

Modernizing the Franklin Line

Rapid, Reliable Transit for Norwood, Foxborough, and Franklin

The Franklin/Foxboro Line is the MBTA Commuter Rail system's fourth-busiest rail line, running just over 30 miles and serving suburbs in Norfolk County. It runs through a medium-to-low-density, job-rich suburban corridor southwest of Boston, before branching at Walpole to serve the small town of Franklin and Gillette Stadium in Foxborough.

Under a Regional Rail model, trains would operate every 15 minutes between South Station and Walpole and every 30 minutes to both Forge Park/495 and Foxboro, all day, every day, in both directions. This will allow the line to serve a larger travel market, providing a more compelling alternative to driving for traditional rush-hour commuters in both directions and opening up the line to off-peak and reverse-commute riders for whom the current infrequent and slower service simply does not work.

The necessary capital and operational improvements to implement this model on the Franklin Line dovetail well with Phase 1 of Regional Rail. Once that phase is

complete, both routes the Franklin Line might take to downtown Boston—the Fairmount Line and the already electrified Northeast Corridor—will support electrified service, making electrifying the rest of the Franklin Line an easier and faster proposition.

Our proposed improvements to the Franklin Line specifically include:

- » Electrification of the Franklin line with overhead catenary
- » Finishing the existing Franklin Line double track project and adding additional double track between Franklin and Forge Park
- » Installation of high-level platforms at all stations
- » Introduction of Electric Multiple Units (EMUs)

These investments will reduce the rush hour travel time from 1 hour and 12 minutes to 44-48 minutes. The MBTA double-tracked the majority of the right-of-way in 2020; as a result, most of the capacity improvements needed to run Regional Rail are complete.



TransitMatters is a 501(c)(3) nonprofit dedicated to improving transit in and around Boston by offering new perspectives, uniting transit advocates, and informing the public. We utilize a high level of critical analysis to advocate for plans and policies that promote convenient, effective, and equitable transportation for everyone.

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Current Situation

The line serves relatively densely populated inner suburbs from Dedham to Walpole; the average distance between stations between Readville and Walpole is under a mile. Between Walpole and Forge Park, the population density and the average stop density are lower, and Foxboro station only has some jobs at Patriot Place and no housing density. Since Spring 2021, the schedule has offered near-clock-face departures - that is, trains operate at the same minute after the hour, every hour, nearly all day. This is an important first step toward frequent Regional Rail style service. Adopting this scheduling pattern system-wide has been a key factor in the commuter rail's strong ridership recovery in the wake of the COVID-19 pandemic. However, there are irregular peak frequencies, and the Forge Park and Foxboro branches only receive service every two hours during midday.

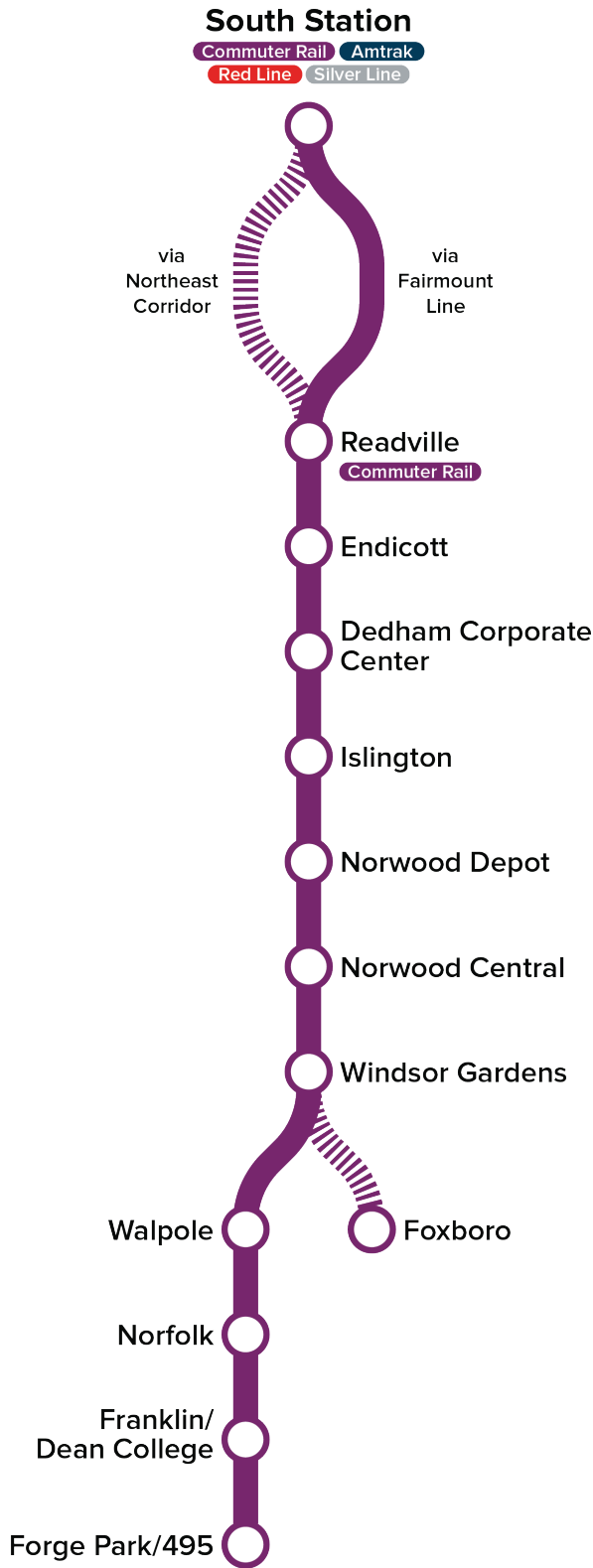
As of 2018, the average weekday inbound ridership was 5,926, of which 85% was in the morning rush hour, and

98% was bound for South Station, Back Bay, or Ruggles. There is considerable potential for other ridership: the suburban towns served by the line had 19,000 residents working in Boston in 2019, and another 8,000 people worked in these towns, largely near the train stations, while living in Boston. With post-COVID commute patterns continuing to trend towards less emphasis on rush-hour commuting, capturing off-peak demand, reverse-peak commutes to suburban job centers, and non-commute trips is important to ensure continued ridership growth and mode shift from single-occupant vehicles along the corridor.

There are two routes from the line to South Station, branching at Readville. Most trains use the Northeast Corridor (NEC) to get to South Station, sharing the trunk with the Providence/Stoughton and Needham Lines. Select trains use the 9.2-mile Fairmount Line to travel between Readville and South Station. To reduce complex scheduling that harms capacity and reliability, all trains should run via either the Northeast Corridor or the Fairmount Line. We discuss the benefits and tradeoffs of each routing option in a section below.

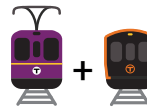



Franklin/Foxboro Line

Current



- Legend**
- Existing Line
 - Existing Line (Weekday service only)
 - Existing Station

The line carries minimal freight service, less than a train every day.

 Regional Rail & Orange Line	 Bus 34B & Orange Line
<p>Walpole Board Regional</p> <p>Back Bay Regional \$2.40</p> <p>Tufts Medical Center \$2.40</p>	<p>Walpole Center Board</p> <p>Forest Hills \$1.70</p> <p>Back Bay \$2.40</p> <p>Tufts Medical Center \$2.40</p>
 Commuter Rail & Orange Line	 Bus 34B & Orange Line
<p>Walpole Board ZONE 4</p> <p>Back Bay ZONE 1A \$8.75</p> <p>Tufts Medical Center \$11.15</p>	<p>Walpole Center Board</p> <p>Forest Hills \$1.70</p> <p>Back Bay \$2.40</p> <p>Tufts Medical Center \$2.40</p>

The current fare system charges considerably more to take a trip by rail versus a slower bus and subway transfer. Under the proposed fare system, traveling the same distance costs the same reasonable price, regardless of mode used.

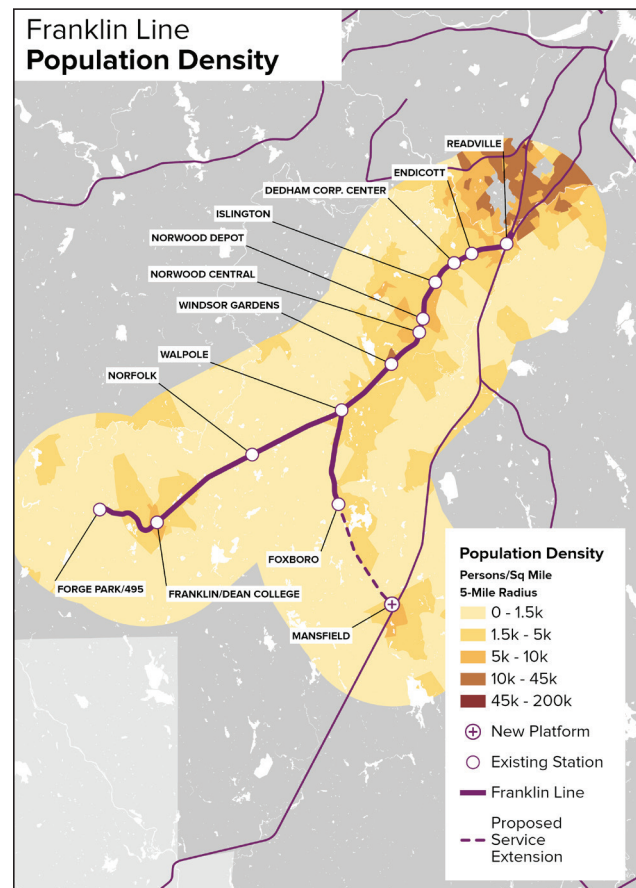
Jobs and Employed Residents

Currently, there are 18,467 jobs and 13,731 employed residents within half a mile of Franklin Line stations south of Readville.¹ Station relocations and an extension through Foxboro² Center to Mansfield would increase this to 22,922 and 16,565, respectively. Regional Rail improvements would also improve access to reverse-commute employment opportunities and stimulate Transit Oriented Development; combined with the existing MBTA Communities Law, this will significantly further increase job and resident density around Franklin Line stations.

Station / Proposed Station	Jobs within 0.5 mi	Employed Residents within 0.5 mi
Forge Park/495	1,786	168
Franklin/Dean College	1,417	1,810
Norfolk	486	258
Walpole (existing site)	1,440	669
Walpole (proposed Elm Street relocation)	2,035	717
Windsor Gardens	237	1,939
Norwood Central	3,535	2,624
	2,566 shared by Norwood Stations	1,016 shared by Norwood Stations
Norwood Depot	3,473	3,066
Islington (proposed Everett Street site)	4,348	1,073
Islington (existing site)	3,311	1,287
	425 shared by Dedham & Islington	112 shared by Dedham & Islington
Dedham Corporate Center	3,906	927

<i>Note: We observed that these jobs are recent additions and mainly originate from an office park on Rustcraft Road - These may be inflated, but we included this to be more consistent with our methodology.</i>	1,957 shared by Dedham & Endicott	177 shared by Dedham & Endicott
Endicott	2,065	2,151
Foxboro (Gillette Stadium)	909	137
Foxboro Center	2,043	1,156
Mansfield	1,205	1,732

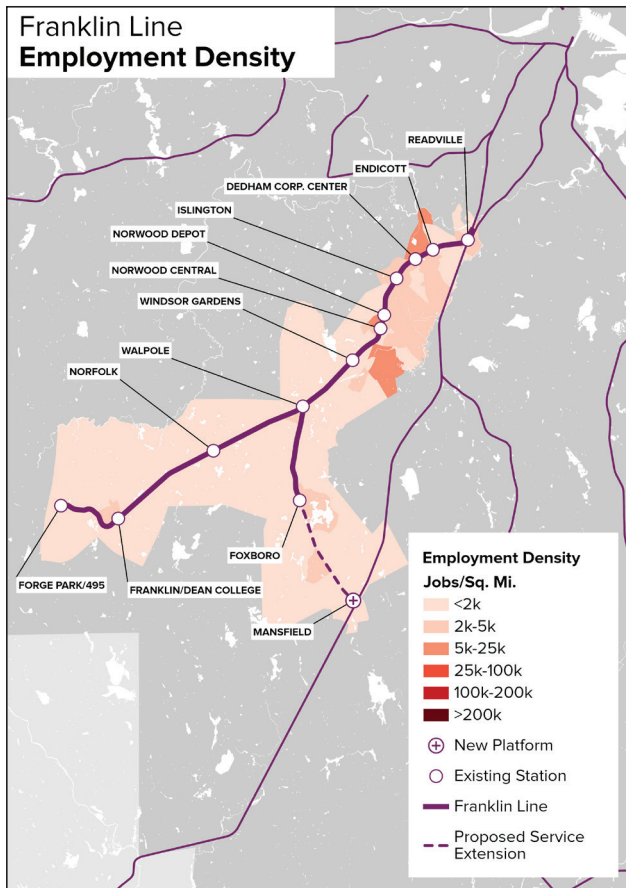
Source: US Census Bureau; OnTheMap <https://onthemap.ces.census.gov/>



Franklin Line Population Density

¹ This does not include South Station or Back Bay

² Foxborough is the spelling used by the Town, while the MBTA uses Foxboro. We use each spelling in context.

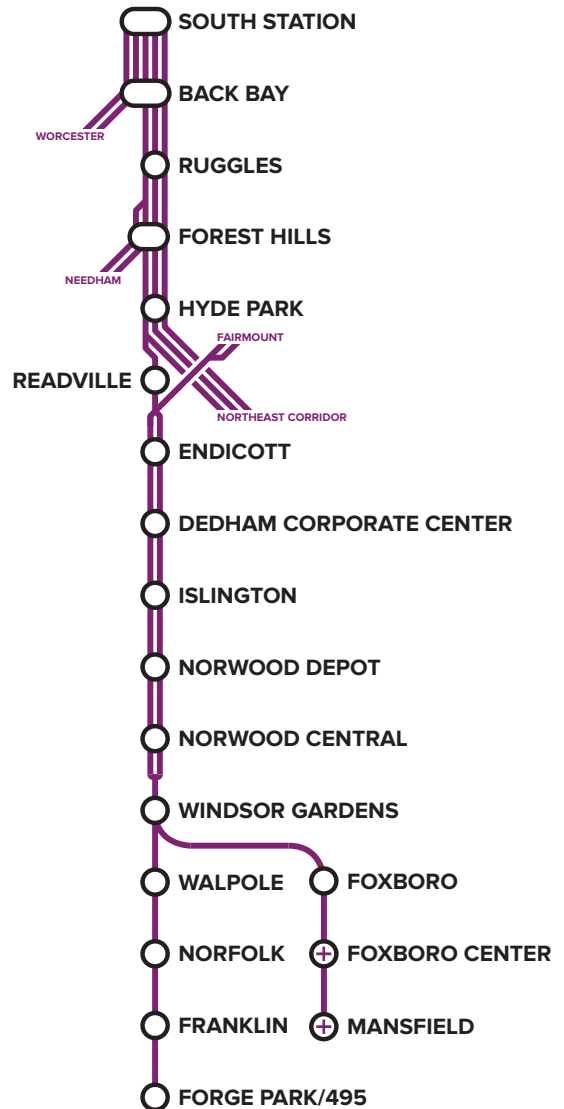


Franklin Line Employment Density

Required Infrastructure Investment

Double Track

Thanks to a 2020 project, much of the line is now double-tracked. The Northeast Corridor and Fairmount Line, both possible routes for the Franklin Line, are fully double-tracked until Readville; on the Fairmount Line, Readville station is single-track, and it will be necessary to double-track it to accommodate interlining with the Franklin Line every 15 minutes. South of Readville, the remaining single-track pinch points are just over 4 miles from Norwood Central to Walpole and approximately 5.5 miles from south of Park Street in Norfolk to the end of the line. Ongoing plans would close most of these gaps, but they remain unfunded. Fortunately, the 2024 Capital Investment Plan includes \$28.3 million for the Franklin and Norwood Central segment.



A diagram of the current trackage along the Franklin Line

Half-hourly service south of Norwood Central requires an additional doubling at the Forge Park terminal, while the Franklin station itself and the segment between Franklin and Forge Park can remain single-tracked.

The meet locations and thus double tracking needs are the same regardless of what route the trains take between Readville and South Station.

Electrification

As with the rest of the MBTA system, the Franklin/Foxboro Line should be fully electrified because of its immense benefits in terms of speed and reliability. While trains currently take about 1 hour and 12 minutes

(1:12) to connect South Station and Forge Park/495, with electrification and high platforms, this stands to fall to 44 minutes via the Northeast Corridor, and 48 minutes via the Fairmount Line cutting times by up to 35%, even with the addition of new stations on the shared trunk with the Providence Line and Fairmount Line.³

The Franklin Line particularly benefits from electrification because of the tight stop spacing between Walpole and Readville. Electric Multiple Unit (EMU) trains accelerate far more quickly than diesel trains; combined with level boarding, they reduce the dwell time at each station from 3 minutes to 60-75 seconds.

Full electrification of the Franklin/Foxboro Line requires wiring the 20.7-mile-long segment between Readville and Forge Park, the Framingham Secondary to Foxboro (and potentially to Mansfield), and ancillary electrical

High-Level Platforms

High platforms provide full-level boarding and are a key part of Regional Rail. Level boarding provides accessibility for all users, increases speed by decreasing boarding times, and improves safety by removing steps when boarding and alighting.

Currently, no station on the Franklin Line itself has a full-length high platform. Fewer than half even have mini-high platforms; Endicott, Islington, Windsor Gardens, and Walpole are not accessible for people with disabilities at all. Thus, it is a priority to install complete level boarding at all stations with high-level platforms - platforms should be at least 400 feet long and 800 feet at high-ridership stations like Walpole and Norwood Central.⁵ We expect doing so at all stations to cost about \$200 million in total, less if some platforms are shorter than 800 feet.⁶ Two stations require particular consideration due to their current placement.

infrastructure upgrades as needed. The considerable cost saving from either trunk route to Boston already being electrified could enable the electrification of the Franklin Line soon after Phase 1 electrification.

Based on Amtrak's Northeast Corridor electrification project in the late 1990s (\$5.6 million per mile in 2020 dollars), electrifying the Franklin Line should cost \$117.37 million, including catenary and supporting infrastructure. This figure is high by international standards and is used as a realistic upper bound; it is possible to achieve a lower cost with disciplined project management and attention to best practices. Based on examples from countries with a variety of prior electrification experience, the Franklin Line could cost as little as \$50 million to electrify.⁴



The current platform setup at Franklin/Dean College. Photo Credit: Garth Frantzen

³ Our analyses of the Providence/Stoughton Line and Fairmount Line call for two urban core infill stations on each line: on the Fairmount Line, at Columbia Road near Ceylon Park in Dorchester and River Street in Milton; on the Providence/Stoughton Line, regular stops with accessible bidirectional platforms at Forest Hills and Readville. An additional possibility in the latter case is a second station in Hyde Park, roughly between Metropolitan Avenue and Cummins Highway, adding approximately one minute to the trip time.

⁴ For further analysis, see the TransitMatters report [Regional Rail Electrification: Costs, Challenges, and Benefits](#) (Fall 2021) as well as research by the Transit Costs Project.

⁵ In order to ensure accessibility, varying platform lengths on the same line require open-gangway trains, where riders can seamlessly move between cars without needing to open doors. These are becoming increasingly commonplace.

⁶ Recent material cost inflation may increase this cost further, but material and construction costs have been particularly variable.



The mini-high at Forge Park/495 Station - a common sight across the Franklin Line. Photo Credit: James Wang

Walpole

Walpole Station’s current site is constrained by the Walpole Union Station building, a structure listed on the National Register of Historic Places, and a junction with the Framingham Secondary Railroad. Additionally, due to its location just south of this junction, Foxboro trains must bypass Walpole station, limiting frequency to one of the line’s busiest stations. A 2010 study recommended relocation to the northeast of Elm Street and construction of an island platform, allowing Franklin and Foxboro branch trains to serve Walpole and providing better access to Downtown Walpole. We agree with that recommendation.

Franklin/Dean College

If two side platforms are built at Franklin/Dean College, additional investment in vertical circulation to and from Main Street would be required. We recommend instead building an island platform, reducing vertical circulation needs.

Speed

The top speed should be 80 mph throughout the line, except where constrained by track geometry; the stop spacing between Walpole and Franklin is wide enough that 100 mph is possible, though time savings from this

higher speed may not be cost-beneficial. Positive Train Control, which prevents overspeed incidents and safely allows for higher speeds, is already installed on the line.

Fleet Requirements

Regardless of the route taken between Readville and South Station, 15-minute frequencies between Boston and Walpole, with half-hourly service to Forge Park and Foxboro, requires eight train sets. If all trains run via the Fairmount Line, the fleet could be combined with the fleet used for the Fairmount Line. However, Fairmount Line trains would need to be lengthened from 4 cars to 6 or 8, so they would need 32 or 48 additional cars. Assuming 7.5-minute frequencies on the Fairmount Line, with half of all trains continuing south, eight additional sets would be needed for the combined Fairmount and Franklin Line fleet.

Capital Costs

The costs below assume 15-minute peak headways on the entire line. Closing Plimptonville station reduces station costs by \$20 million. As electrification and platform improvements on both possible trunk routes to Boston - the Northeast Corridor and Fairmount Line - should be included in Phase 1 of Rail Transformation, the below cost covers electrification and platforms from Readville to points south.⁷

Project Type	Cost
Electrification	\$124.4M
Rolling Stock	Via Fairmount: Via NEC:
Double Track	\$98M
Platforms & Stations	\$207M
Total	\$429.2M⁸

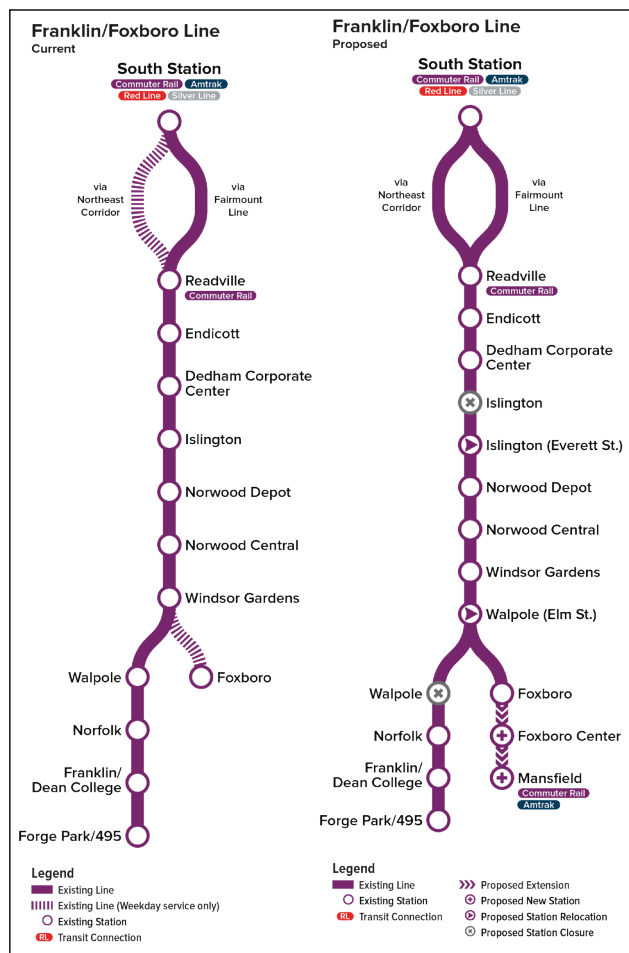
The Franklin/Foxboro Line cannot realistically serve the totality of nearby suburban jobs, as some employment centers are far from the line, and many workers at jobs near the line live far from it. However, for those who live and work within realistic travel distances, regional rail improvements and land use changes will provide

⁷ There may be right-of-way expansion needs associated with double track at Readville station on the Fairmount Line. Because these costs are unclear, we do not include a figure here.

⁸ It may be possible to reduce costs by building shorter platforms than the MBTA’s 800 foot standard, given that trains will run more frequently. A forthcoming TransitMatters report will discuss platform options in depth.

faster trips while reducing emissions and congestion and benefiting local economies. Thus, it is of paramount importance to implement these improvements to increase public transportation accessibility, equity, and transit mode share along the Franklin Line.

Dean College, with 1,600 full and part time students and around 374 faculty and staff, is directly adjacent to the Franklin station, and Forge Park/495 is close to numerous office park jobs. However, very few people use the line to reach these jobs and activity centers: on average, as of 2018, just 89 daily passengers disembarked between Walpole and Readville during the morning rush hour.



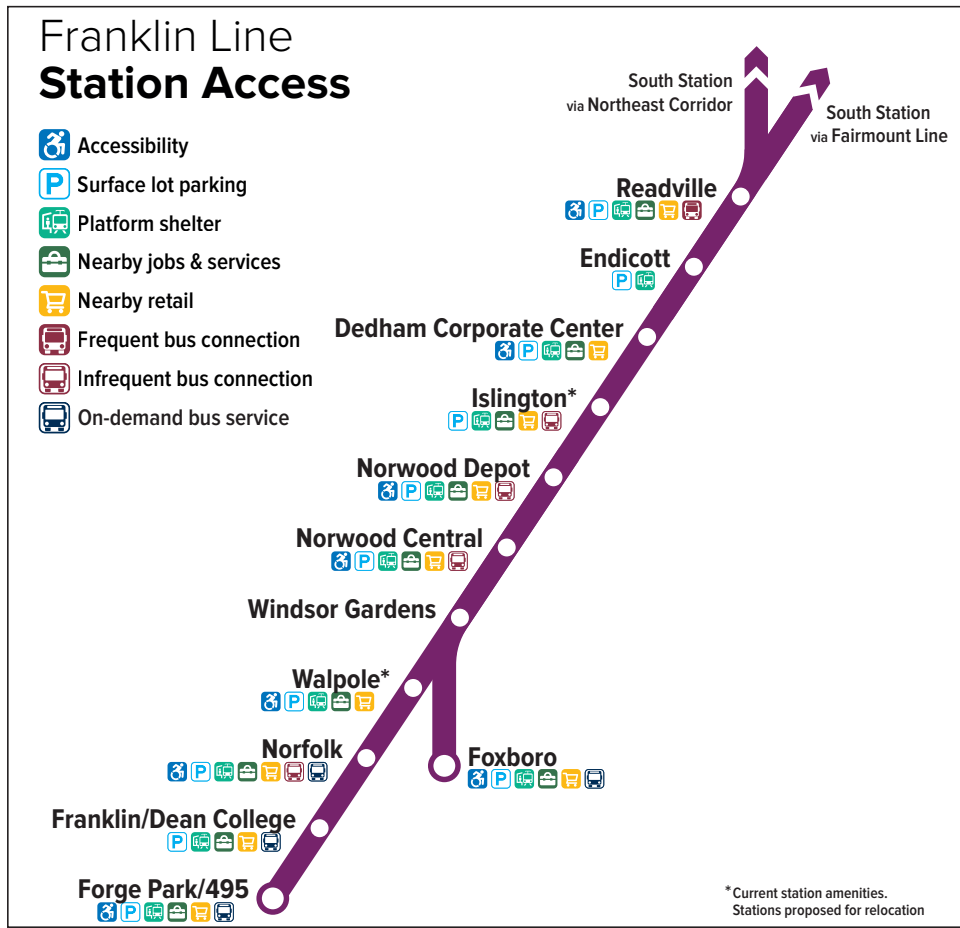
This is a factor of land use as much as poor rail service. While other commuter rail corridors, such as the Framingham/Worcester and Newburyport/Rockport lines, largely retain their urban and village center form, the land use along much of the Franklin Line is heavily auto-oriented. According to MIT’s Boston Transit Access tool, just 516 jobs of the thousands within a half-mile are walkable from the station. Thus, station relocation and active mobility improvements are equally important to growing the line’s ridership as Regional Rail reforms. Some measures are within the purview of the MBTA, while others are the responsibility of the municipalities, possibly aided by the private sector.

There have been recent efforts to retrofit auto-oriented business centers to become more compact and transit accessible. In the Washington, DC metro area, for instance, large employment centers in Fairfax County, Virginia, particularly Tyson’s Corner, have undergone rezoning and infrastructure upgrades to add mixed-use development and improve pedestrian access. Some of these efforts happened in conjunction with the extension of the Washington Metro Silver Line through this corridor. Similar retrofitting efforts have happened abroad, namely in Hong Kong.⁹

Station Access and Land Use

Between Walpole and Readville, there are 20,000 jobs and 14,000 employed residents within walking distance of a station. In Dedham, for instance, the Legacy Place complex is less than a half-mile from Dedham Corporate Center station, and Moderna’s lab, which employs 900 people, is close to the line in Norwood. Norwood has 4,442 jobs within a half-mile of its two stations, many of which can be found at nearby municipal government offices and schools, where shifts often begin and/or end outside the traditional 9-to-5 peak. South of Walpole,

⁹ Mimi Montgomery, *Tyson’s suburban-to-urban transformation still a work in progress - Axios Washington D.C.*, and Matthew Yglesias, *DC just got a new subway line, and it’s creating a new kind of city in Virginia - Vox.*



Station Relocation

Interstate 95/Route 128 cuts off Dedham Corporate Center station from nearby retail and residential areas to the south; moving the platform about 400 feet south in conjunction with rebuilding the station as fully accessible would improve connectivity.

Similarly, relocating Islington Station to Everett Street will bring it within a half-mile of 4,348 jobs, about 1,000 more than the current location, more than any other station on the line. The Moderna lab is about a mile from the Everett Street location; a closer station could encourage it to run last-mile shuttles. The company’s headquarters are in Kendall Square, accessible with a Red Line transfer at South Station; with a relocated station and frequent service, riders could seamlessly travel between both campuses by transit.

10 <https://boston.transit-access.com/>

Reconnecting Stations to Users

Dedham

Dedham Corporate Center highlights the need for safe, accessible, and pedestrian-friendly infrastructure to facilitate station access. While 3,906 jobs fall within a half mile of Dedham Corporate Center, MIT’s Boston Transit Access geospatial tool¹⁰ finds that just 516 are within a “perceived acceptable” walk. The TransitMatters Mobility Hubs Toolkit outlines best practices here. Several barriers impede access to the rail line, such as road design, vertical circulation, inaccessible rights-of-way for those with mobility constraints, and availability of walking and biking paths, all of which reduce access to jobs and hinder ridership growth.

Building a multi-use pathway under Route 128 from the relocated Dedham Corporate Center station to make the area just south of Route 128 walkable would significantly grow the

station’s actual catchment area while maintaining easy access to the north, including to newer transit-oriented development near the existing station location.



station. We recommend the construction of footpaths connecting the station’s parking lot to Forge Parkway as well as Franklin State Forest, crossing Route 140.

Transit-Oriented Development Potential

In addition to existing residential and job sites, there are several opportunities for transit-oriented development (TOD) along the Franklin Line in the form of both infill and redevelopment possibilities. There are opportunities for TOD in Norfolk, Walpole, Franklin, and, most substantially, Norwood and Foxborough, as detailed below. It is critical for these municipalities to take advantage of these opportunities for several reasons. Transit-oriented development is a key part of compliance with the MBTA Communities Law; Norwood passed its multifamily zoning plan in compliance with the law in March 2023. Moreover, TOD helps grow residential tax revenues and return foot traffic to downtowns, improving business vitality and non-residential tax receipts.

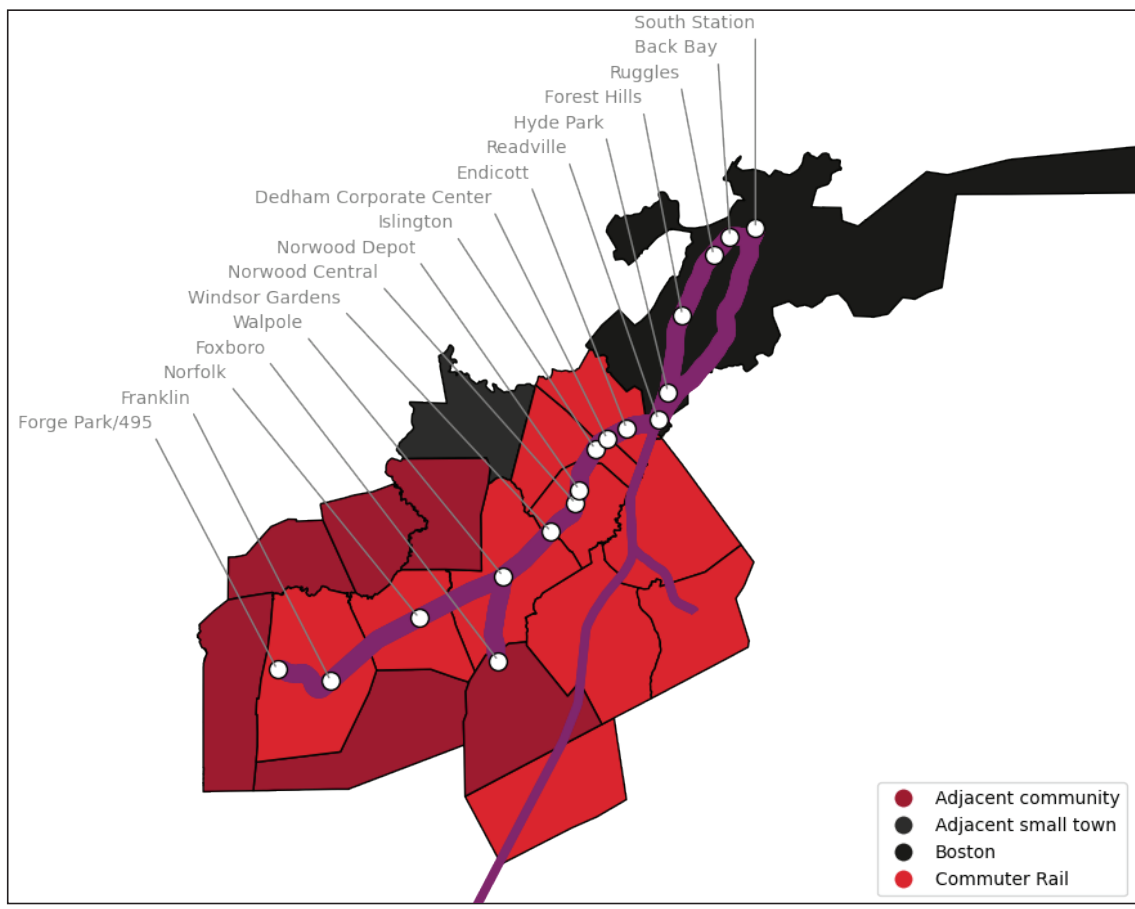
Islington

Islington station, both pre- and post-relocation, is constrained by a pedestrian-hostile environment. Sidewalk widening and traffic calming will be important in ensuring station access for all users.

Forge Park/495

The Forge Park/495 station is a park-and-ride designed to get 9-to-5 commuters from the suburbs to Downtown Boston, though it could be much more. There are more than 1,700 office park jobs within a half-mile of the station

Ridership growth is constrained by poor station access: according to the Transit Access geospatial tool, just 107 of these jobs are located within a “perceived” acceptable walk. This is largely thanks to the fact that the office buildings are south of the road, which is wide and pedestrian-hostile. Encouraging reverse commutes to the Forge Park complex by rail requires improving walk and bike access between those office parks and the



Norwood

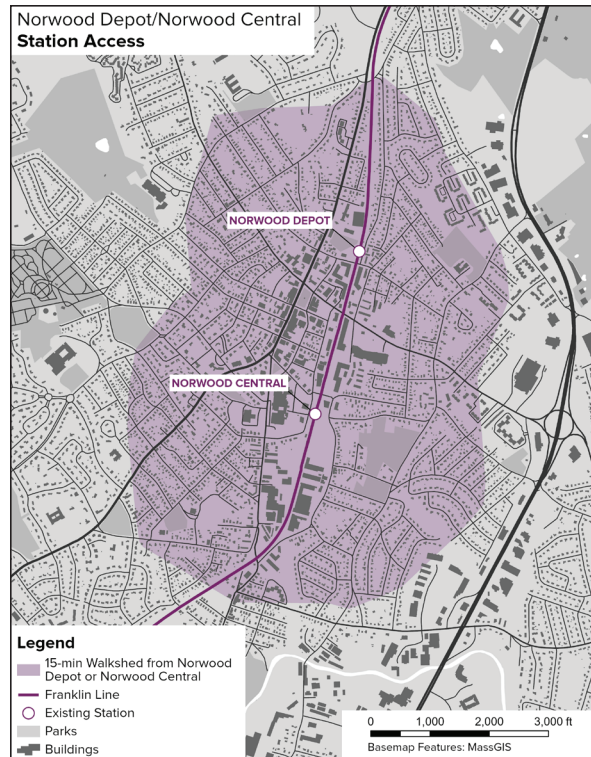
In Norwood, modest mixed-use development is feasible in the downtown central business district adjacent to Norwood Depot. Fortunately, central Norwood is already quite walkable, with extant sidewalks in a traditional downtown, although the high prevalence of surface parking lots is a barrier to walkability.



The sea of parking surrounding Norwood Central. Photo Credit: Eric M

The greatest TOD opportunity is east of Norwood Central station, currently home to commercial properties, manufacturing properties, and the commuter rail parking lot. Some station parking could be preserved by building multiple-deck parking structures or other such infrastructure. Residential construction and selectively inserted commercial pedestrian-oriented streets can lead to the station and the town's existing street grid while concealing at-grade parking.

Norwood also has at least 24.3 acres of surface parking within half a mile of Norwood Central Station, affording significant housing opportunities if redeveloped.; According to the soon-to-be-released TransitMatters Parking Explorer, building mid-sized triple-deckers on surface parking lots within 0.5 miles of Norwood Central could result in at least 884 new housing units able to house more than 2,174 people.



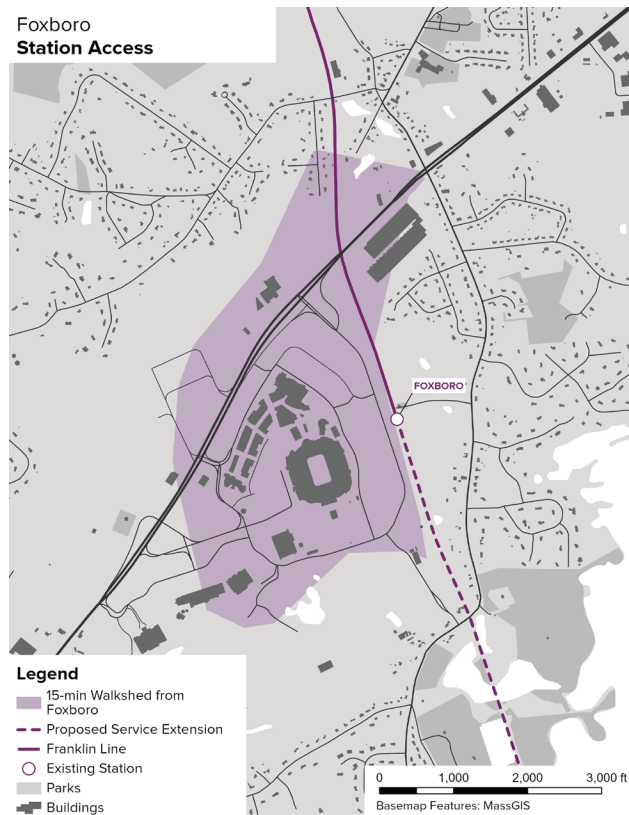
Foxborough

In Foxborough, Gillette Stadium offers a unique TOD opportunity. Extending the adjacent Patriot Place complex from its northern end at the stadium entrance plaza to the MBTA pedestrian underpass at the northeast could create a dynamic continuation of Patriot Place's pedestrian street flanked by mixed-use buildings. Frequent all-day rail service continuing to Foxborough would open up TOD opportunities either in downtown Foxborough or around Chestnut Street, depending on where the station is located.

Coordination between public transportation and land use has been a key point of strategic planning for previous host cities of major events and for stadiums more generally. Boston itself provides an example in Fenway Park, which is seeing major infill residential development around it, much of which is conducted by the park's owners and the Boston Red Sox.

Moreover, there is precedent for large-scale mixed-use development on mall sites. A number of such redevelopment projects have happened in Canada as a way to develop dense infill housing and alleviate

the housing crisis.¹¹ For example, a project currently underway in Mississauga in the Greater Toronto Area will see over 18,000 new housing units.¹²



The Fairmount Line serves dense neighborhoods in Dorchester and Mattapan, warranting high-frequency service all day, equivalent to rapid transit lines, outlined in our report *A Better Fairmount Line*. One way to increase frequency to both corridors is to route all Franklin Line trains, which currently run via the Northeast Corridor, via the Fairmount Line instead. The tradeoffs are summarized in the table below:

Issue	Franklin via Fairmount	Franklin via NEC
Travel speed	Slower route: Readville-SS is 20 minutes	Faster route: Readville-SS is 15 minutes
Near-CBD destinations	None currently; planned redevelopment at South Bay Center means future high-density development would be served at Newmarket	Ruggles, Back Bay
Reverse-commuting destinations	One-seat ride from Dorchester and Mattapan to Dedham and Norwood	One seat ride from Hyde Park and potential Cummins Highway station to Dedham and Norwood job centers (smaller population)
Existing demand	Lower: Under 900 commuters within a half-mile of the Fairmount Line work within a half-mile of the Franklin Line; 2,709 within a mile	Higher: 1,506 commuters within a half-mile of the Franklin Line work within a half-mile of Forest Hills, Ruggles, and Back Bay; 4,099 within a mile of each
Longwood Medical Area access	Bus transfer at Uphams Corner or Newmarket, longer journey	Bus transfer at Ruggles, shorter journey
Maximum frequency possible	Frequency could increase beyond every 15 minutes if demand warrants	15 minutes (limited by NEC capacity)
Fleet Needs	Fewer trainsets required (operationally less expensive)	More trainsets required (operationally more expensive)
Infrastructure needs	Slightly easier: Readville needs to be double-tracked to accommodate higher frequency in the long term.	Slightly harder: the junction needs to be grade-separated to reduce conflicts.

11 <https://www.theglobeandmail.com/real-estate/article-canada-sees-the-rise-of-mall-cities/>

12 *Ibid*

Issue	Franklin via Fairmount	Franklin via NEC
Schedule vulnerability from interlining	Moving Franklin trains to the Fairmount Line removes a branch from the Northeast Corridor. Introduces dependency on Franklin trains for Fairmount trains.	Running three moderate-frequency branches on the three-track NEC increases schedule vulnerability. Does not introduce dependency to Fairmount schedules.
Terminal capacity	Franklin and Fairmount trains sharing platforms frees NEC platforms for intercity trains	Reduces platforms available for intercity trains

Before the Fairmount Line is electrified in Phase 1, the Franklin Line should continue running on the NEC. However, due to the single track at Readville, it may be operationally advantageous for one train an hour to continue from the Fairmount Line to Norwood Central.

After electrification, regardless of the final routing of any train, riders will gain much more frequent service than exists today. At Readville, passengers can quickly transfer between the Providence, Franklin/Foxboro, and Fairmount lines, gaining access to more destinations by transit. The final routing does not greatly impact travel times for any passenger. With full electrification and accessible platforms on the Franklin Line and both trunks, the Fairmount route is 5 minutes longer than the NEC but still provides a 20-minute (34%) faster end-to-end trip time than today.

Bus Connections

Wherever possible, suburban buses should have timed connections to Regional Rail, so as to increase regional connectivity without increasing auto use. The Greater

Attleboro-Taunton Regional Transit Authority (GATRA), which operates buses near the southern half of the line, only operates one fixed route that connects to the Franklin Line. Timed Regional Rail connections would increase demand on RTAs by providing a new source of riders and improving frequency all day.¹³

Half-hourly buses can connect easily to trains traveling in both directions at any station that is served at :00, :15, :30, or :45. On our proposed Franklin Line timetable, these stations are Dedham Corporate Center and Norfolk; there are possible routes with timed connections at Dedham to Medfield and Dover, and at Norfolk to Millis and Wrentham. While these corridors are all low-density, experience in auto-oriented Toronto suburbs like Scarborough, North York, and Etobicoke demonstrates that frequent bus service with connections to rail service can drive ridership growth; these communities have a transit mode share exceeding 35%.¹⁴

Through timed bus connections with free transfers to and from Franklin Line trains, Regional Rail improvements can extend to cities beyond the terminus of today's Franklin Line. Milford, a city of 30,000, and Woonsocket, RI, a city of 43,000, sit 5-7 miles west of Forge Park/495, with relatively high population densities and walkable town centers. However, they currently lack direct transit connections to the Franklin Line, and workers using transit from Woonsocket to Boston must commute on a circuitous, two-hour ride via Providence. Well-timed bus connections would create a reliable, competitive transit trip to Boston and suburban jobs in Norwood and Dedham, expanding the potential ridership market for the Franklin Line. GATRA previously operated a commuter shuttle from Forge Park/495 to the Rhode Island state line; ridership was low, but service was extremely infrequent, with just two daily round trips. The RIPTA 2040 Transit Master Plan suggests a new route from Pawtucket, serving the Woonsocket-Forge Park Corridor. Two vehicles could connect Woonsocket and Milford to every other Franklin Line train on a 60-minute cycle.

¹³ See the *Regional Rail and Bus Coordination* document for more discussion of timed bus connections.

¹⁴ Statistics from Toronto Board of Trade, *NEXT STOP Building Universal Transit Access*

North-South Rail Link

While a significant investment, the North-South Rail Link (NSRL) would, combined with Regional Rail improvements, immensely improve mobility for the Franklin Line corridor. Riders from the North Side could easily access the line's employment hubs and Gillette Stadium by rail. Likewise, Franklin/Foxboro riders could travel to destinations north of Boston faster than driving. NSRL improves capacity and connectivity to the point that it would be reasonable to double peak frequency on each branch: a train every 15 minutes instead of every 30.

Moving Franklin/Foxboro Line trains to the Fairmount Line becomes crucial once NSRL is built. Given future Amtrak service increases, it is not feasible to boost Franklin/Foxboro frequencies beyond every 15 minutes while utilizing the NEC. Moving Franklin/Foxboro Line trains to the Fairmount Line would help balance frequencies and improve service management through the tunnel. Fortunately, NSRL decreases the drawbacks of this transition even further: riders on inbound Franklin/Foxboro trains could transfer indoors and across the platform at South Station to southbound trains stopping at Back Bay and Ruggles or Lansdowne.

15-minute peak service to Forge Park/495 requires additional double track between Franklin and Forge Park/495; Franklin/Dean College station can remain single-track and accommodate this schedule. Still, double-tracking the station is prudent to increase reliability.

Beyond immediate benefits for Franklin Line riders, the operational benefits of through-running service to the regional rail system and the Greater Boston area are significant. Among other considerations, through-running enables more efficient usage of terminal capacity and decreases the need for expensive station expansion projects while allowing existing stub-end terminal platform space to be allocated to intercity- and high-speed-rail services. This is a particularly important consideration as Amtrak works to expand service on the Northeast Corridor to meet current and projected demand.

Potential Extensions

Milford/Woonsocket

In 2020, the MBTA's Fiscal Management and Control Board (FMCB) approved the purchase of the Milford Secondary, which extends the line to Milford. This enables extending the line from its current terminus to either Milford or — with significant investment, including from the State of Rhode Island – Woonsocket, Rhode Island, with an additional intermediate stop in Bellingham.

Foxborough/Mansfield

The Framingham Secondary railroad, which trains use to reach Gillette Stadium from the Franklin Line, extends through downtown Foxborough to Mansfield, where it joins the Northeast Corridor. Extending service from Foxboro station to downtown Foxborough and Mansfield would bring service to 2,888 employed residents and 3,248 combined jobs rather than just the stadium, which is surrounded by parking and currently has event-dependent ridership. Doing so would also facilitate convenient, frequent connections to Gillette Stadium from the Providence Line. Today, the MBTA runs special event trains directly from South Station and Providence to Foxboro. Still, these have very limited frequency, meaning event-goers must time arrivals and departures around specific trains. Half-hourly trains to Mansfield, ideally timed to connect with trains to Providence, would provide more flexibility and, thus, a better rider experience than today's event trains.

Running Foxborough trains on the Northeast Corridor and terminating trains at the existing Mansfield station would introduce scheduling complications with Providence Line and Amtrak trains. Instead, an additional platform could be constructed at Mansfield station on the Framingham Secondary. Planning for new accessible high-level platforms on the Providence Line at Mansfield, already sorely needed, should consider this possibility. These both represent significantly more desirable terminal locations than Gillette Stadium.

Early Action

There is a strong case for speedy and sequenced investment in the Franklin Line. This case rests both on

the technical feasibility of discrete investments in the line and on the potential of these investments to meet growing demand. As of early 2024, commuter rail is the fastest-growing of the MBTA’s modes of transportation. The pilot of regular revenue service to Foxboro surpassed ridership goals, and permanent weekday service launched in October 2023.¹⁵

World Cup

Gillette Stadium has been chosen as one of the 16 North American sites to host games during the 2026 World Cup, with seven games planned to be held there.¹⁶The Kraft Group has advocated for and supported service to Foxboro station.¹⁷ The presence of service at Foxboro station provides a clear opportunity to upgrade infrastructure and service and mitigate the worst potential traffic effects of such an event.

We advocate that this service should align as much as possible with Regional Rail standards: frequent service (at least hourly, potentially half hourly during World Cup games), full high platforms, and preliminary work (such as design, permitting, or engineering) toward electrification. As a first step, Foxboro station should receive full-length high-level platforms to accommodate the crush-load passenger levels and to ensure access and safety for all riders. Following the example of Boston Landing, a fully-accessible station could be developed as a joint project with the Kraft Group.

The MBTA should also continue with the already-proven special event commuter rail passes. These passes have been available for purchase for transportation to and from sporting events and large concerts, including those at Gillette Stadium. These passes charge a flat fee for a round trip fare from South Station to Foxboro, typically between \$10-\$20.¹⁸ It’s also crucial that the MBTA not fall victim to its own success: planners should take care

to ensure that tickets do not sell out, and that ticketing and passenger information systems remain operational even at times of high demand.

Additional no-regrets investments include the installation of four-quadrant gates at all road crossings (and pedestrian gates where sidewalks exist). Currently, only two-quadrant gates exist at the nine road crossings between Readville and Forge Park/495 and three of the six road crossings between Walpole and Mansfield are completely unprotected (the other three have two-quadrant gates). Four-quadrant gates are an important safety measure that also leads to improved reliability. These new crossings should also receive the same high-visibility treatments that have been introduced at other road crossings in the system.

Service

Frequency

The following frequencies are feasible with electrification, double-tracking the terminal at Forge Park/495, and additional double track between Franklin and Forge Park/495:

Stations	Current	RR
South Station-Walpole	60 min	15 min
South Station-Forge Park/495	60 min	30 min
South Station-Mansfield (via Foxboro Branch)	--	30 min

With NSRL increasing capacity and demand by providing more connectivity and additional double tracking between Franklin and Forge Park/495, peak frequencies can be doubled to every 7.5 minutes. This would require all Franklin trains to move to the Fairmount Line.

¹⁵ <https://www.mbta.com/news/2023-09-28/foxboro-station-commuter-rail-pilots-success-leads-permanent-weekday-service>

¹⁶ <https://www.boston.com/sports/soccer/2023/05/18/world-cup-boston-robert-kraft-gillette-stadium-games/>

¹⁷ <https://www.thekraftgroup.com/wp-content/uploads/Partners-in-Patriotism-Newsletter-Q3-2023.pdf>

¹⁸ <https://www.cbsnews.com/boston/news/commuter-rail-tickets-bruce-springstee-karol-g-gillette-stadium/>

Travel Times

With electrification and level boarding at all stations, faster trip times are feasible. Electrification would remove the slow zone approaching South Station, speeding trains up to 30 mph. NSRL would reduce the trip time by one minute since eliminating the stub-end terminal allows trains to enter South Station at 60 mph. If trains run via the Fairmount Line, they will make all stops; the timetable below reflects that.

FRANKLIN LINE			
Station	RR via Fairmount	RR via NEC	Current
SOUTH STATION	0:00	0:00	0:00
BACK BAY	--	0:04	0:06
Ruggles	--	0:06	0:10
Forest Hills	--	0:09	--
Hyde Park	--	0:13	--
Readville	0:20	0:15	0:20
Endicott	0:22	0:18	0:25
Dedham Corporate Center	0:24	0:20	0:28
Islington	0:26	0:21	0:31
Norwood Depot	0:29	0:24	0:35
Norwood Central	0:31	0:26	0:38
Windsor Gardens	0:33	0:28	0:43
Walpole	0:37	0:32	0:47
Norfolk	0:41	0:36	0:54
Franklin / Dean College	0:45	0:40	1:01
FORGE PARK/495	0:48	0:44	1:08
Foxboro/Gillette Stadium	0:39	0:34	1:03
Foxboro Center	0:42	0:37	
MANSFIELD	0:45	0:40	

What is Regional Rail?

MBTA Commuter Rail operates as a mid-20th century service with a mid-20th century business model. It reflects out of date biases about where people and jobs are located, and about how people desire to get from one place to another. Many people no longer work on a strictly 9 am to 5 pm weekday schedule, and many more want convenient and frequent train schedules that respond to the needs of their daily lives.

“The current Commuter Rail paradigm costs way too much money for way too little ridership.”

— MBTA FMCB Chairman Joe Aiello, 11/20/17

Our current approach to Commuter Rail, as a business model, fails to offer its rider/customers the service they want and need. As a result it contributes to the region’s worsening traffic congestion, keeps Gateway Cities isolated during most of the day, and exacerbates income inequality since the inadequate service compels many to drive – for lower income people, the high cost of owning, maintaining and driving an automobile can have a crippling effect on their ability to make ends meet.

Public transit must be frequent all day, not just at rush hour. A Regional Rail system would have trains running at least every half hour all day in the suburbs and at least every fifteen minutes in Boston and other Inner Core communities.

Regional Rail requires both frequent all day service, accessible platforms and smarter equipment to provide the service. That means high-level platforms at stations to simplify and speed up boarding and alighting. It also means electrification of the system, enabling use of Electric Multiple Units to replace the current push/pull diesel fleet. EMUs will be more reliable and less expensive to maintain, will provide riders with speedier trips, and will provide better service without polluting the air around them.

A highly functioning Regional Rail system includes five critical components:

- » **Systemwide electrification** and the purchase of high-performance electric trains.
- » **High platforms**, providing universal access and speeding up boarding for everyone.
- » **Strategic infrastructure investments** to relieve bottlenecks.
- » **Frequent service all day**: every 30 minutes in the suburbs and every 15 minutes in denser neighborhoods.
- » **Free transfers** between regional trains, subways, and buses, and fare equalization with the subway in the subway’s service area.

And one useful component that will complete cross-region mobility:

- » With a modern electric Regional Rail system in place, **the North-South Rail Link (NSRL)** is the next step to drastically enhance regional mobility. NSRL allows trips between any two stations through a one-seat ride or single, seamless transfer, providing the flexibility and connectivity to which many riders and potential riders would be drawn.

MORE INFORMATION AND REPORTS AVAILABLE AT:

[HTTP://REGIONALRAIL.NET](http://REGIONALRAIL.NET)

<i>REGIONAL RAIL FOR METROPOLITAN BOSTON</i>	WINTER ‘18
<i>REGIONAL RAIL PROOF OF CONCEPT</i>	FALL ‘19
<i>REGIONAL RAIL PHASE 1</i>	SUMMER ‘20
<i>PROVIDENCE/STOUGHTON LINE</i>	SPRING ‘20
<i>FAIRMOUNT LINE</i>	FALL ‘20
<i>NEWBURYPORT/ROCKPORT LINE</i>	WINTER ‘21
<i>OLD COLONY LINES</i>	SPRING ‘21
<i>REGIONAL RAIL ELECTRIFICATION</i>	FALL ‘21
<i>HAVERHILL LINE</i>	FALL ‘21
<i>LOWELL LINE</i>	FALL ‘22
<i>FITCHBURG LINE</i>	FALL ‘23

Regional Rail has 5 transformative benefits:



Almost all commuter rail stops have poor accessibility. 32 are entirely inaccessible. High-level platforms provide step free access to all riders, including those with mobility constraints, parents with strollers, and riders with heavy equipment or suitcases.



Regional Rail improvements facilitate economic growth and provide a wider customer base for local businesses. Frequent, reliable rail can increase development near stations. Regional Rail provides a green, economical way to access our rich cultural resources and recreational amenities.



Modern electric trains create zero local emissions, reduce noise pollution, and increase reliability, making rail more attractive relative to car trips. Electrification can thus help reduce respiratory ailments in environmental justice communities, and is critical for meeting the Commonwealth's 2050 zero net emissions goals.



Regional Rail opens up new housing markets, and makes transit-oriented development more attractive. Workers who commute some or all days of the week can use the train for other longer trips, and walk or bike to local destinations. Frequent, reliable, and affordable rail service opens up new employment opportunities, particularly in Gateway Cities, which are well positioned to become employment centers in their own right.



Frequent, reliable, and affordable rail service opens up new employment opportunities. Regional Rail both reduces the “spatial-skills mismatch” that holds back employment, and provides access to vocational opportunities to boost workers’ skills. Regional Rail itself will provide up to 250,000 direct and indirect jobs during construction.



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