

9. Performance Management

Key Chapter Changes

The Performance Management chapter was updated to provide additional information, resources and provide clarification on performance measures. Format was updated to meet accessibility compliance (June 24, 2024).



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9.1 Introduction

This chapter provides an overview of the federal Transportation
Performance Management (TPM)
framework. It provides information on each federal performance measure and highlights requirements for Metropolitan Planning Organizations (MPO) to set performance targets, report performance in Transportation Improvement Programs (TIP) and Long-Range Transportation Plans (LRTP) and integrate TPM into the MPO planning process.





9.1.1 Performance Management Terminology

Table 9.1 lists key TPM-related terms and definitions as they are defined in federal statutes, regulations, and guidance. Because TPM is a requirement for all transportation agencies, Florida Department of Transportation (FDOT), MPOs, and public transportation providers should have a solid understanding of these definitions and how they are applied in the planning process.

Table 9.1 TPM Terminology

| Term | Definition |
|---------------------|--|
| Goal | A broad statement that describes a desired end state. ¹ |
| Objective | A specific, measurable statement that supports achievement of a goal. ² |
| Performance Measure | An expression based on a metric that is used to establish targets and to assess progress toward meeting the established targets. [23 Code of Federal Regulations (CFR) 450.104 and 23 CFR 490.101] |
| Metric | A quantifiable indicator of performance or condition. [23 CFR 490.101] |
| Target | A quantifiable level of performance or condition, expressed as a value for a measure, to be achieved within a time period. [23 CFR 490.101] |

9.1.2 Overview – Federal TPM Framework

In 2012, Moving Ahead for Progress in the 21st Century (MAP-21, PL 112-141) Act ushered in a national TPM framework to strengthen the U.S. transportation system and improve decision-making through better informed transportation planning and programming. MAP-21 established performance-driven and outcome-based requirements to align federal transportation funding with national goals and track progress towards achievement of these goals. The purpose of this performance-based program is for state departments of transportation, MPOs, and public transportation providers to invest resources in projects that, collectively, make progress toward achievement of the national goals.

² FHWA Performance-Based Planning and Programming Guidebook. Page 12. http://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/.



¹ FHWA Performance-Based Planning and Programming Guidebook. Page 12. http://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/.

MAP-21 established the framework for TPM. In the legislation, Congress defined national goals and updated general purposes for the transportation system and required the United States Department of Transportation (USDOT) to establish performance measures related to those goals and purposes. States, MPOs, and public transportation providers must establish performance targets for each measure to be achieved within a specified time period and must monitor and periodically report on progress toward achievement of the targets. **Figure 9.1** presents the TPM framework and the agencies that lead each step. **Figure 9.2** lists the national goals and general purposes defined by Congress.

This represents the first time all states, MPOs, and public transportation providers are required to measure, monitor, and report on the performance of the transportation system using a national framework of consistent performance measures. Prior to MAP-21, there were no explicit requirements to do so.

Figure 9.1 Federal Transportation Performance Management Framework

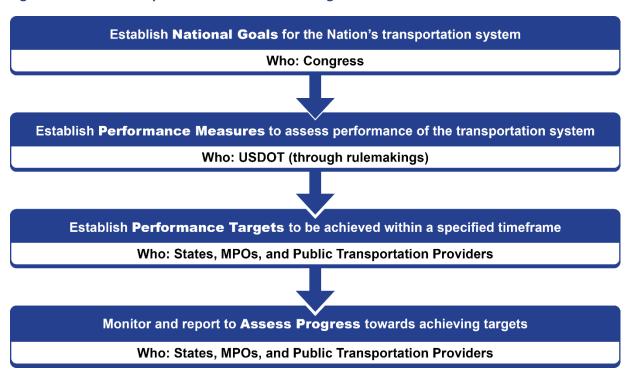




Figure 9.2 National Goals and General Purposes

National Goals [23 United States Code (USC) 150(b)] and General Purposes [49 USC 5301]

National Goals



Safety

Achieve a significant reduction in traffic fatalities and serious injuries on all public roads



Infrastructure Condition

Maintain the highway infrastructure asset system in a state of good repair



Congestion Reduction

Achieve a significant reduction in congestion on the National Highway System (NHS)



System Reliability

Improve the efficiency of the surface transportation system



Freight Movement and Economic Vitality

Improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development



Environmental Sustainability

Enhance the performance of the transportation system while protecting and enhancing the natural environment



Reduced Project Delivery Delays

Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

General Purposes



Establish standards for the state of good repair of public transportation infrastructure and vehicles



Promote continuing, cooperative, and comprehensive planning that improves the performance of the transportation network



9.2 Federal Performance Measures

USDOT promulgated a series of rulemakings that established performance measures tied to the national goals and general purpose areas. [23 USC 150(c), 49 USC 5301]. The federal performance measure rules fall into three primary categories – safety, asset maintenance, and system performance.

- Safety performance measures track the number and rate of roadway and transit fatalities and serious injuries, the number of pedestrian and bicyclist fatalities and serious injuries, and transit derailments, collisions, fires, or evacuations.
- Asset management performance measures track the condition of roads, bridges, and transit equipment, vehicles, and facilities to assess how well these assets are being maintained.
- System performance measures track highway travel reliability, freight movement reliability, congestion, and emissions to assess how well a corridor is moving people and freight, not just vehicles.

The Federal Highway Administration (FHWA) issued three performance measure rules that address highway safety (PM1), pavement and bridge condition (PM2), and system performance (PM3). The Federal Transit Administration (FTA) issued two performance measure rules that address transit assets and transit safety.

In addition to the performance measure rules, FHWA and FTA published a final rule for Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning, [23 CFR Part 450] known as the planning rule, to incorporate the performance management framework presented in Figure 9.2 and associated requirements for target setting and reporting. Table 9.2 provides regulatory citations for the planning rule and the five performance measure rules. Each performance measure rule is then described.

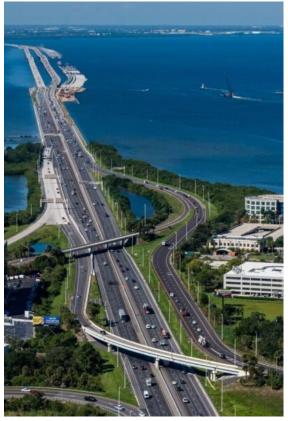




Table 9.2 Federal TPM Rules and Regulatory Citations

| Rule | Regulatory Chapter |
|--|--|
| Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning | 23 CFR Part 450 |
| Highway Safety Performance Management Measures (PM1) | 23 CFR Part 490 Subpart B |
| Assessing Pavement and Bridge Condition for the National Highway Performance Program (PM2) | 23 CFR Part 490, Subpart C (Pavement) and Subpart D (Bridge) |
| Assessing Performance of the National Highway System (NHS), Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program (PM3) | 23 CFR Part 490, Subpart E (NHS), Subpart F (Freight), Subpart G (CMAQ Congestion), Subpart H (Emissions) |
| Transit Asset Management | 49 CFR Part 625 |
| Public Transportation Agency Safety Plan | 49 CFR Part 673 |

9.2.1 Highway Safety Performance Measures (PM1)

The first of the performance measures rules issued by FHWA establishes five performance measures to assess road safety and carry out the Highway Safety Improvement Program (HSIP). The HSIP is a federal-aid funding program intended to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The PM1 (safety performance) performance measures are listed in **Table 9.3**.

Table 9.3 Highway Safety Performance Measures (PM1)

| Highway Safety Performance Measures (PM1) | | |
|---|--|--|
| Number of fatalities | | |
| Number of serious injuries | | |
| Rate of fatalities per 100 million vehicle miles traveled (VMT) | | |
| Rate of serious injuries per 100 million VMT | | |
| Number of non-motorized fatalities and serious injuries | | |

The non-motorized performance measure is one measure. It combines non-motorized fatalities and non-motorized serious injuries.

The Florida Department of Highway Safety and Motor Vehicles (FLHSMV) is the official custodian of traffic crash records for the State of Florida. All crash data originates from FLHSMV. FDOT derives state VMT data from Highway Performance Monitoring System (HPMS) and estimates it for each MPO and/or planning area.



MPOs may access MPO-specific safety performance measures through the <u>FDOT Source Book</u>. Safety performance measures are calculated and published in the <u>FDOT Source Book</u> by **August 31** of each year for the prior calendar year. For the purposes of estimating or monitoring safety performance using current crash data, MPOs may also use <u>Signal 4 Analytics</u>. The safety measures are calculated based on a 5-year rolling average.

9.2.2 Pavement and Bridge Condition Performance Measures (PM2)

FHWA's Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 (pavement & bridge performance) rule, requires state DOTs and MPOs to establish targets for pavement and bridge condition on Interstate and non-Interstate National Highway System (NHS) roads in each state. **Table 9.4** presents the PM2 (pavement & bridge performance) performance measures.

Table 9.4 Pavement and Bridge Condition Performance Measures (PM2)

| Pavement and Bridge Condition Performance Measures (PM2) | |
|--|--|
| Percent of pavements on the Interstate system in Good condition | |
| Percent of pavements on the Interstate system in Poor condition | |
| Percent of pavements on the non-Interstate NHS in Good condition | |
| Percent of pavements on the non-Interstate NHS in Poor condition | |
| Percent of NHS bridges (by deck area) classified as in Good condition | |
| Percent of NHS bridges (by deck area) classified as in Poor condition | |

Pavement condition is assessed based on roughness, cracking, rutting, and faulting. Pavement in good condition suggests that no major investment is needed and should be considered for preservation treatment. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

Bridge condition is assessed by inspecting each bridge deck, superstructure, substructure, and culverts. A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on; however, it is nearing a point where substantial reconstruction or replacement is needed.



FDOT collects pavement and bridge data for the NHS each year. Historical data and current targets for the federal performance measures are available from the <u>FDOT Source Book</u>. The <u>FDOT Source Book</u> is updated by **August 31** of each year with the applicable data for the prior calendar year.

9.2.3 Highway System/Freight/CMAQ Performance Measures (PM3)

FHWA's System Performance/Freight/CMAQ Performance Measures Final Rule assesses passenger and freight travel performance on the Interstate and non-Interstate NHS, and traffic congestion and on-road mobile source emission reductions in areas that do not meet federal air quality standards. The rule, which is referred to as the PM3 (system performance) rule, defines the six performance measures listed in Table 9.5.

Table 9.5 Highway System Performance Measures (PM3)

| Performance Measures | | |
|--|--|--|
| Percent of person-miles traveled on the Interstate system that are reliable | | |
| Percent of person-miles traveled on the non-Interstate NHS that are reliable | | |
| Truck Travel Time Reliability Index (TTTR) | | |
| Annual hours of peak-hour excessive delay (PHED) per capita* | | |
| Percent of non-single occupant vehicle travel (non-SOV)* | | |
| Cumulative 2-year and 4-year reduction of on-road mobile source emissions* | | |

^{*}Not required in Florida

Three of the six PM3 (system performance) measures (PHED, percent non-SOV travel, and cumulative emission reduction) apply only to areas that include any part of a designated air quality nonattainment or maintenance area for ozone, carbon monoxide, or particulate matter. Because all areas in Florida are currently designated as attainment for these pollutants, these three measures do not apply to FDOT or the MPOs.

The data used to calculate the first three measures is provided by FHWA via the National Performance Management Research Data Set (NPMRDS). This dataset contains travel times, segment lengths, and Annual Average Daily Travel (AADT) for Interstate and non-Interstate NHS roads. If FDOT and the MPOs



wish to use a different dataset for travel times and reporting segments in the future, they would need to coordinate with each other to secure agreement on the alternate data. FDOT would then need to request FHWA approval for the use of the alternate data no later than **October 1** before the beginning of the calendar year in which the alternate data would be used. FHWA must approve the use of the data source(s) prior to FDOT and MPO implementation and use of the data source(s).

9.2.3.1 Percent of Person-Miles Traveled that are Reliable

These two performance measures assess the percent of person-miles traveled on the Interstate or the non-Interstate NHS that are reliable. Reliability for these two measures is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads. Travel times are analyzed for each highway segment. A level of travel time reliability (LOTTR) is calculated for each segment for four time periods that cover the hours of 6:00 am to 8:00 pm each day:

- 1. AM Peak 6:00 a.m. 10:00 a.m. Monday through Friday
- 2. Mid-day 10:00 a.m. 4:00 p.m. Monday through Friday
- 3. PM Peak 4:00 p.m. 8:00 p.m. Monday through Friday
- 4. Weekends 6:00 a.m. 8:00 p.m. Saturday and Sunday

A segment is reliable if its LOTTR is less than 1.5 during all four time periods. If one or more time periods has a LOTTR of 1.5 or above, that segment is unreliable. The two measures are expressed as the percent of person-miles traveled on the Interstate or Non-Interstate NHS system that are reliable. Person-miles take into account the number of people traveling in buses, cars, and trucks over these roadway segments. The length of each segment is multiplied by its AADT and average occupancy factor for all vehicles, which results in person-miles. This calculation is done for reliable segments and for all segments. The sum of reliable segment person-miles is divided by the sum of all segment person-miles to calculate the measure. Average vehicle occupancy is obtained from either the most recently available data tables published by FHWA or from other sources chosen by the state, as long as the alternate data is allowed by FHWA. Current FHWA guidance advises using an occupancy factor of 1.7.



9.2.3.2 Truck Travel Time Reliability Index

The TTTR performance measure assesses the reliability index for trucks traveling on the interstate. A TTTR ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over five time periods throughout weekdays and weekends:

- AM Peak 6:00 a.m. 10:00 a.m. on Monday – Friday
- Mid-day 10:00 a.m. 4:00 p.m. on Monday – Friday
- PM Peak 4:00 p.m. 8:00 p.m. on Monday – Friday
- Weekend 6:00 a.m. 8:00 p.m. on Saturday – Sunday
- Overnight 8:00 p.m. 6:00 a.m. on all days of the week



For each segment, the highest TTTR value among the five time periods is multiplied by the length of the segment. The sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index. Historical data and current targets for the federal reliability performance measures are available from the FDOT Source Book. The FDOT Source Book is updated by August 31 of each year with the applicable data for the prior calendar year.



9.2.4 Transit Asset Management Performance Measures

FTA's Transit Asset Management (TAM) rule applies to all recipients and subrecipients of federal transit funding that own, operate, or manage public transportation capital assets. The rule requires that public transportation providers develop and implement TAM plans and established state of good repair standards and performance measures for four asset categories: rolling stock, equipment, transit infrastructure, and facilities. Transit asset performance in each category is measured by asset class, which is the subgroup of capital assets within an asset category. **Table 9.6** lists the asset categories and associated transit asset performance measures.

Table 9.6 Transit Asset Management Performance Measures

| Asset Category | Performance Measure | |
|--|--|--|
| Equipment: Non-revenue support-service and maintenance vehicles | Percent of non-revenue vehicles that have met or exceeded their Useful Life Benchmark | |
| Rolling Stock: Revenue vehicles by mode | Percent of revenue vehicles that have met or exceeded their Useful Life Benchmark | |
| Infrastructure: Only rail fixed-guideway, track, signals and systems | Percentage of track segments with performance restrictions | |
| Facilities: Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities | Percentage of facilities rated in marginal or poor condition on the Transit Economic Requirements Model (TERM) Scale | |

For equipment and rolling stock classes, Useful Life Benchmark (ULB) is defined as the expected lifecycle of a capital asset, or the acceptable period of use in service, for a particular transit provider's operating environment. ULB considers a provider's unique operating environment such as geography, service frequency, etc. and is not the same as an asset's useful life.

The TAM rule also established two tiers of agencies. A Tier I provider is one that owns, operates, or manages either rail or more than 100 vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode. A Tier II provider is one that is either a sub-recipient of FTA 5311 funds, or is an American Indian Tribe, or has 100 vehicles or less in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode.

A Tier I provider must develop its own TAM plan. Tier II agencies may develop their own plans or participate in a group TAM plan, which is compiled by a group TAM plan sponsor. FDOT is the sponsor of a Group TAM plan for subrecipients of <u>Section 5311</u> and <u>Section 5310</u> grant funds.



9.2.5 Public Transportation Agency Safety Measures

FTA's Public Transportation Agency Safety Plan (PTASP) rule requires certain operators of public transportation systems that receive federal financial assistance under 49 USC Chapter 53 to develop and implement a PTASP based on a management systems approach. The rule applies to all operators of public transportation that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 USC 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program. The rule does not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations that are regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

The provider's PTASP must include targets for the performance measures established by FTA in the **National Public Transportation Safety Plan**. These transit safety performance measures are based on data transit providers already submit to the National Transit Database (NTD) and are listed in **Table 9.7**.

Table 9.7 Public Transportation Agency Safety Plan (PTASP) Performance Measures

Performance Measures

Total number of reportable fatalities and rate per total vehicle revenue miles by mode

Total number of reportable injuries and rate per total vehicle revenue miles by mode

Total number of reportable safety events and rate per total vehicle revenue miles by mode

System reliability – mean distance between major mechanical failures by mode

Once completed and certified, transit providers must make their safety plans and targets available to their state and MPO(s) in which their transit services are programmed in the MPO's Transportation Improvement Program (TIP).

In Florida, each <u>49 USC 5307</u> and <u>49 USC 5311</u> transit provider must develop a System Safety Program Plan (SSPP) under <u>Chapter 14-90</u>, <u>Florida Administrative Code (FAC)</u>. FDOT technical guidance recommends that Florida's transit agencies revise their existing SSPPs to be compliant with the new FTA PTASP requirements.



9.3 Establishing Performance Targets

The next step in the TPM framework is for states, MPOs, and providers of public transportation to set targets for each measure that applies in the planning area. This section discusses the target setting process and highlights key dates and other considerations MPOs should be aware of.

States and MPOs set targets on a recurring schedule that differs by performance area. MPOs must establish performance targets not later than 180 days after the date on which the state or public transportation provider establishes the performance targets. [23 CFR 450.306(d)(3)] There are two ways to do this:

Option 1: The MPO agrees to plan and program projects so that they contribute toward the accomplishment of the relevant state or public transportation provider target for that performance measure. (The MPO numeric target is the same as the relevant state or public transportation provider numeric target.)

Option 2: The MPO evaluates performance data and establishes a numeric target for the MPO planning area that is different than the numeric target established by the state or public transportation provider. (The MPO will plan and program projects that contribute toward the accomplishment of the MPO target for that performance measure.)

Deadlines for establishing targets vary. Annual targets are required for PM1 (safety performance) and transit measures, while two-year or four-year targets are required for PM2 (pavement & bridge performance) and PM3 (system performance) measures. **Table 9.8** summarizes the dates initial targets were or are required to be established by the state or provider of public transportation and the MPO, the frequency with which targets must be established, and target update frequency. This is followed by discussion of each measure area.

After MPOs establish targets, the state DOT must be able to provide these targets to FHWA upon request. [23 CFR 490.105(f)(9) 23 CFR 490.209(c)(3)] Therefore, MPOs must report target-related status information to FDOT upon request.



Table 9.8 Target Frequency and Due Dates

| Performance Area | Target Setting Frequency | Target Due Dates |
|-------------------------------------|--|---|
| PM1 (safety performance) | Annual | State: August 31 of each year MPOs: February 27 of each year |
| PM2 (pavement & bridge performance) | New targets every 4 years, with optional target adjustment at midpoint | State: October 1 of each 4 year period (2022, 2026, etc.) MPOs: 180 days after state (March 30, 2023, 2027, etc.) |
| PM3 (system performance) | New targets every 4 years, with optional target adjustment at midpoint | State: October 1 of each 4 year period (2022, 2026, etc.) MPOs: 180 days after state (March 30, 2023, 2027, etc.) |
| Transit Assets | Providers set annual targets | Providers: Varies based on Fiscal Year MPOs: When updating the LRTP |
| Transit Safety | Providers set annual targets | Providers: Varies based on Fiscal Year MPOs: When updating the LRTP |

9.3.1 Establishing PM1 Targets

Performance for the PM1 (safety performance) measures is assessed on an annual basis. Accordingly, targets for the PM1 (safety performance) safety measures are established annually by FDOT and the MPOs. FDOT reports safety targets in its HSIP Annual Report that is due to FHWA each year by **August 31**. Targets are applicable to all public roads regardless of functional classification or ownership.

MPOs must then establish PM1 (safety performance) targets within 180 days of the date that the state established targets. If a state submits its HSIP report prior to **August 31**, FHWA still considers the PM1 (safety performance) targets as being established and reported on **August 31**. Therefore, MPOs must establish their HSIP targets no later than **February 27** each year.

If an MPO elects to establish a PM1 (safety performance) target specific to the MPO planning area for one of the rate measures, the MPO must report the VMT estimate used for rate target and the methodology used to develop the VMT estimate.

In addition to reporting PM1 (safety performance) targets in the HSIP annual report, FDOT must also describe the progress toward achieving safety outcomes and performance targets, and include an overview of general highway safety trends, a discussion of the basis of each established target and how the established target supports FDOT safety goals established in the Strategic Highway Safety Plan, and a discussion of reasons for differences in the actual outcomes and targets.



9.3.2 Establishing PM2 and PM3 Targets

Performance for the PM2 (pavement & bridge performance) and PM3 (system performance) measures is assessed over a four-year performance period. The first performance period was January 1, 2018 through December 31, 2021. The second runs from January 1, 2022 through December 31, 2025, and so on. States are required to report on performance at the beginning, midpoint, and end of each performance period (see 9.4 Monitoring and Reporting for more information on reporting).

Targets for the PM2 (pavement & bridge performance) and PM3 (system performance) measures are established every four years by FDOT and the MPOs for the associated performance period. Additionally, FDOT is required to establish two-year targets for each measure. Note that in areas where



the percent non-SOV travel and total emissions reduction measures apply, MPOs establish both two-year and four-year targets. At the time of this writing, the percent non-SOV travel and total emissions reduction measures do not apply in Florida.

Two-year targets reflect the anticipated performance level at the midpoint of the associated four-year performance period, while four-year targets reflect the anticipated performance level at the end of the performance period.



9.3.2.1 Adjusting PM2 and PM3 Targets

States may adjust an established four-year target for any PM2 (pavement & bridge performance) or PM3 (system performance) measure after the midpoint of the four-year performance period. This adjustment would take place on or before October 1 of the third year of the performance period, which is the due date for states to report performance to FHWA for the first two years. Within 180 days of the state reporting the adjusted target to FHWA, the MPO must report to the state whether it will either agree to plan and program projects so that they contribute to the adjusted state DOT target for that performance measure or commit to a new quantifiable target for that performance measure for its metropolitan planning area. The primary forum for coordination between FDOT and the MPOs on selecting performance targets and related policy issues is the regular meetings of the MPOAC.



Note that if an MPO agreed to plan and program projects so that they contribute toward the accomplishment of the state DOT targets, and the state DOT does not adjust a four-year target at the midpoint of the performance period, the MPO cannot establish its own target at the midpoint. The MPO must continue to contribute to the state targets established at the beginning of the performance period.



9.3.3 Establishing Transit Asset Management Targets

Performance for the transit asset measures is assessed on an annual basis. Accordingly, providers of public transportation annually establish performance targets for the following fiscal year for each asset class included in its TAM plan. FDOT annually establishes collective transit targets for all providers that participate in the Group TAM plan.

Within four (4) months of the end of each transit provider's fiscal year, the provider establishes and submits to FTA's NTD performance targets for the next fiscal year, an asset inventory and condition assessment, as well as a narrative on changes in transit system conditions and progress toward achieving previous performance targets. Once the public transportation provider establishes transit asset targets it must make the targets available to MPOs.

Unlike PM1 (safety performance), PM2 (pavement & bridge performance), and PM3 (system performance) measures, MPOs are not required to establish new transit asset targets annually each time the transit provider establishes targets. Instead, MPOs may choose to update their transit targets when the transit provider(s) updates theirs, or when the MPO updates its LRTP.

Multiple Transit Providers in an MPO Area: In cases where two or more transit providers operate in an MPO planning area and establish a different target for a given measure, the MPO has the option of either coordinating with the providers to establish a single target for the MPO planning area, or establishing a set of targets for the MPO planning area that reflects the different transit provider targets. For both options, the MPO must set the target in coordination with the transit providers.

9.3.4 Establishing Transit Safety Targets

Performance for the transit safety measures is assessed on an annual basis. Accordingly, providers of public transportation annually establish transit safety targets for the following fiscal year. Once the public transportation provider establishes safety targets it must make the targets available to MPOs.

As with the transit asset targets, MPOs are not required to establish new transit safety targets annually each time the transit provider establishes targets. Instead, MPOs may choose to update their transit targets when the transit provider(s) updates theirs, or when the MPO updates its LRTP.

Multiple Transit Providers in an MPO Area: In cases where two or more transit providers operate in an MPO planning area and establish a different safety target for a measure, the MPO may establish a single target for the MPO planning area or establish a set of targets for the MPO planning area that reflect the different transit provider targets.



9.4 Monitoring and Reporting

Accountability and transparency in transportation decision-making is a key provision of the TPM framework. To ensure this, states, MPOs, and public transportation providers are required to report on progress towards meeting performance targets.

States and providers of public transportation are required to submit performance information directly to FHWA or FTA on an ongoing basis through reports and plan updates. The frequency of reporting varies with each performance rule. In contrast, MPOs are not required to report performance information directly to FHWA or FTA. Instead, MPOs provide ongoing performance information and progress towards achieving performance targets in the LRTP, and an assessment of the anticipated effect of the TIP in achieving progress towards targets, as described in the following sections.

9.4.1 TPM Reporting Requirements in the MPO LRTP

The LRTP must include a description of all applicable performance measures and targets used in assessing the performance of the transportation system in the MPO planning area. [23 CFR 450.324(f)(3)]

The LRTP must also include a system performance report. The system performance report must evaluate the condition and performance of the transportation system with respect to the MPO's performance targets, including progress achieved by the MPO in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data. [23 CFR 450.324(f)(4)(i)] The system performance report can be included in the body of the LRTP or as an appendix.

For MPOs that elect to develop multiple scenarios when developing their LRTP, the system performance report must include an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets. [23 CFR 450.324(f)(4)(ii)]

FDOT has created <u>templates the MPOs</u> may use to develop LRTP language specific to each MPO. The requirement to include a system performance report in the LRTP has to be met at the time that the LRTP is updated. A system performance report does not have to be updated when the LRTP is amended.



9.4.2 TPM Reporting Requirements in the MPO TIP

MPOs must design the Transportation Improvement Program (TIP) such that once implemented, it makes progress toward achieving the MPO's performance targets. [23 CFR 450.326(c)]

To the maximum extent practicable, the TIP must include a description of the anticipated effect of the program of projects in the TIP will have toward achieving the performance targets identified in the LRTP; linking investment priorities to those performance targets. [23 CFR 450.326(d)] FHWA defines maximum extent practicable as capable of being done after taking into consideration the cost, existing technology, and logistics of accomplishing the requirement. FDOT has created templates the MPOs may use to develop TIP language to meet the TPM requirements.

FHWA's PBPP Roadmap addresses the basic steps of incorporating the PBPP approach into the TIP and documenting the anticipated effect of the TIP toward achieving the performance targets and linking investment priorities to those performance targets. In addition, FHWA Florida Division documentation states that in general, this description of effect should be at a systems or program level and not at the level of individual projects. As a minimum, it should discuss the effect that the program of projects in the TIP would have toward achieving the federally required performance targets. It should be consistent with and include or reference the goals, objectives, strategies, performance measures and targets in the LRTP (as applicable) and in other plans and processes as they relate to the federally required performance targets. The requirement to assess the effect of the TIP in achieving performance targets only has to be done at the time the TIP is updated, it does not have to be updated with a TIP amendment.



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9.5 Additional MPO TPM Requirements

MPOs must meet the following performance management requirements in addition to the target setting and performance reporting requirements described above.

9.5.1 Use of a Performance-Based Planning and Programming Process

MPOs, in cooperation with the state and public transportation operators, must develop LRTPs and TIPs through a performance-driven, outcome-based approach to planning for metropolitan areas of the state. [23 CFR 450.306(a)]

The MPO planning process must provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals. [23 CFR 450.306(d)(1)]





MPOs must integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other state or public transportation provider transportation plans and processes required as part of a performance-based program. These include:

- The state asset management plan for the NHS, referred to as the Transportation Asset Management Plan (TAMP)
- The Transit Asset Management Plan.
- Applicable portions of the Highway Safety Improvement Program, including the Strategic Highway Safety Plan.
- The Public Transportation Agency Safety Plan.
- Other safety and security planning and review processes, plans, and programs, as appropriate.
- The Congestion Mitigation and Air Quality Improvement Program performance plan, as applicable.
- Appropriate metropolitan portions of the State Freight Plan, referred to in Florida law as the Freight Mobility and Trade Plan.
- The Congestion Management Process, if applicable.





Other state transportation plans and transportation processes required as part of a performancebased program.

Regarding the TAMP, FHWA's "Asset Management Plans and Periodic Evaluations of Facilities Repeatedly Requiring Repair and Reconstruction Due to Emergency Events" rule requires states to develop and implement the TAMP for the NHS to improve or preserve the condition of assets and the performance of the system. [23 CFR Part 515] The rule also requires the state to conduct periodic evaluations to determine if reasonable alternatives exist to roads, highways, or bridges that repeatedly require repair and reconstruction activities. [23 CFR Part 667]

Although this rule is not a performance measure rule, it does require that the TAMP include investment strategies leading to a program of projects that would make progress toward achievement of state targets for pavement and bridge condition. In addition, the planning rule requires the state DOT to integrate into the statewide transportation planning process the goals, objectives, performance measures, and targets of other state transportation plans, including the TAMP. These provisions mean that, in carrying out the transportation planning process, the state DOT must consider its TAMP, including the TAMP's investment strategies, as part of the decision-making process during planning. Similarly, MPOs, as listed above, must integrate in the metropolitan transportation planning process the goals, objectives, performance measures, and targets contained in the TAMP.

FDOT's current TAMP was submitted to FHWA on December 30, 2022. FDOT will update the TAMP every four years or whenever an asset management process changes. FDOT updated its **Part 667 evaluation** for NHS roads, highways, and bridges on March 1, 2024. The report documents permanent repairs on NHS roads (with two or more occurrences), and permanent repairs on NHS bridges (with one occurrence). FDOT must also prepare an evaluation for all other roads, highways, and bridges prior to including any project for the repeatedly damaged facility in the STIP and must consider the evaluation when developing the project (i.e., project planning, the environmental review process, and preliminary and final design that move a highway project to construction). FDOT and the MPOs are encouraged, but not required, to consider the information during development of transportation plans and programs and during the environmental review process.

FDOT will incorporate the results of the evaluation into each TAMP update, and will update the evaluations after every emergency event, as well as on a regular 4-year cycle.



9.5.2 Coordination Requirements and Consensus Planning Document

States, MPOs and public transportation providers have overlapping performance management roles and responsibilities. For example, they may draw from the same data sources when addressing performance measures. Because of this, Federal legislation and regulations require the agencies to coordinate when establishing targets and assessing progress.

MPOs must coordinate the selection of targets with the relevant state(s) and public transportation providers to ensure consistency, to the maximum extent practicable. [23 CFR 450.306(d)] In turn, each state shall select and establish performance targets in coordination with the relevant MPOs to ensure consistency to the maximum extent practicable. [23 CFR 450.206(c)(2)] Providers of public transportation must coordinate with states and MPOs in the selection of state and MPO transit asset and transit safety performance targets, to the maximum extent practicable. [49 CFR 625.45(e), 49 CFR 673.15(b)]

FHWA defines maximum extent practicable as capable of being done after taking into consideration the cost, existing technology, and logistics of accomplishing the requirement.

Coordination is defined in this context as the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate. [23 CFR 450.104]

This coordination process must be formalized. The MPO, state, and providers of public transportation must jointly agree upon and develop specific written provisions for: [23 CFR 450.314(h)(1)]

- Cooperatively developing and sharing information related to transportation performance data.
- Selection of performance targets.
- Reporting of performance targets.
- Reporting of performance to be used in tracking progress toward attainment of critical outcomes for the MPO.
- Collection of data for the state asset management plans for the NHS.



These provisions must be documented either as part of the metropolitan planning agreements required under 23 CFR 450.314(a), (e), and (g), or in some other means outside of the metropolitan planning agreements as determined cooperatively by the parties to the agreement. [23 CFR 450.314(h)(2)]

To satisfy this requirement for written provisions FDOT and the MPOAC developed the <u>Transportation</u> <u>Performance Measures Consensus Planning Document</u> to describe the general processes through which FDOT, the MPOs, and the providers of public transportation in MPO planning areas will cooperatively develop and share information related to transportation performance management to ensure consistency to the maximum extent practicable. Each individual MPO adopted the Consensus Planning Document by incorporation in its annual TIP or by separate board action as documented in a resolution or meeting minutes, which also serves as documentation of agreement by the provider(s) of public transportation in the MPO planning area to carry out their roles and responsibilities as described in the document.

9.5.3 Role of the FDOT MPO Liaison in TPM

FDOT, MPOs, and transit providers are mutually responsible for implementing TPM regulations and coordinating with each other on performance data collection and analysis, setting performance targets, reporting on performance, and developing and implementing performance-based plans. MPO Liaisons have the following specific TPM-related responsibilities:

- Communicate the status of FDOT target setting progress and actions.
- Monitor MPO decisions about supporting FDOT targets or setting their own targets.
- Review TIPs and LRTPs and provide guidance and technical support for incorporating performance-based planning language and required performance information (e.g., targets).



9.6 References

This section cites federal laws and regulations, and provides references related to Performance Management requirements for MPOs and supporting materials related to TPM.

Table 9.9 Federal TPM Laws, Regulations, and References

Citation: 23 USC 150

Description: Describes the national goals, establishment of performance measures and performance targets, and reporting requirements for the federal-aid highway program.

Citation: 49 USC 5301

Description: Describes the national policy and

general purposes for funding public

transportation systems.

Citation: 23 USC 134

Description: Describes the metropolitan

transportation planning process.

Citation: 49 USC 5303

Description: Describes the metropolitan

transportation planning process.

Citation: 23 CFR Part 450

Description: Describes planning assistance and

standards.

Citation: 23 CFR Part 490

Description: Describes national performance

measures for highways.

Citation: 49 USC 5326

Description: Describes national performance measures for transit assets and transit safety.

Citation: 49 USC 5329

Description: Describes national performance measures for transit assets and transit safety.

Citation: MAP-21 (PL 112-141)
Description: MAP-21 Legislation.

Citation: FDOT Performance Management

Policy

Description: Establishes FDOT's policy on

performance management.

Citation: FHWA Performance-Based Planning

and Programming Guidebook

Description: FHWA's guidance on

performance-based planning and programming.

Citation: FHWA Transportation Performance

Management Website

Description: FHWA's guidance on transportation performance management.

Citation: FHWA Performance-Based Planning

and Programming Roadmap

Description: Summarizes TPM requirements, describes available resources, and addresses the basic steps of incorporating the PBPP approach into the planning process.

Citation: Performance Data Integration Space Description: Hub for information produced and curated by the FDOT Systems Forecasting and Trends Office to assist department stakeholders with data-driven transportation decisions.

Citation: FDOT Source Book

Description: Historical data and current targets for the federal performance measures. The Source Book is updated by August 31 of each year with the applicable data for the prior calendar year.

Citation: MPO Performance Resources
Description: FDOT has worked with the
MPOAC to develop TPM factsheets and to
develop templates MPOs may use to address
TPM in the TIP and LRTP.

