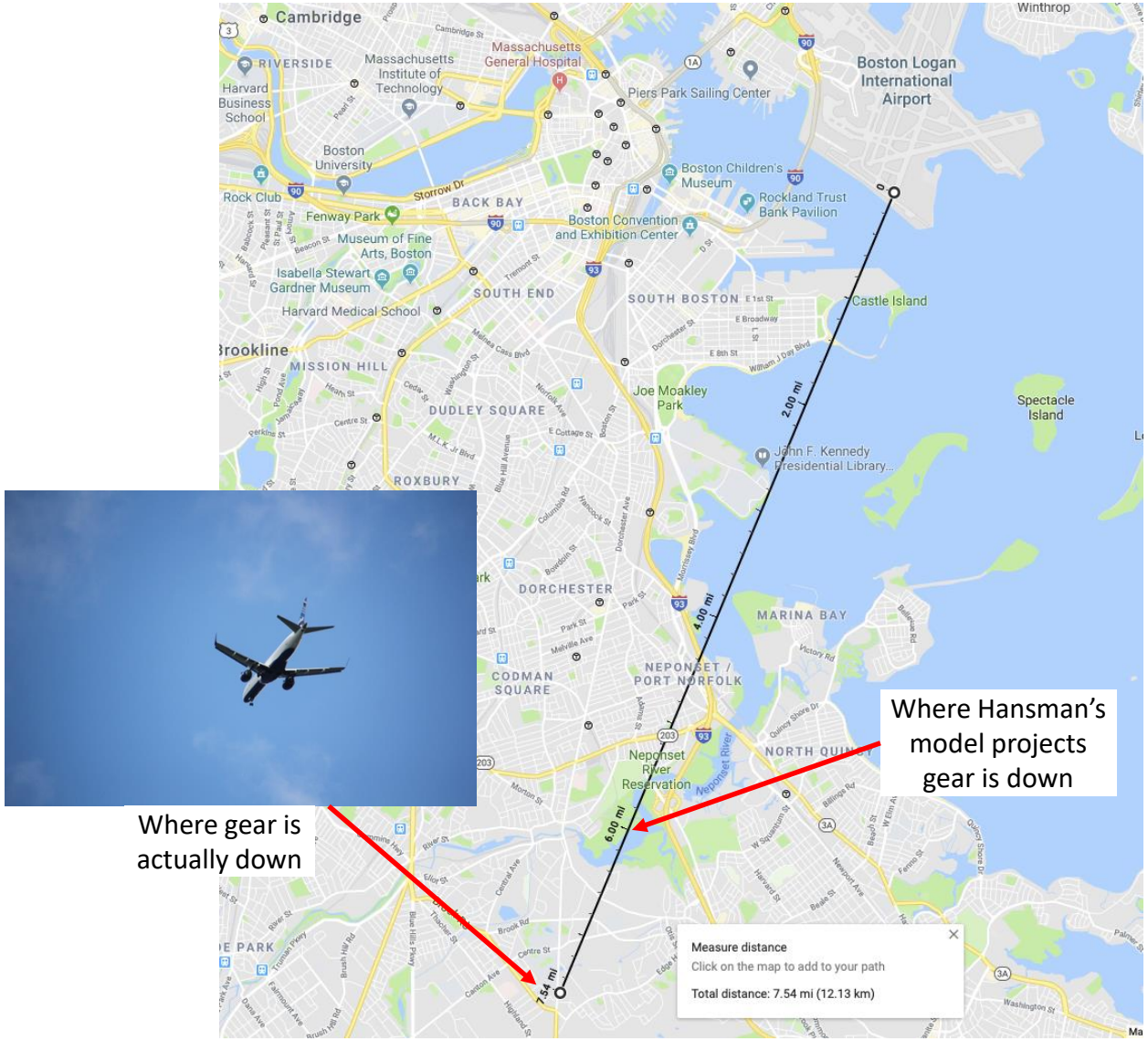
Source: Massport

MIT's noise models do not reflect conditions on the ground – and bring into question the model's accuracy.

MIT'S NOISE MODEL DOES NOT REFLECT REALITY, EITHER

- Pilots often refer to landing gear as "rubber air brakes" because they can be deployed far earlier than flaps can.
- On September 7 around 1:20 pm, JetBlue flight 1482 passed over Milton with landing gear down at least 7.5 miles from runway end.
- The MIT model being used in Block 2 assumes that gear is deployed at 6 miles; noise from gear and flaps is largely omitted from the model prior to this point.
- Professor Hansman is aware of the discrepancy, and reliance on the model in this flawed state underestimates the noise burden of **<u>any</u>** community that deals with approaches.
- **Proper field examination would provide valuable insight in amending the model to reflect actual conditions.**

JetBlue Flight 1482, September 7, 2019



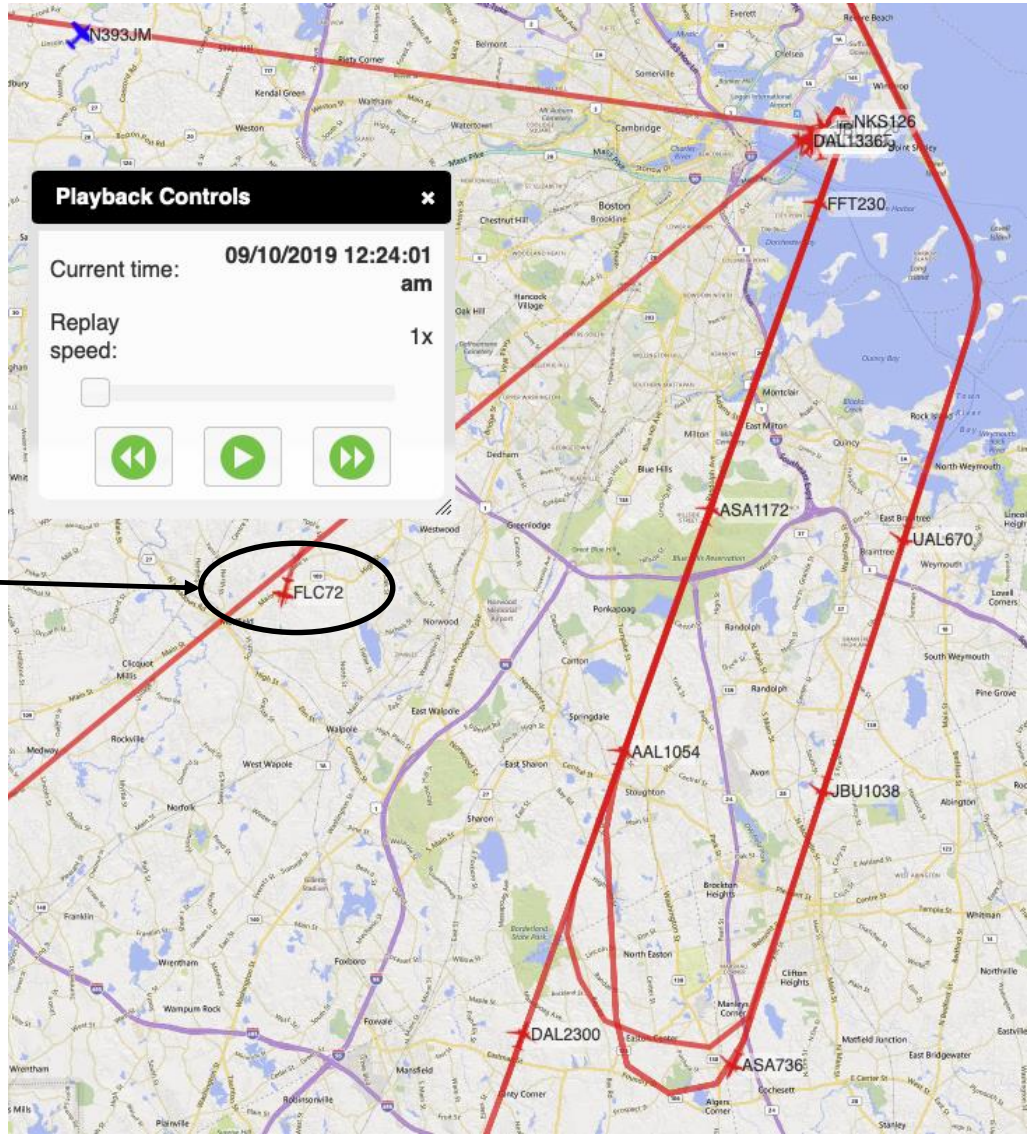
Source: Massport Flight Monitor, Google Maps

NIGHTTIME NOISE ABATEMENT IS INEFFECTIVE TO NONEXISTENT

Nighttime noise abatement is intended to allow residents to get much-needed sleep.

- According to Massport, the nighttime period runs from midnight to 5 am, during which time noise abatement procedures should be in use, conditions permitting.
- On night of September 9th, arrivals continued until approximately 2 am despite the fact that winds were light enough (4-5 mph) to allow a shift to the nighttime pattern.
- Traffic did shift to Runway 33 just before 4 am – for three arrivals.
- 4R was back in operation at approximately 4:30 am, again despite the light winds, giving Milton residents only 2.5 hours of quiet in conditions that did not require the 4s to be used.
- **This situation will only worsen as air traffic intrudes further into nighttime hours.**

Late-night flight operations on 4R



FAA flight inspection plane

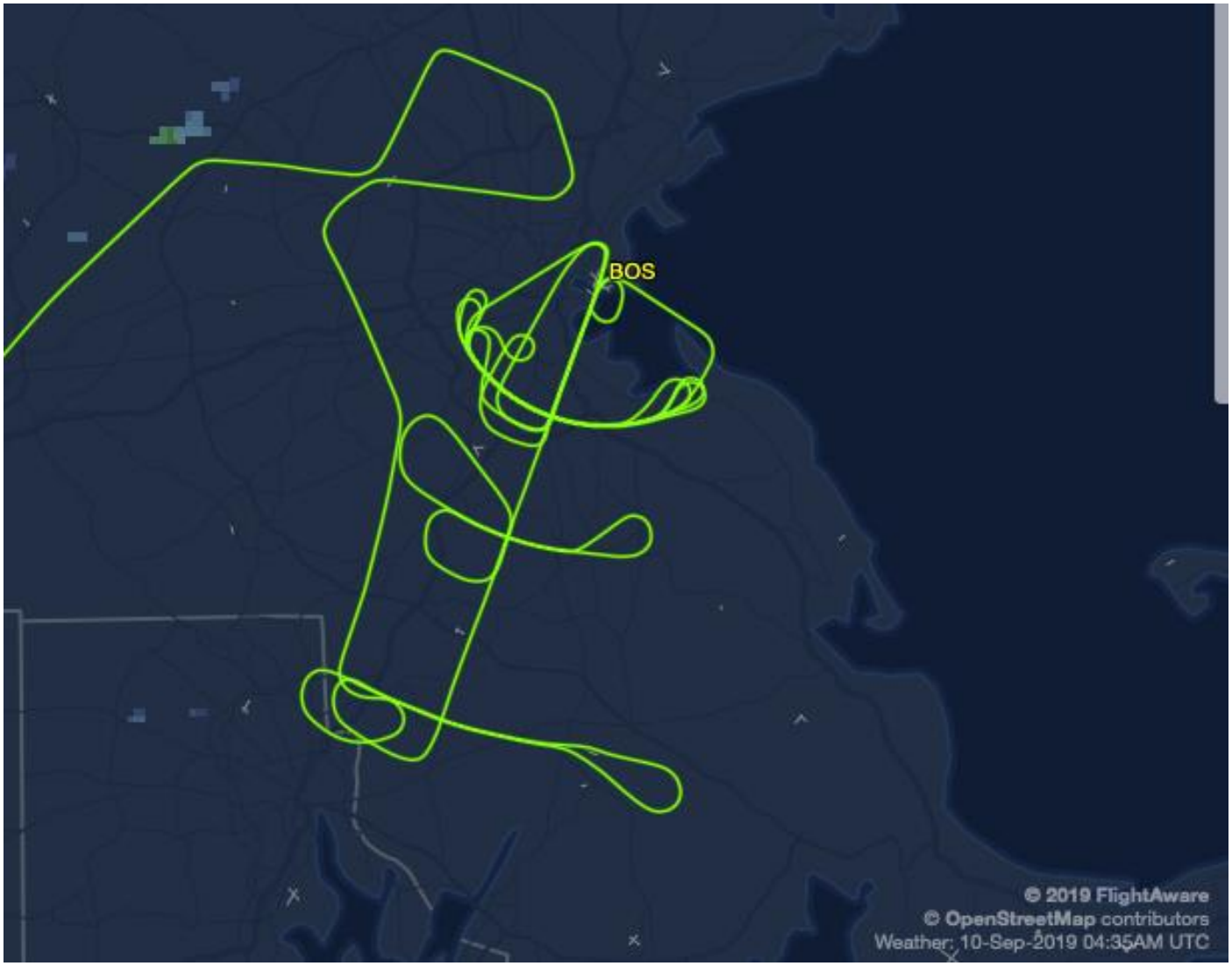
Source: Massport Flight Monitor

A runway inspection plane flew over the area for hours – and then disappeared from the record.

THE FAA MAY BE TESTING SOMETHING AT LOGAN – AGAIN

- FLC 72 left White Plains airport at 10:52 pm and landed at Logan at 2:21 am.
- According to the FAA, flight inspection aircraft are used for the "inspection of all space and ground-based instrument flight procedures and the validation of electronic signals in space that are transmitted from approximately 13,500 various navigation systems."
- FLC72 appears to have inspected the area covered by runways 4R and 4L, which may be undergoing upgrades or repairs.
- As with other FLC flights, the flight track data was removed from Massport's flight monitor within 24 hours of the flight's completion.

Finfo Flight Inspection Aircraft 72 (FLC72) – September 10, 2019



Source: FlightAware

ROADMAP

RECOMMENDATIONS FROM ANAC

1. Obtain the Statement of Work for the Hansman MIT Study (we only have what HMMH has agreed to). Ask Congressman Lynch's office for help if need be.
2. Examine whether the Record of Decision (ROD) can be used to compel Massport to create a new Runway Use Plan (RUP), as required by the ROD.
3. Move to prevent or delay a Wake ReCat (wake recategorization) from occurring at Logan.
4. Hire a technical consultant to advise on how to reduce the impact of air traffic over Milton.
5. Formally invite Professor Hansman and the MIT team to Milton to observe when and where landing gear is actually deployed so that their noise model can be updated accordingly.
6. Reach out the Governor's office about the appointment of a new permanent CEO for Massport. Ask that the CEO’s compensation be tied to minimizing the impact of airplane noise and air pollution on local communities.
7. Reach out the Governor's office about the appointment of a each new Massport Trustee. Ask that the new Trustees’ compensation be tied to minimizing the impact of airplane noise and air pollution on local communities.
8. Hold a Town Hall to update the people on what is happening and what they can do.
9. Reach out to the Community Noise Lab to get Milton included in its current work.
10. Reach out to the School Board to raise their awareness on the issues of airplane noise and air pollution.
11. Reach out to our federally-elected officials and ask them to compel the FAA to provide the results from the Noise Study that has allowed to linger in draft form.
12. Establish working rules for oversight of our MCAC representative and for communicating the town's position through the representative.
13. Create the position of Airplane Advocate to advance the cause of fair and equitable air traffic distribution for the Town of Milton.

THIS CANNOT BECOME OUR NORMAL