



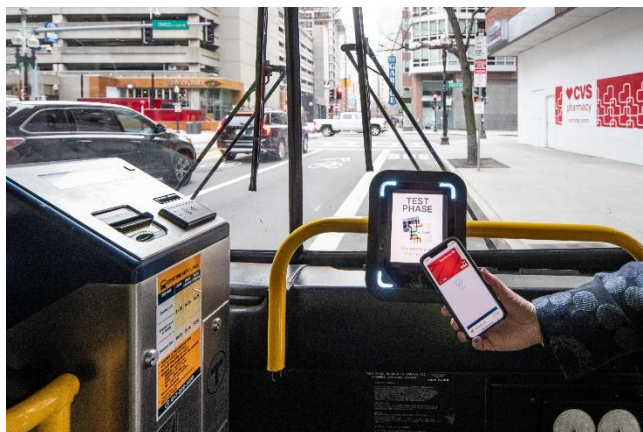
# 2024 Sustainability Bond Progress Report

Massachusetts Bay Transportation Authority

December 2025



Senior Sales Tax Bonds 2024 Series B (Sustainability Bonds)



## INTRODUCTION

The Massachusetts Bay Transportation Authority (MBTA) has a goal to make transportation more eco-friendly, reliable, and equitable; and Sustainability Bonds play a key role in financing capital initiatives that advance this goal.

The MBTA relies on its Sustainability Bond Framework to identify capital projects that make targeted environmental and social improvements. Environmental goals help to achieve low carbon emissions, building climate resilient infrastructure and a sustainable community. Social goals help to construct critical infrastructure to ensure communities have equal and affordable access to safe and reliable public transportation.

In July 2024, the MBTA issued Sustainability Bonds on its Sales Tax lien to fund a diverse set of projects focused on sustainability. The 2024 Series B provided capital for 17 different projects. The projects that dominated spending were **Fare Transformation (\$79.80 million)**, **Fairmount Line Zero Emissions Project (\$5.62 million)** and **High Priority Stations Accessibility Improvements Program (\$5.56 million)**.

An additional \$11,984,224.55 was used to fund 14 other projects focused on sustainability. As of the publication of this report, all bond proceeds have been spent. There will be no further disclosure relating to this series of bonds.

Sustainability remains a central focus of the MBTA, and we anticipate further issuances of Sustainability Bonds.

Sincerely,

Mary Ann O'Hara, Chief Financial Officer

Patrick Landers, Treasurer

Gianpiero Tirella, Senior Director of Treasury

## SUSTAINABILITY BOND FRAMEWORK & CAPITAL PROJECTS

Since 2017, MBTA has issued several sustainability bonds to fund capital projects and most recently issued the 2024 Sales Tax bonds as Sustainability Bonds.

New Issuance
<b>\$97,705,000 Senior Sales Tax Bonds Series B</b> AAA/Stable (Fitch) and AAA/Stable (Kroll) and AA+/Stable (S&P) CUSIP: 575579W37 Maturity: July 1, 2038

Capital projects that are eligible for sustainability funds are selected by an internal Sustainability Committee, which relies on the MBTA Sustainability Bond Framework to identify projects. The framework evaluates the environmental and social benefits provided by these projects. The use of proceeds from a sustainability bond fall into one (or more) of the following categories:

### Environmental Considerations:

1. **Built Environment:** Enhancing the quality of the travel experience while respecting and improving the built environment.
2. **Capacity:** Reducing emissions from personal vehicle trips by increasing passenger capacity and making public transit more attractive through frequent, reliable, and comfortable service.
3. **Carbon, Energy, and Climate Resilience:** Reducing carbon emissions and preparing for climate change and extreme weather impacts.
4. **Natural Environment:** Protecting and enhancing the natural environment to contribute to quality of life.
5. **Noise:** Managing and controlling transport-related noise and vibration.
6. **Pollution Prevention:** Minimizing and controlling pollution through proactive management.
7. **Resource Management:** Using resources (including water) wisely and minimizing waste.

### Social Considerations:

1. **Affordability:** Balancing customer means, especially for low-income riders, with the organization's financial constraints.
2. **Accessibility:** Operating an inclusive system that accommodates a diverse customer base.
3. **Availability:** Ensuring equitable access to the system within the service area.
4. **Equity:** Striving for an even distribution of benefits and burdens across diverse modes, customer bases, and service areas, while offsetting social and environmental burdens experienced by certain populations or communities.
5. **Safety:** Protecting the well-being of passengers, operators, and the general public.
6. **Workplace Environment:** Maintaining a safe, empowering, and satisfying workplace for MBTA and affiliated employees.

# Fare Transformation Project

. The Fare Transformation Project modernizes how customers pay for MBTA transportation services, making the experience more convenient, intuitive, and reliable. The legacy fare collection system was complex, labor-intensive, and had reached the end of its useful life. This project replaces it with a unified, contactless fare collection system that simplifies payment for riders while reducing operational complexity and improving efficiency for the MBTA. This project introduces a unified fare collection system that simplifies the process for both customers and the MBTA.

## Key Upgrades

- **Multiple Payment Methods:** Effortlessly pay with a single tap using credit cards, debit cards, smartphones, or fare media, streamlining the payment process for all passengers.
- **All-Door Boarding:** Speed up commute with the convenience of boarding from any door on buses and Green Line trains, minimizing stop times and improving overall efficiency.
- **Backend Efficiency:** Optimized processes cut down on labor requirements and lower future costs, enhancing the operational efficiency of the transit system.
- **Cashless Buses and Light Rail:** Transition away from cash payments to improve efficiency and reduce wait times.

## Environmental and Social Benefits

- **Enhanced Accessibility:** The new fare system will promote equitable access to public transit by offering discounted fare options such as distance-based pricing and fare capping for low-income riders, seniors, and students. Additionally, upgraded fare vending machines and gate technology cater to riders with disabilities and non-English speakers, supporting social equity and ensuring affordable, efficient transportation for all.
- **Data-Driven Improvements:** The modern fare system facilitates the collection of comprehensive ridership data, which is crucial for making informed decisions about service enhancements, route adjustments, and resource allocation. This data-driven approach enhances the overall efficiency and sustainability of the transit network by optimizing operations and targeting areas for improvement.
- **Increased Availability:** With the introduction of the new fare system, passengers can choose from a variety of payment methods, including mobile apps, contactless cards, and traditional options. This flexibility accommodates diverse preferences and needs, making public transit more accessible and user-friendly for everyone.

## Project Details

- **Contract awarded:** March 2018
- **Projected completion:** June 2026
- **Budget:** \$952.7 million
- **Sustainability Bond Proceeds Used:** \$79.80 million



## Fairmount Line Zero Emissions Project

The Fairmount Line (also called the Dorchester Branch) is the shortest of the Commuter Rail Lines, with nine stations including major hubs such as South Station and Readville. Leveraging the existing electrification infrastructure, the Fairmount Line presents a strong and logical starting point for advancing rail decarbonization. This Project will deliver decarbonized service on the Fairmount Line and provide 20-minute service frequency all-day in both directions by introducing Battery Electric Multiple Units (BEMUs). Keolis Commuter Services, LLC (“Keolis”) was selected by MBTA as the Project Delivery Partner (“PDP”) in July 2024 to manage the program which includes procurement of rolling stock and lessor, Light Maintenance Facility (LMF), battery modelling, clearance/LiDAR measurement, electrified layover and supporting infrastructure solutions.

### Key Upgrades/Milestones

- Rolling stock and lessor bids have been received and are under evaluation. Projected rolling stock delivery in 2028.
- Light Maintenance Facility (LMF): Design, permitting and site investigation are underway for the selected site which is on existing MBTA property. The construction contract will be procured subsequently.
- Layover tracks are being electrified on existing MBTA property.
- Additional actions are required to address infrastructure compatibility identified through clearance data/LiDAR scans.

### Environmental and Social Benefits

- **Zero own source emissions and reduced energy consumption:** The decarbonized service is projected to save 1.6 million gallons of fuel and 17,700 tons of carbon dioxide per year compared to diesel powered service.
- **Quieter Service:** Battery-electric trains provide a quieter, faster service, with significantly reduced noise and vibration for passengers and residents adjacent to the route, yards and maintenance facility.
- **Reduced Infrastructure Cost:** The use of batteries drastically reduces infrastructure costs by not requiring the installation of catenary wires for the entire route (which often requires rebuilding stations and bridges). BEMUs are able to recharge using the overhead wires (where they exist) and operate on the battery power for other sections.
- **Enhanced passenger experience:** Multiple-Unit trains will provide enhanced passenger experience, with smoother rides, more space, and a modernized experience.
- **Increased ridership:** Since May 2024, the Fairmount line service frequency was increased from every 45 minutes to every 30 minutes, bringing ridership from 3,100 passengers per day to 4,600 per day. The MBTA expects to introduce service to every 20 minutes, which will increase ridership further. The fall survey of over 8,000 riders and potential riders identified lack of service frequency as the top barrier to use of regional rail.

## Program Details

- Project Development Phase (PDP): Keolis milestone payments cover design and program management costs
- Total PDP contract value is \$54 million
- BEMU: Trains will be leased.
- Infrastructure & Maintenance Facility total cost is estimated at ~\$70 million.
- 2024 Sustainability Bond Proceeds Used: \$5.62 million



*Conceptual designs of potential decarbonized Commuter Rail trains provided by Stadler, Alstom and Siemens in response to an RFI*



# High Priority Stations Accessibility Improvements Program

The High Priority Stations Accessibility Improvements Program will provide accessible boarding at inaccessible commuter rail stations. The new mini-high platforms will allow passengers to board commuter rail trains on a high level which increases passenger safety. The project will also improve the lighting in station areas for better security camera monitoring and will provide emergency call boxes with Public Address (PA) system capacity on the new platforms.

## Key Projects:

Projects listed below are non-ADA compliant and will be part of this program.

- Wakefield Station – Haverhill Line
- Concord Station – Fitchburg Line
- Wyoming Hill Station - Haverhill Line
- Endicott Station- Franklin/Foxboro Line
- Lincoln Station - Fitchburg Line

## Key Upgrades

- Freestanding Mini High Platforms for high level boarding
- ADA Compliant Ramps
- Platform Canopy
- VMS upgrades and installation
- Installing emergency call boxes
- Improved wayfinding and lighting
- ADA curb ramps
- ADA parking upgrades



## Social Benefits

**Increased Accessibility:** ADA accessibility requirements necessitate compliant boarding infrastructure at all MBTA stations. Without an existing mini-high platform, a station may be subject to closure. This project ensures continued, equitable access to transit service for customers across the Greater Boston area. **Enhanced Safety:** The project will increase safety at these stations with the installation of emergency call boxes and improved wayfinding and lighting.

## Program Details

- **Contract Awarded:** Multiple Awards
- **Projected Completion:** April 2027
- **Budget:** \$10.7 million
- **Sustainability Bond Proceeds Used:** \$5.56 million

## ADDITIONAL PROJECTS FINANCED FROM THE 2024 SUSTAINABLE BOND ISSUANCE

Project Funded	Amount of Sustainability Funds Used
Green Line Surface Station Accessibility I	\$4,183,205
Facility Roof Replacement	\$2,833,346
Bus Facility Improvements	\$1,910,179
Bus Facility Modernization Program	\$739,011
Rail Modernization Planning	\$656,962
Green Line Transformation	\$646,742
Cabot Yard Complete Upgrade	\$416,805
Red / Orange Line Vehicles	\$257,692
Alewife Garage Rehabilitation	\$215,989
Franklin Double Track and Signal	\$85,515
Courthouse Station Leaks	\$23,141
Route 128/University Park Garage Improvements	\$6,007
Wellington Yard Complete Upgrade	\$4,908
Lechmere Viaduct Rehabilitation Project	\$4,721



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