TECHNICAL MEMORANDUM

DATE: December 7, 2017 (Updated April 27, 2018)

TO: Boston Region Metropolitan Planning Organization

FROM: Michelle Scott, Metropolitan Planning Organization Staff

RE: Proposed SFY 2018 Transit Asset Management Targets for the Boston Region

Note: Boston Region Metropolitan Planning Organization (MPO) staff has updated this memorandum, last revised December 21, 2017, to incorporate clarifications pertaining to: 1) Section 5310 subrecipients subject to Transit Asset Management (TAM) requirements (see Table 1); 2) asset inventories in TAM plans and annual development of transit agency TAM targets (see Table 2); and 3) identifying proposed targets as initial MPO TAM targets. MPO staff has also updated the MetroWest Regional Transit Authority's (MWRTA) state fiscal year (SFY) 2017 asset and performance values for its cutaway vehicles (see Table 5) and made other clarifying edits. These changes have not affected the proposed SFY 2018 TAM targets for the Boston region.

Under the Federal Transit Administration's (FTA) rule on TAM, transit agencies that receive federal transit dollars and that own, operate, or manage capital assets used to provide public transportation are required to follow specified asset management practices, including developing targets for TAM performance measures. Under the Federal Highway Administration (FHWA) and FTA's joint Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning rule, MPOs are required to set performance targets for these TAM performance measures for their regions, in coordination with transit and state agencies.

Both rules are part of a series of federal rulemakings, first initiated through the Moving Ahead for Progress in the 21st Century (MAP-21) legislation, that are designed to focus the federal surface transportation program on the achievement of performance outcomes. The TAM rule requires transit agencies to achieve and maintain a state of good repair for the nation's public transportation assets,[1]

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[1] Federal Transit Administration (FTA) final rule on Transit Asset Management (TAM): Title 49 of the Code of Federal Regulations (CFR), Part 625 (July 2016).

while the planning rule requires MPOs to use "a performance-driven, outcome-based approach to planning for metropolitan areas".[2]

This memorandum describes general TAM requirements and TAM activities being undertaken by transit agencies and Massachusetts Department of Transportation (MassDOT) in the Boston region. In particular, it lists proposed SFY 2018 performance targets for relevant transit asset classes for the Boston region based on targets set by the Massachusetts Bay Transportation Authority (MBTA), the Cape Ann Transportation Authority (CATA), and the MWRTA.[3]

MPO staff recommends that the MPO adopts this set of targets for the Boston region for monitoring and for consideration when programming transit dollars in the Transportation Improvement Program (TIP).

Finally, the memo discusses next steps for the MPO to incorporate TAM targets into its performance-based planning and programming (PBPP) process. All of these TAM activities support the MPO's system preservation goal, specifically the related objective to "maintain and modernize capital assets, including transit assets, throughout the system."[4]

1   TRANSIT ASSET MANAGEMENT OVERVIEW

TAM refers to "a business model that prioritizes funding based on the condition of transit assets, in order to achieve or maintain transit networks in a state of good repair."[5] The final TAM rule:
- Defines the term "state of good repair"
- Requires grantees that receive FTA dollars to develop a TAM plan
- Establishes TAM performance measures
- Establishes requirements that transit agencies will follow when reporting annually to the National Transit Database (NTD)
- Requires FTA to provide technical assistance to support implementation of this rule

In the TAM rule, state of good repair is defined as "the condition in which a capital asset is able to operate at a full level of performance. A capital asset is

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[2] Federal Highway Administration (FHWA) and FTA final rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning: Title 23 CFR Part 450s and 771 and 49 CFR Part 613 (May 2016).

[3] This refers to a state fiscal year that runs from July to the following June. For more details, see Section 4.

[4] See the Boston Region MPO's Vision, Goals, and Objectives at www.ctps.org/data/pdf/plans/lrtp/charting/Goals_Objectives.pdf.

[5] FTA. Transit Asset Management Final Rule Fact Sheet. April 4, 2017. www.transit.dot.gov/sites/fta.dot.gov/files/docs/TAMFactSheet_2017-04-03.pdf

considered to be in a state of good repair when it is able to perform its designed function; does not pose a known, unacceptable safety risk; and its life cycle investments have been met or recovered" (in other words, the agency business processes and primary and support functions are aligned to help the organization manage its assets effectively).[6]

2   ROLES AND RESPONSIBILITIES

The TAM rule applies to all transit providers that are recipients or subrecipients of federal assistance under Title 49 of the US Code, Chapter 53, that own, operate, or manage transit capital assets used in the provision of public transportation.[7] The rule classifies these agencies into two groups, as shown in Table 1.

TABLE 1
Boston Region Transit Agencies by TAM Rule Classification

Boston Region Transit Agencies	Transit Agency Classification	Classification Definition
MBTA	Tier 1	- Operates rail, or - Operates 101 or more vehicles across all fixed route modes, or - Operates 101 or more vehicles in one non-fixed route mode
CATA, MWRTA, and other subrecipients of FTA Section 5310 funding (such as municipal transportation providers or councils on aging)	Tier 2	- Subrecipient of 5311 funds, or - American Indian tribe, or - Operates 100 or fewer vehicles across all fixed route modes, or - 100 or fewer vehicles in one non-fixed route mode

CATA = Cape Ann Transportation Authority. FTA = Federal Transit Administration. MBTA = Massachusetts Bay Transportation Authority. MWRTA = MetroWest Regional Transit Authority. TAM = Transit Asset Management. Note: The FTA 5310 program, Enhanced Mobility of Seniors & Individuals with Disabilities, provides formula funding to states to support transportation services that are planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities.[8] In Massachusetts, this funding is distributed through MassDOT's Community Transit Grant Program. Section 5310 subrecipients that operate service open to the general public—or a segment of the general public defined by age, disability, or low income—are subject to TAM requirements.[9] The FTA 5311 program, Formula Grants for Rural Areas, provides capital, planning, and operating assistance for public transportation in rural areas with populations of less than 50,000.[10]

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[6] *Ibid.*

[7] The accountable executive of a transit service provider, such as its general manager or its chief executive officer, is ultimately responsible for implementing and resourcing both the agency's TAM plan (in accordance with 49 U.S.C. 5326) and its Safety Plan (in accordance with 49 U.S.C. 5329 [d]).

[8] FTA. Grant Programs. Accessed November 21, 2017. www.transit.dot.gov/grants.

[9] Preamble to the FTA final rule on TAM: Title 49 of the CFR, Parts 625 and 630. Accessed April 24, 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Transit%20Asset%20Management%20Final%20Rule.pdf, pg. 44-45.

[10] *Ibid.*

Multiple agencies, however, have participated and will continue to participate in fulfilling the TAM rule requirements and in working towards a state of good repair for the Boston region's transit assets. These include the Boston Region MPO and MassDOT. Each agency is responsible for various aspects of TAM, as summarized in Table 2. The TAM plans discussed in the table must include, at a minimum, an asset inventory and a condition assessment of inventoried assets, descriptions of decision support tools used to estimate capital needs and/or prioritize investments, and a prioritized list of investments to improve the state of good repair for transit assets; Tier 1 agencies are subject to additional requirements.[11] As detailed below, MassDOT's Rail and Transit Division will act as a sponsor for other Tier 2 FTA 5310 funding recipients (excluding CATA and MWRTA) and coordinate development of a group TAM plan and TAM targets for these agencies. Tier 2 FTA 5310 funding recipients that opt out of this group plan will be subject to MassDOT oversight when developing TAM plans and setting TAM targets.

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[11] FTA. TAM Plans. November 8, 2017. www.transit.dot.gov/TAM/TAMPlans.

TABLE 2
General TAM Responsibilities by Agency

Agency	Task: Conduct asset inventories and condition assessments	Task: Develop and implement TAM plans	Task: Set targets for TAM performance measures	Task: Report targets and progress on targets
MBTA, CATA, and MWRTA	Inventory transit assets. Report asset and condition information in TAM plans and to NTD.	Develop and implement TAM plans. Share TAM plans with the MPO and MassDOT.	Set agency-level targets on an annual basis. Coordinate with MPO and MassDOT on target setting.	Report targets and progress from prior year to NTD on an annual basis. Share progress information with MassDOT and MPO.
MassDOT (Rail and Transit Division and Office of Transportation Planning)	Report transit assets and condition information in TAM plans and to NTD on behalf of other FTA 5310 funding subrecipients.	Sponsor a group TAM plan for other FTA 5310 funding subrecipients and share it with the MPO. Provide oversight of TAM plan development for other FTA 5310 funding subrecipients not in the group plan.	Set targets on an annual basis on behalf of other FTA 5310 funding subrecipients in the group TAM plan and share with the MPO. Provide oversight of target-setting processes for FTA 5310 funding subrecipients opting out of the group plan.	Report on targets and progress to NTD on behalf of other FTA 5310 funding subrecipients on an annual basis. Report on targets in STIPs and SLRTPs.
Other FTA 5310 Funding Subrecipients	Inventory transit assets. Report assets and condition information to MassDOT.	Participate in group TAM plan development. If opting out of group plan, develop a separate TAM plan. Share plan with MassDOT and the MPO.	If not in group TAM plan, set agency-level targets on an annual basis. Share information with MassDOT and the MPO.	Share progress information with MassDOT and MPO.
Boston Region MPO	NA	NA	Set regional targets. Coordinate with transit agencies and MassDOT on target setting.	Submit targets to MassDOT. Report on targets and progress in LRTPs and TIPs.

CATA = Cape Ann Transportation Authority. FTA = Federal Transit Administration. LRTP = Long-Range Transportation Plan. MassDOT = Massachusetts Department of Transportation. MBTA = Massachusetts Bay Transportation Authority. MPO = Metropolitan Planning Organization. MWRTA = MetroWest Regional Transit Authority. NA = Not Applicable. NTD = National Transit Database. SLRTP = State Long-Range Transportation Plan. STIP = State Transportation Improvement Program. TAM = Transit Asset Management.

The remainder of this memorandum focuses specifically on MPO responsibilities, particularly target setting and reporting. However, all agencies will collaborate on planning and implementation activities designed to meet TAM rule requirements.

3   TAM PERFORMANCE MEASURES

The TAM rule specifies four performance measures, which apply to four TAM asset categories: equipment, rolling stock, infrastructure, and facilities. Table 3 describes these measures.

TABLE 3
TAM Performance Measures by Asset Category

Asset Category	Relevant Assets	Measure	Measure Type	Desired Direction
Equipment	Service support, maintenance, and other non-revenue vehicles	Percentage of vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Rolling Stock	Buses, vans, and sedans; light and heavy rail cars; commuter rail cars and locomotives; ferry boats	Percentage of revenue vehicles that have met or exceeded their ULB	Age-based	Minimize percentage
Infrastructure	Fixed guideway track	Percentage of track segments with performance (speed) restrictions, by mode	Performance-based	Minimize percentage
Facilities	Passenger stations, parking facilities, administration and maintenance facilities	Percentage of assets with condition rating lower than 3.0 on FTA TERM Scale	Condition-based	Minimize percentage

FTA = Federal Transit Administration. TAM = Transit Asset Management. TERM = Transit Economic Requirements Model. ULB = Useful Life Benchmark.

Two definitions apply to these performance measures:
- **Useful Life Benchmark (ULB)**—"The expected lifecycle of a capital asset for a particular transit provider's operating environment, or the acceptable

period of use in service for a particular transit provider's operating environment."[12] For example, FTA's default ULB of a bus is 14 years.[13]

- **FTA Transit Economic Requirements Model (TERM) Scale**—A rating system used in FTA's TERM to describe asset condition. The scale values are 1 (poor), 2 (marginal), 3 (adequate), 4 (good), and 5 (excellent).

4   TARGET-SETTING REQUIREMENTS AND ACTIVITIES

Transit Agencies and Sponsors

Transit agencies—and state agencies acting as sponsors of group TAM plans—are required to develop targets for the measures in Table 3 for each fiscal year.[14] Transit agencies and group plan sponsors must set their targets based on the most recent data available on the number and condition of relevant transit assets, as well as their expectations for funding to improve assets during that fiscal year. This includes taking into account the anticipated effects that capital investments will have on asset procurement and improvements. FTA stipulates that transit agencies must coordinate with MPOs and states to the maximum extent practicable when setting these targets.

Transit agencies and group plan sponsors were given the option to submit targets for their 2018 fiscal year to NTD, but they are not required to submit targets until October 2018[15], when they must submit targets for their 2019 fiscal year. Transit agencies and group sponsors are also required to submit an asset inventory to NTD and to complete an initial or updated TAM Plan in October 2018; after this date, TAM plans must be updated at least once every four years. In October 2019, transit agencies and group plan sponsors will not only need to submit their fiscal year 2019 asset inventory and their fiscal year 2020 targets, but also a narrative report that describes changes in the condition of the transit system from the previous year "and progress made during the year to meet the performance targets set in the previous reporting year."[16] FTA will review target information that transit agencies and other sponsors submit to NTD, but these agencies will neither be penalized for not achieving targets, nor will they be rewarded for attaining targets.

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[12] FTA. Performance Management. November 15, 2017. www.transit.dot.gov/PerformanceManagement.

[13] FTA. Default Useful Life Benchmark Cheat Sheet. October 26, 2016. www.transit.dot.gov/TAM/ULBcheatsheet.

[14] MassDOT and transit agencies in the Boston region operate on and set targets for a state fiscal year that begins in July and ends the following June, whereas the MPO operates on a federal fiscal year that begins in October and ends the following September. Fiscal years vary for transit agencies nationwide.

[15] Transit agencies with fiscal years that end June 30 must report to NTD by October 31.

[16] FTA. Transit Asset Management: Frequently Asked Questions. November 14, 2017. www.transit.dot.gov/TAM/gettingstarted/htmlFAQs

Metropolitan Planning Organizations

Transit agencies and group plan sponsors must provide TAM targets to each MPO in the metropolitan area in which the transit provider's projects and services are programmed in the MPO's TIP. MPOs must adopt initial targets within 180 days of when transit agencies set their targets. While MPOs are required to coordinate with transit and state agencies when setting these targets, the process used to set these targets is based on local coordination and decisions. Once targets are adopted, MPOs must submit them to state transportation agencies.

Although the Boston Region MPO will share adopted targets with MassDOT and transit agencies, it is not required to report directly to FTA on targets or on progress achieving targets. Instead, the MPO will include a section in its next Long-Range Transportation Plan (LRTP) document that describes the TAM performance measures, presents targets for these measures, and discusses the progress achieved in meeting these targets as compared to system performance reported in previous reports, including baseline data.[17]

The MPO will also update the performance chapter in its TIP document to describe the TAM measures, present targets, and "to the maximum extent practicable, provide a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan," the goal of which is to link investment priorities to those performance targets.[18] MPOs must revisit their TAM targets whenever they update their TIP or LRTP.[19] The MPOs will neither be penalized for not achieving regional TAM targets, nor will they be rewarded for attaining them. FTA will review MPO PBPP activities, including those related to TAM, as part of MPO certification reviews.

States

As described above, MassDOT's Rail and Transit Division will coordinate and share targets and information with the Boston Region MPO on behalf of FTA 5310 funding recipients participating in a group TAM plan, and will oversee the target-setting activities of agencies that may opt out of the group plan. The MPO will share its regional TAM targets with MassDOT so that these targets may be incorporated into the State Transportation Improvement Program and other state-level planning documents. The MPO also will coordinate with MassDOT staff to

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[17] 23 CFR 450.324(g)(3)

[18] 23 CFR 450.326(c),(d)

[19] FTA. Metropolitan Planning Organization Responsibilities for the Transit Asset Management Rule FAQs. March 13, 2017. www.transit.dot.gov/regulations-and-guidance/transportation-planning/metropolitan-planning-organization-responsibilities.

identify effective practices for setting regional targets and reporting on performance. For more information on this, see Section 6.

5 PROPOSED SFY 2018 TAM TARGETS

Target-setting Process

The MBTA, CATA, and MWRTA submitted agency-level targets for SFY 2018 (July 2017 through June 2018) to MPO staff. Their targets reflect the agencies' most recent data available on the number, age, and condition of their assets, and their expectations and capital investment plans for improving these assets during SFY 2018. Each agency has discretion to use FTA-identified default ULB values for vehicles or to adjust ULB values with approval from FTA. The MBTA has used FTA default values for this set of targets, while CATA and MWRTA have selected other values.[20] While these transit agencies have the option to report SFY 2018 targets to NTD, they are not required to report until October 2018, when they will be reporting SFY 2019 targets.

MPO staff has used these transit agency targets as the basis for proposed initial regional TAM targets. At this time, MPO staff proposes adopting separate TAM targets for the MBTA, CATA, and MWRTA. The proposed targets listed below (in Tables 4 through 7) follow those targets set by the MBTA, MWRTA, and CATA, except for cases where targets for subgroups of transit assets have been aggregated or disaggregated.

Target information is not yet available for other transit agencies that receive FTA Section 5310 funding. MassDOT's Rail and Transit Division will coordinate development of SFY 2019 targets in conjunction with development of a group TAM plan for these agencies, which is scheduled for completion by October 2018.

This first target-setting and monitoring year will give the MPO, MassDOT, and transit agencies the opportunity to learn, explore, and further define and refine coordination processes. The MPO will continue collaborating with its planning partners to examine other factors and methods related to target setting, including other approaches for aggregating or disaggregating targets. MPO staff also expects to glean information and lessons learned from MassDOT and transit agencies' experiences in developing TAM plans. Information from these experiences can be applied when the MPO revisits its TAM targets when updating the TIP or LRTP.

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[20] CATA used useful life criteria as defined in FTA Circular 5010.1E (Award Management Requirements) for ULB values. MWRTA used useful life criteria as defined in MassDOT's Fully Accessible Vehicle Guide and in FTA Circular 5010.1E for ULB values.

Proposed Targets

Tables 4 through 7 describe proposed MPO targets for SFY 2018 for each of the four TAM measures. Each of the four tables describes the number of assets at the end of SFY 2017 (the baseline year), and the percent of assets in that year that exceeded performance thresholds. The tables also describe anticipated assets during SFY 2018, as well as the proposed SFY 2018 performance target for that asset group.

Table 4 describes baselines and proposed SFY 2018 targets for transit agency equipment, which refers to service support, maintenance, and other non-revenue vehicles. MPO staff proposes aggregating targets for non-revenue vehicle subtypes for each of the three transit agencies. Green shading in the target column indicates that the target percentage of vehicles meeting or exceeding their ULB is smaller as compared to the baseline year percentage (a desirable change), while red shading in the target column indicates that the target is larger as compared to the baseline year percentage (an undesirable change).

TABLE 4
Baseline Performance Measure Values and Proposed Targets for Equipment: Percentage of Non-Revenue Vehicles that have Met or Exceeded their ULB, by Agency

Agency	SFY 2017 (Baseline)		SFY 2018 (Target)	
	Number of Assets	Percent of Assets ≥ ULB	Anticipated Number of Assets	Target Percent of Baseline Assets ≥ ULB
MBTA	1,822	35%	1,824	37%
CATA	3	0%	3	0%
MWRTA	13	62%	14	50%

CATA = Cape Ann Transportation Authority. MBTA = Massachusetts Bay Transportation Authority. MWRTA = MetroWest Regional Transit Authority. SFY = State Fiscal Year. ULB = Useful Life Benchmark.

In SFY 2018, the MBTA anticipates some increases in the shares of non-revenue vehicles serving the transit and commuter rail systems that meet or exceed their ULB. CATA expects that all of its non-revenue vehicles will continue to be in a state of good repair. MWRTA expects to add an additional tow truck to its equipment fleet, which will reduce the percentage of its equipment vehicles that meet or exceed their ULB.

Table 5 describes baselines and proposed SFY 2018 targets for rolling stock, which refers to vehicles that provide passenger service. Green shading in the target column indicates that the target percentage of vehicles meeting or

exceeding their ULB is smaller as compared to the baseline year percentage (a desirable change), while red shading in the target column indicates that the target percentage of vehicles meeting or exceeding their ULB is larger compared to the baseline year percentage (an undesirable change).

TABLE 5
Baseline Performance Measure Values and Proposed Targets for Rolling Stock: Percentage of Revenue Vehicles that have Met or Exceeded their ULB, by Agency and Rolling Stock Type

| Agency | Rolling Stock Type | SFY 2017 (Baseline) | | SFY 2018 (Target) | |
		Number of Assets	Percent of Assets ≥ ULB	Anticipated Number of Assets	Target Percent of Baseline Assets ≥ ULB
MBTA	Buses	1,027	3%	1,023	25%
MBTA	THE RIDE Vans and Sedans	647	29%	647	14%
MBTA	Light Rail Vehicles	203	45%	206	45%
MBTA	Heavy Rail Vehicles	424	45%	430	58%
MBTA	Commuter Rail Locomotives	87	23%	90	20%
MBTA	Commuter Rail Coaches	443	13%	443	13%
MBTA	Ferries	2	0%	4	0%
CATA	Buses	7	14%	7	14%
CATA	Cutaway Vehicles[1]	24	0%	24	0%
CATA	Trolley (simulated)[2]	2	100%	2	100%
MWRTA	Cutaway Vehicles[3,4]	82	13%	87	0%
MWRTA	Autos[3]	9	0%	9	0%

CATA = Cape Ann Transportation Authority. MBTA = Massachusetts Bay Transportation Authority. MWRTA = MetroWest Regional Transit Authority. SFY = State Fiscal Year. ULB = Useful Life Benchmark.

[1] The NTD defines a cutaway vehicle as a vehicle in which a bus body is mounted on a van or light-duty truck chassis, which may be reinforced or extended. CATA uses eight of these vehicles to provide fixed route services, and 16 vehicles to provide demand response service.

[2] Simulated trolleys, also known as trolley-replica buses, have rubber tires and internal combustion engines, as opposed to steel-wheeled trolley vehicles or rubber-tire trolley buses that draw power from overhead wires.

[3] MWRTA uses cutaway vehicles to provide fixed route and demand response service, and uses autos to provide demand response service.

[4] In April 2018, MWRTA updated its SFY 2017 cutaway vehicle count from 83 to 82 and updated the SFY 2017 percentage of vehicles exceeding their ULB from 14 to 13.

The MBTA has set SFY 2018 targets that are equal to or lower than baseline conditions for vehicles that serve THE RIDE, light rail vehicles, commuter rail coaches and locomotives, and ferryboats. The authority has set targets assuming that larger percentages of buses and heavy rail vehicles will exceed their useful life benchmarks, compared to the baseline. The MBTA is funding bus, light rail, and heavy rail maintenance programs and initiatives to ensure safe and reliable service, and a procurement process for new Red and Orange Line (heavy rail) cars is underway. The delivery of 152 Orange Line cars, which will enlarge the fleet by 32 vehicles, will start in SFY 2018 and is expected to be complete by SFY 2022. The delivery of 252 new Red Line vehicles, which will enlarge the total number of Red Line vehicles by 42 cars, will start in SFY 2019 and is expected to be complete by SFY 2024. MWRTA expects to make investments that will replace vehicles in and expand its fleet, and has set SFY 2018 targets to bring all of its rolling stock vehicles into a state of good repair. CATA expects that it will maintain the same level of state of good repair for its rolling stock vehicles in SFY 2018.

Table 6 describes baselines and proposed SFY 2018 targets for parking facilities, stations, and other facilities.

TABLE 6
Baseline Performance Measure Values and Proposed Targets for Facilities:
Percentage of Assets with Condition Rating Lower than 3.0 (FTA TERM
Scale), by Agency and Facility Type

		SFY 2017 (Baseline)		SFY 2018 (Target)	
Agency	Facility Type	Number of Assets	Percent of Assets with Condition Rating < 3.0	Anticipated Number of Assets	Target Percent of Assets with Condition Rating < 3.0
MBTA	Administrative, Maintenance, and Other Facilities[1]	141	46%	141	46%
MBTA	Stations	277	54%	277	54%
MBTA	Parking[2]	99	65%	99	65%
CATA	Administrative, Maintenance, and Other Facilities	1	0%	1	0%
MWRTA	Administrative, Maintenance, and Other Facilities	1	0%	1	0%

CATA = Cape Ann Transportation Authority. FTA = Federal Transit Administration. MBTA = Massachusetts Bay Transportation Authority. MWRTA = MetroWest Regional Transit Authority. SFY = State Fiscal Year. TERM = Transit Economic Requirements Model.

[1] The MBTA includes commuter rail layover yards and subway power substations in the category of "administrative, maintenance, and other facilities."

[2] Parking facilities include garages and surface lots.

For all three of the transit agencies, SFY 2018 condition targets equal the baseline percent of assets with a FTA TERM Scale condition rating lower than three. MBTA staff notes that the Authority's Department of Asset Management is in the process of establishing comprehensive condition assessment standards for all types of facilities that will be rolled out on a systemwide level. CATA and MWRTA facilities meet state of good repair thresholds.

Table 7 describes baselines and proposed SFY 2018 targets for infrastructure, specifically rail fixed guideway. The MBTA is the only transit agency with this asset type.

TABLE 7
Baseline Performance Measure Values and Proposed Targets for Infrastructure (Rail Fixed Guideway): Percentage of Track Segments with Performance (Speed) Restrictions, by Mode (System), MBTA

		SFY 2017 (Baseline)		SFY 2018 (Target)	
Agency	**System**	**Directional Track Miles**	**Percent of Track Miles with Performance Restrictions**	**Anticipated Directional Track Miles**	**Target Percent of Track Miles with Performance Restrictions**
MBTA	Light Rail	45.68	8.58%	45.68	8.58%
MBTA	Heavy Rail (including Mattapan High Speed Line)	84.55	5.62%	84.55	5.62%
MBTA	Commuter Rail	663.84	0.35%	663.84	0.35%

MBTA = Massachusetts Bay Transportation Authority. SFY = State Fiscal Year.
Note: The term "directional track miles" represents the miles managed and maintained by the MBTA with respect to each direction of travel (for example, northbound and southbound), and excludes non-revenue tracks such as yards, turnarounds, and storage tracks. The baseline and target percentages represent the annual average number of miles meeting this criterion over the 12-month reporting period.

MBTA staff notes that these 2018 targets are based on historical data and enhanced track quality inspection processes, ongoing maintenance initiatives, and planned capital investment in track renewals and other assets that might affect speed restrictions, such as signals or bridge work. Future target setting will also be based on these factors. The MBTA's Department of Asset Management is currently establishing comprehensive condition assessment standards for tracks, signals, and communication and power systems, which will further refine condition criteria and assessment methodologies.

6   NEXT STEPS

MPO staff will continue to work with the MPO and other planning partners to integrate TAM elements, including targets, into its PBPP process.

Coordination to Address TAM Requirements

MPO staff regularly participates in meetings of the Transportation Program Managers Group's subcommittee on performance measures, which brings together MPO and MassDOT staff representatives to discuss ways to address PBPP requirements and needs. Staff also maintains ongoing communication with the MBTA, MWRTA, and CATA on TAM activities and performance monitoring. Staff will continue these practices going forward, and will also continue coordinating with MassDOT on the items pertaining to the group TAM plan and targets for other transit providers that receive FTA Section 5310 funding. In the coming months, staff will work with MassDOT and the transit agencies to define roles and responsibilities more specifically as they pertain to TAM and performance monitoring, and to document these roles and responsibilities. Staff will also work with these agencies to keep the MPO informed of the status of TAM plans and related planning and reporting processes.

Performance Monitoring and Relationships to Capital Investments

As part of broader coordination efforts, MPO staff will follow the MBTA's, MWRTA's, and CATA's work to inventory and monitor the condition of their transit assets and to evaluate progress made during SFY 2018. MPO staff will also follow MassDOT's work with other FTA 5310 subrecipients to monitor and report their asset inventories, asset condition information, and progress with respect to performance targets. MPO staff will work with transit agencies and MassDOT to establish methods and identify data needed for the MPO to examine transit funds that are proposed for programming in its TIP in the context of TAM targets. The goal of these processes is to generate information to support the MPO as it develops its TIPs and LRTPs.

Performance Reporting

The MPO is required to include TAM performance measure and target information in TIPs or LRTPs updated or amended after October 1, 2018. MPO staff will work with MassDOT and transit agencies to develop content on TAM performance targets that can be included in the FFYs 2019–23 TIP (scheduled for MPO adoption in May 2018). This learning experience will provide useful information for performance reports that MPO staff will develop for inclusion in *Destination 2040* and the FFYs 2020–24 TIP (both scheduled for adoption in FFY 2019).

MS/ms

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