

The Proposed Pilot Extension of MBTA Commuter Rail Service to Foxborough Response to Questions Posed by the Fiscal & Management Control Board

- 1. Please provide the documents regarding the Fairmont Line that contain the commitments made by the MBTA? These were cited by public speakers. Also provide in summary form.**

The only binding commitment made by MassDOT (not the MBTA) regarding the Fairmount Line is found within the 'Fairmount Line improvements' section of the State Implementation Plan.¹

The State Implementation Plan requires that, "before December 31, 2011, the following facilities shall be completed and open to full public use: Fairmount Line improvements consisting of enhancements of existing stations including, without limitation: platform extensions; improved lighting and improved access; a new station in the general location of Four Corners, and a new station in each of the neighborhoods of Dorchester, Mattapan, and Roxbury; and bridge upgrades and other measures to improve service and increase ridership (the Fairmount Line Project)."

Although the majority of the obligations listed above have been met, the full commitment is not yet complete due to delays in constructing the final station, at Blue Hill Avenue (the station is currently under construction). As such, the MBTA is providing interim mitigation: additional trips via a dedicated shuttle on the CT3 bus route between Andrew Station and Boston Medical Center and increased weekday frequency on the Route 31 bus. These services will remain in place until the Fairmount Line Improvement Project is fully complete, which is currently projected to be in March 2019.

- 2. A number of speakers expressed concern that the Franklin Branch and the Fairmont Line will be made more vulnerable to equipment/infrastructure breakdown; please provide your analysis of the situation.**

To determine the impact of the proposed Pilot on existing MBTA services, a simulation was run in order to project, as accurately as possible, rail operations under both idealized and randomized conditions. Random delays happen in real day-to-day operations due to signal or track maintenance, malfunctioning equipment or disabled trains, or conflicts with other operations. The purpose of simulating randomized conditions is to test the stability and performance of the system under real-world conditions.

The existing and proposed randomized simulations were run a total of ten times, omitting the two worst and two best results in order to obtain average results. Averaged on-time performance statistics for the simulation runs were then used to determine the impacts of the proposed operating plan on existing operations. The results of the simulation indicate that the

¹ <http://www.greenlineextension.org/documents/RelRegulatory/SIPAmendment.pdf>

proposed operating plan is feasible and that the service will operate within the MBTA's Commuter Rail standards.

3. Only one additional train set is proposed, leaving Fairmont riders concerned about upstream breakdowns and crowding – please indicate the merits and drawbacks of having an additional train set involved as a mechanism to provide greater severability from the Fairmont service. What would the resulting service changes look like?

The analysis of the Pilot proposal – including the simulation described above – concluded that the proposed Foxborough Pilot would not meaningfully compromise either capacity or reliability on the Fairmount Line. In particular, the analysis included an evaluation of seat availability and the potential for crowding, and determined that seats would continue to be available at all stations during the Pilot service.

In the case of the proposed Pilot, an additional trainset - dedicated solely to the Pilot Foxborough service or kept 'on-call' for Fairmount Line trips in the event of delays from Foxborough – would be neither beneficial nor would it directly address the concerns stated above. The advantage of using existing equipment and currently scheduled trains for the duration of the Pilot is precisely that the Pilot will not then increase the number of trains in operation – which could cause delays in and of themselves – or into and out of South Station during the morning and evening peak periods.

In addition, the use and availability of a second additional trainset would result in additional costs for the Pilot, and would not necessarily benefit mobility in the overall corridor. However, the MBTA does have the flexibility to add additional coaches to existing trains, should the need arise.

4. Do we have a formal quote from Keolis to operate the service? Please provide the proposed contract amendment.

When the MBTA considers a modification to the existing Commuter Rail system or service, it must negotiate with Keolis Commuter Services on the costs and methods of implementing the proposed modification. These negotiations are based on the development of a new, draft schedule which includes the proposed modification, and an ultimate agreed-upon price flows from there. Only after all of that work is complete will the costs be codified in an amendment to the existing contract between the MBTA and Keolis. This process mirrors what was done most recently to prepare for the new Boston Landing station to come on-line.

The MBTA has had productive preliminary discussions with Keolis about the proposed Pilot, and feels that the estimated operating costs brought to the FMCB are both conservative and set a reasonable framework for future discussions, should the Pilot move forward. Staff will report

regularly to the FMCB on the development of the Pilot, including on any matters related to the negotiations with Keolis.

5. The T would own the downside of operating costs in excess of estimates. Please provide sensitivities on key components of cost that could run over.

As stated above in No. 4, the MBTA will negotiate with Keolis to determine an appropriate operating cost for the proposed Pilot that will guard against large and unexpected increases in costs.

6. Please provide a summary slide that shows in one place: the cost to purchase the right of way; the nature and costs of improvements made to date; and any anticipated investments for the remainder of 2017 and 2018.

MassDOT Initiatives

MassDOT has been and is continuing to advance the following work on the Framingham Secondary, the 21-mile Framingham-to-Mansfield line that MassDOT purchased from CSX in 2015. The Framingham Secondary includes a 4.3-mile section from Walpole to Foxboro.

- 2015 purchase cost: \$23 million
- Rail, ties, ballast, culverts, and grade crossing investments since the 2015 purchase:
 - FY2016: \$1.2 million
 - FY2017: \$7.3 million
- Inspections and daily maintenance: \$625,000 annually
- Underway and upcoming maintenance and safety work:
 - FY2018: \$14.2 million programmed
- If the Pilot goes forward, certain projects currently programmed in the FY19-22 Capital Investment Plan, which includes \$11.8 million for these types of investments, would need to be accelerated to meet the Pilot schedule, such as:
 - Furnish and install continuously welded rail for the Walpole-to-Foxboro section of the Framingham Secondary: \$3.6 million

MBTA Initiatives

The MBTA has been and will continue to advance the following projects, all aimed at improving safety and reliability for rail service – both freight and event – in the vicinity of Walpole and Foxborough:

- Positive Train Control - The MBTA is planning to install Positive Train Control between Walpole and Foxborough in 2020. Should the Pilot move forward, the work would need to be accelerated if service were to occur by 2019. *Preliminary estimates of approximately \$6 million*
- Lewis Wye Signal Upgrades - The signal system in the Lewis Wye area south of Walpole Station will be upgraded. *Approximately \$1.5 million*

7. Should the service be made permanent – please provide a breakdown of capital costs and needs that are required and/or recommended. What is the basis of these estimates?

This information would be developed as part of the operation of the Pilot service.

8. What would be the list and value of proposed mitigation measures? Please be clear about why the mitigation is needed/recommended.

The MBTA has an ongoing program to upgrade railroad/road grade crossings across the Commonwealth, and would include two crossings related to the Pilot in its upcoming efforts. The improvement of these crossings – both of which were frequently mentioned as a point of public concern during the development of the Pilot - would be completed in time for the start of the Pilot, and would also improve safety and reliability for freight and event services in the vicinity of Walpole and Foxborough:

- Summer Street Grade Crossing in Walpole - This highway-railroad at-grade crossing will be upgraded with gates, flashers, signage, sidewalks, guardrails, etc. *Approximately \$600,000*
- Walpole Station Grade Crossings - The at-grade crossing and pedestrian at-grade crossing at the station driveway entrance will be upgraded with flashers, signage, and pavement markings, as appropriate. *Approximately \$700,000*

In addition to the safety upgrades listed above, the Town of Foxborough would coordinate with the Operation Lifesaver team prior to the implementation of service in order to provide rail safety education in regional schools.

9. Please provide a list/date of all meetings held regarding this topic since July 2015; and please place these in the buckets of Foxboro related meetings, Walpole and Fairmont lines. This includes all types of meetings – public officials, open forums, private parties, citizen groups etc.

Date	Subject
8/12/2015	Foxborough Pilot
8/25/2015	Foxborough Pilot
9/23/2015	Foxborough Pilot
10/1/2015	Foxborough Pilot
10/15/2015	Foxborough Pilot
11/15/2016	Foxborough Pilot/Walpole
12/4/2015	Foxborough Pilot
12/16/2015	Foxborough Pilot
1/28/2016	Foxborough Pilot
3/7/2016	Foxborough Pilot
3/15/2016	Foxborough Pilot
3/31/2016	Foxborough Pilot
4/1/2016	Foxborough Pilot
5/4/2016	Foxborough Pilot
5/20/2016	Foxborough Pilot
6/9/2016	Foxborough Pilot
6/30/2016	Foxborough Pilot
7/20/2016	Foxborough Pilot
11/10/2016	Foxborough Pilot
11/15/2016	Foxborough Pilot
11/21/2016	Foxborough Pilot
11/29/2016	Foxborough Pilot
11/29/2016	Foxborough Pilot
12/6/2016	Foxborough Pilot/Walpole
12/14/2016	Foxborough Pilot
1/12/2017	Foxborough Pilot
1/24/2017	Foxborough Pilot
2/2/2017	Foxborough Pilot
2/7/2017	Foxborough Pilot
2/15/2017	Foxborough Pilot
2/21/2017	Foxborough Pilot
2/23/2017	Fare-Free and Foxborough Pilots/Fairmount
3/3/2017	Foxborough Pilot/Walpole
3/23/2017	Foxborough Pilot/Fairmount
3/23/2017	Foxborough Pilot

4/3/2017	Foxborough Pilot/Walpole
4/12/2017	Foxborough Pilot/Fairmount
4/13/2017	Foxborough Pilot
5/11/2017	Foxborough Pilot
5/11/2017	Foxborough Pilot
5/15/2017	Foxborough Pilot
5/23/2017	Foxborough Pilot
5/25/2017	Foxborough Pilot
6/6/2017	Foxborough Pilot
6/8/2017	Foxborough Pilot
6/13/2017	Fare-Free and Foxborough Pilots/Fairmount
6/22/2017	Foxborough Pilot/Fairmount
6/22/2017	Foxborough Pilot
6/27/2017	Foxborough Pilot
7/6/2017	Foxborough Pilot
7/12/2017	Foxborough Pilot
7/17/2017	Foxborough Pilot
7/17/2017	Foxborough Pilot/Fairmount
7/20/2017	Foxborough Pilot
7/24/2017	Foxborough Pilot/Fairmount
7/31/2017	Foxborough Pilot
8/10/2017	Foxborough Pilot

10. Please provide a discussion paper on past, current and proposed speeds for all rail moves through the Walpole community.

The following table summarizes the existing and future maximum authorized speeds (MAS) on the Franklin Line and Framingham Secondary for passenger and freight services in Walpole.

		Existing		Future (after improvements are complete)	
		Passenger	Freight	Passenger	Freight
Franklin Line - MP16.7 to MP21.6		70 MAS	40 MAS	70 MAS	40 MAS
Speed Restriction or Exceptions:	Walpole Station MBTA/Private Grade Crossing MP19.1	30 MAS	25 MAS	30 MAS	25 MAS
	Curve between MP19.3 and MP19.6	60 MAS	40 MAS	60 MAS	40 MAS
	Curve between MP21 and MP23	60 MAS	40 MAS	60 MAS	40 MAS
Framingham Secondary - Walpole to Foxboro		15 MAS	10 MAS	40 MAS	40 MAS
Speed Restriction or Exceptions:	Lewis Wye	10 MAS	10 MAS	10 MAS	10 MAS

Note: MAS obtained from MBTA, July 1, 2014 KCS Operating Rules and Instructions, track charts and MassDOT planned improvements.

11. Please provide a tabulation of all freight moves in the Foxboro/Walpole elements by quarter beginning with January 2015.

Freight trains typically operate on the Framingham Secondary five times a day on Sunday-Thursday. Below is the projected usage information that CSX provided in 2014, the most current year for which this information is available.

Foxboro Station Commuter Rail Improvements
Adjusted Future CSX Operating Times

July 15, 2014

Event	Station	B725	
		40 mph	25 mph
OR	Framingham	23:15	23:15
AR	Med Jct		
LV	Med Jct		
BY	Walpole	23:59	0:25
AR	Mansfield	0:45	1:19
LV	Mansfield	1:15	1:49
AR	Attleboro	1:45	2:24
LV	Attleboro	3:45	4:24
BY	Mansfield	4:15	4:59
BY	Walpole	5:00	5:52
AR	Med Jct		
LV	Med Jct		
TE	Framingham	5:45	7:03

Event	Station	B731	
		40 mph	25 mph
OR	Readville	10:30	10:30
AR	Walpole	11:30	11:30
LV	Walpole	12:00	12:00
AR	Med Jct	12:30	12:35
LV	Med Jct	13:00	13:05
AR	Framingham	13:30	13:56
LV	Framingham	14:00	14:26
AR	Walpole	15:30	16:22
LV	Walpole	16:00	16:52
TE	Readville	17:00	17:52

Event	Station	B732	
		40 mph	25 mph
OR	Readville	19:30	19:30
AR	Walpole	20:30	20:30
LV	Foxboro	21:00	21:05
AR	Foxboro	23:00	23:05
LV	Walpole	23:30	23:40
AR	Readville	0:30	0:40

Event	Station	B733	
		40 mph	25 mph
OR	Walpole	9:35	9:35
AR	Mansfield	10:35	10:43
LV	Mansfield	18:20	18:28
AR	Walpole	19:20	19:36

*Note: Assumes 25 mph operating speed on the Framingham Secondary - between Framingham - Walpole Junction - Mansfield Interlocking
Note: 40 mph schedule provided by CSX - 2014*

12. Please provide a memo from our rail safety office outlining any safety related concerns we should be aware of. One Walpole official referred to certain pedestrian/track crossing interfaces.

Upgrades and safety enhancements at the grade crossing at Summer Street in South Walpole, as well as the station entrance grade crossing and pedestrian crossing at Walpole Station, are currently underway by the MBTA. The MBTA Safety Department is preparing a memorandum outlining any additional concerns that would need to be addressed beyond those already identified.

13. What would be the cost of a monthly pass from Uphams Corner to the Gillette Station?

With the exception of Readville Station, all stations on the Fairmount Line are within Zone 1A. As such, these stations are not eligible for an interzone fare, and persons wishing to travel to Foxborough would need to purchase a Zone 5 pass (the fare to Foxboro Station), which currently costs \$291.50 per month. The same trip to Dedham Corporate Center Station would require a Zone 2 pass and cost \$217.75.

Because Readville Station is Zone 2, Interzone fares are available from there. A customer making a 'reverse commute' between Readville Station and Foxboro Station could purchase an Interzone 4 pass for a current cost of \$130.25 a month. The same trip to Dedham Corporate Center Station would require an Interzone 1 pass and would currently cost \$90.25.

14. Has a protocol been established that commits Keolis to certain actions when they have insufficient 'ready' trainsets for the operation. Has the MBTA enhanced penalties to be sure that the required additional set(s) are available?

The MBTA has numerous initiatives underway to increase the availability and reliability of trainsets for the entire Commuter Rail system – some of which are beginning to bear fruit – and penalties already exist for instances when Keolis fails to have a sufficient number of reliable trainsets available for service. Those initiatives and penalties would continue into the period in which the proposed Pilot would enter service (late 2018/early 2019).

15. What actions have we taken since the previous presentation to determine accurate passenger counts? How will we determine new versus riders switching from nearby stations? Will we be tracking changes in boardings and parking use at the other area stations? We could see an indirect benefit there.

Prior to the start of the Pilot service, the MBTA would collect ridership counts on the Franklin and Providence/Stoughton Lines in order to establish a baseline for the Pilot. Additionally, ridership counts would be collected at key stations such as Mansfield, Sharon, Walpole, Norfolk, and Franklin. During the Pilot period, ridership counts on the Franklin and

Providence/Stoughton Lines and at key stations would again be collected – quarterly during the Pilot period – in order to track the performance of the Pilot. Monthly counts would also be collected at Foxboro Station.

Prior to start of service, parking data – such as the available number of spaces, utilization, and capacity at key stations such as Mansfield, Sharon, Walpole, Norfolk, and Franklin – would be collected. During the Pilot, parking counts at Foxboro Station would be collected frequently, as part of the MBTA parking program ongoing data collection efforts.

16. Please provide a critical path schedule that would cover board approval to determination of success/failure at Pilot’s conclusion. To the extent that the project is considered a success and continued, what does the critical path look like toward final implementation?

