STRATEGIC ASSET MANAGEMENT PLAN

October 2026



Massachusetts Bay Transportation Authority

CONTENTS

INTRODUCTION 1

BACKGROUND 3

ASSET MANAGEMENT OBJECTIVES 7

STRATEGIC ALIGNMENT 8

ASSET LIFECYCLE MANAGEMENT 9

ROLES AND RESPONSIBILITIES 10

IMPLEMENTATION 12







INTRODUCTION

The Strategic Asset Management Plan is a high-level roadmap that translates the goals established in the Strategic Plan into asset management objectives for the agency.

The Massachusetts Bay Transportation Authority (MBTA) is one of the oldest and largest transit agencies in the United States, with over 900,000 average weekday ridership as of spring 2026. The agency serves 177 cities and towns in greater Boston via light rail, heavy rail, regional rail, bus, paratransit, and ferry.

Together these modes account for tens of thousands of assets across four categories: rolling stock, equipment, facilities, and infrastructure. Many assets are at a point in their lifespan that requires an increased level of capital and operating investment to keep the system operating safely and efficiently.

SERVICE MODES

REGIONAL RAIL
12 lines covering 685+ miles of track, reaching from Boston into eastern and central Massachusetts.

TRANSIT RAIL
3 heavy rail rapid transit lines and 2 light rail lines, covering 130+ miles of track connecting riders across downtown Boston.

BUS
5 bus rapid transit lines covering 150+ bus routes.

FERRY
Provides water transportation service through the Boston Harbor with connections to communities north, south, and east of downtown Boston.

THE RIDE
On-demand pick-up and drop-off paratransit service available in 58 cities and towns.

ASSET PORTFOLIO

REVENUE VEHICLES
Vehicles providing passenger service to customers including transit rail cars, locomotives, coaches, buses, trolleys, vans, automobiles, and ferryboats.

EQUIPMENT
Non-revenue service vehicles and equipment including first response vehicles, tow trucks, spot tampers, crane cars, snow plows, and others.

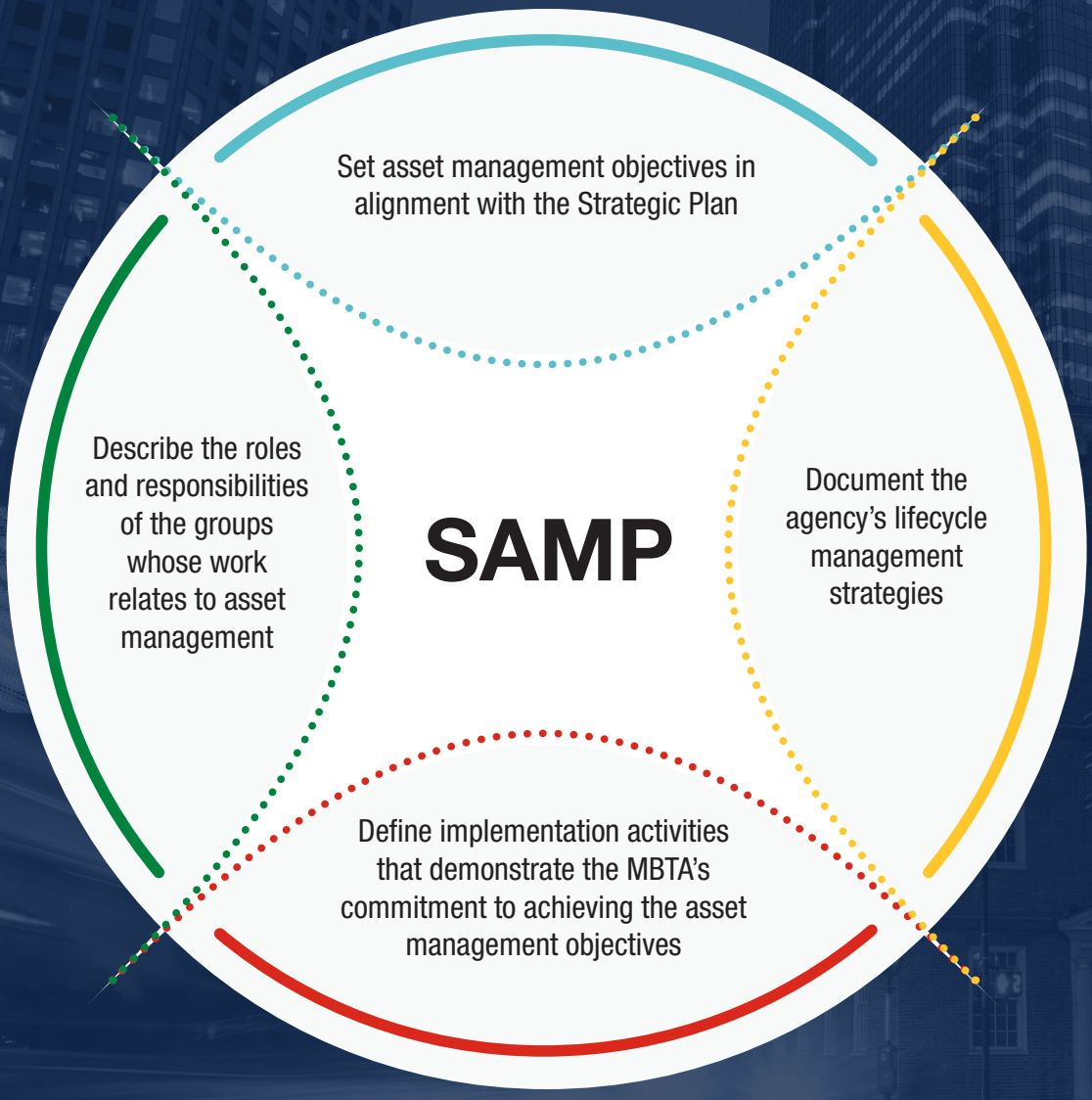
FACILITIES
Stations, stops, parking structures, trailers, garages, and other buildings.

INFRASTRUCTURE
Includes equipment related to signals, track, power, bridges, tunnels, and communication systems.

The MBTA Asset Management office establishes guidelines, standards, policies, and processes governing asset management activities from initial planning and design through retirement and disposal. The team works with key internal stakeholders to understand asset performance, risks, and planning priorities.

In 2020, the MBTA developed its first Strategic Asset Management Plan (SAMP) to establish the agency's asset management objectives, define the business model for asset management, and create a foundation for strategic asset planning. It was developed in parallel with the 2020 Strategic Planning Report, which identified the agency's key values. This update to the SAMP seeks alignment to the 2024 Strategic Plan, which further defines the MBTA's values into strategic goals.

The purpose of the SAMP is to:



BACKGROUND

The Strategic Asset Management Plan is one of several documents guiding asset management policy and activities at the MBTA.

The SAMP connects the goals outlined in the MBTA Strategic Plan with the agency's asset management policies and activities. It feeds into the FTA-required Transit Asset Management Plan (TAM Plan), which further documents the MBTA's asset portfolio, system condition, and asset management practices and defines the actions needed to improve the management of our infrastructure. The SAMP and the TAM Plan are both updated cyclically, with the TAM Plan covering a four-year implementation period.

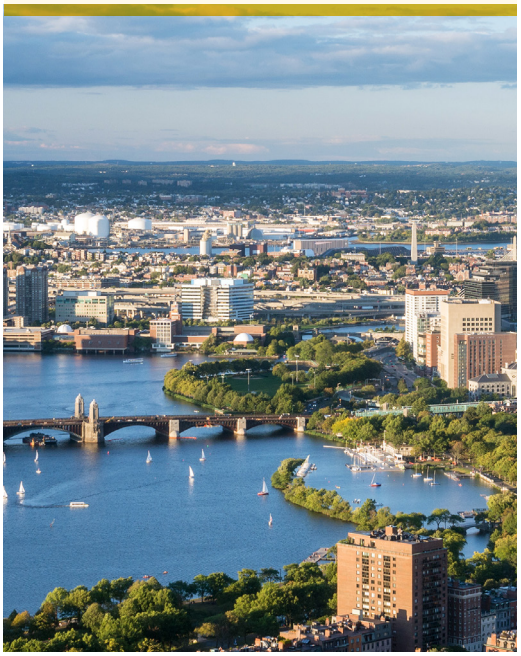
STRATEGIC PLAN

The Strategic Plan defines the mission, values, and strategic goals of the MBTA.



ASSET MANAGEMENT POLICY

The Asset Management Policy defines the principles guiding the MBTA's asset management activities.



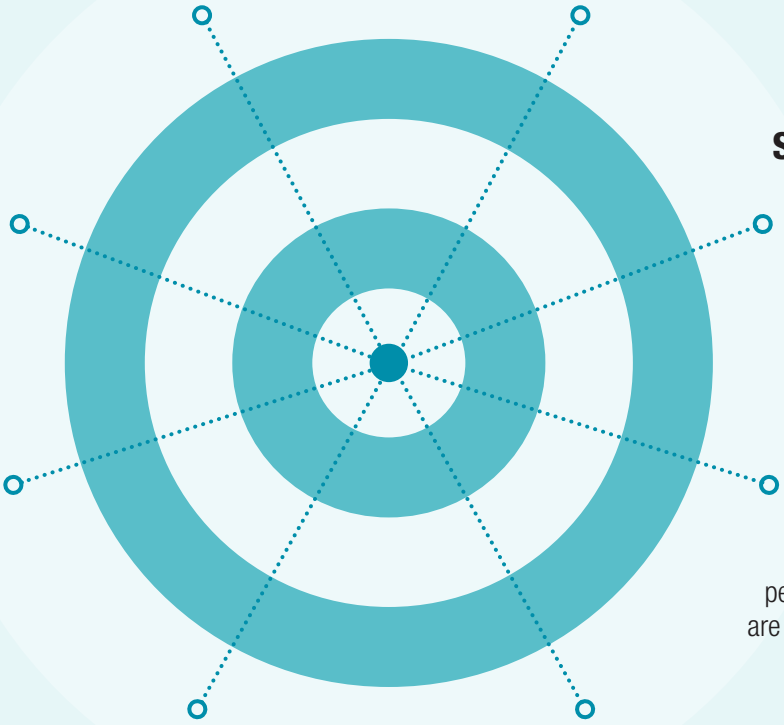
TRANSIT ASSET MANAGEMENT PLAN

The FTA-required TAMP details the MBTA's current asset management practice and goals for future improvement.



MBTA STRATEGIC PLAN

The MBTA Strategic Plan sets the agency's priorities and provides direction for all activities across the organization. Our agency values are safety, service, equity, sustainability, culture, and accessibility. Guided by these values, the MBTA's strategic goals are:



SERVICE AND ECONOMIC VITALITY

Support the regional vitality by providing dependable, frequent, and accessible service that riders love.

SAFETY

Empower and support staff to develop a culture which prioritizes and promotes safety.

SUSTAINABILITY AND RESILIENCE

Increase the environmental sustainability and resilience of our transit system.

MODERNIZATION AND STATE OF GOOD REPAIR

Efficiently modernize assets and improve connectivity, while ensuring the MBTA property is maintained to a state of good repair.

MODE SHIFT

Attract new riders, retain existing riders, and increase the percentage of transit-trips in the region.

TRANSPARENT COMMUNICATION

Ensure the experiences and perspectives of our staff and riders are accounted for through transparent decision making.

COMMUNICATING OUR COSTS

Communicate openly about our costs and the revenue needed to support our ongoing service and the growth of our system.

WORKFORCE

Retain, attract, and invest in a diverse and qualified workforce that represents our ridership.

ASSET MANAGEMENT POLICY

The Asset Management Policy defines the principles guiding the MBTA's asset management activities. Our asset management policy is as follows:



We will endeavor to bring all of the MBTA's assets into a state of good repair.

We will work to ensure all decisions are data-driven, transparent, and consistent, enabling us to clearly demonstrate priorities across asset classes.

We will work to meet or exceed service delivery goals by ensuring necessary work is undertaken for all MBTA assets and considering opportunities for improving service delivery.

We will effectively identify, prioritize, and manage asset risks, including safety, reliability, financial, performance, and climate-related risks.

We will sustain the MBTA's fiscal discipline by optimizing available resources through lifecycle management, reliability-centered maintenance, business process improvement, and the adoption of other best practices.

We will work to build the confidence and trust of all internal and external stakeholders, demonstrating good practice in all that we do.

As one of the oldest and largest transit agencies in the U.S. and a pioneer in asset management practice, we will work to achieve compliance with Federal and State requirements and demonstrate leadership amongst our peers.

TRANSIT ASSET MANAGEMENT PLAN

Every agency that owns, operates, or manages capital assets used to provide public transportation and that receives federal financial assistance is required to develop and maintain a Transit Asset Management Plan (TAM Plan, or TAMP). The MBTA developed its first TAM Plan in 2018 and publishes an update every four years. The TAMP is intended to:



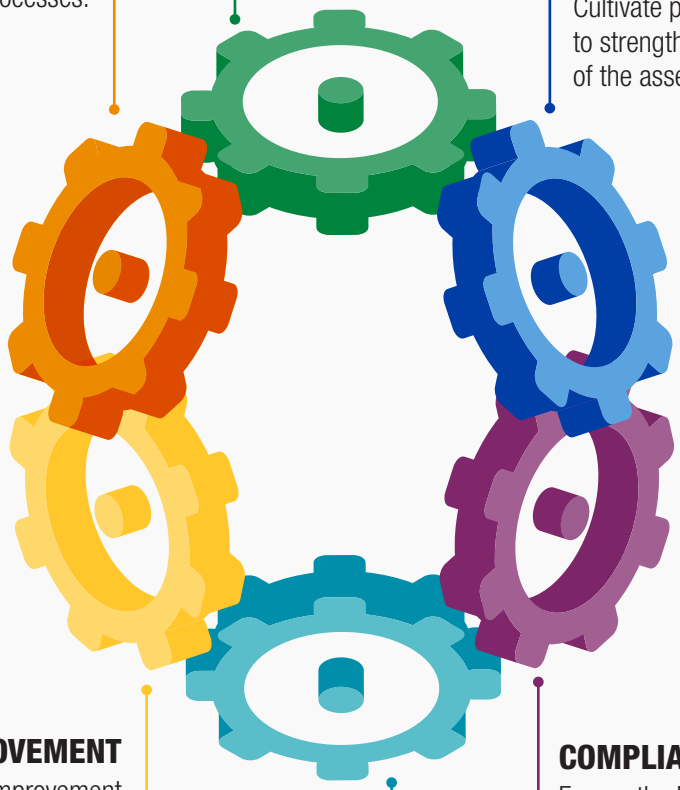
ASSET MANAGEMENT OBJECTIVES

The MBTA's asset management activities are driven by six objectives, which are aligned to the agency's values and strategic goals.

DATA AND TECHNOLOGY
Maintain a single system of record for asset information to support maintenance and capital planning, and utilize technology improvements to enhance asset monitoring, management, and reporting activities.

ASSET MANAGEMENT STANDARDS
Establish, maintain, and communicate asset management policies and standards to ensure consistent application of asset processes.

COLLABORATION
Cultivate partnerships with other departments to strengthen collaboration across all phases of the asset and planning lifecycle.



PERFORMANCE AND IMPROVEMENT
Promote a culture of continuous improvement and ongoing asset performance management.

COMPLIANCE
Ensure the MBTA is meeting all federal regulatory and reporting requirements including National Transit Database (NTD) reporting, TAMP updates, and Triennial Reviews.

SKILLS AND COMPETENCIES
Invest in the continuous development of the workforce by identifying existing skills gaps and opportunities for training and hiring.

STRATEGIC ALIGNMENT

Our asset management objectives support the Asset Management Policy and the MBTA's strategic goals.

ASSET MANAGEMENT OBJECTIVES	ASSET MANAGEMENT POLICY	MBTA STRATEGIC GOALS
Asset Management Standards	☑ Risk Awareness ☑ Transparency ☑ Service Delivery ☑ Fiscal Responsibility ☑ Social Responsibility	☑ Safety ☑ Modernization and SGR ☑ Transparent Communication ☑ Workforce ☑ Service and Economic Vitality ☑ Sustainability and Resilience
Data and Technology	☑ Transparency ☑ Industry Leadership ☑ Fiscal Responsibility	☑ Safety ☑ Modernization and SGR ☑ Transparent Communication ☑ Communicating Our Costs
Collaboration	☑ Transparency ☑ Risk Awareness ☑ Fiscal Responsibility ☑ Industry Leadership	☑ Safety ☑ Transparent Communication ☑ Workforce
Performance and Improvement	☑ State of Good Repair ☑ Industry Leadership ☑ Social Responsibility	☑ Safety ☑ Modernization and SGR ☑ Transparent Communication ☑ Service and Economic Vitality
Skills and Competencies	☑ Risk Awareness ☑ Service Delivery ☑ Social Responsibility ☑ Fiscal Responsibility	☑ Safety ☑ Modernization and SGR ☑ Transparent Communication ☑ Workforce
Compliance	☑ Industry Leadership ☑ Social Responsibility	☑ Safety ☑ Modernization and SGR ☑ Transparent Communication ☑ Workforce

ASSET LIFECYCLE MANAGEMENT

We aim to maximize the value and lifespan of our assets to effectively optimize resources throughout the asset lifecycle. Once assets enter the inventory, our approach to their lifecycle management relies on inspection/assessment, monitoring, preventive maintenance, corrective maintenance, overhaul/renewal, and upgrade/enhancement.

INSPECTION / ASSESSMENT

Includes visual inspection and technical testing to ensure safe operating capability, inspection activities are typically on a time or mileage interval. Asset assessment or asset health is typically graded on a scale and supports long-term planning for the asset.

MONITORING

Includes real-time sensors or electronic equipment that continuously monitor the status of an asset and provide alerts when thresholds have been exceeded.

PREVENTIVE / ROUTINE MAINTENANCE

Includes regular, sometimes daily activities or tasks to ensure assets continue to operate in safe and reliable conditions. Also includes seasonal preventive programs for extreme temperature in the summer or winter.

CORRECTIVE MAINTENANCE / REPAIRS

Includes standard repair tasks that occur due to a condition or fault issue discovered through inspection, monitoring, or during operations.

OVERHAUL / RENEWAL

Includes more extensive capital maintenance activities required to bring a set of assets up to an acceptable condition or extend their useful life. Overhauls and renewals are typically assigned on time-, usage-, and/or condition-based intervals.

UPGRADE / ENHANCEMENT

Include asset or system-wide capital improvement activities that go beyond like-for-like replacement and enhance current service levels, performance, reliability, capacity, or technology for existing assets, such as increasing track capacity, track-class upgrades, and vehicle upgrades.

ROLES AND RESPONSIBILITIES

Successful management of the MBTA's assets requires coordination across multiple groups within the organization.

GROUP	ROLES AND RESPONSIBILITIES
ASSET MANAGEMENT	• Oversees ongoing development of the MBTA's asset inventory through the collection, validation, and maintenance of asset data. • Establishes standards for measuring asset condition and criticality and develops scores for each asset in the inventory. • Performs asset reporting and State of Good Repair analyses, including the FTA's annual NTD process and the Capital Needs Assessment. • Translates asset data into useful tools for planning and prioritization.
RELIABILITY ENGINEERING	• Configures EAMS to support operations and ongoing management of assets. • Create, update, and monitor PMI/maintenance plans. • Determine optimum reliability centered maintenance to minimize lifecycle costs. • Perform failure analyses to identify areas to optimize preventive maintenance.
ENGINEERING AND MAINTENANCE	• Performs daily maintenance and inspection of the system. • Provides recommendations on maintenance actions. • Completes short/medium term repairs that do not require design/permits.
QUALITY MANAGEMENT	• Performs third-party inspections to improve quality assurance practices. • Validates inspections with third-party inspectors.

GROUP	ROLES AND RESPONSIBILITIES
INFRASTRUCTURE PLANNING	• Uses condition, criticality, and additional resources to identify key investment needs and make recommendations for prioritizing assets. • Develops programming, concept design packages, budgets, and schedules for large facility and fixed guideway projects.
TECHNICAL ENGINEERING AND DESIGN	• Provides technical support to address operational and safety challenges, root cause analysis, and corrective actions. • Performs design reviews/approvals. • Maintains engineering standards and guidelines. • Implements the MBTA's design quality assurance program.
VEHICLE ENGINEERING	• Leads the development and purchase of new revenue vehicles. • Manages the overhaul of existing revenue fleets to ensure they meet or exceed their useful life benchmark.
CAPITAL PROGRAMS	• Manages the design, construction, and turnover of major capital projects. • Oversees contract activities for capital projects, from initial procurement through project closeout.
CAPITAL FINANCE AND ACCOUNTING	• Manages implementation of capital funds and allocation of capital funding sources to projects based on eligibility. • Maintains the MBTA's financial Fixed Asset Register and financial reporting.
POLICY AND STRATEGIC PLANNING	• Leads initiatives tied to the MBTA Strategic Plan including capital planning, climate planning, fare policy, and regional planning partnerships. • Manages the development, implementation, and analysis of the MBTA's five-year, fiscally constrained CIP and programs available funding to priority projects. • Oversees federal and discretionary grant proposals to support capital work.

IMPLEMENTATION

- Asset Management Standards
- Data and Technology
- Collaboration
- Performance and Continuous Improvement
- Skills and Competencies
- Compliance

Pre-2023

- Asset data collection, preparation and upload into Enterprise Asset Management System (EAMS) including associated PMs
- Created asset condition and criticality standards for each asset class
- Published the 2022 Transit Asset Management Plan (TAMP)

2023

- Completed the 2023 Capital Needs Assessment and Inventory (CNAI)

2024

- Developed standards for asset data and nomenclature for each asset class
- Implemented new Asset Information Delivery and Asset Tagging procedures
- Completed Institute of Asset Management (IAM) Training
- Began coordinating with the Infrastructure Planning group to support asset-based master planning

2025

- Developed processes for consistent asset data management from design to disposal
- Initiated the AM Performance Management dashboard
- Completed Reliability Centered Maintenance (RCM) Certification
- Supported the MBTA's 2025 FTA Triennial Review submission

2026 & Beyond

- Develop the 2027 Capital Needs Assessment and Inventory (CNAI)
- Begin next condition assessment cycle with improved scoring criteria
- Develop the 2026 Transit Asset Management Plan (TAMP)
- Coordinate with Finance and Technology teams to align the Fixed Asset Register with EAMS



Massachusetts Bay
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