

Foxboro Service Pilot

Update and Performance Metrics and Monitoring



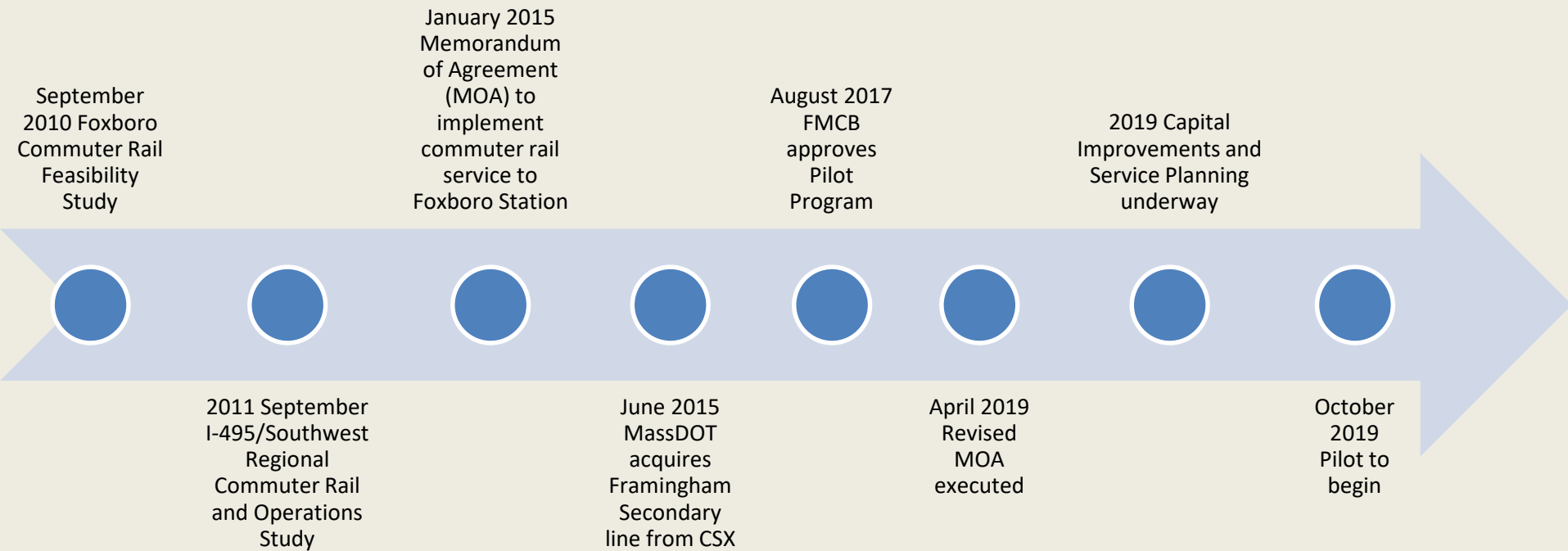
FOXBORO STATION
INBOUND TO BOSTON

Fiscal Management and Control Board
July 2019

- In 2017, the FMCB approved a *Transit Pilot Policy*, where sponsors like cities and towns can propose service pilots, which, if approved, begin as limited-duration, experimental pilots and allow opportunities to evaluate success before decisions are made before becoming permanent.
- A successful service pilot features the following: more frequent service, extended hours of operation, and/or new service routes, and demonstrates demand for the service, community support, and operational feasibility.
- In 2017, the Town of Foxboro, in partnership with The Kraft Group (TKG), submitted a Pilot Proposal for the MBTA to extend existing MBTA trains to Foxboro Station for weekday commuter service.
- In August 2017, the FMCB approved the Foxboro Pilot Service, which is scheduled to begin operation in October 2019.

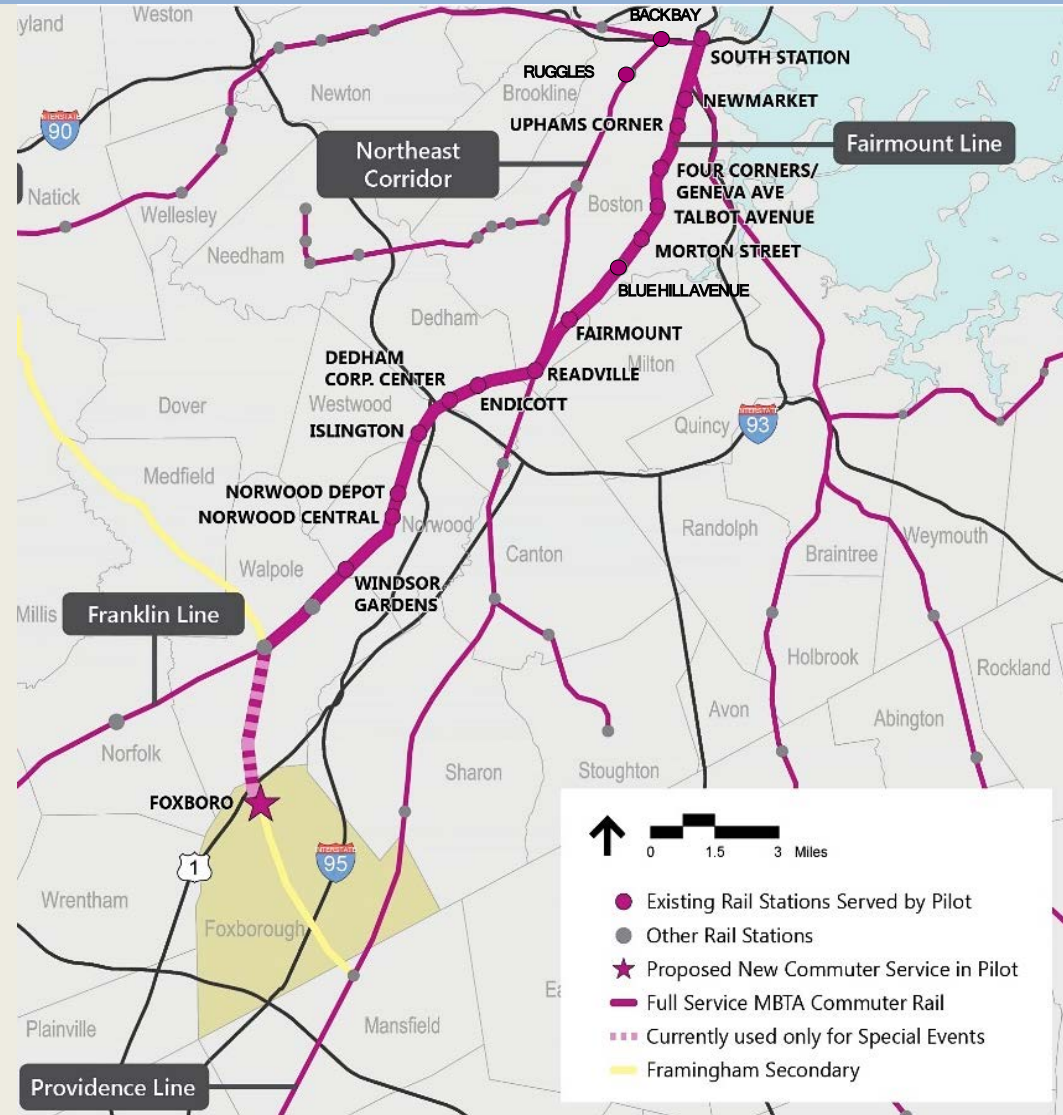


Pilot Timeline



General Update

- Pilot to begin service October 2019
- MOA executed, subject to change based on revised schedule
- Infrastructure improvements underway
- Draft service schedule developed (*to be finalized as part of MBTA 2019 Fall Schedule update*)
- Marketing program in initial stages
- Pre-pilot baseline monitoring underway



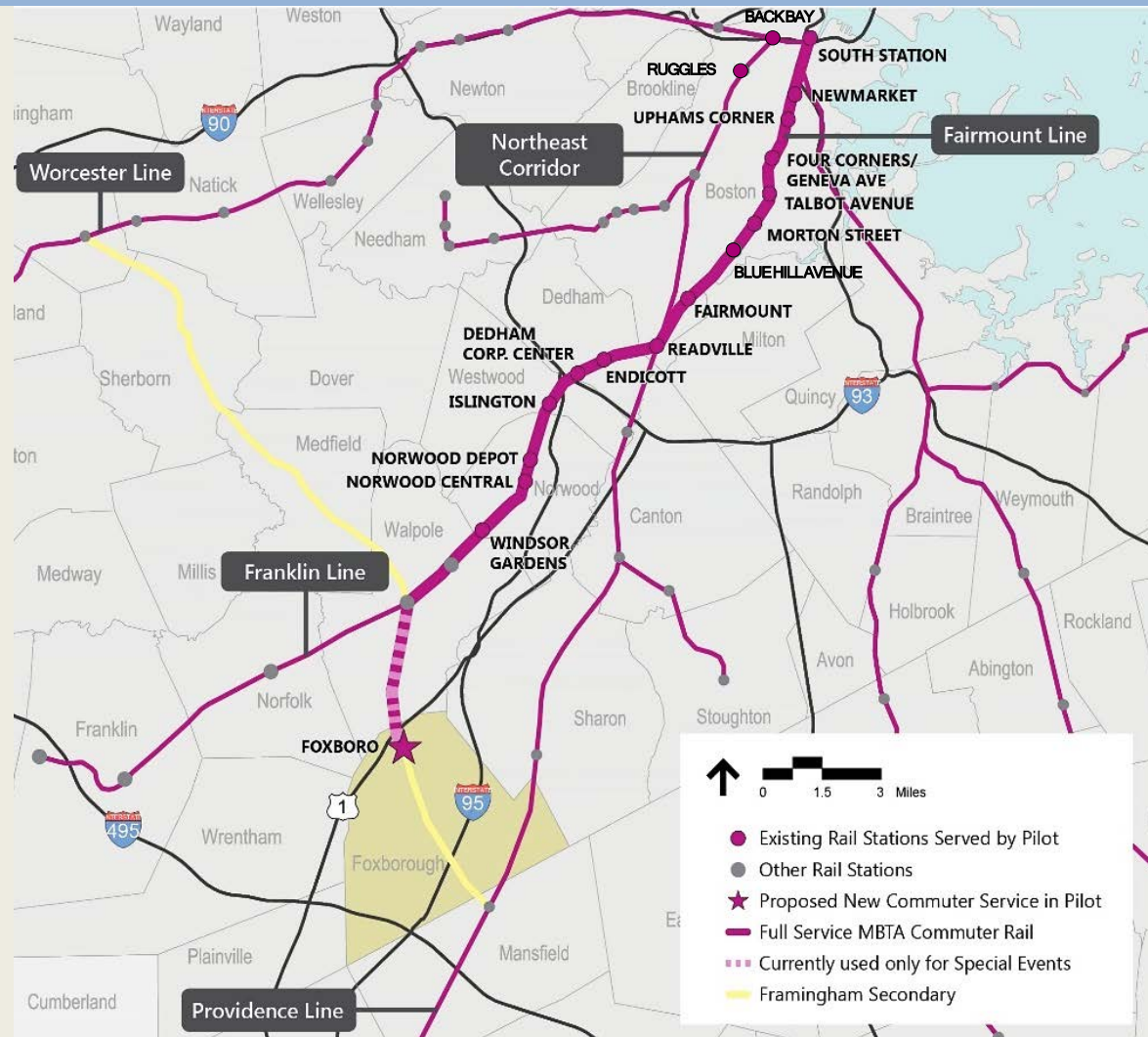
Responding to FMCB requests

- Grade crossing improvements
- Reverse commute options
- Monitoring plan for on-time performance and crowding on Franklin and Fairmont line



Infrastructure Improvements

- Infrastructure improvements are currently underway in the Walpole Station area and along the Framingham Secondary in Walpole and Foxboro
- **Grade crossing safety** enhancements at Walpole Station and at Summer Street in Walpole
- Track and signal upgrades along the Framingham Secondary
- PTC equipment installed and in service prior to start of Pilot
- Fencing installed at key locations



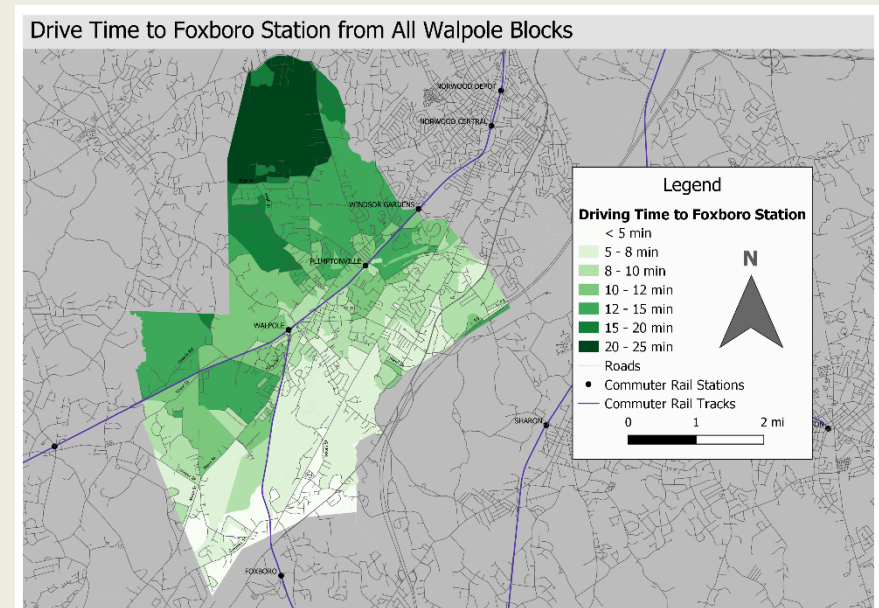
- Service schedule developed for Pilot Proposal
 - Initial feedback is that times are not ideal and there are little to no reverse commute opportunities
- MBTA, with input from Keolis, has a proposed modified schedule as part of systemwide Fall schedule change
 - **Better opportunities for midday and reverse commuters**
 - Maintains more commuting service via the NEC to serve Ruggles and Back Bay
 - Provides reverse commuting slots to Foxboro in both peak periods
 - Provides additional midday and late evening trips
 - Does not significantly change existing service Franklin and Fairmount Line services
 - Does not prevent future increases of service on Fairmount Line
 - Provides ability to revert back to the current schedule should the Pilot found not to be successful
- Subject to change prior to Pilot initiation based on MBTA 2019 Fall Service adjustments, but will be basis to begin marketing program.

Proposed Service Schedule

- Provides a total of 20 trips.
 - Inbound Trips: 10 (3 peak, 3 reverse commute, 4 midday/off-peak)
 - Outbound Trips: 10 (3 peak, 2 reverse commute, 5 midday/off-peak)
 - Peak Period arrival and departure times.
 - AM Peak Period - Arrive South Station @ 6:52AM, 8:24AM and 9:16AM
 - PM Peak Period - Depart South Station @ 4:15PM, 5:03PM, 6:30 PM
- Proposal to be Zone 4 station

Proposed Foxboro Schedule											Scheduled developed by Keolis 06/2019 Schedule is subject to change									
MONDAY THROUGH FRIDAY																				
Train No.	750	740	742	760	766	774	744	780	746	784										
INBOUND											A.M.	A.M.	A.M.	A.M.	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.
Forge Park/495	----	----	----	----	----	----	----	----	----	----										
Franklin/Dean Coll.	----	----	----	----	----	----	----	----	----	----										
Norfolk	----	----	----	----	----	----	----	----	----	----										
Foxboro	5:48	7:30	8:20	10:30	1:30	4:33	5:26	6:37	7:40	9:50										
Walpole	----	----	----	----	----	----	----	----	----	----										
Plimptonville	----	----	----	----	----	----	----	----	----	----										
Windsor Gardens	6:00	7:42	8:32	10:42	1:42	4:45	----	6:49	----	10:02										
Norwood Central	6:05	7:47	8:37	10:46	1:46	4:49	5:41	6:53	7:55	10:06										
Norwood Depot	6:08	7:50	8:40	10:48	1:48	4:51	5:43	6:55	----	10:08										
Islington	6:12	7:54	8:44	10:51	1:51	4:54	5:46	6:58	----	10:11										
Dedham Corp.Ctr.	6:15	7:57	8:47	10:53	1:53	4:56	5:48	7:00	8:00	10:13										
Endicott	6:18	8:01	8:50	10:56	1:56	4:59	5:51	7:03	----	10:16										
Readville	6:22	8:06	8:55	11:00	2:00	5:03	5:55	7:08	----	10:20										
Hyde Park		----	----				----		----											
Ruggles		----	L 9:06				----		----											
Back Bay		L 8:18	L 9:10				L 6:11		L 8:20											
South Station	6:52	8:24	9:16	11:30	2:30	5:33	6:16	7:38	8:25	10:50										
VIA FMT: Operates via the Fairmount Line between Readville and South Station. See the Fairmount Line schedule for all stops.																				
MONDAY THROUGH FRIDAY																				
Train No.	751	753	741	763	769	743	745	779	783	787										
OUTBOUND											A.M.	A.M.	A.M.	A.M.	P.M.	P.M.	P.M.	P.M.	P.M.	
South Station	6:05	7:05	8:50	11:45	2:45	4:15	5:03	6:30	8:15	10:00										
Back Bay			8:55				5:08													
Ruggles			8:59				5:12													
Hyde Park			----				5:21													
Readville	6:35	7:35	9:09	12:15	3:15	4:37	5:25	7:00	8:45	10:30										
Endicott	----	7:38	9:12	----	3:20	4:40	5:29	----	8:48	----										
Dedham Corp.Ctr.	6:40	7:41	9:15	12:20	3:23	4:43	5:33	7:05	8:51	10:35										
Islington	----	7:44	9:18	----	3:26	4:46	5:36	----	8:54	----										
Norwood Depot	----	7:47	9:21	----	3:30	4:49	5:40	----	8:57	----										
Norwood Central	6:45	7:50	9:24	12:25	3:33	4:52	5:44	7:10	9:00	10:40										
Windsor Gardens	----	----	----	----	3:37	4:56	5:48	----	9:04	----										
Plimptonville	----	----	----	----	----	----	L 5:52	----	----	----										
Walpole	----	----	----	----	----	----	----	----	----	----										
Foxboro	7:00	8:05	9:39	12:42	3:51	5:11	6:05	7:25	9:18	10:55										
Norfolk	----	----	----	----	----	----	----	----	----	----										
Franklin/Dean Coll.	----	----	----	----	----	----	----	----	----	----										
Forge Park/495	----	----	----	----	----	----	----	----	----	----										
VIA FMT: Operates via the Fairmount Line between Readville and South Station. See the Fairmount Line schedule for all stops.																				

- Trains serving Foxboro can't stop at Walpole due to track configuration
- The new schedule eliminates 4 inbound and 2 outbound Walpole stops daily
- For peak trains, the new schedule at most changes the time of the next Walpole train by 24 minutes
- There is capacity on remaining trains stopping at Walpole to accommodate current passengers
- Move Foxboro into Zone 4 to allow switching at same fare
- Additional 500 parking spots at Foxboro Station available
- Same parking rate of \$4 a day at each station



Service via Fairmount Line

- Several Foxborough trains will operate as extensions of existing Fairmount Line trains
- Fairmount Line service will generally operate as it does today and not be adversely impacted by the Foxboro service
- Crowding will be monitored throughout Pilot duration
- Foxboro Pilot will not preclude the potential Fairmount Line Service Pilot currently proposed by City of Boston



Ridership Updates

- In 2016, CTPS evaluated ridership for a Fairmount - Foxboro Service:
 - Foxboro Station Daily Boardings – 150
 - New system ridership – 160 daily diversions from auto to commuter rail.
- Utilizing new service schedule, and updated land use model, CTPS evaluated ridership for Pilot
 - Foxboro Station Daily Boardings – 210
 - New system ridership – 210

Performance Metric - Ridership	No Build	Foxborough Pilot	Change
Inbound CR Boardings by Line			
Fairmount Line	1340	1340	0
Franklin Line	5920	6240	320
Providence/Stoughton Line	4790	4680	-110
Total CR Line	12050	12260	210
Inbound Boardings at Key Stations			
Foxboro	0	210	210
Walpole	740	710	-30
Norwood Central	1020	1,070	50
Dedham Corp Ctr	740	890	150
Forge Park	680	670	-10
Franklin	630	560	-70
Norfolk	870	800	-70
Windsor Gardens	250	290	40
Norwood Depot	280	310	30
Mansfield	1,880	1,830	-50
Sharon	1,280	1,220	-60
Rte 128 Station	1,630	1,630	0
Islington	120	130	10
Endicott	250	260	10

- Operating Costs during Pilot Program duration (\$1.68 million annually)
 - Utilizes existing equipment; additional costs associated with crew and fuel
- Ridership estimates project an increase in fare revenue of approximately \$368k during pilot
- Additional parking revenue estimated to be approximately \$153k during the pilot
- Evaluation of Subsidy/Rider for Pilot Program
 - Current MBTA Commuter Rail average subsidy: \$5.33 per rider.
 - Foxboro Station service projected subsidy: \$12.00 per rider (before private contribution).
 - Net delta: \$6.67 per rider.
- Private contribution by The Kraft Group/TKG during Pilot
 - Parking area provided for minimum of 500 vehicles.
 - On-site security and maintenance will be privately funded.
 - TKG to address cost differential of operating subsidy (estimated to be approximately \$645,000 during the pilot).



Operations



Ridership



Parking



Revenues/Subsidies



Opportunities

Performance metrics

- Monitoring metrics: ongoing evaluation to ensure existing service isn't impacted
- Success metric: used to determine if pilot will become permanent with targets
- Support metric: measures benefits of pilot to support decision, but no target

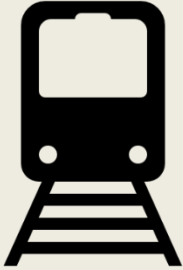
Data collection plan

- MBTA and pilot sponsors developing a data collection plan for all of the metrics with roles defined
- Will require existing data systems, manual counts, passenger surveys, revenue data
- Frequency of monitoring and reporting data depends on the metric

Pilot Monitoring and Performance Metrics

Metric	Objective	Type of Metric	Data Sources	Frequency of collection
Operations	<ul style="list-style-type: none"> Pilot impact on OTP on existing Commuter Rail service Comfort/crowding impact on existing customers 	<ul style="list-style-type: none"> Monitoring metrics 	<ul style="list-style-type: none"> MBTA/Keolis OTP reports for Fairmount and Franklin lines Onboard observations and ridership counts 	<ul style="list-style-type: none"> Monthly Initial two weeks, then monthly
Ridership	<ul style="list-style-type: none"> Foxboro Station Boardings: 210 daily New Riders: 210 daily 	<ul style="list-style-type: none"> Success metric 	<ul style="list-style-type: none"> CTPS 2018 Counts, Passenger counts, APCs 	<ul style="list-style-type: none"> Initial two weeks – manual counts @ Foxboro Station (ons/offers) Monthly
Parking	<ul style="list-style-type: none"> Increase parking capacity with 500 parking spaces at Foxboro Additional parking revenue 	<ul style="list-style-type: none"> Support metric 	<ul style="list-style-type: none"> MBTA Counts (Foxboro, Mansfield, Sharon, Walpole, Norfolk, and Franklin) Parking revenue above current return 	<ul style="list-style-type: none"> Initial two weeks – manual counts Monthly
Subsidies	<ul style="list-style-type: none"> Comparable commuter rail subsidy 	<ul style="list-style-type: none"> Success metric 	<ul style="list-style-type: none"> Pilot Revenue (new parking and fares) Commuter rail subsidy comparison 	<ul style="list-style-type: none"> Quarterly
Opportunities	<ul style="list-style-type: none"> Reverse commuters Economic opportunities 	<ul style="list-style-type: none"> Support metrics 	<ul style="list-style-type: none"> Passenger counts, employer surveys, demographic survey of riders 	<ul style="list-style-type: none"> Halfway through pilot

Appendix



Metric – On-Time Performance (OTP) and Crowding

- Foxboro Pilot service
- Fairmount Line
- Franklin Line

Baseline Data

- MBTA/Keolis historic monthly OTP reports, passenger counts

Pilot Monitoring Method

- MBTA/Keolis OTP reports, onboard observations
- Information/data on service disruptions to assess if delays are due to Pilot service or other factors (e.g., adverse weather conditions, construction)
- Frequency: Monthly



Metric - Ridership Increases and Passenger Comfort

- New daily systemwide round-trips (CTPS Projection: 210)
- Daily boardings at Foxboro Station (CTPS Projection: 210)

Baseline Data

- 2018 CTPS counts at all stations

Pilot Monitoring Method

- Initially – Manual counts at Foxboro, Mansfield, Sharon, Walpole, Norfolk and Franklin Stations
- As soon as possible (2019/2020) – On-Board Automatic Passenger Counters (APCs)
- On-board observations
- Frequency: Weekly at Foxboro Station for first two weeks; Monthly for all other stations



Metric - Parking Utilization

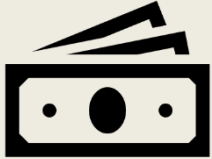
- Number of vehicles parked at Foxboro Station
- Parking availability at Foxboro Station
- Parking availability at area stations - Mansfield, Sharon, Walpole, Norfolk, Franklin

Baseline Data

- MBTA parking counts – Spring 2019

Pilot Monitoring Method

- MBTA parking utilization data
- Quarterly counts at private lots (if possible)
- Frequency: Weekly at Foxboro Station for first two weeks; Monthly for all other stations



Metric – Revenues and Subsidies

- Fare revenues
- Parking revenues
- Private subsidies (up to \$645,000)

Baseline Data

- Current MBTA Fare and Parking revenue

Pilot Monitoring Method

- MBTA/Keolis fare collection reports
- MBTA parking reports
- Foxboro Station parking revenue reports
- Subsidy calculations (compared to operating subsidy/passenger)
- Frequency: Quarterly



Other Pilot Benefits

- Number of daily reverse commuters
- Number of daily shuttle riders to Foxborough employment centers
- Economic development opportunities at Patriot Place
- Demographic survey of riders

Pilot Monitoring Method

- Station level counts at Foxboro Station
- Feedback from area employers
- Frequency: at half way mark