

March 5, 2019

The Honorable Carolyn C. Dykema State Representative, 8th Middlesex District Room 127, State House Boston, MA 02133-1054

# Dear Representative Dykema:

Thank you for your letter and your interest in improving commuter rail service on the Worcester/Framingham Line. The information you requested is below, along with some additional explanation and context. Please let us know if you have additional questions, and we would be happy to meet with you to discuss the information in more detail.

# Locomotive Inventory and Condition:

The chart below shows the MBTA commuter rail locomotive fleet with the quantity, age, date of last refurbishment, and emissions tier of each locomotive model. All MBTA locomotives can operate in both Northside and Southside service. We do not dedicate specific locomotives to any particular line; this becomes impossible to manage due to prescribed maintenance intervals. We do target the best performing locomotives to the most demanding lines in terms of distance, speeds, train size, required horsepower, etc.

Locomotive Fleet	Quantity	Age	Date of Last Refurbishment	Emissions Tier
HSP46	40	4-5 years	None	Tier 3
MP36PH-3C	2	10 years	None	Tier 1
F40PHM-3C	1	New	N/A	Tier 0+
GP40MC	25	21 -22 years	2008 - 2011 - Top Deck & HEP Upgrade	Tier 0
F40PH-2C*	24	31-32 years	2004 - 2005 Midlife Overhaul	Tier 0
F40PHM-2C*	12	27-28 years	2004 Midlife Overhaul	Tier 0

\*Note: The F40PH-2C locos and the F40PHM-2C locos are part of a 2-year overhaul program that will eliminate these two series of locomotives. These locomotives will exit the program as F40PHM-3C locomotives and will all be tier 0+.

### Train Delay Data:

A summary of train delays on the Worcester/Framingham Line for calendar year 2018 is attached for your reference. The delays are categorized by cause, and also attached is a comprehensive listing of delay causes with definitions and explanations of what's included in each category.

### Actions to Reduce Delays:

Signal Delays: Many signal delays are due to the aged and antiquated signal system.
 This is most evident between Framingham and Boston. As part of the multi-year PTC project, we are replacing the signal system between Framingham and Boston.

In addition, many of the signal issues we experience are attributed to the reliance on third parties, such as Verizon, for the legacy phone lines the railroad dispatchers use to control signals in the field. When there is an issue on the telecommunications side, this can impact our ability to operate the signal system. Over the next 5 years, with the installation of fiber optic cable along the railroad—which is already completed—we will be transitioning away from copper phone lines and moving to our own, captive network.

- Track Defects: MBTA has a long term capital program to replace aged rail over the next several years. We replaced 28,000 feet of rail on the Worcester Line in 2018, which significantly reduced heat-related speed restrictions. Since much of this work was done in the fall, we expect to continue see the benefits in summer 2019 and beyond.
- Slippery Rail: In 2018, we introduced two new, faster wash trains that have dramatically improved railhead treatment. Along with continued vegetation management, these new rail wash trains should help reduce the effects of slippery rail on the Worcester Line and across the commuter rail system.
- Mechanical and Equipment: Ten of the worst performing F40 locomotives are being
  fully rebuilt in Boise, Idaho. As these like-new locomotives return to service, we can
  expect a reduction in mechanical delays, since these particular locomotives will not be
  susceptible to the mechanical failures previously associated with the age and poor
  condition of the vehicles. The contract for this overhaul work also includes options
  for the remaining 27 F40 locomotives, which are currently under consideration.

To address the growing commuter rail ridership, the MBTA is currently preparing for the procurement of 200 bi-level coaches. This will increase equipment availability, which will allow for the potential for longer trains, and will add seating capacity, which will ultimately reduce delays attributable to long dwell times due to heavy ridership.

## Parking Lot Capacity:

Attached for your reference is a chart showing Worcester/Framingham parking lot capacity, average occupancy, and utilization rates for calendar year 2018. We do not capture data on the time of day each lot reaches capacity. If you have additional questions, we would be happy to discuss further.

Thank you for your letter, and I look forward to working with you to continue improving commuter rail service on the Worcester/Framingham Line and across the entire system.

Sincerely,

Steve Poftak General Manager

Massachusetts Bay Transportation Authority

#### CC:

Honorable Karyn Polito, Lieutenant Governor Dan Gates, Office of Lt. Governor Polito Jody Ray, MBTA Michael Muller, MBTA Ryan Coholan, MBTA Corey Lynch, MBTA Trish Foley, MBTA Rep. Alice Peisch Rep. Michael Moran Rep. Jim O'Day Rep. Hannah Kane

#### Enc.:

Worcester Line Delays Summary 2018 Train Delay Categories Worcester Framingham Parking Capacity 2018