

## 4.) Performance Measures

### Overview of Performance-Based Planning and Programming

Performance-Based Planning and Programming (PBPP) refers to a transportation agency's application of performance management in their planning and programming processes. The foundation of PBPP was initially federally-legislated through Moving Ahead for Progress in the 21st Century (MAP-21) and reaffirmed in the new Bipartisan Infrastructure Law (BIL). The requirement for PBPP transformed the federal-aid highway program by establishing new requirements for performance management to ensure the most efficient investment of federal transportation funds that support the following National Goals:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Activity
6. Environmental Sustainability
7. Reduced Project Delays

In addition to the federal requirements for Metropolitan Planning Organizations (MPOs) to integrate PBPP into their transportation processes, MPOs are required to adhere to the federal Continuing, Cooperative, and Comprehensive ("3C") Metropolitan Transportation Planning Process. For MPOs, this includes activities and products that address a range of planning emphasis areas typically undertaken by a transportation agency together with other agencies, interested stakeholders and the public. The planning emphasis areas of particular interest to the CMMPO are: Safety, Security, State of Good Repair, Congestion, Multimodal, Sustainability, Equity, Economic Vitality & Freight Movement, Stormwater Management & Infrastructure Resiliency and Travel & Tourism. Each of these emphasis areas are fully considered when the CMMPO is developing strategies, projects, plans or initiatives. Examples include the following:

- Long-Range Transportation Plans (LRTPs)
- Other plans and processes, including those that are federally-required, such as Strategic Highway Safety Plans, Asset Management Plans, the Congestion Management Process
- Transit Agency Asset Management Plans and Transit Agency Safety Plans as well as others that are not required by regulation
- Programming documents, including state and metropolitan Transportation Improvement Programs (STIPs and TIPs)

The CMMPO's PBPP process is guided by both the federal transportation performance management requirements and the MPO's own customized goals and objectives, which were established as part of the CMMPO's current LRTP, *Mobility 2040: Update for 2020*. These goals and objectives have been integrated through the various planning emphasis areas when

developing transportation plans. By addressing the planning emphasis areas in all aspects of the transportation process, the CMMPO has been able to produce balanced and well-rounded transportation products for the region. Further, the overall intent of PBPP is to ensure that transportation investment decisions—both long-term planning and short-term programming—are based on the ability to meet the established goals.

## Federal Performance Management Requirements

The US Department of Transportation had previously published three performance rules that require all States, MPOs and public transit providers to interactively coordinate and set performance targets. Collectively, the three published performance measure rulemakings establish the regulations necessary to more effectively evaluate and report on safety, infrastructure condition, on-road mobile source emissions, and surface transportation performance across the Nation. State DOTs and MPOs should use the information and data subsequently generated to inform ongoing and future transportation planning and programming decisions. In turn, the FHWA and FTA use the information to more reliably assess and report on the impacts of federal funding investments.

Table 1 shows the federally-required performance measures for highway and Table 2 shows the federally-required performance measures for transit.

TABLE 1: FEDERALLY-REQUIRED HIGHWAY PERFORMANCE MEASURES				
National Goal	Highway Performance Area	FHWA Rule	Performance Measure	MPO Goal Area
Safety	Injuries & Fatalities	Safety (PM1)	<ul style="list-style-type: none"> <li>• # of fatalities</li> <li>• Fatality rate per 100 million vehicle-miles traveled</li> </ul>	Safety
			<ul style="list-style-type: none"> <li>• # of serious injuries</li> <li>• Serious injury rate per 100 million vehicle-miles traveled</li> <li>• # of non-motorized fatalities and non-motorized serious injuries</li> </ul>	
Infrastructure Condition	Pavement Condition	Pavement & Bridge (PM2)	<ul style="list-style-type: none"> <li>• % of pavements on the Interstate system in <i>good</i> condition</li> <li>• % of pavements on the Interstate system in <i>poor</i> condition</li> <li>• % of pavements on the non-Interstate NHS in <i>good</i> condition</li> <li>• % of pavements on the non-Interstate NHS in <i>poor</i> condition</li> </ul>	State of Good Repair

TABLE 1: FEDERALLY-REQUIRED HIGHWAY PERFORMANCE MEASURES				
National Goal	Highway Performance Area	FHWA Rule	Performance Measure	MPO Goal Area
Infrastructure Condition	Bridge Condition	Pavement & Bridge (PM2)	<ul style="list-style-type: none"> <li>• % of NHS bridges by deck area classified as in <i>good</i> condition</li> <li>• % of NHS bridges by deck area classified as in <i>poor</i> condition</li> </ul>	State of Good Repair
System Reliability	Performance of the National Highway System	System Performance, Freight & CMAQ (PM3)	<ul style="list-style-type: none"> <li>• % of person-miles traveled on the Interstate system that are reliable</li> <li>• % of person-miles traveled on the non-Interstate NHS that are reliable</li> </ul>	Congestion / Mobility
Freight Movement & Economic Vitality	Freight Movement on the Interstate System	System Performance, Freight & CMAQ (PM3)	<ul style="list-style-type: none"> <li>• Truck travel time reliability on the Interstate system (average truck reliability index)</li> </ul>	Economic Vitality / Freight
Congestion Reduction	Traffic Congestion	System Performance, Freight & CMAQ (PM3)	<ul style="list-style-type: none"> <li>• Percent of non-single-occupant vehicle travel</li> <li>• Annual hours of peak-hour excessive delay per capita</li> </ul>	Congestion / Mobility
Environmental Sustainability	On-Road Mobile Source Emissions	System Performance, Freight & CMAQ (PM3)	<ul style="list-style-type: none"> <li>• Total emissions reduction</li> </ul>	Reduce GHG / Promote Sustainability

The CMMPO has and will continue to set targets on a periodic basis for the three federally-required performance rules and will also continue to coordinate on PBPP activities with MassDOT, the WRTA, other MPOs and stakeholders. To date, the CMMPO has consistently decided to adopt MassDOT's performance targets as they essentially match the CMMPO's trends, which has resulted in the creation of an effective, integrated, and informative PBPP process.

## Safety Performance Measures (PM1)

The CMMPO has consistently voted to adopt the statewide safety performance measure targets set by MassDOT, most recently for Calendar Year (CY) 2022 at their February 16, 2022 meeting. In setting these targets, MassDOT has followed FHWA guidelines by using statewide crash data

and Highway Performance Monitoring System (HPMS) data for vehicle miles traveled (VMT) in order to calculate 5-year, rolling average trend lines for all FHWA-defined safety measures. For CY 2022 targets, four of the five safety measures—total number of fatalities, rate of fatalities per 100 million vehicle miles traveled (VMT), total number of incapacitating injuries, and rate of incapacitating injuries per 100 million VMT—were established by extending earlier MassDOT trend lines into the 2018-2022 period. All four of these measures reflect a modest decrease in statewide trends. The fifth safety measure, the total number of combined incapacitating injuries and fatalities for non-motorized modes, is projected to decrease from last year's target. The likely projected decrease from the CY 2021 target is directly related to a number of implementation strategies from the Statewide Bike Plan, Statewide Pedestrian Plan, and Strategic Highway Safety Plan. In recent years, MassDOT and the CMMPO have also invested in the "Complete Streets" program, bicycle & pedestrian infrastructure, intersection & safety improvements in both the Capital Investment Plan (CIP) and Statewide Transportation Improvement Program (STIP) to address an increasing mode share and to incorporate safety mitigation elements into projects. Looking ahead, the CMMPO, in coordination with MassDOT, is actively seeking to improve the data collection methodology for bicycle & pedestrian counts while also continuing to analyze crash clusters and crash counts that include both motorized and non-motorized modes to address safety issues at identified locations.

In all safety categories, MassDOT has established a long-term target of "Toward Zero Deaths" through their Performance Measures Tracker<sup>2</sup> and will continue to establish safety targets for the MPOs to consider for adoption each calendar year. While the MPOs are not required by FHWA to report on annual safety performance targets, FHWA guidelines require MPOs to either adopt MassDOT's annual targets or to establish their own customized targets each year.

The safety measures MassDOT has established for CY 2022, recently adopted by the CMMPO, are as follows:

- 1) Fatalities: MassDOT's long-term goal is zero deaths and injuries. With that preface, for federal reporting purposes, the estimated five-year average target number of fatalities in CY 2022 based on historical data, reported as part of this exercise, is 340, down from an average of 354 fatalities for the years 2016–2020. [See Figure 1 for the CMMPO vs. statewide comparison of the trend for this performance measure.]
- 2) Rate of Fatalities per 100 million VMT: The target fatality rate for CY 2022 is 0.56, down from a 0.57 average for the years 2016–2020. [See Figure 1 for the CMMPO vs. statewide comparison of the trend for this performance measure.]

---

<sup>2</sup> [MassDOT Annual Performance Management Tracker Reports](#)

- 3) Serious Injuries: The target number of serious injuries for CY 2022 is 2504, down from the average of 2641 for the years 2016–2020. [See Figure 2 for the CMMPO vs. statewide comparison of the trend for this performance measure.]
- 4) Rate of Serious Injuries per 100 million VMT: The serious injury rate target for CY 2022 is 4.11 per year, down from the 4.28 average rate for the years 2016–2020. [See Figure 2 for the CMMPO vs. statewide comparison of the trend for this performance measure.]
- 5) Total Number of Combined Incapacitating Injuries and Fatalities for Non-Motorized Modes: The CY 2022 target number of fatalities and incapacitating injuries for non-motorists is 471 per year, down from 484 during the years 2016–2020. [See Figure 3 for the CMMPO vs. statewide comparison of the trend for this performance measure.]

**Figure 1**  
**Total Fatalities and Fatality Rate comparison between MassDOT and CMMPO**

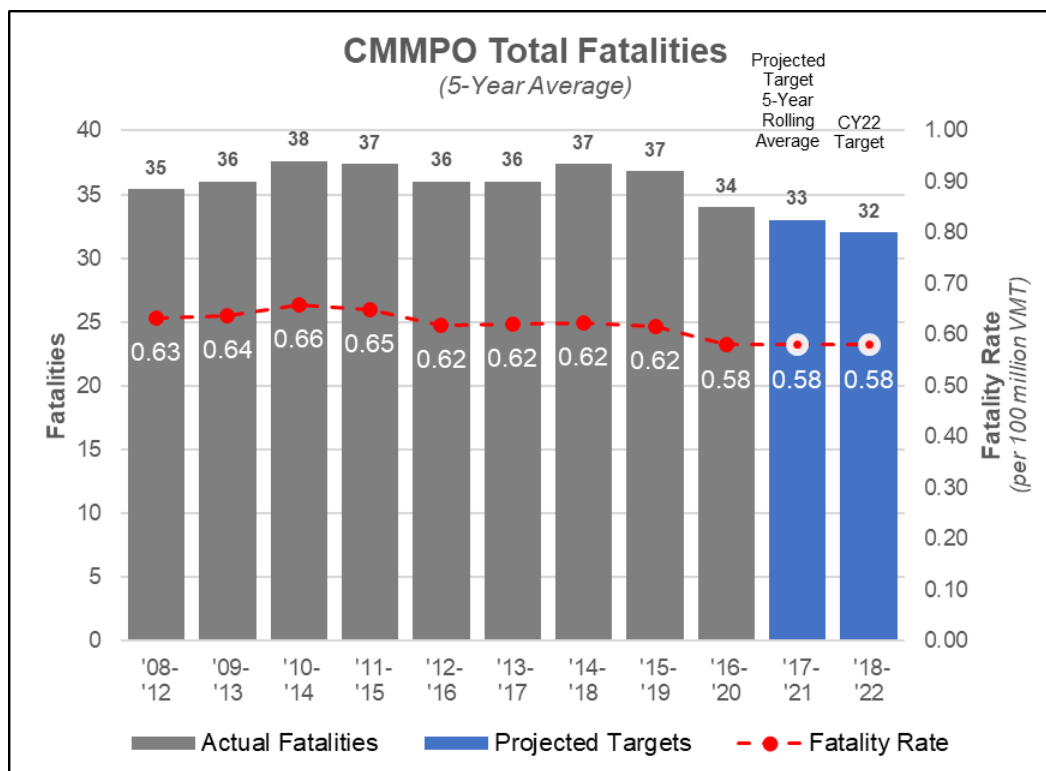
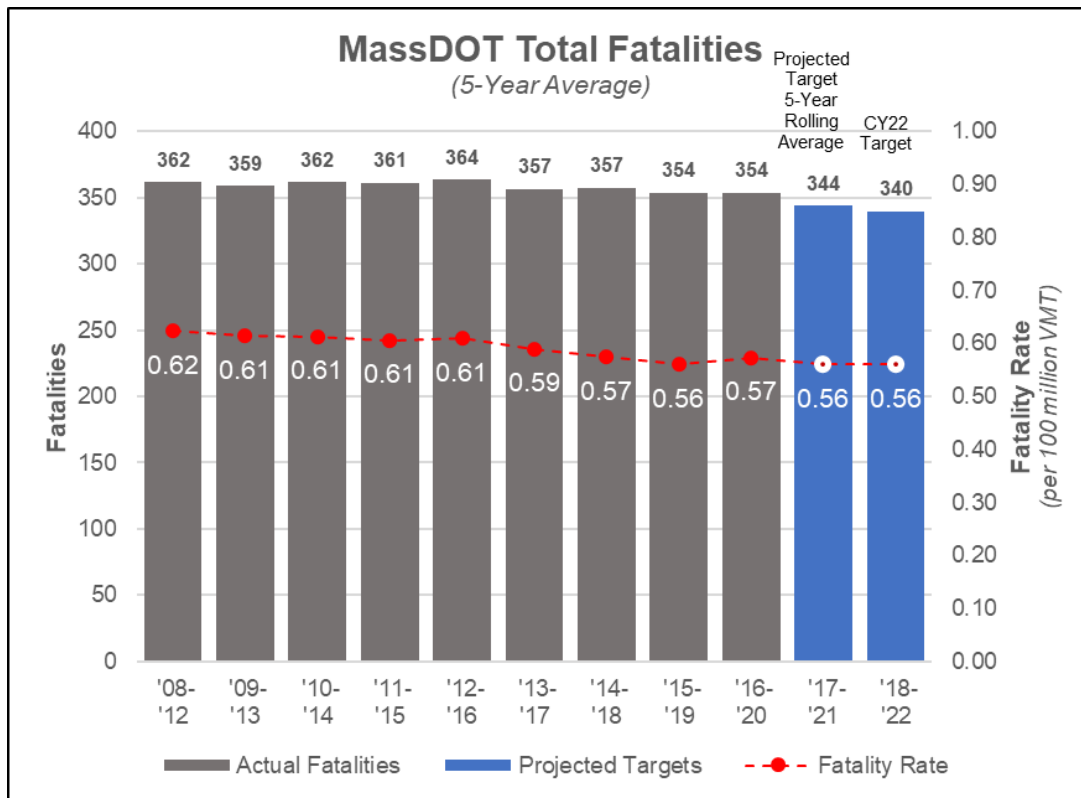
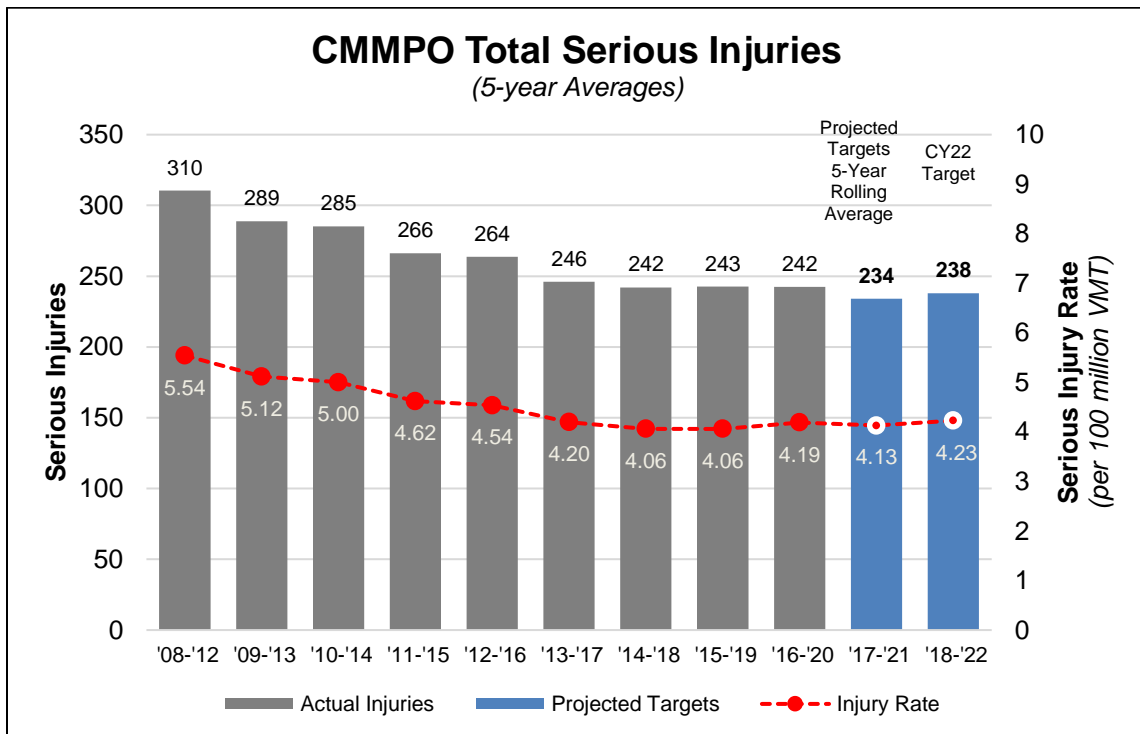
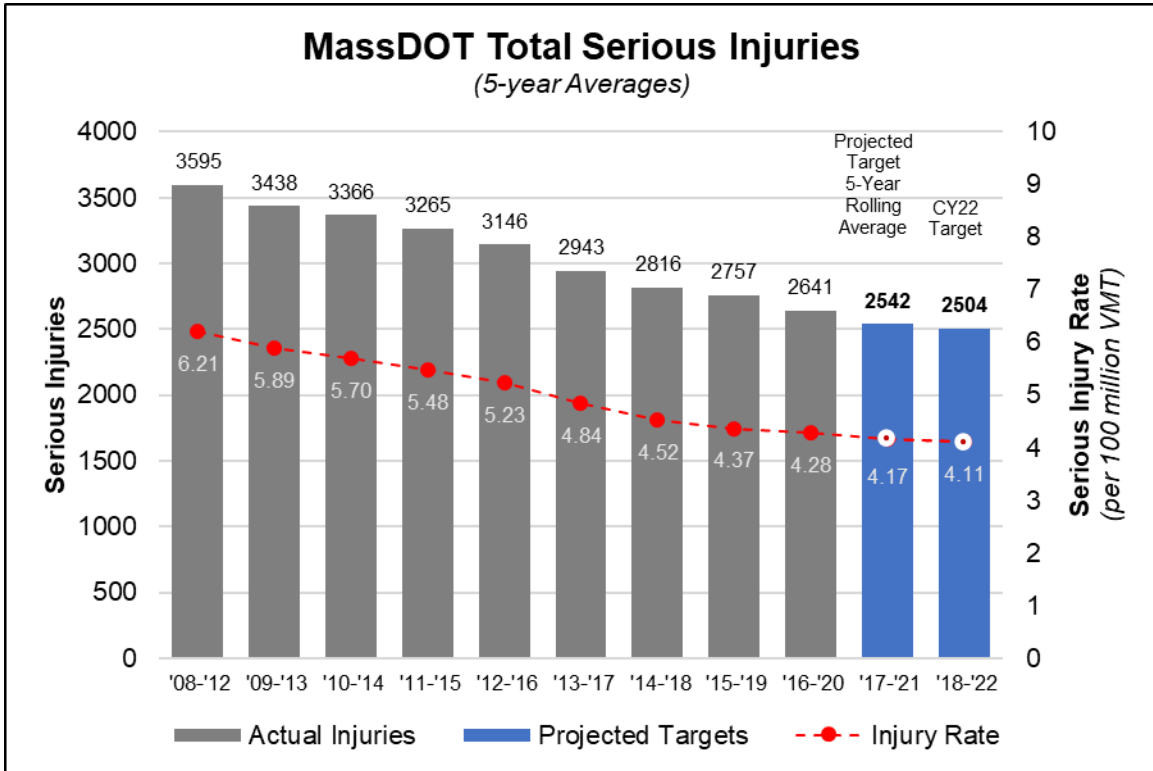
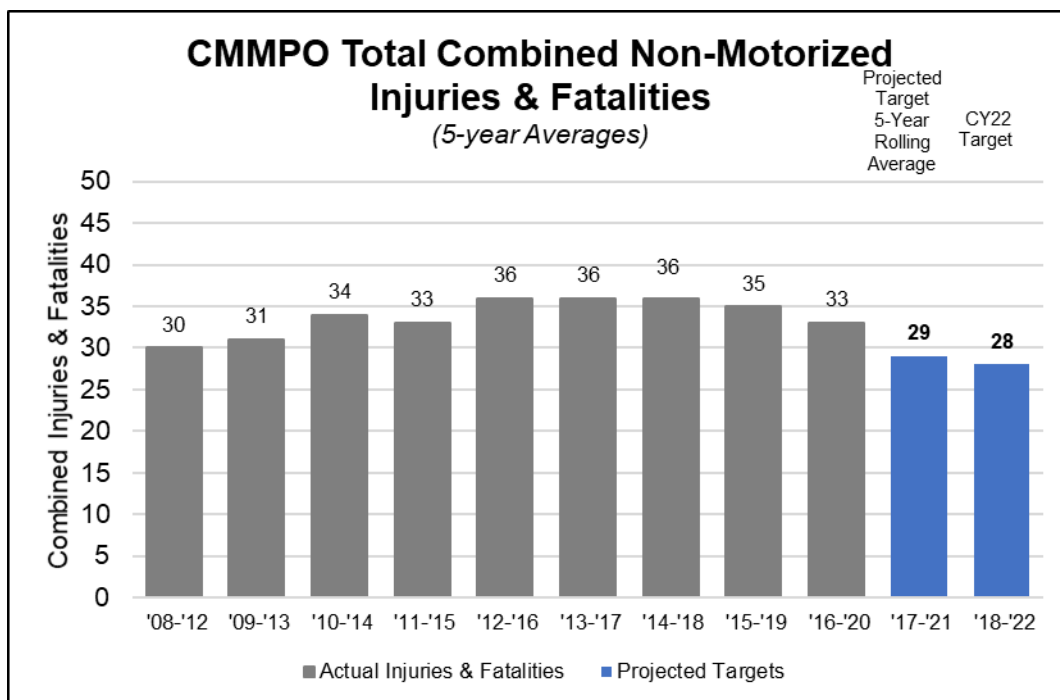
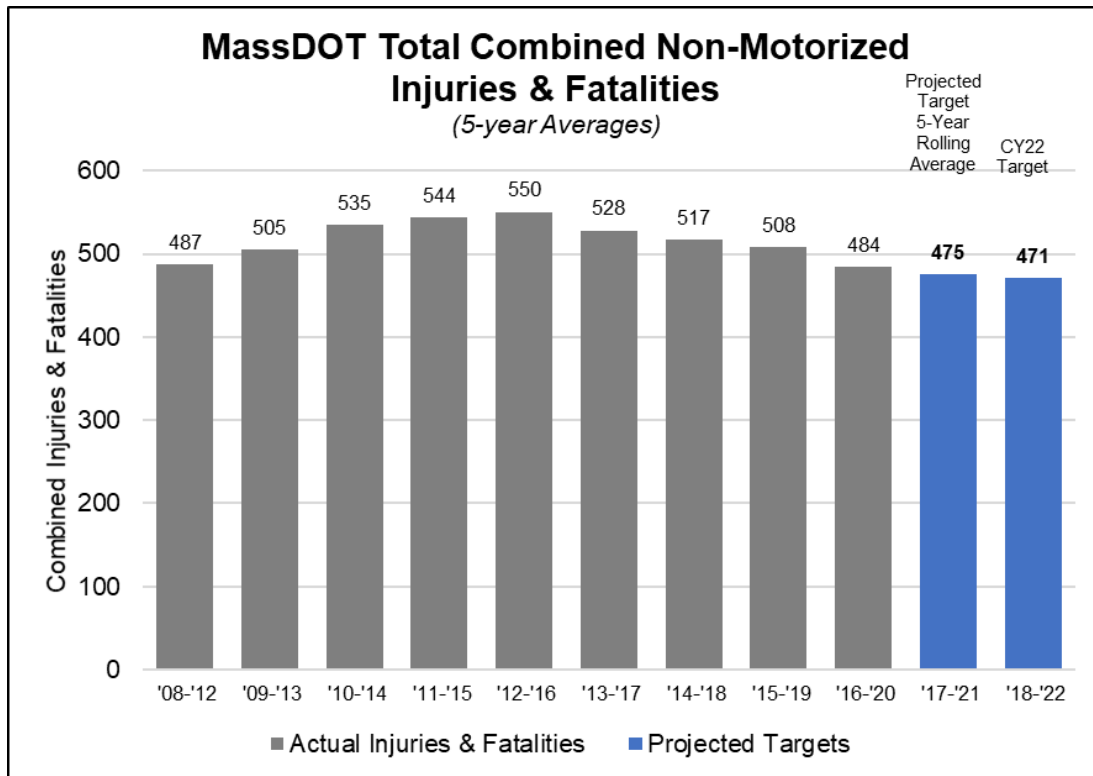


Figure 2

Total Serious Injuries and Serious Injury Rate comparison between MassDOT and CMMPO



**Figure 3**  
**Total Combined Non-Motorized Injuries & Fatalities comparison**  
**between MassDOT and CMMPO**





## Bridge & Pavement Performance Measures (PM2)

Previously, the CMMPO voted to adopt the 2-year (2020) and 4-year (2022) statewide bridge and pavement performance measure targets set by MassDOT. MassDOT was required to adopt statewide targets by 5/20/18, with the MPOs either adopting the statewide targets or establishing their own by November 2018. The CMMPO adopted the established MassDOT statewide targets at their October 17, 2018 meeting. In 2020, MassDOT performed a mid-performance review of the targets and decided to reaffirm the 2022 targets. When originally setting the targets, MassDOT followed FHWA guidelines by measuring bridge and pavement condition using the 9-point National Bridge Inventory Standards (NBIS); the International Roughness Index (IRI); the presence of pavement rutting; and the presence of pavement cracking. 2-year and 4-year targets were set for the following six (6) individual performance measures:

1. percent of bridges in good condition
2. percent of bridges in poor condition
3. percent of Interstate pavement in good condition
4. percent of Interstate pavement in poor condition
5. percent of non-Interstate pavement in good condition
6. percent of non-Interstate pavement in poor condition

All of the above listed performance measures are tracked in greater detail in [MassDOT's Transportation Asset Management Plan \(TAMP\)](#), which was finalized in September 2019. The performance measures can also be found in MassDOT's Performance Management Tracker.<sup>3</sup>

Targets for bridge-related performance measures were determined by identifying which bridge projects are programmed and projecting the rate of bridge condition deterioration. The bridge-related performance measures consider the percentage of deck area, as opposed to the total number of bridges. There are numerous bridge projects programmed in the 2023 – 2027 TIP.

Performance targets for pavement-related performance measures were based only on a single year of valid data, following the guidance from FHWA, and thus will remain steady. These measures were revisited at the 2-year mark (2020), when three years of data was available, for better-informed target setting. At that time, MassDOT decided to keep the original 4-year (2022) targets.

MassDOT continues to measure pavement quality and to set both statewide short and long-term targets in the MassDOT Performance Management Tracker using the Pavement Serviceability Index (PSI), which differs from IRI. These measures and targets are used in conjunction with federal measures to inform program sizing and project selection.

---

<sup>3</sup> [MassDOT Annual Performance Management Tracker Reports](#)

PERFORMANCE MEASURE	CURRENT DATA*	2-YEAR TARGET (2020)	4-YEAR TARGET (2022)
Bridges in good condition	15.6%	15%	16%
Bridges in poor condition	13.1%	13%	12%
Interstate Pavement in good condition	75.6%	70%	70%
Interstate Pavement in poor condition	0.1%	4%	4%
Non-Interstate Pavement in good condition	34.1%	30%	30%
Non-Interstate Pavement in poor condition	31.4%	30%	30%

\*Current data is from Mid Performance Period Progress Report

## Reliability, Congestion, & Emissions Performance Measures (PM3)

Previously, the CMMPO voted to adopt the 2-year (2020) and 4-year (2022) statewide reliability, congestion, and emissions performance measure targets set by MassDOT. MassDOT was required to adopt statewide targets by 5/20/18, with the MPOs either adopting the statewide targets or establishing their own by November 2018. The CMMPO adopted the original statewide targets at their October 17, 2018 meeting. In 2020, MassDOT performed a mid-performance review of the targets and at that time decided to update the Non-SOV and Emission Reduction 4-year (2022) targets. The CMMPO voted to adopt the updated targets at their February 17, 2021 meeting.

MassDOT followed FHWA regulation in measuring Level of Travel Time Reliability (LOTTR) on both the Interstate and non-Interstate NHS as well as Truck Travel Time Reliability (TTTR) on the Interstate System using the National Performance Management Research Dataset (NPMRDS) provided by FHWA. These performance measures aim to identify the predictability of travel times on the highway network by comparing the average travel time along a given segment against longer travel times. For LOTTR, the performance of all segments of the Interstate and non-Interstate NHS are defined as either “reliable” or “unreliable” based on a comparison between the 50<sup>th</sup> percentile travel time and the 80<sup>th</sup> percentile travel time, thus determining the proportion of reliable segments. For TTTR, the ratio between the 50<sup>th</sup> percentile travel time and the 90<sup>th</sup> percentile travel time for trucks only along the Interstate System is reported as a statewide measure. The following two tables compare the LOTTR and TTTR between Statewide and the CMMPO planning region. The following Statewide and CMMPO interstate and non-interstate percentages are from the Probe Data Analytics Suite of the Regional Integrated Transportation Information System (RITIS) website.

Year	Statewide		CMMPO		Interstate Target	Non-Interstate Target
	Interstate %	Non-Interstate %	Interstate %	Non-Interstate %		
2017	70.4%	80.1%	89.7%	87.1%	68%	80%
2018	69.8%	80.4%	87.3%	89.6%		
2019	69.1%	82.8%	84.6%	88.9%		
2020*	94.4%	91.3%	99.1%	94.1%		
2021	84.2%	87.9%	96.4%	92.9%		

*\*COVID-19 pandemic occurred during 2020*

Year	Statewide Interstate TTTR Ratio	CMMPO Interstate TTTR Ratio	Interstate TTTR Target
2017	1.81	1.71	1.85
2018	1.88	1.79	
2019	1.84	1.77	
2020*	1.44	1.22	
2021	1.61	1.59	

*\*COVID-19 pandemic occurred during 2020*

The CMMPO—whose planning area includes communities in the Boston Urbanized Area (UZA), and as a signatory to the 2018 Boston UZA Memorandum of Understanding (MOU)—has also adopted 2-year (2020) and 4-year (2022) Boston UZA-wide congestion performance measure targets. These performance measures are the percentage of non-single occupancy vehicle (SOV) travel and Peak Hour Excessive Delay (PHED). Targets were developed in coordination with MassDOT and those neighboring MPOs that have the transportation planning responsibility for portions of the Boston UZA.

The percentage of non-SOV travel is approximated using the US Census Bureau’s American Community Survey (ACS) Journey-to-Work data. In the Boston UZA, the proportion of non-SOV travel has been steadily increasing and is projected to continue to increase annually. Accordingly, in October 2020, MassDOT updated the 4-year (2022) target from 35.1% to a revised target of 35.8% based on new available data.

PHED is measured by totaling the number of hours spent in excessive delay (defined as travel time at 20 miles per hour or at 60% of the posted speed limit, whichever is greater) in peak hours (between 6:00 AM and 10:00 AM, and between 3:00 PM and 7:00 PM) divided by the total UZA population. When targets initially needed to be set, there was only one year of data available. As such, the performance targets for PHED will remain flat until further data becomes available.

Emissions reduction targets are measured as the sum total of all emissions reductions anticipated through CMAQ-funded projects in non-attainment or air quality maintenance areas (currently the cities of Lowell, Springfield, Waltham, and Worcester, and the town of Oak Bluffs) identified in the Statewide Transportation Improvement Program (STIP). This anticipated emissions reduction total is calculated using existing CMAQ processes. This 4-year (2022) target was also updated in October 2020. The new targets are 0.559 (VOC), 1.71 (NOx), and 6.53 (CO).

PERFORMANCE MEASURE	CURRENT DATA*	2-YEAR (2020)	4-YEAR (2022)
Non-Interstate LOTTR	82.4%	80%	80%
Interstate LOTTR	69.1%	68%	68%
TTTR	1.86	1.85	1.85
PHED (Boston UZA)	25.6%	18.31	18.3
% non-SOV (Boston UZA)	34.6%	34.5%	35.8%

\*Current data is from Mid Performance Period Progress Report

Table 2 contains the federally-required performance measures for transit in regards to safety and infrastructure condition.

TABLE 2: FEDERALLY-REQUIRED TRANSIT PERFORMANCE MEASURES			
National Goal	Transit Performance Area / Asset Category	Performance Measure	MPO Goal Area
Safety	Fatalities	<ul style="list-style-type: none"> <li>Total # of reportable fatalities and rate per total vehicle revenue miles by mode</li> <li>Total # of reportable injuries and rate per total vehicle revenue miles by mode</li> <li>Total # of reportable events and rate per total vehicle revenue miles by mode</li> <li>Mean distance between major mechanical failures by mode</li> </ul>	Safety
	Injuries		
	Safety Events		
	System Reliability		
Infrastructure Condition	Equipment	<ul style="list-style-type: none"> <li>% of vehicles that have met or exceeded their Useful Life Benchmark (ULB)</li> <li>% of revenue vehicles within a particular asset class that have met or exceeded their ULB</li> <li>% of track segments with performance restrictions</li> <li>% of facilities within an asset class rated below 3.0 on the FTA Transit Economic Requirements Model Scale</li> </ul>	State of Good Repair
	Rolling Stock		
	Infrastructure		
	Facilities		

## Transit Asset Condition

The CMMPO and Worcester Regional Transit Authority (WRTA) originally developed a Transit Asset Management Plan (TAM Plan) in October 2018. All transit agencies that own, operate, or manage capital assets used in the provision of public transportation and that receive federal financial assistance under 49 U.S.C. Chapter 53 - either as recipients or subrecipients - must develop a TAM Plan. A TAM Plan is a necessary tool that assists transit providers in:

1. Assessing the current condition of its capital assets
2. Determining what the condition and performance of its assets should be (if they are not already in a state of good repair)
3. Identifying the unacceptable risks, including safety risks, in continuing to use an asset that is not in a state of good repair
4. Deciding how to best balance and prioritize reasonably anticipated funds (revenues from all sources) towards improving asset condition and achieving a sufficient level of performance within those means
5. TAM Plans must include at a minimum an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the state of good repair of their capital assets.

One provision of the TAM Plan is for transit agencies to work with MPOs to set performance targets for each four-year cycle. On an annual basis, the RTAs must submit an annual condition report of assets to the National Transit Database (NTD). RTAs must also set targets every four years for the performance of assets. Each asset category has its own performance measure by which to set targets:

- Rolling stock: % of revenue vehicles exceeding Useful Life Benchmark (ULB)
- Equipment: % of nonrevenue service vehicles exceeding ULB
- Facilities: % of facilities rated under 3.0 on the Transit Economic Requirements Model (TERM) scale
- Infrastructure: % of railroad track segments under performance, or speed, restriction

Included in the below table, the CMMPO coordinated with the WRTA to develop an initial set of TAM targets for the region for CY 2018.

WRTA ASSET CONDITION PERFORMANCE TARGETS		
Category	Class	Performance Target
Rolling Stock	Buses	100% of fleet meets or exceeds ULB of 12 years
	Short Buses	100% of fleet meets or exceeds ULB of 10 years

WRTA ASSET CONDITION PERFORMANCE TARGETS		
	Vans	100% of fleet meets or exceeds ULB of 5 years
Equipment	Automobile	100% of fleet meets or exceeds ULB of 4 years
Facilities	Admin/Maintenance Facility	0% of facilities rated under 3.0 on TERM scale
	Passenger/Parking Facility	0% of facilities rated under 3.0 on TERM scale

FTA defines ULB as “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.” For example, FTA’s default ULB value for a bus is 14 years. FTA’s Transit Economic Requirements Model (TERM) scale, which pertains to the facilities measure, is a rating system that describes asset condition. The scale values are 1 (poor), 2 (marginal), 3 (adequate), 4 (good), and 5 (excellent). Because each measure is intended to represent the share of transit assets that are not in a state of good repair, the goal is to minimize the value for all four required measures.

Within the 2023-2027 Transit TIP, projects include the purchase of support vehicles and new buses (35’ & 40’). By purchasing the new support vehicles and buses, the WRTA will maintain their rolling stock in excellent condition and meet the performance targets within the TAM Plan. Additionally, other projects in the transit TIP include the rehabilitation and renovation of both the bus terminal “Hub” and the maintenance facility which will help maintain the good to excellent conditions suggested by the current TAM Plan targets.

## Public Transportation Agency Safety Plan (PTASP)

The FTA has adopted the principals and methods of Safety Management Systems (SMS) as the basis for enhancing the safety of public transportation in the United States. Each Public Transportation Agency Safety Plan (PTASP) will incorporate SMS principals and methods tailored to the size, complexity, and scope of the public transportation system and the environment in which it operates. Transit agencies were required to develop, certify, and implement an Agency Safety Plan by 12/31/20 while the CMMPO had up to 180-days after the Plan is certified to adopt the included targets. The WRTA PTASP was finalized and subsequently endorsed by the WRTA Advisory Board in November 2020. The Plan utilizes existing agency safety practices as well as identifies industry best practices to be implemented in order to meet the new regulation in 49 CFR Part 673 of the federal guidelines. Later, the CMMPO adopted the WRTA’s PTASP targets at their February 17, 2021 meeting. The following seven (7) measures must be included in the PTASP:

1. Total number of injuries
2. Injury rate per total vehicle revenue miles
3. Total number of fatalities
4. Fatality rate per total vehicle revenue miles
5. Total number of safety events
6. Safety events rate per total vehicle revenue miles
7. System reliability mean distance between major mechanical failures

The below targets are based on a review of the previous five years (FY15-FY19) of the WRTA's safety performance data for both Fixed-Route and Demand Response transit services. Rates are calculated per 1,000,000 vehicle revenue miles. Below are the targets that were set for FY 2021. New targets will be updated annually based on 5-year rolling averages.

FY 2021 WRTA Safety Targets							
Mode of Transit Service	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (Miles between Failures)
Fixed Route	0	0	10	5.1	9	4.6	10,000
Demand Response	0	0	1	0.8	1	0.8	100,000

Similar to the WRTA's TAM Plan, new bus and support vehicle purchases included in the 2023-2027 Transit TIP is also anticipated to help reach the safety targets listed in the PTASP. The new buses and support vehicles replacing the older vehicles are expected to be more reliable and safer on the roadways. In addition, the purchasing of support equipment and associated capital maintenance item will assist in the repair of older vehicles. Further, the purchase of a new bus shelter will help keep the transit riders safe while waiting for the bus.

## **CMMPO Regionally-Customized Performance Measures**

In addition to the federally-required performance measures, the CMMPO has established regionally-customized measures for the region. These measures are based on a range of transportation planning emphasis areas that are not part of the federal PM1, PM2, or PM3 requirements. The planning areas addressed with regionally-customized measures are security, multimodality, sustainability, equity, economic, stormwater management, and travel & tourism. Although some measures may continue to be refined as the program continues to evolve, the following summarizes those measures currently used by the CMMPO:

- Condition of Sidewalks
- Condition of ADA Ramps
- Miles of Bicycle Lanes
- WRTA Ridership
- Jobs-to-Housing Ratio
- Percent of EJ & Vulnerable Populations Intersecting WRTA Fixed Route Service
- Percent of CMMPO Subregion Costs Per Capita that Benefit from a TIP Project so as to Provide Equal Opportunity to All Communities
- Accessibility to Jobs
- Culvert Assessments

Annual System Performance reports have been produced since 2016. The results of the above listed regionally-customized performance measures are included in the reports along with the federally-required performance measures. The reports can be found on the CMRPC website at <http://www.cmrpc.org/performance-management>.

## **Performance and Project Selection**

The CMMPO's selection of projects for the TIP has evolved into a collaborative process involving both the CMMPO's Advisory Committee and the CMRPC Transportation Planning Committee. The overall intent is to select projects that will advance the region towards the both the federal and regionally-customized targets adopted by the CMMPO. As such, the CMMPO uses a TIP Project Screening Scoresheet (shown in the Section 6) to inform the transportation investment decision making process within the PBPP framework. The TIP Project Screening Scoresheet includes a checklist for assessing how a certain project might potentially meet the established targets. Each candidate project eligible for TIP programming is analyzed and subsequently scored by the CMMPO staff working with both the aforementioned committees.