

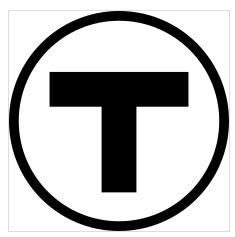
History of the MBTA

The history of the Massachusetts Bay Transportation Authority (MBTA) and its predecessors spans two centuries, starting with one of the oldest railroads in the United States. Development of mass transportation both followed existing economic and population patterns, and helped shape those patterns.

Privately owned mass transit in the Boston area evolved from the colonial period into the early 1900s, including ferries, steamships, steam commuter railroads, horse and electric streetcars, elevated railways, and subways. Many streetcar lines were consolidated into the West End Street Railway in 1887. This was merged into the Boston Elevated Railway in 1897, which that same year opened the first subway in the United States (the Tremont Street subway). Subway construction was funded by city taxpayers, and overseen by the new Boston Transit Commission. As automobiles started causing financial problems for mass transit operators, the MTA took over the BER in 1947 and began replacing inner commuter rail service with rapid transit expansions. The MTA started running ferry services in 1963. The MBTA replaced the MTA in 1964, expanding the service area to fully include the area's commuter rail services, all of which had to be taken over by the government or discontinued for financial reasons. Paratransit services began in 1977.

Except for the <u>Mattapan Trolley</u> and some portions of the <u>Green Line</u>, all streetcars were replaced by buses. The MBTA benefitted from a political turn away from highway construction in the 1970s, which resulted in relocation of part of the Orange Line. In the following decades, demand for mass transit services increased as the population migration out of the urban core toward the carcentric suburbs reversed, and overall population kept increasing.

The agency continued expanding and reactivating commuter rail services, and expanding rapid transit into the late 20th and early 21st century. The <u>Big Dig</u> (1991-2006) resulted in the creation of the Silver Line subway-busline and other promised expansions to mitigate the increased pollution caused by increased highway



MBTA "lollipop" logo, designed by <u>Tom Geismar</u> of <u>CambridgeSeven</u> architects in the 1960s. The group decided to nickname the service "The T" and modelled the logo after Stockholm's <u>Tunnelbana</u>.[1]



An MBTA train, c. 1979



An MBTA bus, c. 1972

capacity (required after a <u>Clean Air Act</u> lawsuit by the <u>Conservation Law Foundation</u>). In 2000, the state changed the MBTA financing mechanism from habitually paying expenses in arrears to getting a

fixed budget: 1% of state retail sales (out of a total 5% statewide sales tax at the time) plus assessments from cities and towns in the service area. Partly due to an increase in ecommerce, sales tax revenues were lower than expected, and because debt service for the Big Dig transit projects had been allocated to the MBTA, the agency experienced financial problems that required occasional supplemental state funding. It became a division of the newly consolidated MassDOT in 2009. During the term of Governor Charlie Baker (2015-2023), deferred subway system maintenance from the period of austerity became problematic. A 2015 snowstorm shut down two subway lines, resulting in temporary appointment of a Fiscal and Management Control Board. During the recovery from the COVID-19 pandemic, an accumulation of high-profile safety incidents resulted in a Federal Transit Administration investigation in 2022, and sudden safety-related service cuts.

Early mass transit

Mass transit in <u>Boston</u>, <u>Massachusetts</u> began as a family-owned and operated ferry about the <u>time of the founding</u> of Boston, in around 1630. [2] Ground transportation started in Boston with a private stagecoach operation in 1793. [3]

Steam intercity railroads

The steam locomotive became practical for mass transportation in the 1810s and came to the United States in the 1820s. The private Boston and Lowell Railroad was chartered in 1830, connecting Boston to Lowell, a major northerly mill town (which was also connected via the Middlesex Canal). It was one of the oldest railroads in North America and the first major one in Massachusetts. This route marked the beginning of the development of intercity railroads that eventually evolved into the MBTA Commuter Rail system and the Riverside Green Line D branch. Origins of the various rail lines are listed below:

Steam railroads also proved stiff competition for slower steamships, which gradually declined.



Steam railroads in Boston in 1880. From the <u>United States Census</u> Bureau.

Boston and Maine Railroad

The <u>Haverhill Line</u> was originally chartered as the <u>Andover and Wilmington Railroad</u> in 1833 and extended to <u>Haverhill</u> in 1837 as the <u>Andover and Haverhill Railroad</u>. The line became the Boston & Maine's first acquisition, as the result of a consolidation of three railroads between Boston and Portland, Maine.

Lowell Line — Boston and Lowell Railroad, chartered 1830

Fitchburg Line — Fitchburg Railroad, chartered 1842

The <u>Newburyport/Rockport Line</u> was originally chartered as the <u>Eastern Railroad</u> in 1836. The line first opened between <u>Salem</u> and <u>East Boston</u> in 1838. The railroad expanded until it was running from Portland, Maine to Boston, putting the line in direct competition with the Boston & Maine. In 1884, the Eastern Railroad was leased by the Boston & Maine, ending the competition and leading to an outright purchase in 1900.

Penn Central

The Penn Central Transportation Company came into existence in 1968 when the New York Central Railroad merged with the Pennsylvania Railroad, absorbing the New York, New Haven and Hartford Railroad at the beginning of 1969.

New York, New Haven and Hartford Railroad

- Providence/Stoughton Line Boston and Providence Railroad, chartered 1831; Stoughton Branch Railroad portion chartered 1841; Cranston-Wickford Junction portion opened 1837 by the New York, Providence and Boston Railroad; Providence connector opened 1848
- Fairmount Line Built in 1855 for the Norfolk County Railroad
- Needham Line Inner portion opened 1850 as a branch of the Boston and Providence Railroad, outer portion opened 1853 (Charles River Branch Railroad), connecting segment opened 1906 by the NYNH&H
- Franklin/Foxboro Line Norfolk County Railroad, opened 1849; later acquired by New York and New England Railroad

New York Central Railroad

■ Framingham/Worcester Line — Boston and Worcester Railroad, chartered 1831

Old Colony Lines

Acquired by the large <u>Old Colony Railroad</u>, much of which was since abandoned, and which later merged into the <u>New York</u>, <u>New Haven and Hartford Railroad</u> and then the <u>Penn Central</u> Transportation Company.

- Plymouth/Kingston Line Original Old Colony Railroad, opened to Plymouth in 1845
- Middleborough/Lakeville Line Randolph and Bridgewater Railroad and Middleborough
 Railroad chartered 1845
- **Greenbush Line** South Shore Railroad, chartered 1846
- Gillette Stadium spur of Providence/Stoughton Line Agricultural Branch Railroad, chartered 1847? (see Old Colony Railroad; eventually purchased by MBTA from New York, New Haven and Hartford Railroad

New York Central Bailroad

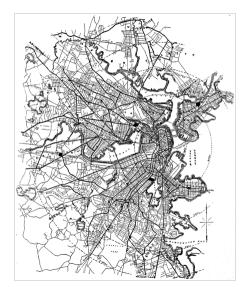
Green Line D branch — Brookline Branch Railroad, opened 1847; Charles River Branch Railroad extended from Brookline Village to Cook Junction in 1852; Boston and Albany Railroad extended to Riverside in 1886

The Grand Junction Railroad, built between 1847 and 1856, was owned by a succession of railroad companies, culminating in ownership by CSX Transportation. In 2010, this trackage, along with several other portions of CSX-owned track with current or potential future MBTA service, was purchased by the state for the MBTA. For years, the MBTA had used it only for non-revenue movement of trains between the northern and southern halves of its commuter rail system, but it now has plans to use the tracks to route some trains from west of Boston into North Station, to supplement existing routes into South Station. As of 2012, there is some community opposition from the city of Cambridge, Massachusetts, and it is not clear if or when such service will begin. [5][6] The Grand Junction trackage has also been considered for the proposed Urban Ring Project, intended to bypass severe overcrowding in the Downtown Boston rapid transit stations.

Streetcar era

The Cambridge Railroad was the first streetcar company in Massachusetts. It was chartered in 1853 to connect the West End of Boston to Central Square and Harvard Square in Cambridge via the West End Bridge. (The bridge was replaced by the current Longfellow Bridge in early August 1906). This is the same route followed by today's Red Line subway, but on the surface street network. Using horse-drawn streetcars, the Cambridge Railroad started running on March 26, 1856. Another streetcar company, the Dorchester Railroad, was chartered in 1854. Over 20 streetcar lines were laid down throughout the Boston area by these and other competing companies.

In order to regulate fares and reduce competition, the General Court of Massachusetts passed the West End Consolidation Act to consolidate the rail line operations. This created the West End Street Railway in 1885. The company consolidated ownership of existing streetcar lines in Boston and the inner suburbs and began converting the animal-drawn vehicles to electric propulsion. The first electric trolleys ran in 1889, and the last horsecar went out of service around 1900.



Planned West End Street Railway system, 1885; consolidation of these lines was complete by 1887. See also Boston horse railroads map.jpg 1880 horse railway map (https://commons.wikimedia.org/wiki/lmage:1880).

In the late 19th century and early 20th century, two other streetcar companies gained consolidated ownership of many smaller lines. The <u>Middlesex and Boston Street Railway</u> came to control the western suburbs, and the <u>Eastern Massachusetts Street Railway</u> came to control the northern and southern suburbs.

Streetcar subways and elevated rail

Severe streetcar congestion on streets in downtown Boston created the need for <u>subways</u> and elevated rail. These <u>grade-separated</u> railways would add transportation capacity, and avoid delays caused by intersections with cross streets and growing congestion in mixed street traffic. The West End Street

Railway was renamed the <u>Boston Elevated Railway</u> (BERy), and undertook several such projects.

Boston's subway was the first in the <u>United States</u> and is often called "America's First Subway" by the MBTA and others. [8] In 1897 and 1898, the <u>Tremont Street subway</u> opened as the core of the precursor to the <u>Green Line</u>. [9]

In 1901, the Main Line Elevated, the precursor to the Orange Line opened. It was a rapid transit line running as an elevated railway through outlying areas and using the Tremont Street subway



Park Street on the Green Line soon after opening, circa 1898

downtown, with the outer tracks and platforms reconfigured for Elevated trains. [10] The Atlantic Avenue Elevated opened soon after, providing a second route through downtown. This was the first elevated railway and the first rapid transit line in Boston, three years before the first underground line of the New York City Subway, but some 33 years after the first elevated railway in New York.

In 1904, the next line to open was the <u>East Boston Tunnel</u>, a streetcar tunnel under <u>Boston Harbor</u> to <u>East Boston</u>. This replaced a transfer between streetcars and <u>ferries</u> and provided access to the other subways downtown. The tunnel was converted to <u>rapid transit</u> specifications in 1924, with an easy cross-platform streetcar transfer at the East Boston end. East Boston ferry continued to run until 1952. [11]

In 1908, the <u>Washington Street Tunnel</u> opened, giving the Elevated a shorter route through downtown and returning the older Tremont Street subway to full streetcar service. [10] Various extensions and branches were built to the Tremont Street subway in both directions, bypassing more surface tracks. In addition, when the Main Line El opened in 1901, many surface routes were cut back to its <u>Dudley Square</u> and <u>Sullivan Square</u> terminals to provide a transfer for a faster route downtown. Further elevated extensions, as with the <u>Charlestown Elevated</u>, were soon built on each end, and more streetcar lines were connected.

In 1912, the <u>Cambridge Tunnel</u> opened, connecting the Downtown Boston routes to <u>Harvard Square</u> in <u>Cambridge</u>. It was soon extended south from Downtown to <u>Dorchester</u> as the <u>Dorchester Tunnel</u>. The <u>Dorchester Extension</u>, opening in stages from 1927, took the line further along a former <u>New York</u>, <u>New Haven and Hartford Railroad</u> branch through Dorchester, with the <u>Ashmont–Mattapan High Speed Line</u> continuing along the old right-of-way to <u>Mattapan</u>. This, too, resulted in cutbacks in streetcar service to its terminals.

As built, many of the key rapid transit transfer stations were prepayment stations, in which free transfers could be made between surface streetcar lines and grade-separated subway or elevated lines. This was made possible by the operation of all services under one umbrella; some suburban services that operated over the same streetcar tracks used different areas outside <u>fare control</u>. Some of the streetcar levels in transfer stations were later converted for bus or <u>trackless trolley</u> operation; other such spaces have been closed. Some of the prepaid transfer areas still exist architecturally, and faregates enclose all subway stations (but not most above-ground Green Line stops).

Free in-station transfers were eliminated in October 1961, except among subway routes at the transfer stations in Downtown Boston. Transfers between bus and rapid transit were restored, in a limited capacity in 2000, and in full in 2007 as long as a CharlieCard is used. Transfers between bus and subway are reduced price but not free, while a single transfer between one local bus and another is free.

Prepayment streetcar stations included rapid transit transfer stations at <u>Andrew</u>, <u>Ashmont</u>, <u>Broadway</u>, <u>Dudley</u>, <u>Egleston</u>, <u>Everett</u>, <u>Fields Corner</u>, <u>Forest Hills</u>, <u>Harvard</u>, <u>Lechmere</u>, <u>Massachusetts</u>, <u>Maverick</u>, and Sullivan Square; surface-streetcar-only stations at Arborway, Kenmore, and Watertown Yard.

Mid-20th century

Decline of streetcars and railroads

The Boston Elevated Railway started replacing rail vehicles with buses in 1922, a process later dubbed "bustitution". The last Middlesex and Boston Street Railway streetcars ran in 1930. The BERy started replacing some rail vehicles with trackless trolleys in 1936.

By the beginning of 1953, the only <u>remaining streetcar lines</u> fed two tunnels — the main <u>Tremont Street subway</u> network downtown and the short tunnel (now the <u>Harvard bus tunnel</u>) in <u>Harvard Square</u>. Diesel-powered buses could not be used in the tunnels due to the problem of venting exhaust fumes.

In 1958, the Harvard Square tunnel routes were replaced with electrically powered trackless trolleys, which were the only such MBTA routes. A short non-revenue connection from the terminus of the #71 trackless trolley out of Harvard Square runs to the <u>Watertown Carhouse</u> for maintenance. In the 21st century, with the new Phase 2 <u>Silver Line</u> in South Boston, trackless trolley services were extended for the first time in decades.

The old elevated railways proved to be an eyesore, and several sharp curves following Boston's twisty streets became more problematic because of severe speed limitations, high maintenance, and noise. The beginning of the decline of the Atlantic Avenue Elevated line was the Boston molasses disaster of 1919, which interrupted service on the line. After another serious accident in 1928, the Atlantic Avenue Elevated was partially closed, running as a stub shuttle. In 1938, it was completely shut down and then demolished for scrap metal in 1942.

In 1944, passenger service on the <u>Fairmount Line</u> was canceled by the <u>New York, New Haven and Hartford Railroad</u> after a long period of declining ridership. As rail passenger service became increasingly unprofitable, largely due to the increasingly popular <u>automobile</u>, government takeover became necessary to prevent abandonment of commuter rail services by bankrupt railroad companies.

MTA incorporation and takeovers

In 1947, the newly formed Metropolitan Transit Authority (MTA) purchased and took over subway, elevated, streetcar, and bus operations from the <u>Boston Elevated Railway. [12]</u> The original MTA district consisted of 14 cities and towns — <u>Arlington</u>, <u>Belmont</u>, <u>Boston</u>, <u>Brookline</u>, <u>Cambridge</u>, <u>Chelsea</u>, Everett, Malden, Medford, Milton, Newton, Revere, Somerville, and Watertown.

A state commission headed by Lieutenant Governor <u>Arthur W. Coolidge</u> published in 1947 an ambitious plan to replace private commuter rail services (which were losing money) with higher-frequency electric rapid transit that would run roughly out to what is now the <u>Massachusetts Route</u> 128 corridor. The goal was to shift commuters from automobiles and buses and deal with the "intolerable traffic conditions in downtown Boston". [13] The MTA successfully implemented a few rapid transit expansions, but progress was slowed as automobile ownership increased and the Federal-Aid Highway Act of 1956 diverted many commuters off of mass transit.

Between 1952 and 1954, the Revere Extension (now part of the <u>Blue Line</u>) opened to <u>Wonderland</u>, mostly along the former narrow-gauge Boston, Revere Beach and Lynn Railroad right-of-way.

In 1959, MTA streetcar service opened on what is now the Riverside Green Line D branch, connecting to the Boylston Street subway and using trackage purchased from the New York Central Railroad, which had stopped running on the line the previous year. The new service required much more rolling stock than expected, due to heavy ridership.

Also in 1959, with the opening of the <u>Southeast Expressway</u>, the <u>New York, New Haven and Hartford Railroad</u> halted passenger service on the former <u>Old Colony Railroad</u> lines. The replacement rapid transit service did not open <u>until a dozen years later</u>, with the service finally going just beyond <u>the new Expressway</u>'s southern end nine years afterward.

Meanwhile, the last two streetcar lines running into the <u>Pleasant Street Portal</u> of the <u>Tremont Street subway</u> were replaced with buses in 1953 and 1962, and the portal has since been covered over by a public park.

When the MTA reintroduced year-round ferry service to Hull in 1963 (now MBTA boat), it was the only commuter boat service in the United States.

MBTA incorporation

Formation and commuter rail takeovers

On August 3, 1964, the MBTA succeeded the MTA, with an enlarged service area of 78 cities and towns. A 79th community (Maynard) joined in or before 1972 and left in or after 1976.

The MBTA was formed partly to <u>subsidize</u> existing commuter rail operations, provided at that time by three private railroad companies — the <u>Boston and Maine Railroad</u>, the <u>New York Central Railroad</u> (via the <u>Boston and Albany Railroad</u>), and the <u>New York, New Haven and Hartford Railroad</u> — with the B&M running the north-side lines and the NYC and NYNH&H (both merged into Penn Central in 1968, and taken over by Conrail in 1976) on the south side. The MBTA soon began to subsidize the

companies, and acquired the lines in stages from 1973 through 1976, but with major cutbacks in service and coverage area. Since then, many of these lines have seen service return, most notably the Old Colony Railroad (NYNH&H) lines to the South Shore.

By 1964, commuter rail service to Worcester was being provided. In 1965, the Boston and Maine Railroad started receiving MBTA subsidies for its commuter service. In 1973, the MBTA bought most of its present-day commuter rail trackage from the Boston and Maine Railroad and Penn Central (into which the New York Central Railroad and the New York, New Haven and Hartford Railroad had merged). It also purchased rolling stock at this time. Trackage between Framingham and Worcester was not acquired by the agency, and due to a lack of state subsidy, commuter rail service on this portion was cut in 1975. Service was resumed in 1994, though the track was still privately owned until the state purchased it from CSX Transportation in 2011. The Fairmount Line was purchased from Penn Central in 1976. Passenger service resumed there in 1979 during diversion of other lines during Southwest Corridor construction and was continued even after the project was complete.

Bus expansion and streetcar cutbacks

In 1965, the MBTA assigned colors to its four rapid transit lines on the advice of the <u>CambridgeSeven</u> architectural consulting group, and lettered the branches of the Green Line from north to south. However, shortages of streetcars, among other factors, eventually caused bus substitution of rail service on two branches of the Green Line. In 1969, the <u>A branch</u> was replaced by bus service in its entirety. In 1985, the portion of the E branch from Heath Street to Arborway was replaced by buses.

In 1968, the MBTA purchased bus routes in the outer suburbs to the north and south, from the Eastern Massachusetts Street Railway. Western suburban routes were purchased in 1972 from the Middlesex and Boston Street Railway. (Both of these companies had long since ceased running any streetcar service). A few routes to the north were taken over from Service Bus Lines in 1975, and one in the south in 1980 from the Brush Hill Transportation Company. As with the commuter rail system, many of the outlying routes were dropped soon before or after the takeover, due to low ridership and high operating costs, and out-of-district communities' refusal to join or contract with the MBTA.

Rapid transit expansion

In the 1970s, the MBTA received a boost from the <u>BTPR</u> areawide re-evaluation of the role of transit relative to highways. Following a moratorium on major highway construction inside Route 128, numerous transit lines were planned for expansion by the Voorhees-Skidmore, Owings and Merrill-ESL consulting team.

The <u>Charlestown Elevated</u>, part of the <u>Orange Line</u> north of downtown Boston, was replaced by the *Haymarket North Extension* in 1975.

The *Braintree extension*, a branch of the Red Line to <u>Braintree</u>, opened in stages from 1971 to 1980, upgrading an existing rail corridor. The <u>Red Line Northwest Extension</u> to <u>Alewife</u> opened in 1985, with an intermediate opening in 1984, partly along a railroad corridor and partly through a newly built deep-bore tunnel.

The southern part of the <u>Washington Street Elevated</u> lasted until 1987 when the <u>Southwest Corridor</u> was opened, rerouting service from discontinued elevated trackage to new facilities in a parallel existing rail corridor. The closure of the Washington Street Elevated south of downtown Boston brought the end of rapid transit service to the <u>Roxbury</u> neighborhood, which was eventually replaced with the Silver Line bus rapid transit.

These extensions provided not only additional subway system coverage but also major <u>parking</u> structures at several of the terminal and intermediate stations. For example, the <u>Route 2 freeway</u> ends at the <u>Red Line</u> terminus, <u>Alewife</u> station, where there is a large parking garage operated by the MBTA.

With the 2004 replacement of the <u>Causeway Street Elevated</u> by a subway tunnel connection, the only remaining <u>elevated railways</u> are a short portion of the <u>Red Line</u> at <u>Charles/MGH</u>, and a short portion of the Green Line between Science Park and Lechmere.

21st century

MBTA expansion and the Big Dig

In 1999, the district was expanded further to 175 cities and towns, adding most communities that were served by or adjacent to Commuter Rail lines (again including Maynard). The MBTA did not assume responsibility for local transit service in those communities, some of which run their own buses, and some of which depend on private bus services.

Prior to July 1, 2000, the MBTA had been automatically reimbursed by the Commonwealth of Massachusetts for all costs above revenue collected (net cost of service). Beginning on that date, the T was granted a dedicated revenue stream consisting of amounts assessed on served cities and towns, along with a dedicated 20% portion of the 5% state <u>sales tax</u>. Going forward, the MBTA now would have to live within this "forward funding" budget.

The Commonwealth assigned to the MBTA responsibility for increasing public transit to compensate for increased automobile pollution from the <u>Big Dig</u>. The T submerged a nearby portion of the Green Line and rebuilt <u>Haymarket</u> and <u>North Stations</u> during Big Dig construction. However, these projects have strained the MBTA's limited resources, since the Big Dig project did not include funding for these improvements. Since 1988, the MBTA has been the fastest expanding transit system in the country, even as <u>Greater Boston</u> has been one of the slowest growing metropolitan areas in the United States. When, in 2000, the MBTA's budget became limited, the agency began to run into debt from scheduled projects and obligatory Big Dig remediation work, which have now given the MBTA the highest debt of any transit authority in the country. In an effort to compensate, rates underwent an appreciable hike on January 1, 2007. Increasingly, local advocacy groups are calling on the state to assume \$2.9 billion of the authority's now approximate debt of \$9 billion, the interest on which severely limits funds available for required projects. [15]

In 2006, the creation of the MetroWest Regional Transit Authority saw Framingham, Natick, Weston, Sudbury, Wayland, Marlborough, Ashland, Sherborn, Hopkinton, Holliston, and Southborough subtract their MWRTA assessment from their MBTA assessment. Communities that are also members of other RTAs such as CATA, MVRTA, LRTA, WRTA, GATRA, and BAT may also subtract their RTA assessment from their MBTA assessment. The amount of funding the MBTA received remained the same; the assessment on remaining cities and towns increased but is still allocated by the same formula. On October 31, 2007, the MBTA reestablished commuter rail service to the Greenbush section of Scituate, the third branch of the Old Colony service. Rail renovation on the Green Line D branch took place in the summer of 2007. New, low-floor cars on the line were introduced on December 1, 2008.

In 2008, <u>Daniel Grabauskas</u>, then the MBTA General Manager, revealed that the MBTA cut trips from published train and bus schedules without informing passengers, referred to as "hidden service cuts", saying this misrepresentation of service had been happening for years. Grabauskas said this practice has been ended. [18]

On June 26, 2009, Governor <u>Deval Patrick</u> signed a law to place the MBTA along with other state transportation agencies within the administrative authority of the <u>Massachusetts Department of Transportation</u> (MassDOT), with the MBTA now part of the Mass Transit division (MassTrans). [19][20][21][22] The 2009 transportation law continued the MBTA corporate structure and changed the MBTA board membership to the five Governor-appointed members of the Mass DOT Board. [23]

Rhode Island, which has funded commuter rail service to <u>Providence</u> since 1988, paid for extensions of the <u>Providence</u>/Stoughton Line to <u>T.F. Green Airport in 2010 and Wickford Junction in 2012. The <u>Fairmount Line</u>, located entirely in the southern reaches of Boston, has been undergoing an improvement project since 2002. The first new station, Talbot Avenue, opened in November 2012. [24]</u>

Debt concerns, route cutbacks, and fare increases

Claims have been made by the Pioneer Institute that since 1988 the MBTA has been the fastest expanding transit system in the country, even as <u>Greater Boston</u> has been the slowest growing metropolitan area. However, research by the Frontier Group finds that "no category has the MBTA been the "fastest-growing" of the nation's largest transit agencies, and in only two categories does it crack the top 10. However, the MBTA does crack the top 10 in another category: absolute growth in transit ridership." [26]

When, in 2000, the MBTA's income was capped, the agency began to run up large debts from already-scheduled projects and obligatory Big Dig remediation work. As of 2012, the MBTA has the highest debt of any transit authority in the United States. In an effort to compensate, rates were hiked on January 1, 2007, from \$1.25 up to \$2.00 per subway ride with a CharlieTicket, and \$1.70 with a CharlieCard. Increasingly, local advocacy groups are calling on the state to assume \$2.9 billion of the authority's debt, which totals approximately \$9 billion. The interest on this debt is a large proportion of the MBTA's annual expenses, and severely limits funds available for any further required projects. [28]

In April 2012, the MBTA Advisory Board approved major fare increases on all MBTA services, and cutbacks or terminations of some transit routes. In July 2014, fares were increased further by an average of 5%.

T-Radio

On October 10, 2007, the MBTA introduced a pilot program in North, South, and Airport stations called T-Radio. The program would have been expanded to pipe in music, light news, weather, entertainment tips, and eight to ten minutes of commercials each hour to every MBTA subway station. After the agency received an overwhelming number of e-mails - 1,800, mostly complaints - it decided to shelve the program on October 25.

Major incidents

On May 28, 2008, a westbound trolley on the <u>Green Line D branch</u> slammed into a stopped train between the <u>Waban</u> and <u>Woodland</u> stations shortly after 6 p.m. At least seven people were injured, and the operator of the moving train, Terrese Edmonds, 24, was killed. On May 8, 2009, two Green Line trolleys collided between <u>Park Street</u> and <u>Government Center</u> when the driver of one of them, 24-year-old Aiden Quinn, was <u>text messaging</u> his <u>girlfriend</u>. A rule banning cell phones for operators while driving their bus, train, or streetcar was put into place days later.

Immediately following the <u>Boston Marathon bombing</u>, the MBTA was partially shut down and National Guardsmen were deployed in various stations around the city. During the ensuing manhunt for Dzhokhar and Tamerlan Tsarnaev the MBTA was fully shut down until the stay-inside request for Watertown, Newton, Waltham, Cambridge, Belmont, and Boston was lifted. During the manhunt, MBTA buses were used to ferry police around the city. After the suspect was caught the MBTA resumed normal service. The next day the MBTA began displaying "BOSTON STRONG" and "WE ARE ONE BOSTON" on buses and subway cars, in addition to the destination that is normally displayed. [36]

Charlie Baker administration (2015–2023)

Crisis and appointment of control board

In February 2015, there was record breaking snowfall in Boston from the 2014–15 North American winter causing a partial shutdown and severe delays on all MBTA subway lines, [37] and many long-term operational and financial problems with the entire MBTA system came under greater public attention. [38][39] Massachusetts Governor Charlie Baker indicated at the time that he was reluctant to discuss the financing issues but that he would "have more to say about that in a couple of weeks." [40]

Following criticism of his emergency management and polling demonstrating public opinion in favor of his administration prioritizing resolving the MBTA's issues, [41][42] Baker announced the formation of a special advisory panel to diagnose the MBTA's problems and write a report recommending proposals to address them. [43] The special advisory panel released its report that April. [44] The report was broadly critical of MBTA operational and financial management, noting that the system was in "severe financial distress", was "governed ineffectively", spent inefficiently, and had a high-absentee

workplace culture. [45] Among other reforms, the report recommended suspending the governance of the agency by the MassDOT Board of Directors; replacing it with a temporary Fiscal and Management Control Board directly appointed by the Governor and the leadership of the state legislature; expanding the existing MassDOT Board; and adding term limits. [46] The MassDOT Board resigned on Baker's request the following week. [47] Legislation, which closely followed the report's recommendations, [48] passed the following July [49] along with the appointment of the Fiscal and Management Control Board. [50][51] Baker also appointed a new MassDOT Board of Directors and proposed a five-year, \$83 million winter resiliency plan. [52][53]

Governance

After initially blaming the snowfall and a lack of public investment in an aging system for the crisis, MBTA General Manager Beverly Scott announced her resignation effective April 11. MassDOT Chief Operating Officer and Highway Division Administrator Frank DePaola was appointed to fill Scott's position. DePaola retired June 30, 2016, and was replaced with Brian Shortsleeve. Shortsleeve swapped positions with Fiscal and Management Control Board vice chair Steve Poftak on June 30, 2017. Baker launched a search for a permanent MBTA General Manager in February 2017.

That August, the MBTA named former <u>General Electric</u> executive Luis Ramirez to be its new general manager. [60] Ramirez's previous management experience, as well as the process for vetting him, [61] came under public scrutiny and criticism because of a twice-dismissed class action lawsuit during his tenure as CEO of the <u>Dallas</u>-based Global Power Equipment Group. [62][63] Even so, Baker spoke in favor of Ramirez, [64] who began his tenure as MBTA General Manager on September 12, 2017. [65] Ramirez left the position effective January 1, 2019, and was replaced by Steve Poftak. [66] In June 2021, the Fiscal and Management Control Board was dissolved, [67] and the following month, Baker signed into law a supplemental budget bill that included a provision creating a permanent MBTA Board of Directors and Baker appointed the new board the following October. [68][69]

Injuries involving a Green Line collision and Back Bay escalator malfunction, a dragging death on the Red Line, a fatal Commuter Rail collision with a car, and a death resulting from a fall through a rusty staircase attracted considerable public attention. [70] In April 2022, the Federal Transit Administration announced in a letter to general manager Poftak that it would assume an increased safety oversight role over the MBTA and would conduct a safety management inspection. [71][72]

The FTA soon found subway dispatchers working 20-hour shifts due to a staffing shortage. The MBTA cut rush hour service frequency on the Red, Blue, and Orange Lines to allow dispatchers and subway supervisors adequate rest. Federal inspectors also issued emergency directives concerning runaway trains in yards, and the backlog of track maintenance, which caused about 10% of the subway system to be under speed restriction. After an Orange Line train fire endangered hundreds of passengers and caused one to jump off a bridge into the Mystic River, the MBTA decided to shut down the entire Orange Line for 30 days to accelerate track work and re-open with all new subway cars. In December 2022, the Orange Line was unable to meet even its reduced schedule when about half the trains were pulled from service without notice to passengers, due to problems with electrical arcing.

The full FTA safety report released in August 2022^[77] demanded an increase in staffing and retention of senior employees; collection of, prioritization of, and decision-making based on safety-related risks, failures, and precursors; clarification of safety communication-related procedures for frontline workers; oversight of failures to implement safety requirements; more resources for formal technical training; addressing radio dead zones; more independent quality assurance; more active and independent safety oversight by the Massachusetts Department of Public Utilities.^[78]

Service cuts and improvements

In June 2015, the MBTA scaled back the schedule for a one-year pilot program to expand late-night service on weekends, [79] having expanded it that February. [80] The program was cut in March 2016. [81] Despite this setback, improvements were made to service during this time. In October 2015, the MBTA announced that the Commuter Rail was adding nonstop trips during peak commute times along the Framingham/Worcester Line between Back Bay and Worcester Union Stations. [82] In March 2016, the MBTA reopened Government Center Station after two years of construction upgrades. [83] In September 2016, a month after Baker signed into law a regulatory framework for ridesharing companies, [84] Baker and the MBTA announced a pilot program partnering the MBTA's The Ride with Uber and Lyft to improve paratransit services for disabled riders, [85] which was expanded the following February to all users of The Ride.

In December 2016, the MBTA Fiscal and Management Control Board approved a proposal to replace all MBTA Red Line fleet vehicles by 2025. [87] In January 2017, the MBTA announced that the new Boston Landing Station on the Commuter Rail's Framingham/Worcester Line would open the following May. [88] A groundbreaking for the \$38.5 million renovation of Ruggles Station, in Roxbury, occurred that August. [89] In April 2017, the Federal Transit Administration approved a revised cost estimate for the Green Line Extension proposed by the MBTA Fiscal and Management Control Board and the MassDOT Board of Directors, allowing the project to be eligible for federal funding. [90][91] The Green Line Extension broke ground in Somerville in June of the following year. [92]

In April 2018, the MBTA began a one-year pilot program for early morning bus service along certain MBTA bus routes in Boston (which the Fiscal and Management Control Board voted to make permanent the following December), [93][94] and the MBTA Silver Line began operating a route from Chelsea to South Station. [95] In June 2018, the MBTA began a 3-month pilot of a summer weekend Commuter Rail fare of \$10 for unlimited use, which was subsequently extended another three months. [96][97] Also in June 2018, the MBTA announced parking fee changes based on parking lot usage, [98] and the MBTA released estimates showing that the proposed North-South Rail Link would cost between \$12.3 billion and \$21.5 billion. [99] In January 2019, following a one-month hiatus, MBTA General Manager Steve Poftak announced that the Federal Transit Administration approved a six-month extension of the Commuter Rail weekend fare pilot beginning that month, [100] which the Fiscal and Management Control Board voted to make permanent the following March. [101]

Budget balancing and fares

In August 2015, MBTA officials released revised estimates of the MBTA's State-of-Good-Repair backlog upwards to \$7.3 billion. While MBTA officials announced the following month that advertising revenue was running 26 percent higher that year than at the same time the previous

year, [103] the Fiscal and Management Control Board released its first report. The board report showed that the MBTA's operating expenses and debt service were growing nearly three times the rate of revenue growth—being projected to grow from a projected \$170 million in fiscal year 2016 to a projected \$427 million by fiscal year 2020 if left unaddressed—and that operator absences accounted for 69 percent of the 34,347 dropped bus runs and subway trips between January and August of that year. [104][105] The Fiscal and Management Control Board voted to increase fares across the system by an average of 9.3 percent that March. [106] However, according to an April 2016 estimate, the agency was losing \$42 million per year due to fare evasion (amounting to approximately one-fourth of the agency's \$170 million operating budget deficit in fiscal year 2016). [107][104] In June 2016, the MBTA Fiscal and Management Control Board voted unanimously to indefinitely extend a pilot program of discounted passes for low-income youths and to increase the maximum age for participation in the program to 25. [108]

In July 2016, after the Fiscal and Management Control Board completed its first year, Baker addressed the status of MBTA operations and financial management. There was significant progress, including a leveling of the MBTA operating expense budget between the 2015 and 2016 fiscal years (after a 5 percent per year increase over the previous 15 years), a 25 percent decline in operator absenteeism, a 30 percent decline in overtime expenses, a one-third decline in dropped bus runs, and improvements to system infrastructure. [109] However, at the same time, Baker noted that the MBTA was "still in very tough shape", reiterating concerns about the MBTA pension system, [110] the security of the MBTA's cash-handling operations, [111] need for reform to the MBTA's procurement and contracting system, and improvements to its infrastructure maintenance system highlighted in the advisory panel report. [112] Also in July 2016, Baker signed into law a bill capping MBTA fare increases to 7 percent once every two years. [113]

In October 2016, the MBTA Fiscal and Management Control Board voted to outsource the MBTA's cash-handling operations to the security company Brink's on a \$18.7 million, five-year contract, a decision opposed by unions and elected officials. [114][115] The MBTA also extended its existing contract with the Boston Carmen's Union in December 2016 through 2021 with new wage structures that would reduce the MBTA's operating budget by \$80 million over the subsequent four years. [116] The following month, the agency outsourced its warehousing and parts-delivery operations to an external vendor for \$28.4 million on a five-year contract. [117]

In April 2017, the Fiscal and Management Control Board approved a \$1.98 billion budget which reduced the MBTA operating budget deficit from \$42 million to \$30 million. [118] The following month, Baker approved the Fiscal and Management Control Board's request to exercise the two-year extension option to continue its governance of the MBTA allowed under the law that authorized its formation. [58] In July 2017, interim MBTA General Manager Steve Poftak said that the MBTA would accelerate its capital spending from an average of \$437 million (excluding expansion projects) in the previous five years to \$702 million for fiscal year 2019. [119] Simultaneously, Poftak also noted that the MBTA was "saving money" by outsourcing "ancillary" operations to vendors. [120]

In November 2017, the MBTA Fiscal and Management Control Board voted to award a 13-year contract for \$723 million to the <u>Cubic Corporation</u> to design, implement, and operate a new fare collection system for the MBTA by 2020. [121] In February 2018, MBTA General Manager Luis Ramirez announced to the Fiscal and Management Control Board that the MBTA would face a \$111 million

operating budget deficit for fiscal year 2019. However, that August, MBTA officials announced that the agency had finished the 2018 fiscal year with a balanced operating budget for the first time in a decade. [123]

COVID-19 pandemic

In February 2020, the <u>COVID-19 pandemic</u> began to impact Massachusetts. When the stay-at-home advisory was issued the following month, businesses closed or sent staff to work from home, and people were advised to avoid riding public transit unless necessary. At the lowest point, MBTA ridership dropped about 78% on buses, 92% on the subway, on 71% paratransit, and 97% on commuter rail. Bus and subway ran on a modified Saturday schedule; commuter rail was on a reduced schedule and ferries were shut down completely. To facilitate social distancing from drivers, buses started running fare-free with rear-door-only boarding, passengers were required to wear face masks (except small children and people with relevant medical conditions), and the agency began frequently sanitizing vehicles and stations. Driver availability was limited as some employees contracted the virus. The T received \$827 million in federal aid for FY2020 and FY2021 to make up for increased costs and lost revenue. [125]

In June, the MBTA announced that commuter rail tickets and passes valid as of March 10 would be valid for 90 days, starting on June 22. It also made various fare changes to encourage riders to shift from potentially crowded bus or subway, including discounted ten-ride tickets, half-price tickets for youth, and Zone 1A fares extended to Lynn and River Works stations. [126]

2021 budget proposal

Due to the COVID-19 pandemic, ridership on the MBTA has declined by $87\%^{\boxed{[127]}}$ which has forced Massachusetts legislators and the MBTA to potentially implement a plan that would eliminate weekend commuter rail services and shut it down after 9 p.m. on weeknights, eliminate 25 bus routes, stop subway and bus services at midnight, among other changes to scale back services. This plan, if implemented through a vote by the Fiscal and Management Control Board, would save Massachusetts more than \$130 million. The loss in services could potentially mean that up to 1,700 riders will not be able to take the bus and 733 riders will not be able to take the train. Supporters of this plan believe that this is the best plan as the majority of ridership has decreased due to the pandemic and it is not feasible to continue providing services that would not be used, especially if there are alternatives to using public transportation, such as personal vehicles. Through saving money by cutting services, the city is planning on using the money for services once the pandemic has ended. [128] Supporters claim that reduced services will still be sufficient for those who still rely on public transport during the pandemic. Changes would not be implemented right away, rather, they could slowly be introduced, with the earliest changes coming in January 2021 and other changes coming as late as summer 2021. This allows the MBTA to adjust service needs based on ridership needs. [129] On the other hand, opponents argue that by reducing services, it will be harder for riders, who are typically low-income or people of color to get to essential jobs. Riders will be forced to find other ways of transportation, which could mean using personal vehicles, leading to an increase in dependence on the automobility

paradigm. [128] Opponents argue that public transportation should be treated as a public good, which means asking wealthier people and corporations to pay their share for the upkeep of transportation as a way to achieve mobility justice. [127]

Maps gallery



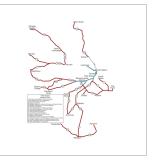
Boston in 1880, highlighting horse railroads



1925 Boston Elevated Railway map



Boston Elevated Railway streetcar lines in 1940. Lighter lines were abandoned earlier; the darkest ones still existed in 1969.



Streetcar lines remaining in Boston in 1953.



Subway map from 1967 — 1969



Subway map from 1973



MBTA Commuter Rail service in 1975.



Geographically accurate MBTA map (2011)

See also

- Atlantic Avenue Elevated
- Boston Elevated Railway
- Boston Street Railway Association
- Causeway Street Elevated
- Charlestown Elevated

- Green Line (MBTA)
- Lechmere Viaduct
- MBTA kickback schemes
- Trolleybuses in Greater Boston
- Washington Street Elevated

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External links

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- nycsubway.org Boston, Massachusetts (https://www.nycsubway.org/wiki/Boston,_Massachusetts), an overview of rail transit in Boston back through the 1800s
- Historic American Engineering Record (HAER) documentation of Boston Elevated Railway
 Company's Main Line Elevated (Former Orange Line) (http://world.nycsubway.org/us/boston/main_line_el.html)
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