Proposed Foxborough Service Pilot

Service Pilot Evaluation
Presented by MassDOT

Fiscal Management and Control Board
July 31, 2017
History

• The concept of extending Commuter Rail service to Foxboro in order to serve the growing economic node there has been studied and considered for many years.

• September 2010
  ▪ Foxborough Commuter Rail Feasibility Study
  ▪ MBTA study concludes that commuter rail service to Foxborough is feasible and would meet Commonwealth policy objectives of reducing greenhouse gas emissions, providing public transit options, and supporting smart development.

• 2013
  ▪ Foxborough Master Plan
  ▪ Recommended advancing development of a multi-modal corridor serving freight and commuters. Considered expansion of commuter rail in the long-term, to include a stop at Gillette Stadium.

• January 2015
  ▪ Memorandum of Agreement among MBTA, MassDOT, and The Kraft Group
  ▪ The MBTA, MassDOT, and The Kraft Group agree to implement regular commuter rail service to Foxborough using the Framingham Secondary railroad line.

• June 2015
  ▪ MassDOT acquires the Framingham Secondary from CSX.
Introduction:
Characteristics of the Proposed Pilot

• The Town of Foxborough is the Pilot sponsor, in cooperation with MassDOT, the MBTA, and The Kraft Group.

• The Pilot will extend **eight existing Fairmount Line trains and one existing Franklin Line train** from South Station to Foxboro Station and back.

• Pilot service is proposed to begin in **late 2018/early 2019**.

• The Pilot will make use of **existing MassDOT/MBTA-owned infrastructure**.

• The Pilot **does not require** any additional or unplanned capital investments.

• The Pilot requires the use of **one additional trainset**.
Introduction: Projected Ridership

• 150 riders per weekday are projected to board at Foxboro Station.

• MBTA system-wide ridership is projected to increase by 160 new riders, all of whom are expected to shift from private automobiles to the train.

• 210 existing riders are projected to divert from existing stations to Foxboro Station and/or other stations on the line, potentially opening up capacity for additional new riders.

• The Pilot will include 500 new parking spaces for MBTA customers, which will generate new revenue for the MBTA, alleviate parking shortages at nearby stations, and potentially prompt additional ridership.
Introduction:
Costs and Revenues

• The Pilot will generate an estimated $459,000 of new revenue for the MBTA, and require an estimated $1,200,000 to operate, for a net cost to the MBTA of $741,000.

• A private partner, the Kraft Group, has committed to fund any difference between the per-passenger cost of the Foxboro Pilot (estimated at $8.58/passenger) and the average per-passenger cost for the Commuter Rail system (currently $6.07/passenger), up to $217,000.

• For the Pilot duration, the net cost to the MBTA, minus the private contributions of $217,000, would be $524,000.
Presentation Overview

• The **Results** of the Service Pilot Proposal Evaluation:
  - Infrastructure
  - Operations
  - Ridership
  - Parking
  - Air Quality
  - Costs and Revenues
  - Support and Opposition
  - Proposed Schedule

• **Performance Metrics** for Evaluation of Service Pilot

Foxboro is official name of Foxboro Station; Foxborough is the official spelling of the Town of Foxborough.
Proposed Foxborough Service Pilot

Evaluation of the Proposed Pilot Service
The infrastructure necessary to operate the proposed Pilot exists and is owned by MassDOT/MBTA:

- The Pilot would use the **Fairmount Line, Franklin Line, and Framingham Secondary.**

- **Foxboro Station** provides both a low-level and mini-high platform.

- **Parking is available both** on-site and in close proximity to the station.

- MassDOT/MBTA are currently upgrading the Framingham Secondary, which will both support the Pilot and improve reliability along the corridor for current event and freight services.
Operation of the Pilot

• 41 daily one-way trips currently run between Readville and South Station on the Fairmount Line.

• The Pilot will extend eight Fairmount Line trains and one Franklin Line train to Foxboro Station.

• Of those trains, three will be peak period/peak direction trips and then limited midday service.

• The MBTA will continue to serve the Fairmount Line as the Line is served today.

• The operation of the Pilot does not reduce existing Fairmount Line service, stops, or frequencies.

• The operation of the Pilot does not impact Franklin Line or Providence Line services.

• The new riders and new trips can be served with one additional trainset only.
Anticipated Ridership

• Prepared by the Central Transportation Planning Staff.

• **150 riders per weekday** are projected to board at Foxboro Station during the Pilot.

• **MBTA system-wide ridership is projected to increase by 160 new riders** because of the Pilot, all of whom are expected to shift from private automobiles to the train.

• **210 existing riders are projected to board divert from stations** during the Pilot to Foxboro Station and other stations on the line.
Anticipated Capacity

• Utilizing ridership estimates for the Pilot developed by Central Transportation Planning Staff and current ridership counts, it was calculated that:

  ▪ **Existing Fairmount Line trains have capacity** to support a Pilot extension to Foxboro Station.

  ▪ Even with the extension to Foxboro, **trains would continue to have seats available when they arrive in South Station during the Pilot period.**
### Transit Capacity Projections

<table>
<thead>
<tr>
<th>Trip Route (Including Existing Terminus)</th>
<th>Proposed Trainset</th>
<th>Maximum Load / Seated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seated Capacity</td>
<td>Existing</td>
</tr>
<tr>
<td><strong>INBOUND TRAINS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foxboro (5:50 AM) – Readville (6:25 AM) – South Station</td>
<td>570</td>
<td>17%</td>
</tr>
<tr>
<td>Foxboro (6:35 AM) – Readville (7:10 AM) – South Station</td>
<td>570</td>
<td>34%</td>
</tr>
<tr>
<td>Foxboro (8:13 AM) – Norwood Central (8:31 AM) – South Station</td>
<td>948</td>
<td>38%</td>
</tr>
<tr>
<td>Foxboro (1:25 PM) – Readville (2:00 AM) – South Station</td>
<td>570</td>
<td>10%</td>
</tr>
<tr>
<td><strong>OUTBOUND TRAINS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Station (6:24 AM) – Readville – Foxboro</td>
<td>948</td>
<td>1%</td>
</tr>
<tr>
<td>South Station (11:45 AM) – Readville – Foxboro</td>
<td>570</td>
<td>11%</td>
</tr>
<tr>
<td>South Station (3:30 PM) – Readville – Foxboro</td>
<td>948</td>
<td>9%</td>
</tr>
<tr>
<td>South Station (5:45 PM) – Readville – Foxboro</td>
<td>570</td>
<td>23%</td>
</tr>
<tr>
<td>South Station (6:30 PM) – Readville – Foxboro</td>
<td>570</td>
<td>16%</td>
</tr>
</tbody>
</table>

*Note: Train departing Foxboro at 8:13 AM is an existing Franklin Line train. All other trains are existing Fairmount Line trains.*
Anticipated Air Quality Benefits

- The Central Transportation Planning Staff estimated that the Pilot would generate **regional improvements in air quality** during the duration of the Pilot, due to some motorists opting to use the Commuter Rail instead of drive.

- **10,500** fewer Vehicle Miles Traveled

- **12,449 fewer** kilograms of carbon dioxide

- **59 fewer** kilograms of carbon monoxide

- **1 kg fewer** volatile organic compounds

- **2 kg fewer** nitrogen dioxide
Parking
Additional Available Parking at Foxboro Station

• **500 privately-owned parking spaces will be made available for MBTA passengers** as part of the Service Pilot, with the ability to increase spaces if demand grows.

• Parking will be available to all communities with no residential restrictions.

• Spaces will cost **$4/day**, in keeping with existing MBTA parking fees.

• **Convenient location** near Route 1, I-495, and I-95.
Parking
Limited Availability at Existing Stations

• Existing town-owned and -managed lots **limit parking options** for commuters.

• Parking lots at several Franklin and Providence Line stations are **at or near capacity**.

• **Demand for additional parking appears to** exist now and could increase if ridership grows.

• The Pilot offers an opportunity to test the theory that parking acts as a constraint on Commuter Rail ridership.
Costs and Revenues
Estimates for Duration of Service Pilot

• Operating Costs for Service Pilot: $1.2 million
  ▪ This projection was developed in conjunction with Keolis.
  ▪ The costs would need to be incorporated in the FY2019 MBTA operating budget.

• Capital Costs
  ▪ MassDOT/MBTA are currently upgrading the Framingham Secondary, which will both support the Pilot and improve reliability along the corridor for current event and freight services. There are no capital investments required for the Pilot that aren’t already planned.

• Revenues from Fares and Parking: $459,000
  ▪ $324,000 in new fare revenue.
  ▪ $135,000 in new parking revenue.

• Subsidy Cost/Passenger:
  ▪ Current commuter rail average subsidy: $6.07 per passenger.
  ▪ Estimated subsidy for Service Pilot: $8.58 per passenger.
  ▪ Private contribution from the Kraft Group of up to $217,000 to match the existing average commuter rail subsidy/passenger.

• Net Cost to the MBTA
  ▪ $524,000
Outreach Efforts

• The Town of Foxborough engaged in outreach efforts to identify support for and concerns with Service Pilot.

  ▪ Briefings with the Fairmount Indigo Transit Coalition
  ▪ Briefings with Walpole officials
  ▪ Coordination with the Town of Mansfield Board of Selectman
  ▪ Meeting with City of Boston officials.

• Through this process, Foxborough found both support and concern about the Pilot.

• Should the Pilot progress, Foxborough commits to continue to work with all impacted stakeholders and, as appropriate, to help address potential mitigation.
• Groups Supporting Service:
  - Towns: Foxborough, Mansfield, Sharon, Franklin
  - Transit Providers: GATRA
  - Regional Groups: 495/MetroWest Corridor Partnership, Neponset Valley TMA, MAPC
  - Business Groups: Foxborough Economic Development Committee, Foxborough Route 1 Business Association, Wrentham Economic Development Commission, Tri-Town Chamber of Commerce, Neponset Valley Chamber of Commerce, United Regional Chamber of Commerce
  - Employers: Christmas Tree Shops, Colwen Hotels / XSS Hotels, Davio’s Northern Italian Steakhouse, Dorel Juvenile Group, Dunkin Donuts, Renaissance, Schneider Electric, The Kraft Group, Toby Keith’s, Waste Management of Mass, Inc.
  - Unions

• Reasons service supported:
  - Improved access and mobility for commuters.
  - Additional parking for residents and commuters.
  - Benefits to parking at other area stations with capacity issues (i.e. Mansfield)
  - Increased employment and healthcare opportunities.
  - Some potential for “reverse commute” opportunities to employers in Foxborough.
  - Support for economic development growth in the region.
• Groups expressing concerns or opposition:
  ▪ Town Walpole
  ▪ Fairmount Indigo Transit Coalition and Fairmount Corridor Community Groups

• Concerns or opposition:
  ▪ Walpole identified a number of concerns associated with more frequent train service on the corridor, including noise, impact to abutters, and safety.
  ▪ The Fairmount Indigo Transit Coalition raised a long-standing desire for increased frequency on the existing Fairmount Line and improved reliability, as well as concerns related to fare inequity. Additional concerns raised by the Fairmount community are the potential of the Pilot to impact service reliability, seated capacity for Fairmount Line riders, and the future vision of rapid transit service on the Fairmount Line.
Future Public Involvement

- Prior to a late 2018/early 2019 launch of the Pilot, the Town of Foxborough and MBTA would engage in:
  - Public meetings and community briefings in Foxborough, Walpole, and along the Fairmount Line (through coordination with the Fairmount Indigo Transit Coalition).
  - Targeted outreach through conductor announcements, informational handouts, and signage.
  - Promoting awareness through a variety of local media outlets.
  - Coordination with the Operation Lifesaver program to provide rail safety education in Foxborough and Walpole.
Proposed Schedule and Next Steps for Service Pilot

• **Summer 2017**: FMCB Decision

• **Fall of 2017-Fall of 2018:**
  - Develop and sign a three-way MOA between MBTA, Town of Foxborough, and The Kraft Group
  - Continue ongoing capital upgrades
  - Complete Service planning
  - Develop and execute marketing plan
  - Perform all necessary public outreach

• **Late 2018/Early 2019**: Pilot service begins

• **Service Pilot Duration**: 12 months
  - Collect data and evaluate performance metrics during Service Pilot
  - Identify additional infrastructure requirements during Service Pilot

• **Prior to Service Pilot Completion**: FMCB determination on continuation of service.

• **Work needs to begin now to be ready to launch in late 2018/early 2019.**
Proposed Foxborough Service Pilot

Performance Metrics for Evaluation of Service Pilot
Performance Metrics
To be evaluated during Service Pilot

• Data will be collected and evaluated throughout the Service Pilot, with regular reporting to FMCB. Suggested metrics include:

  ▪ **Costs and Revenues:** Compare operating costs and revenues to Service Pilot estimates. Re-evaluate impact of Service Pilot on subsidy/trip. Evaluate amount of private contributions during the Service Pilot.

  ▪ **Operations:** Evaluate for consistency with MBTA performance standards.

  ▪ **Ridership:** Assess if ridership meets CTPS projections for auto diversions, other station diversions, and Foxboro Station boardings.

  ▪ **Parking:** Compare parking availability at key stations to data collected prior to the Service Pilot, as well as to CTPS estimates.

  ▪ **Opportunities:** Assess the potential for growth and the demand for access to opportunities by working with commuters, community groups, area employees, and developers. Monitor use of the proposed Foxborough Shuttle service.

  ▪ **Service Continuation Evaluation:** Plan for needs associated with continuation of service, including any additional infrastructure that would be required, a schedule for implementation, capital operating costs, funding (including potential continuation of private funding), and coordination with project stakeholders to obtain feedback.
Proposed Foxborough Service Pilot

Appendix
<table>
<thead>
<tr>
<th>Date</th>
<th>Study or Action</th>
<th>Key Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>Stadium Act, Massachusetts Acts 16, 2</td>
<td>Called for rail improvements to spur economic development in Foxborough, in conjunction with construction of Gillette Stadium.</td>
</tr>
<tr>
<td>April 2008</td>
<td>Massachusetts Growth Initiative - Foxborough Plan</td>
<td>Growth encouraged in Foxborough and around transit; map shows transit access at proposed Foxboro Station.</td>
</tr>
<tr>
<td>June 2009</td>
<td>South Coast Rail Corridor Plan</td>
<td>Outlined where new development should be supported, including around commuter rail stations; designated the Route 1 Corridor as a priority development area.</td>
</tr>
<tr>
<td>September 2010</td>
<td>Foxborough Commuter Rail Feasibility Study</td>
<td>MBTA study concluded that commuter rail service to Foxborough is possible and meets the Commonwealth’s policy objectives of, ‘reducing GHGs, providing alternative public transit options, and supporting smart growth development.’</td>
</tr>
<tr>
<td>September 2011</td>
<td>I-495/Southwest Regional Commuter Rail and Operations Study</td>
<td>Evaluated the opportunity to use existing infrastructure to expand transit service without significant financial commitment.</td>
</tr>
<tr>
<td>2013</td>
<td>Foxborough Master Plan</td>
<td>Recommended advancing development of a multi-modal corridor serving freight and commuters. Considered expansion of commuter rail in the long-term, to include a stop at Gillette Stadium.</td>
</tr>
<tr>
<td>2013</td>
<td>Economic Development Master Plan</td>
<td>Presented scenarios, including the potential for increased rail service to the stadium area.</td>
</tr>
<tr>
<td>June 2015</td>
<td>Framingham Secondary Acquisition</td>
<td>MassDOT acquired Framingham Secondary from CSX.</td>
</tr>
<tr>
<td>Late 2015</td>
<td>Discussions of MOA for Pilot Service</td>
<td>A draft new agreement, superseding the original MOA, to provide commuter rail service as a Pilot Program to the extension</td>
</tr>
<tr>
<td>July 2017</td>
<td>Foxborough Service Pilot Proposal</td>
<td>Prepared a proposal based on MassDOT’s Policy on the Evaluation and Selection of MBTA Pilots for submission to the FMCB.</td>
</tr>
</tbody>
</table>
Anticipated Ridership
Ridership and Capacity of Service Pilot Trains

<table>
<thead>
<tr>
<th>Inbound</th>
<th>Outbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOXBORO</td>
<td>19:35</td>
</tr>
<tr>
<td>PLIMPTONVILLE</td>
<td>18:52</td>
</tr>
<tr>
<td>WINDSOR GARDENS</td>
<td>18:15</td>
</tr>
<tr>
<td>NORWOOD CENTRAL</td>
<td>17:45</td>
</tr>
<tr>
<td>NORWOOD DEPOT</td>
<td>16:27</td>
</tr>
<tr>
<td>ISLINGTON</td>
<td>15:30</td>
</tr>
<tr>
<td>DEDHAM CORP. CENTER</td>
<td>14:30</td>
</tr>
<tr>
<td>ENDICOTT</td>
<td>14:00</td>
</tr>
<tr>
<td>READVILLE</td>
<td>13:25</td>
</tr>
<tr>
<td>FAIRMOUNT</td>
<td>12:15</td>
</tr>
<tr>
<td>MORTON STREET</td>
<td>11:45</td>
</tr>
<tr>
<td>TALBOT AVENUE</td>
<td>11:09</td>
</tr>
<tr>
<td>FOUR CORNERS/GENEVA AVENUE</td>
<td>9:09</td>
</tr>
<tr>
<td>UPHAM'S CORNER</td>
<td>8:13</td>
</tr>
<tr>
<td>NEWMARKET</td>
<td>7:26</td>
</tr>
<tr>
<td>SOUTH STATION</td>
<td>6:35</td>
</tr>
</tbody>
</table>

Maximum Load/Seat Capacity

- Each seat represents seated capacity for 100 passengers, rounded to the nearest 100.
- Each person represents a maximum load of 100 passengers, rounded up to the nearest 100.