Template to Address Performance Management Requirements in Metropolitan Planning Organization Transportation Improvement Programs

Office of Policy Planning

Florida Department of Transportation

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Table of Contents

[1 - Purpose 2](#_Toc126264190)

[2 - Background 3](#_Toc126264191)

[3 - Highway Safety Measures (PM1) 4](#_Toc126264192)

[3.1 Highway Safety Targets 4](#_Toc126264193)

[3.2 Safety Trends in the MPO Area 8](#_Toc126264194)

[3.3 FDOT Safety Planning and Programming 9](#_Toc126264195)

[3.4 Safety Investments in the TIP 12](#_Toc126264196)

[4 – Pavement & Bridge Condition Measures (PM2) 18](#_Toc126264197)

[4.1 Bridge & Pavement Condition Targets 18](#_Toc126264198)

[4.2 Bridge & Pavement Investments in the TIP 21](#_Toc126264199)

[5 - System Performance, Freight, & Congestion Mitigation & Air Quality Improvement Program Measures (PM3) 23](#_Toc126264200)

[5.1 System Performance and Freight Targets 23](#_Toc126264201)

[5.2 System Performance and Freight Investments in the TIP 26](#_Toc126264202)

[6 - Transit Asset Management Measures 29](#_Toc126264203)

[6.1 FDOT Group TAM Plan Participants 30](#_Toc126264204)

[6.2 Transit Asset Management Targets 31](#_Toc126264205)

[6.3 Transit Asset Management Investments in the TIP 36](#_Toc126264206)

[7 - Transit Safety Performance 39](#_Toc126264207)

[7.1 Transit Safety Targets 40](#_Toc126264208)

[7.2 Transit Safety Investments in the TIP 42](#_Toc126264209)

# 1 - Purpose

This document provides language that Florida’s metropolitan planning organizations (MPO) may incorporate in Transportation Improvement Programs (TIP) to meet the federal transportation performance management rules.

MPOs may adapt this template language as needed as they update their TIPs. In most sections, there are two options for the text, to be used by MPOs supporting statewide targets or MPOs establishing their own targets. Areas that require MPO input are highlighted in yellow. This can range from simply adding the MPO name and adoption dates to providing MPO-specific background information and relevant strategies and prioritization processes.

The document is consistent with the Transportation Performance Measures (TPM) Consensus Planning Document developed jointly by the Florida Department of Transportation (FDOT) and the Metropolitan Planning Organization Advisory Council (MPOAC). The Consensus Planning Document outlines the minimum roles of FDOT, the MPOs, and the public transportation providers in the MPO planning areas to ensure consistency to the maximum extent practicable in satisfying the federal transportation performance management requirements.

The document is organized as follows:

* [Section 2 provides a brief background on transportation performance management](#_2_-_Background);
* [Section 3 covers the Highway Safety measures (PM1)](#_3_-_Highway);
* [Section 4 covers the Bridge and Pavement Condition measures (PM2)](#_4_-_Bridge);
* [Section 5 covers System Performance and Freight Movement measures (PM3)](#_5_-_System);
* [Section 6 covers Transit Asset Management (TAM) measures](#_6_-_Transit); and
* [Section 7 covers Transit Safety measures](#_7_-_Transit).

# 2 - Background

Transportation Performance Management (TPM) is a strategic approach to connect transportation investment and policy decisions to help achieve performance goals. Performance measures are quantitative expressions used to evaluate progress toward goals. Performance targets are quantifiable levels of performance to be achieved within a time period. Federal transportation law requires state departments of transportation (DOT), MPOs, and public transportation providers to conduct performance-based planning by tracking performance and establishing data-driven targets to assess progress toward achieving goals. Performance-based planning supports the efficient investment of transportation funds by increasing accountability, providing transparency, and linking investment decisions to key outcomes related to seven national goals established by Congress:

* Improving safety;
* Maintaining infrastructure condition;
* Reducing traffic congestion;
* Improving the efficiency of the system and freight movement;
* Protecting the environment; and
* Reducing delays in project delivery.

Federal law requires FDOT, the MPOs, and public transportation providers to coordinate when selecting performance targets. FDOT and the MPOAC developed the TPM Consensus Planning Document to describe the processes through which these agencies will cooperatively develop and share information related to transportation performance management and target setting.

# 3 - Highway Safety Measures (PM1)

The first of FHWA’s performance management rules establishes measures to assess fatalities and serious injuries on all public roads. The rule requires state DOTs and MPOs to annually establish targets and report performance and progress toward targets to FHWA for the following safety-related performance measures:

1. Number of Fatalities;
2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT);
3. Number of Serious Injuries;
4. Rate of Serious Injuries per 100 million VMT; and
5. Number of Nonmotorized Fatalities and Serious Injuries.

## 3.1 Highway Safety Targets

**3.1.1 Statewide Targets**

Safety performance measure targets are required to be adopted on an annual basis. In August of each calendar year, FDOT reports targets to FHWA for the following calendar year. On August 31, 2022, FDOT established statewide safety performance targets for calendar year 2023. Table 3.1 presents FDOT’s statewide targets.

**Table 3.1. Statewide Highway Safety Performance Targets**

|  |  |
| --- | --- |
| Performance Measure | Calendar Year 2023 Statewide Target |
| Number of fatalities | 0 |
| Rate of fatalities per 100 million vehicle miles traveled (VMT) | 0 |
| Number of serious injuries | 0 |
| Rate of serious injures per 100 million vehicle miles traveled (VMT) | 0 |
| Number of non-motorized fatalities and serious injuries | 0 |

FDOT adopted a vision of zero traffic-related fatalities in 2012. This, in effect, became FDOT’s target for zero traffic fatalities and quantified the policy set by Florida’s Legislature more than 35 years ago (Section 334.046(2), Florida Statutes, emphasis added):

*“The mission of the Department of Transportation shall be to provide a* ***safe*** *statewide transportation system…”*

FDOT and Florida’s traffic safety partners are committed to eliminating fatalities and serious injuries. As stated in the Safe System approach promoted by the FHWA, the death or serious injury of any person is unacceptable. The Florida Transportation Plan (FTP), the state’s long-range transportation plan, identifies eliminating transportation-related fatalities and serious injuries as the state’s highest transportation priority. Therefore, FDOT established 0 as the only acceptable target for all five federal safety performance measures.

**3.1.2 MPO Safety Targets**

MPOs are required to establish safety targets annually within 180 days of when FDOT established targets. MPOs establish targets by either agreeing to program projects that will support the statewide targets or establish their own quantitative targets for the MPO planning area.

[Use either Option A or Option B below. Option A is for MPOs that support all five state safety targets. Option B is for MPOs that establish their own safety target or targets.]

[OPTION A: For MPO that supports statewide targets]

The [insert name] MPO, along with FDOT and other traffic safety partners, shares a high concern about the unacceptable number of traffic fatalities, both statewide and nationally. As such, on [insert date], the [insert MPO name] agreed to support FDOT’s statewide safety performance targets for calendar year 2023, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets. The safety initiatives within this TIP are intended to contribute toward achieving these targets. [The MPO may discuss the reasoning or analysis behind the decision to support the state targets.]

[END OF OPTION A. Continue at “Section 3.2 Safety Trends in the MPO Area”]

[OPTION B: For MPO that establishes its own targets]

The [insert name] MPO acknowledges FDOT statewide 2023 safety targets, which are set at “0” for each performance measure to reflect FDOT’s goal of zero deaths. However, the MPO established safety performance targets specific to the MPO planning area. On [insert date], the [insert MPO name] established the calendar year 2023 safety targets listed in Table 3.2.

[Insert table such as the one below. If desired, include the statewide targets in the table for reference purposes, or combine Tables 3.1 and 3.2 into one table.]

**Table 3.2. MPO Safety Performance Targets**

| Performance Measure | Calendar Year 2023 MPO Target |
| --- | --- |
| Number of fatalities | x |
| Rate of fatalities per 100 million vehicle miles traveled (VMT) | x |
| Number of serious Injuries | x |
| Rate of serious injures per 100 million vehicle miles traveled (VMT) | x |
| Number of non-motorized fatalities and serious injuries | x |

[The MPO should discuss why and how it established its own targets. Include the basis for developing the MPO targets and cite relevant factors. Examples may include different safety performance trends in the MPO area compared to the state, additional funding for safety, an increased focus on safety as an MPO priority, the use of safety criteria for selecting projects, differing travel behavior in the MPO area, etc. See examples below.]

Example from a recent Hillsborough MPO TIP:[[1]](#footnote-1)

*The Hillsborough MPO is setting its safety performance targets based upon data collected within the MPO planning area for ten previous years related to safety performance measures. With the historical crash data, a linear trend projection is used to estimate the forthcoming year’s crash performance. A crash reduction estimate is applied to the future year end crash estimate, the methodology of which has been adopted in the It’s Time Hillsborough: 2045 Plan. The methodology forecasts a reduction in crashes based upon level-of-investment in safety projects. It is assumed that all funds will be invested in countermeasures which can optimize crash reduction based on countermeasures and location of crash hotspots. As an example, our It’s Time Hillsborough: 2045 Plan used a proprietary post-processor to estimate the crash reduction benefits and found that a countermeasure bundle of sidewalks, streetlights spaced at 1/4mi intervals, and complete streets treatments would optimize the effectiveness of our investments. The 2022 targets reflect the baseline funding scenario and a 0.93% annual reduction. While the TPO board recognizes the importance of setting data-driven, realistic targets that reflect long-term goals, this year, the board resolved to establish a more aggressive target than in previous years to signal its commitment to expediting a reduction. This lower target more accurately reflects the community's desire to accelerate the pace of crash reduction, noting the record high number of fatalities experienced across Hillsborough County in 2021.*

Example from a recent River to Sea TPO TIP:[[2]](#footnote-2)

*While acknowledging and supporting FDOT’s vision and their safety target of zero, the River to Sea TPO has established independent safety performance targets based upon data collected within the TPO planning area for previous years and based on analysis of anticipated progress that can be achieved during the calendar year. In February 2018, 2019, and 2020 the River to Sea TPO adopted safety performance targets reflecting a two percent (2%) reduction per year in each of the required safety measures. In February 2021 and 2022, the River to Sea TPO updated their annual safety performance targets to continue to reduce the target by two percent for each category where measures are trending downward, however if the data showed that measures were trending upward in a category, the previous year’s target was retained.*

Example from a recent Sarasota/Manatee MPO TIP[[3]](#footnote-3). MPOs that include a table similar to this should use the most recent data available:

*The MPO analyzed safety data collected within the MPO planning area for the ten previous years related to safety performance measures in an effort to identify realistic, attainable safety performance targets based on historical data and projected trends. Following the FDOT’s designation of targets for the five safety performance measures, the Sarasota/Manatee MPO Board adopted their fifth round of targets for the 2017 – 2021 five-year rolling average on February 22, 2021.*

*The MPO has met the 2017 – 2021 targets for numbers of fatalities and serious injuries, and the fatality and serious injury rates. The MPO missed the 2017 – 2021 targets for non-motorized fatalities and serious injuries.*

*Table

Description automatically generated*

*After a careful analysis of data for the ten previous years, the MPO adopted their third round of targets for the 2018 – 2022 five-year rolling average on January 24, 2022, setting realistic, attainable safety performance targets based on historical statistics and projected trends. The MPO also supported FDOT’s target of “0” as a long-term goal and will continue to implement strategies that work towards accomplishing this goal.*

*Table

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*To set the targets for 2021 and 2022, the MPO reviewed the actual annual crashes from 2013 to 2021 and found that fatalities and serious injuries had been increasing throughout the years, following an upwards trend line. Now, using actual data through November of 2019, the projected numbers for 2021 and 2022 show an increase in number of fatalities and number of serious injuries but a decrease in non-motorized fatalities and serious injuries.*

Table

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[END OF OPTION B. Continue with next section, “Section 3.2 Safety Trends in the MPO Area”]

## 3.2 Safety Trends in the MPO Area

[MPOs may discuss recent safety performance data in the MPO area, as shown in the Sarasota/Manatee TIP example provided above. Note that MPOs are not required to discuss performance trends in the TIP, but its inclusion can provide context and supporting information for the narrative.]

Example from a Broward MPO TIP[[4]](#footnote-4). MPOs that include a table similar to this should use the most recent data available:

*After FDOT set its Safety Performance Measures targets in 2018, both FDOT and the Broward MPO established 2017 Baseline Safety Performance Measures. To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2015-2019) of crash data and VMT were utilized. Table 3-2 presents the Baseline Safety Performance Measures for Florida and Broward MPO.*

*Table

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*The MPO uses crash data tracking fatalities and serious injuries in Broward County to analyze past trends and identify regional safety issues. Tracking these measures will help to estimate the effectiveness of future MPO transportation investment, as reflected in the TIP. Table 3-3 shows the changes in Safety Performance Measures for Broward MPO from 2016 through 2020. The measures shown in Table 3-3 were calculated by following the same methodology as that used to calculate the baseline conditions.*

Table

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## 3.3 FDOT Safety Planning and Programming

**3.3.1 Florida’s Strategic Highway Safety Plan**

Florida’s Strategic Highway Safety Plan (SHSP), published in March 2021, identifies strategies to achieve zero traffic deaths and serious injuries. The SHSP was updated in coordination with Florida’s 27 MPOs and the MPOAC, as well as other statewide traffic safety partners. The SHSP development process included review of safety-related goals, objectives, and strategies in MPO plans. The SHSP guides FDOT, MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the state.

Florida’s transportation safety partners have focused on reducing fatalities and serious injuries through the 4Es of engineering, education, enforcement, and emergency response. To achieve zero, FDOT and other safety partners will expand beyond addressing specific hazards and influencing individual behavior to reshaping transportation systems and communities to create a safer environment for all travel. The updated SHSP calls on Florida to think more broadly and inclusively by addressing four additional topics, which are referred to as the 4Is: information intelligence, innovation, insight into communities, and investments and policies. The SHSP also embraces an integrated “Safe System” approach that involves designing and managing road infrastructure to keep the risk of a mistake low and to ensure that when a mistake leads to a crash, the impact on the human body does not result in a fatality or serious injury. The five Safe System elements together create a holistic approach with layers of protection: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care.

The SHSP also expands the list of emphasis areas for Florida’s safety programs to include six evolving emphasis areas, which are high-risk or high-impact crashes that are a subset of an existing emphasis area or emerging risks and new innovations, where safety implications are unknown. These evolving emphasis areas include work zones, drowsy and ill driving, rail grade crossings, roadway transit, micromobility, and connected and automated vehicles.

**3.3.2 Florida’s Highway Safety Improvement Program**

While the FTP and the SHSP both highlight the statewide commitment to a vision of zero deaths, the Florida Highway Safety Improvement Program (HSIP) Annual Report documents statewide performance and progress toward that vision. It also lists all HSIP projects that were obligated during the reporting year and the relationship of each project to the SHSP.

As discussed above, in the 2022 HSIP Annual Report, FDOT reported 2023 statewide safety performance targets at “0” for each safety performance measure to reflect the vision of zero deaths. Annually, FHWA determines whether Florida has met the targets or performed better than baseline for at least four of the five measures. If this does not occur FDOT must submit an annual implementation plan with actions, it will take to meet targets in the future.

On April 21, 2022, FHWA reported the results of its 2020 safety target assessment. FHWA concluded that Florida had not met or made significant progress toward its 2020 safety targets, noting that zero had not been achieved for any measure and that only three out of five measures (number of serious injuries, serious injury rate, and number of non-motorized fatalities and serious injuries) were better than baseline. Subsequently, FDOT developed an HSIP Implementation Plan to highlight additional strategies it will undertake in support of the safety targets. This plan was submitted with the HSIP Annual Report to FWHA on August 31, 2022 and is available at [[insert link when available](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/safety/11a-safetyengineering/fhwa-reports-plans/2022-hsip-implementation-plan_august-2022_final.pdf?sfvrsn=4bf94921_2)]. *Note: FDOT will send updated text once FHWA sends the 2021 safety target assessment.*

Consistent with FHWA requirements, the HSIP Implementation Plan focuses specifically on implementation of the HSIP as a core federal-aid highway program and documents the continued enhancements planned for Florida’s HSIP to better leverage the benefits of this program. However, recognizing that FDOT already allocates all HSIP funding to safety programs - and building on the integrated approach that underscores FDOT’s safety programs – the HSIP Implementation Plan also documents how additional FDOT, and partner activities may contribute to progress toward zero. Building on the foundation of prior HSIP Implementation Plans, the 2022 HSIP Implementation Plan identifies the following key commitments:

* Improve partner coordination and align safety activities.
* Maximize HSIP infrastructure investments.
* Enhance safety data systems and analysis.
* Focus on safety marketing and education on target audiences.
* Capitalize on new and existing funding opportunities.

Florida conducts extensive safety data analysis to understand the state’s traffic safety challenges and identify and implement successful safety solutions. Florida’s transportation system is evaluated using location-specific analyses that evaluate locations where the number of crashes or crash rates are the highest and where fatalities and serious injuries are most prominent. These analyses are paired with additional systemic analyses to identify characteristics that contribute to certain crash types and prioritize countermeasures that can be deployed across the system as a whole. As countermeasures are implemented, Florida also employs predictive analyses to evaluate the performance of roadways (i.e., evaluating results of implemented crash modification factors against projected crash reduction factors).

FDOT’s State Safety Office works closely with FDOT Districts and regional and local traffic safety partners to develop the annual HSIP updates. Historic, risk-based, and predictive safety analyses are conducted to identify appropriate proven countermeasures to reduce fatalities and serious injuries associated with Florida’s SHSP emphasis areas, resulting in a list of projects that reflect the greatest needs and are anticipated to achieve the highest benefit. While these projects and the associated policies and standards may take years to be implemented, they are built on proven countermeasures for improving safety and addressing serious crash risks or safety problems identified through a data-driven process. Florida continues to allocate all available HSIP funding to safety projects. [FDOT’s HSIP Guidelines](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/safety/6-resources/florida-hsip-manual-v2021-f-(2021-08-12).pdf?sfvrsn=960bbf43_2) provide detailed information on this data-driven process and funding eligibility.

Florida received an allocation of approximately $189 million in HSIP funds for use during the 2021 state fiscal year from July 1, 2021 through June 30, 2022, and fully allocated those funds to safety projects. FDOT used these HSIP funds to complete projects that address intersections, lane departure, pedestrian and bicyclist safety, and other programs representing the remaining SHSP emphasis areas. This year’s HSIP allocated $159.7 million in infrastructure investments on state-maintained roadways and $22.1 million in infrastructure investments on local roadways. The remaining $7.2 million included supporting activities such as transportation safety planning, preliminary engineering, traffic engineering studies, transportation statistics, and public information or education. A list of HSIP projects can be found in the [HSIP 2021 Annual Report](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/safety/11a-safetyengineering/fhwa-reports-plans/hsip-2021---report.pdf?sfvrsn=3b86a611_2).

Beginning in fiscal year 2024, HSIP funding will be distributed among FDOT Districts based on statutory formula to allow the Districts to have more clearly defined funding levels for which they can better plan to select and fund projects. MPOs and local agencies coordinate with FDOT Districts to identify and implement effective highway safety improvement projects on non-state roadways.

**3.3.3 Additional FDOT Safety Planning Activities**

In addition to HSIP, safety is considered as a factor in FDOT planning and priority setting for projects in preservation and capacity programs. Data is analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The [Florida PD&E Manual](https://www.fdot.gov/environment/pubs/pdeman/pdeman-current) requires the consideration of safety when preparing a proposed project’s purpose and need as part of the analysis of alternatives. Florida design and construction standards include safety criteria and countermeasures, which are incorporated in every construction project. FDOT also recognizes the importance of the American Association of State Highway Transportation Official (AASHTO) Highway Safety Manual (HSM). Through dedicated and consistent training and messaging over the last several years, the HSM is now an integral part of project development and design.

FDOT holds Program Planning Workshops annually to determine the level of funding to be allocated over the next 5 to 10 years to preserve and provide for a safe transportation system. Certain funding types are further analyzed and prioritized by FDOT Central Offices, after projects are prioritized collaboratively by the MPOs, local governments, and FDOT Districts; for example, the Safety Office is responsible for the HSIP and Highway Safety Program (HSP) and the Systems Implementation Office is responsible for the Strategic Intermodal System (SIS). Both the Safety and SIS programs consider the reduction of traffic fatalities and serious injuries in their criteria for ranking projects.

## 3.4 Safety Investments in the TIP

[The TIP document must include a written narrative describing the anticipated effect of the TIP toward achieving the targets, linking investment priorities to those performance targets. MPOs should address this requirement by describing how the TIP implements goals, objectives, strategies, and investment priorities from other performance-based plans and processes (i.e., the HSIP and SHSP).

The MPO should include the following information as applicable:

* Discuss safety programs included in the TIP and how they link to the LRTP and SHSP. The text should give particular attention to programs consistent with the SHSP emphasis areas, as well as programs involving extensive partner input such as the Community Traffic Safety Team and the Safe Routes to Schools Team.
* Discuss the prioritization process used to select safety related investment priorities in the TIP, including how the safety performance measures are considered in this process. This discussion could include both how priorities are set for safety-specific programs (such as HSIP), as well as how safety is a factor in setting priorities for preservation and capacity programs.
* Reference safety data used in the decision-making process. For example, some project types, based on research, are anticipated to have a specific quantifiable effect (e.g., roundabouts, pedestrian beacons).
* Compare current levels of funding for specific safety-related projects to previous funding, and/or compare the number of specific safety-related project types to the current number of projects of the same type.
* Identify examples of safety projects that address the most problematic locations in the MPO area. The MPO can provide information on HSIP projects and associated funding from the most recent HSIP Annual Report.

Examples are provided below. Note that MPOs are not required to describe the anticipated effect of individual projects in the TIP on achieving the targets, but rather must describe the collective impact of the program of project activities.]

The TIP includes projects that fall into specific investment priorities established by the MPO in the LRTP. This includes safety programs such as:

*- List infrastructure examples: Installation of school flashing signals, roadway lighting, traffic calming, traffic signals, bike lanes, sidewalks.*

*- List behavioral safety examples: Safe Routes to Schools education/enforcement activities, pedestrian/bicycle safety education.*

Example from a recent MetroPlan Orlando TIP:[[5]](#footnote-5)

*The TIP considers potential projects that fall into specific investment priorities established by the MPO in the Metropolitan Transportation Plan (MTP). For MetroPlan Orlando this includes Transportation System Management and Operations (TSMO) projects specifically related to improving safety such as traffic signal retiming, adding turn lanes at intersections, dynamic message signs, roadway lighting, etc. MetroPlan Orlando’s TSMO Advisory Committee was established several years ago to focus on the planning and implementation of TSMO projects and to provide input to the MetroPlan Orlando Board on the prioritization of these projects. The list of TSMO projects is shown in Section VII in the TIP.*

*In addition, in 2017, MetroPlan Orlando received a grant of $11.9 million from FHWA as part of the Advanced Traffic and Congestion Management Technology Deployment program which is being used for the installation and operation of advanced transportation technologies to improve safety, efficiency and system performance in east Orange County near the University of Central Florida.*

*Improving bicycle and pedestrian safety is also a high priority in the MetroPlan Orlando region, and includes adding infrastructure such as sidewalks and bike lanes as well as conducting education programs on bicycle and pedestrian safety. One example of this is the Best Foot Forward program which is a safety initiative designed to improve pedestrian safety through education, engineering, and enforcement. The list of bicycle and pedestrian projects is shown in Section IX in the TIP.*

*In recent years, MetroPlan Orlando and its partner jurisdictions and agencies have emphasized the implementation of Complete Streets projects in the region. These projects can include a combination of adding bicycle and pedestrian facilities, transit improvements such as bus pull-outs, and intersection improvements that are designed to improve traffic flow and safety along existing roadways without adding capacity.*

Example from the River to Sea TPO TIP:[[6]](#footnote-6)

*The River to Sea TPO has had a longstanding commitment to improving transportation safety, which is demonstrated through planning and programming activities. Activities included in the Unified Planning Work Program such as the completion of school safety studies for all elementary and middle schools within the planning area, pedestrian law enforcement training and exercises, health and safety partnerships with local agencies, participation on the Community Traffic Safety Teams and helmet distribution programs have led to increased safety awareness and project specific recommendations to reduce injuries and fatalities throughout the planning area.*

*In order to achieve the reduction established by the safety targets, the TPO has evaluated projects that fall into specific investment categories established by the MPO in the project application, evaluation, and ranking process. All new projects added to the TIP by the TPO that will improve safety and help the TPO reach its safety targets include a statement to that effect.*

*The TPO also reviewed safety-related projects that have been identified and added to the work program and TIP by other agencies such as Bicycle and Pedestrian Safety, Lighting projects, Safe Routes to School projects, and Community Traffic Safety Team initiatives. The TPO is very supportive of all agencies that seek to improve transportation safety and we will continue to work with those agencies to understand their selection methodology and to ensure they conform to guidance issued by federal and state agencies.*

*This TIP includes specific investment priorities that support all of the TPO’s goals including safety, using a prioritization and project selection process established previously in the LRTP. The LRTP is currently being updated by the TPO and the role of Transportation Performance Management and safety in particular will be an emphasis area in the development of that plan. The TPO’s goal of reducing fatal and serious injury crashes is linked to this investment plan and the process used in prioritizing the projects is consistent with federal requirements. The TPO has long utilized an annual project ranking criteria that identifies and prioritizes projects aimed at improving transportation safety. The ranking criteria are included in the appendices of this TIP. Going forward, the project evaluation and prioritization process will continue to use a data-driven strategy that considers stakeholder input to evaluate projects that have an anticipated effect of reducing both fatal and injury crashes. The TPO’s goal of reducing fatal and serious injury crashes is linked to the TIP and the process used in prioritizing the projects is consistent with federal requirements.*

Example from the Broward MPO TIP:[[7]](#footnote-7)

*The MPO considers safety as a planning factor in the project selection process. One goal of the 2045 MTP is to reduce accidents, injuries, and fatalities. The MTP strengthened the connection between its spending and safety performance by continuing the CSMP, the CSLIP, and introduced the TSMO and safety program, which aim to improve safety of the transportation system. For example, Safety accounts for 20% of the CSLIP selection criteria. As part of the MTP and TIP, the MPO allocates a large portion of its discretionary funds to 37 these programs. Projects identified in these programs have been funded through the TIP.*

*The TIP includes specific investment priorities that support all of the MPO’s goals including safety, using a prioritization, and project selection process established in the MTP. This process evaluates projects that have an anticipated effect of reducing both fatal and injury crashes. The MPO’s goal of reducing fatal and serious injury crashes is linked to this investment plan and the process used in prioritizing the projects is consistent with federal requirements. The TIP prioritization process uses stakeholder input as a criterion to evaluate projects that have an anticipated effect of reducing both fatal and injury crashes. The MPO’s goal of reducing fatal and serious injury crashes is linked to the TIP and the process used in prioritizing the projects is consistent with federal requirements.*

*The program of projects identified through this process are anticipated to contribute toward achievement of the safety targets. The safety infrastructure investments are targeted at specific opportunities to improve safety. For example, additional roadway lighting at intersections will improve pedestrian visibility to drivers. In addition to the specific safety programs included in the TIP, other programs also consider safety as a key factor. Safety impacts are considered in the evaluation of proposed preservation, capacity, and operations projects, including projects on Florida’s Strategic Intermodal System as well as regionally significant facilities identified in the MTP.*

*The TIP FY 2023 to 2027 includes 140 projects that improve safety conditions County-wide, totaling $350 million. These projects fall in the following categories. The MPO continues monitoring investments in the TIP and demonstrating progress toward goals and objectives.*

*1. Bike lane/Sidewalk*

*2. Lighting*

*3. Traffic control devices/system*

*4. Safety projects*

*5. Push button*

*6. Corridor improvements*

*7. Add turning lanes*

*8. Signing and pavement markings*

*The 2045 The MTP is the primary source for identifying priority projects for inclusion in the TIP. There are many projects included in the 2045 MTP that focus on improving safety of the Broward county transportation systems. For the complete list of projects, refer to the plan at http://browardmpo.org/index.php/commitment-2045-metropolitan-transportation-plan. The MTP consolidates eligible classes of localized projects into one overall program, CSLIP. The MPO’s CSLIP provides funding for small local transportation projects which improve the safety and mobility for all transportation users in Broward. This competitive grant 38 program can fund projects such as (but not limited to): complete streets projects, traffic calming and intersection improvements, ADA upgrades, mobility hubs, bike racks, and technology advancements such as transit signal priority and traffic control devices. These projects are ranked based on the projects ability to address connectivity, mobility, safety, and economic development. The ranking is conducted objectively based on these categories to ensure an equal and fair distribution of funding. The MTP set aside 15% discretionary funds to the Systems Management and Safety program and proposes to utilize 10% of the available federal and state funding included in the “Other Roads” program for off-system safety projects (consistent with the published guidance provided by FDOT in the 2045 Revenue Forecast – Broward MPO/Broward Metropolitan Area). One goal of the Systems Management and Safety program is to identify, prioritize, and implement safety improvements at locations with high fatality and serious injuries. High priority crash locations are included in the MMPL for future safety study and capital project funding. A new off-system Road Safety Audit (RSA) process has also been developed to expedite safety studies and safety construction projects on off-system roadways.*

*Broward MPO Complete Streets Initiative The MPO understands the importance of creating a transportation system that addresses the needs of all users of the road, including the needs of people who walk, bike, drive, and take transit. Health, safety, and economic development benefits have been directly attributed to roads planned, designed, and operated for all users. To ensure that this is firmly embedded into our transportation planning process, the Broward MPO developed the Complete Streets Initiative. This program, guided by the Complete Streets Advisory Committee (CSAC), with the main intent to provide the necessary tools to our local governments in implementing Complete Streets in their respective communities. The Complete Streets Initiative also serves as a platform to move forward active transportation projects identified in our plans, initiatives, and studies from the planning to design and ultimately to construction through the MPO’s CSMP.*

When referencing other programs such as Federal grants, the text should be clear about whether the referenced activities are included in the TIP. Example from the Broward MPO TIP:

*The MPO considers safety as a planning factor in the project selection process. One goal of the 2045 MTP is to reduce accidents, injuries, and fatalities. The MTP strengthened the connection between its spending and safety performance by continuing the Complete Streets Master Plan, the Complete Streets and Localized Incentives program (CSLIP), and introduced the TSMO and safety program, which aim to improve safety of the transportation system. For example, Safety accounts for 30% of the CSLIP selection criteria. As part of the MTP and TIP, the MPO allocates a large portion of its discretionary funds to these programs. Projects identified in these programs have been funded through the TIP.*

Example from the Sarasota/Manatee MPO TIP:[[8]](#footnote-8)

*The TIP considers potential projects that fall into specific investment programs established by the MPO. The TIP includes specific investment projects that support all of the MPOs goals including safety, using a prioritization and project selection process. The TIP prioritization process continues to use a data-driven method to evaluate projects that have an anticipated effect of reducing both fatal and injury crashes. The MPO’s goal of reducing fatal and serious injury crashes is linked to this investment plan and the process used in prioritizing the projects is consistent with federal requirements.*

*The Sarasota/Manatee MPO supports safety programs including Safe Routes to Schools (SRTS) and the Community Traffic Safety Team (CTST) where local law enforcement, emergency responders, jurisdiction engineers, and the school board come together to tackle safety issues within the region. The following safety factors are considered in the project prioritization process. Does the project:*

*• Address an identified motorized or non-motorized high crash location?*

*• Improve safety for vulnerable users?*

*• Improve traffic flow on an evacuation route*

*In FY 2017/18 the MPO conducted an in-depth analysis of all crashes. Using crash patterns identified throughout the region, the MPO developed a set of mitigation strategies aimed at improving safety. Then, in 2020, the MPO analyzed the US 41 Multi Modal Emphasis Corridor (MMEC) to examine existing conditions along the corridor to identify potential safety and mobility assessments that address the MPO’s safety, mobility, and environmental and livability performance measures. US 41 MMEC is a program included in the past two Long Range Transportation Plans (LRTP) and was recently expanded to include seven additional corridors in the Transform 2045 Long Range Transportation Plan (LRTP). For this LRTP, the MPO updated the 2019 Safety Report to incorporate in the 25 year long range transportation plan. Based on the safety recommendations from the 2018 safety analysis, the 2020 US 41 MMEC study, as well as high crash locations throughout the region, a list of over 70 high priority locations have been identified.*

*On February 28, 2022, the Sarasota/Manatee MPO Governing Board adopted Destination Zero: The Sarasota/Manatee Path to Zero Fatalities and Serious Injuries. This Action Plan is a commitment to making significant reductions in the rates of serious injury and fatal crashes on our roads. Development of the Action Plan was data-driven and built on the Safe System Approach, a set of six principles adopted by US DOT to improve road safety. The MPO Board also approved the formation of a dedicated Destination Zero Advisory Group to facilitate implementation of the Destination Zero Action Plan. Comprised of safety, transportation, and engineering professionals from the MPO’s jurisdictional partners, the Advisory Group exists to help local jurisdiction develop and adopt their own Destination Zero Action Plan.*

*Table

Description automatically generated*

*The Sarasota/Manatee MPO continues monitoring investments in the TIP and demonstrating progress toward goals and objectives. The TIP 2021 to 2026 includes $125 million totaling 34 projects improving safety between the two counties. These projects fall in the following categories: Bike lane/Sidewalk; Lighting; Traffic control devices/system; Safety projects; Push button; Corridor improvements; Add turning lanes; and Signing and pavement markings.*

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Because safety is inherent in so many FDOT and [insert MPO name] programs and projects, and because of the broad and holistic approach FDOT is undertaking with its commitment to Vision Zero, the program of projects in this TIP is anticipated to support progress towards achieving the safety targets.

# 4 – Pavement & Bridge Condition Measures (PM2)

FHWA’s Bridge & Pavement Condition Performance Measures Final Rule, which is also referred to as the PM2 rule, requires state DOTs and MPOs to establish targets for the following six performance measures:

1. Percent of NHS bridges (by deck area) classified as in good condition;
2. Percent of NHS bridges (by deck area) classified as in poor condition;
3. Percent of Interstate pavements in good condition;
4. Percent of Interstate pavements in poor condition;
5. Percent of non-Interstate National Highway System (NHS) pavements in good condition; and
6. Percent of non-Interstate NHS pavements in poor condition;

For the pavement measures, five pavement metrics are used to assess condition:

* International Roughness Index (IRI) - an indicator of roughness; applicable to asphalt, jointed concrete, and continuous concrete pavements;
* Cracking percent - percentage of pavement surface exhibiting cracking; applicable to asphalt, jointed concrete, and continuous concrete pavements;
* Rutting - extent of surface depressions; applicable to asphalt pavements only;
* Faulting - vertical misalignment of pavement joints; applicable to jointed concrete pavements only; and
* Present Serviceability Rating (PSR) – a quality rating applicable only to NHS roads with posted speed limits of less than 40 miles per hour (e.g., toll plazas, border crossings). States may choose to collect and report PSR for applicable segments as an alternative to the other four metrics.

## 4.1 Bridge & Pavement Condition Targets

### 4.1.1 Statewide Targets

Federal rules require state DOTs to establish two-year and four-year targets for the bridge and pavement condition measures. On December 16, 2022, FDOT established statewide bridge and pavement targets for the second performance period ending in 2025. These targets are identical to those set for 2019 and 2021, respectively. Florida’s performance through 2021 exceeds the targets. The two-year targets represent bridge and pavement condition at the end of calendar year 2023, while the four-year targets represent condition at the end of 2025. Table 4.1 presents the statewide targets.

**Table 4.1. Statewide Pavement and Bridge Condition Performance Targets**

| Performance Measure | 2023 Statewide Target | 2025 Statewide Target |
| --- | --- | --- |
| Percent of NHS bridges (by deck area) in good condition | 50.0% | 50.0% |
| Percent of NHS bridges (by deck area) in poor condition | 10.0% | 10.0% |
| Percent of Interstate pavements in good condition | 60.0% | 60.0% |
| Percent of Interstate pavements in poor condition | 5.0% | 5.0% |
| Percent of non-Interstate pavements in good condition | 40.0% | 40.0% |
| Percent of non-Interstate pavements in poor condition | 5.0% | 5.0% |

For comparative purposes, the baseline (2021) conditions are as follows:

* 61.3 percent of NHS bridges (by deck area) is in good condition and 0.5 percent is in poor condition.
* 70.5 percent of the Interstate pavement is in good condition and 0.7 percent is in poor condition;
* 47.5 percent of the non-Interstate NHS pavement is in good condition and 1.1 percent is in poor condition; and

In determining its approach to establishing performance targets for the federal bridge and pavement condition performance measures, FDOT considered many factors. FDOT is mandated by Florida Statute 334.046 to preserve the state’s bridges and pavement to specific state-defined standards. To adhere to the statutory guidelines, FDOT prioritizes funding allocations to ensure the current transportation system is adequately preserved and maintained before funding is allocated for capacity improvements. These state statutory guidelines envelope the statewide federal targets that have been established for pavements and bridges.

In addition, FDOT develops a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP must include investment strategies leading to a program of projects that would make progress toward achievement of the State’s targets for asset condition and performance of the NHS. FDOT’s first TAMP was approved on June 28, 2019. The TAMP has since been updated in 2022 and is waiting final approval from FHWA.

Further, the federal pavement condition measures require a methodology that is different from the methods historically used by FDOT. For bridge condition, the performance is measured in deck area under the federal measure, while FDOT programs its bridge repair or replacement work on a bridge-by-bridge basis. As such, the federal measures are not directly comparable to the methods that are most familiar to FDOT. For pavement condition, the methodology uses different ratings and pavement segment lengths, and FDOT only has one year of data available for non-Interstate NHS pavement using the federal methodology.

FDOT collects and reports bridge and pavement data to FHWA each year to track performance and progress toward the targets. The percentage of Florida’s bridges in good condition is slowly decreasing, which is to be expected as the bridge inventory grows older. Reported bridge and pavement data through 2021 exceeded the established targets. Based on anticipated funding levels, FDOT believes the previous targets are still appropriate for 2023 and 2025.

In early 2021, FHWA determined that FDOT made significant progress toward the 2019 targets; FHWA’s assessment of progress toward the 2021 targets is anticipated to be released in March 2023.

### 4.1.2 MPO Targets

MPOs must set four-year targets for the six bridge and pavement condition measures within 180 days of when FDOT established targets. MPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the MPO’s planning area for one or more measures.

[Use either Option A or Option B below. Option A is for MPOs that support all six-state pavement and bridge targets. Option B is for MPOs that establish their own targets.]

[OPTION A: For MPO that supports all statewide targets]

On [insert date], the [insert MPO name] agreed to support FDOT’s statewide bridge and pavement performance targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets. [The MPO may discuss the reasoning or analysis behind the decision to support the state targets.]

[END OF OPTION A. Continue at “Section 4.2 Pavement and Bridge Investments in the TIP”]

[OPTION B: For MPO that establishes its own targets for one or more PM2 measures]

The [insert name] MPO acknowledges FDOT’s statewide bridge and pavement condition targets. However, on [insert date], the [insert MPO name] established the four-year bridge and pavement condition targets for the MPO’s planning area identified in Table 4.2:

[Insert table similar to the one below. If desired, include the statewide targets in the table for reference purposes, or combine Tables 4.1 and 4.2 into one table. Note that MPOs are required to establish only 4-year targets for the federal bridge and pavement condition measures. An MPO may choose to establish 2-year targets.]

**Table 4.2 [MPO name] Pavement and Bridge Condition Performance Targets**

| Performance Measure | 2025 MPO Target |
| --- | --- |
| Percent of NHS bridges (by deck area) in good condition | xx.x% |
| Percent of NHS bridges (by deck area) in poor condition | x.x% |
| Percent of Interstate pavements in good condition | xx.x% |
| Percent of Interstate pavements in poor condition | x.x% |
| Percent of non-Interstate pavements in good condition | xx.x% |
| Percent of non-Interstate pavements in poor condition | x.x% |

In establishing the MPO’s targets for the bridge and pavement condition performance measures, [insert MPO name] considered many factors. [The MPO should discuss why and how it established its own targets. Include the basis for developing the MPO targets and cite relevant factors. Examples may include different performance trends in the MPO area compared to the state, additional funding for bridge or pavement projects in the MPO area, an increased focus on bridges or pavement as an MPO priority, the use of bridge or pavement condition criteria for selecting projects, etc.]

[END OF OPTION B. Continue with “Section 4.2 Bridge and Pavement Investments in the TIP,” below.]

## 4.2 Bridge & Pavement Investments in the TIP

[The TIP document must include a written narrative describing the anticipated effect of the TIP toward achieving the targets, linking investment priorities to those performance targets. MPOs could address this requirement by describing how the bridge and pavement preservation projects in the TIP were determined, including how performance targets were considered in this process. This section also could discuss how the TIP implements goals, objectives, strategies, and investment priorities from other performance-based plans and processes (for example, the TAMP). MPOs are required to describe the anticipated effect of the collective program of project activities, not the impact of individual projects in the TIP.]

The [insert MPO name] TIP reflects investment priorities established in the [insert name of the current LRTP]. The focus of [insert MPO name]’s investments in bridge and pavement condition include [list example programs and strategies or major projects funded in the TIP that address system preservation/maintenance on the Interstate and non-Interstate NHS in the MPO area, such as those in the following categories:

* Bridge replacement or reconstruction
* New bridge capacity on the NHS
* System resiliency projects that improve NHS bridge components (e.g., upgrading culverts)]
* Pavement replacement or reconstruction (on the NHS)
* New NHS lanes or widenings, including resurfacing existing lanes associated with new capacity

[If the MPO uses project selection criteria related to bridge and pavement condition in the LRTP or TIP selection process, insert a discussion here. Note any data-driven, performance-based elements.]

[Summarize the funding amounts identified in the TIP for bridge and pavement condition programs and strategies such as those listed above. Also consider how other programs may contribute toward achievement of the statewide bridge and pavement condition targets, such as widenings that will have new pavement.]

[Example: The TIP devotes a significant amount of resources to projects that will maintain bridge and pavement condition performance. Investments in bridge and pavement condition include bridge replacement and reconstruction, pavement replacement and reconstruction, and new bridge and pavement capacity. The TIP will fund $xx million for bridges, $xx million for resurfacing, and xx million for new capacity.]

Example below is from a recent Forward Pinellas TIP:[[9]](#footnote-9)

*The Forward Pinellas TIP reflects investment priorities established in Advantage Pinellas, the 2045 LRTP. The focus of Forward Pinellas’ investments in bridge and pavement condition include:*

*• Rigid Pavement Rehabilitation on I-175 from 16th St to 4th St*

*• Resurfacing on SR 693/ Pasadena Ave from Park St to Central Ave*

*• Resurfacing on SR 679/Pinellas Bayway from Bunces Pass to Madeira Cir*

*• Structural Rehab on I-275/Sunshine Skyway Bridge*

*• Replacement of the SB/WB Howard Frankland Bridge*

*• Replacement of the 40th Ave NE Bridge over Placido Bayou*

*• Rehabilitation of I-275 SB over 31st St Bridge*

*• Bridge Replacement on Ridgemoor Blvd & Brooker Creek*

*By advancing these projects, and other system preservation projects included in the Forward Pinellas TIP, it is expected that progress will be made towards achieving the targets set in this section.*

*The TIP devotes a significant amount of resources to projects that will maintain pavement and bridge condition performance. Investments in pavement and bridge condition include pavement replacement and reconstruction, bridge replacement and reconstruction, and new bridge and pavement capacity. The TIP will fund $889 million for bridges and $59 million for resurfacing.*

The projects included in the TIP are consistent with FDOT's Five Year Work Program, and therefore to FDOT’s approach to prioritize funding to ensure the transportation system is adequately preserved and maintained. Per federal planning requirements, the state selects projects on the NHS in cooperation with the MPO from the approved TIP. Given the significant resources devoted in the TIP to pavement and bridge projects, the MPO anticipates that once implemented, the TIP will contribute to progress towards achieving the statewide pavement and bridge condition performance targets.

# 5 - System Performance, Freight, & Congestion Mitigation & Air Quality Improvement Program Measures (PM3)

FHWA’s System Performance/Freight/CMAQ Performance Measures Final Rule, which is referred to as the PM3 rule, requires state DOTs and MPOs to establish targets for the following six performance measures:

**National Highway Performance Program (NHPP)**

1. Percent of person-miles traveled on the Interstate system that are reliable
2. Percent of person-miles traveled on the non-Interstate NHS that are reliable;

**National Highway Freight Program (NHFP)**

1. Truck Travel Time Reliability index (TTTR);

**Congestion Mitigation and Air Quality Improvement Program (CMAQ)**

1. Annual hours of peak hour excessive delay per capita (PHED);
2. Percent of non-single occupant vehicle travel (Non-SOV); and
3. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NOx, VOC, CO, PM10, and PM2.5) for CMAQ funded projects.

Because all areas in Florida meet current national air quality standards, the three CMAQ measures do not apply in Florida. A description of the first three measures is below.

The first two performance measures assess the percent of person-miles traveled on the Interstate or the non-Interstate NHS that are reliable. Reliability is defined as the ratio of longer travel times to a normal travel time over of all applicable roads, across four time periods between the hours of 6 a.m. and 8 p.m. each day.

The third performance measure assesses the reliability of truck travel on the Interstate system. The TTTR assesses how reliable the Interstate network is by comparing the worst travel times for trucks against the travel time they typically experience.

## 5.1 System Performance and Freight Targets

### 5.1.1 Statewide Targets

Federal rules require state DOTs to establish two-year and four-year targets for the system performance and freight targets. On December 16, 2022, FDOT established statewide performance targets for the second performance period ending in 2025. These targets are identical to those set for 2019 and 2021, respectively. Florida’s performance through 2021 exceeds the targets. The two-year targets represent performance at the end of calendar year 2023, while the four-year targets represent performance at the end of 2025. Table 5.1 presents the statewide targets.

**Table 5.1. Statewide System Performance and Freight Targets**

|  |  |  |
| --- | --- | --- |
| Performance Measure | 2023 Statewide Target | 2025 Statewide Target |
| Percent of person-miles traveled on the Interstate system that are reliable | 75.0% | 70.0% |
| Percent of person-miles traveled on the non-Interstate NHS that are reliable | 50.0% | 50.0% |
| Truck travel time reliability (Interstate) | 1.75 | 2.00 |

For comparative purposes, baseline (2021) statewide conditions are as follows:

* 87.5 percent of person-miles traveled on the Interstate are reliable;
* 92.9 percent of person-miles traveled on the non-Interstate are reliable; and
* 1.38 truck travel time reliability index.

In establishing these targets, FDOT reviewed external and internal factors that may affect reliability, analyzed travel time data from the National Performance Management Research Dataset (NPMRDS), and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable.

FDOT collects and reports reliability data to FHWA each year to track performance and progress toward the reliability targets. Performance for all three measures improved from 2017 to 2021, with some disruption in the trend during the global pandemic in 2020. Actual performance in 2019 was better than the 2019 targets, and in early 2021 FHWA determined that FDOT made significant progress toward the 2019 targets. FHWA’s assessment of progress toward the 2021 targets is anticipated to be released in March 2023.

The methodologies for the PM3 measures are still relatively new, and the travel time data source has changed since the measures were first introduced. As a result, FDOT only has three years (2017-2019) of pre-pandemic travel reliability trend data as a basis for future forecasts. Based on the current data, Florida’s performance continues to exceed the previous targets. Given the uncertainty in future travel behavior, FDOT believes the previous targets are still appropriate for 2023 and 2025.

System performance and freight are addressed through several statewide initiatives:

* Florida’s Strategic Intermodal System (SIS) is composed of transportation facilities of statewide and interregional significance. The SIS is a primary focus of FDOT’s capacity investments and is Florida’s primary network for ensuring a strong link between transportation and economic competitiveness. These facilities, which span all modes and includes highways, are the workhorses of Florida’s transportation system and account for a dominant share of the people and freight movement to, from and within Florida. The SIS includes 92 percent of NHS lane miles in the state. Thus, FDOT’s focus on improving performance of the SIS goes hand-in-hand with improving the NHS, which is the focus of the FHWA’s TPM program. The SIS Policy Plan was updated in early 2022 consistent with the updated FTP. The SIS Policy Plan defines the policy framework for designating which facilities are part of the SIS, as well as how SIS investments needs are identified and prioritized. The development of the SIS Five-Year Plan by FDOT considers scores on a range of measures including mobility, safety, preservation, and economic competitiveness as part of FDOT’s Strategic Investment Tool (SIT).
* In addition, FDOT’s Freight Mobility and Trade Plan (FMTP) defines policies and investments that will enhance Florida’s economic development efforts into the future. The FMTP identifies truck bottlenecks and other freight investment needs and defines the process for setting priorities among these needs to receive funding from the National Highway Freight Program (NHFP). Project evaluation criteria tie back to the FMTP objectives to ensure high priority projects support the statewide freight vision. In May 2020, FHWA approved the FMTP as FDOT’s State Freight Plan.
* FDOT also developed and refined a methodology to identify freight bottlenecks on Florida’s SIS on an annual basis using vehicle probe data and travel time reliability measures. Identification of bottlenecks and estimation of their delay impact aids FDOT in focusing on relief efforts and ranking them by priority. In turn, this information is incorporated into FDOT’s SIT to help identify the most important SIS capacity projects to relieve congestion.

### 5.1.2 MPO Targets

MPOs must establish four-year targets for all three performance measures. MPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the MPO’s planning area for one or more measures.

[Use either Option A or Option B below. Option A is for MPOs that support all state targets for the federal system performance and freight measures. Option B is for MPOs that establish their own targets.]

[OPTION A: For MPO that supports statewide targets]

On [insert date], the [insert MPO name] agreed to support FDOT’s statewide system performance and freight targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets. [The MPO may discuss the reasoning or analysis behind the decision to support the state targets.]

[END OF OPTION A. Continue at “Section 5.2 System Performance and Freight Investments in the TIP”]

[OPTION B: For MPO that establishes its own targets for one or more measures]

The [insert name] MPO acknowledges FDOT’s statewide system performance and freight targets. However, on [insert date], the [insert MPO name] established the four-year targets for the MPO’s planning area identified in Table 5.2:

[Insert table similar to the one below. If desired, include the statewide targets in the table for reference purposes, or combine Tables 5.1 and 5.2 into one table. MPOs are required to establish only 4-year targets for the federal system performance and freight measures. However, an MPO may choose to establish 2-year targets.]

**Table 5.2 [MPO name] System Performance and Freight Targets**

|  |  |
| --- | --- |
| Performance Measure | 2025 MPO Target |
| Percent of person-miles traveled on the Interstate that are reliable | xx.x% |
| Percent of person-miles traveled on the non-Interstate NHS that are reliable | xx.x% |
| Truck travel time reliability index (Interstate) | x.xx |

In establishing the MPO’s targets for the system performance and freight measures, [insert MPO name] considered many factors. [The MPO should discuss why and how it established its own targets. Include the basis for developing the MPO targets and cite relevant factors. Examples may include different performance trends in the MPO area compared to the state, additional funding for system performance and/or freight projects in the MPO area, an increased focus on system performance or freight as an MPO priority, the use of reliability criteria for selecting projects, etc.]

[END OF OPTION B. Continue with “Section 5.2 System Performance and Freight Investments in the TIP” below.]

## 5.2 System Performance and Freight Investments in the TIP

[The TIP document must include a written narrative describing the anticipated effect of the TIP toward achieving the targets, linking investment priorities to those performance targets. MPOs could address this requirement by describing how the system performance and freight projects in the TIP were determined, including how performance targets were considered in this process. The section also can discuss how the TIP implements goals, objectives, strategies, and investment priorities from other performance-based plans and processes (for example, the Florida Freight Mobility and Trade Plan). MPOs are required to describe the anticipated effect of the collective program of project activities, not the impact of individual projects in the TIP.]

The [insert MPO name] TIP reflects investment priorities established in the [insert name of the current LRTP]. The focus of [insert MPO name]’s investments that address system performance and freight include [list example programs and strategies or major projects funded in the TIP that address system performance and freight on the Interstate and non-Interstate NHS in the MPO area, such as those in the following categories:

* Corridor improvements
* Intersection improvements (on NHS roads)
* Projects evaluated in the CMP and selected for the TIP
* Investments in transit, bicycle, or pedestrian systems that promote mode shift
* Managed lanes
* Freight improvements (Interstate) that increase reliability (could include improved weigh stations, addressing identified truck bottlenecks on the Interstate, etc.).
* TSMO/ITS projects or programs
* Travel demand management programs, park, and ride lots, etc.]

[If the MPO uses project selection criteria related to congestion-relief, reliability, mode shift, freight, TDM, etc. in the LRTP or TIP development process, insert a discussion here. Note any data-driven, performance-based elements.]

[Summarize the funding amounts identified in the TIP for system performance and freight-related projects on the NHS such as those listed above. Also consider how other project types may contribute toward achievement of statewide targets - for example, safety programs could reduce incidents and related travel delay.]

[Example: The TIP devotes a significant amount of resources to programs and projects that will improve system performance and freight reliability on the Interstate and non-Interstate NHS. Investments include (list programs such as those identified above). The TIP will fund $x million for intersection improvements, $x million for congestion relief projects, $x million for freight, $x thousand for TDM, $xx million for managed lanes, and $x million for TSMO projects.]

Example from the Space Coast TPO:[[10]](#footnote-10)

*The Space Coast TPO’s TIP reflects investment priorities established in the 2045 LRTP. The focus of Space Coast TPO’s investments that address system performance and freight are identified below. The TIP will fund $201 million for congestion relief projects and freight, $12.2 million for TSM&O projects.*

* *Intersection improvements (on NHS roads) – US 192 / Hollywood.*
* *Freight improvements (SIS) to increase capacity on SR 528 (Beachline) and roadway rehabilitation to SR 528 and I-95.*
* *Ellis Road widening (SIS) to Orlando-Melbourne International Airport.*
* *Space Freight (SIS hubs and connectors) – replacement of NASA Cswy/Indian River Bridge; SR 405 Spaceport Connector Intersection improvements; Space Commerce Way widening.*
* *Freight and Cargo - SR 401 bascule bridges replacement – critical to economic prosperity of central Florida regions – corridor serves, Port Canaveral cruise passengers, Kennedy Space Center, Space Florida, Seaport Canaveral, port assets of the US Navy and US army and the Cape Canaveral Air force Station. The volume of freight and cargo movement is drivers that impact the performance and reliability of the bascule bridges.*
* *Investments in transit, bicycle, or pedestrian systems that promote mode shift.*
* *TSM&O / ITS projects - The strategies to address these objectives include capital investments in the county’s arterial and limited access roadways providing access to major economic generators like ports, downtown areas, and other emerging employment centers as well as incremental improvements in the county’s Intelligent Transportation System through the TPO’s ITS Master Plan.*
* *Projects evaluated in the State of the System / Congestion Management System and selected for the TIP.*

Example from the Forward Pinellas TIP:[[11]](#footnote-11)

*The Forward Pinellas TIP reflects investment priorities established in Advantage Pinellas, the 2045 LRTP. The focus of Forward Pinellas’ investments that address system performance and freight include:*

* *Alt US 19/Bayshore Blvd at Curlew Rd Intersection Improvements*
* *Duhme Rd/113th St. ATMS Improvements*
* *Alderman Rd ATMS Improvements*
* *SR 586/Causeway Blvd ATMS Improvements*
* *SR 590/Drew St. ATMS Improvements*
* *SR 580/Skinner ATMS Improvements*

*Forward Pinellas includes mobility measures in its project selection and review criteria. Criteria considered include if the project is intended to improve traffic flow (including if the project encourages a mode shift), if the project provides new services where one currently does not exist (for all modes), if the project completes a gap in the network and if the project is supportive of the Investment Corridor framework identified in Advantage Pinellas, the 2045 LRTP.*

*The TIP devotes a significant amount of resources to programs and projects that will improve system performance and freight reliability on the Interstate and non-Interstate NHS. Investments include ATMS and enhancement projects to improve mobility across the network. The TIP will fund $9 million in ITS/ATMS projects and more than $1.5 billion in roadway capacity projects.*

The projects included in the TIP are consistent with FDOT's Five Year Work Program, and therefore to FDOT’s approach to prioritize funding to address performance goals and targets. Per federal planning requirements, the state selects projects on the NHS in cooperation with the MPO from the approved TIP. Given the significant resources devoted in the TIP to programs that address system performance and freight, the MPO anticipates that once implemented, the TIP will contribute to progress towards achieving the statewide reliability performance targets.

# 6 - Transit Asset Management Measures

**Transit Asset Performance Measures**

FTA’s Transit Asset Management (TAM) regulations apply to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The regulations define the term “state of good repair,” require that public transportation providers develop and implement TAM plans, and established state of good repair standards and performance measures for four asset categories: equipment, rolling stock, transit infrastructure, and facilities. Table 6.1 identifies the TAM performance measures.

**Table 6.1. FTA TAM Performance Measures**

| Asset Category | Performance Measure |
| --- | --- |
| 1. Equipment | Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their Useful Life Benchmark |
| 1. Rolling Stock | Percentage of revenue vehicles within a particular asset class that have either met or exceeded their Useful Life Benchmark |
| 1. Infrastructure | Percentage of track segments with performance restrictions |
| 1. Facilities | Percentage of facilities within an asset class rated below condition 3 on the 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.

Public transportation providers are required to establish and report TAM targets annually for the following fiscal year. Each public transportation provider or its sponsors must share its targets with each MPO in which the public transportation provider’s projects and services are programmed in the MPO’s TIP. MPOs are not required to establish TAM targets annually each time the transit provider establishes targets. Instead, MPO targets must be established when the MPO updates the LRTP (although it is recommended that MPOs reflect the most current transit provider targets in the TIP if they have not yet taken action to update MPO targets). When establishing TAM targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional TAM targets for the MPO planning area. MPO targets may differ from agency targets, especially if there are multiple transit agencies in the MPO planning area. To the maximum extent practicable, public transit providers, states, and MPOs must coordinate with each other in the selection of performance targets.

The TAM regulation defines two tiers of public transportation providers based on size parameters. Tier I providers are those that operate rail service, or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in one non-fixed route mode. Tier II providers are those that are a subrecipient of FTA 5311 funds, or an American Indian Tribe, or have 100 or less vehicles across all fixed route modes or have 100 or less vehicles in one non-fixed route mode. A Tier I provider must establish its own TAM targets, as well as report performance and other data to FTA. A Tier II provider has the option to establish its own targets or to participate in a Group Plan with other Tier II providers whereby targets are established for the entire group in coordination with a group plan sponsor, typically a state DOT.

[If there are Tier II providers serving the MPO region that are participants in FDOT’s Group TAM Plan, include Section 6.1. If not, skip to Section 6.2.]

## 6.1 FDOT Group TAM Plan Participants

A total of 18 public transportation providers participated in the FDOT Group TAM Plan and continue to coordinate with FDOT on establishing and reporting group targets to FTA through the National Transit Database (NTD) (Table 6.2). These are FDOT’s Section 5311 Rural Program subrecipients. The Group TAM Plan was adopted in September 2022 and covers fiscal years 2022-2023 through 2025-2026. Group TAM Plan targets for fiscal year 2022 were submitted to NTD in July 2022. *MPO has the option of including the full table below for context, or just identifying those Tier II providers in the MPO planning area that participated in the Group TAM Plan, if any. If the MPO area includes any providers participating in the Group TAM Plan, the MPO should check with FDOT before submitting the TIP to confirm the final 2022 targets.*

**Table 6.2. Florida Group TAM Plan Participants**

| District | Participating Transit Providers |
| --- | --- |
| 1 | Central Florida Regional Planning Council |
| 2 | Baker County Council on Aging  Big Bend Transit\*  Levy County Transit  Nassau County Council on Aging/Nassau TRANSIT  Ride Solution (Putnam County)  Suwannee River Economic Council  Suwannee Valley Transit Authority |
| 3 | Big Bend Transit\*  Calhoun County Senior Citizens Association  Gulf County ARC  JTRANS  Liberty County Transit  Tri-County Community Council  Wakulla Transportation |
| 4 | *No participating providers* |
| 5 | Flagler County Public Transportation  Marion Transit  Sumter County Transit |
| 6 | Key West Transit |
| 7 | *No participating providers* |

**\*** Provider service area covers portions of Districts 2 and 3.

## 6.2 Transit Asset Management Targets

The following providers operate in the MPO planning area: identify providers and indicate those that are Tier I providers and/or Tier II providers. For Tier II providers, indicate those that are participants in FDOT’s Group TAM Plan.

Example from River to Sea TPO TIP:[[12]](#footnote-12)

*The River to Sea TPO planning area is served by three (3) transit service providers: Flagler County Public Transportation (FCPT), Votran, and SunRail. SunRail is considered a Tier I while Votran and FCPT are Tier II providers. The following tables represent the transit data reported by each transit agency for each of the applicable Asset Categories along with the targets set by those agencies and supported by the TPO.*

### 6.2.1 Transit Provider Targets

Use this language to discuss targets established by Tier I provider(s) and Tier II providers that are not part of the Group TAM Plan, if applicable: The [insert transit agency] established TAM targets for each of the applicable asset categories on [insert date]. Table 6.3 presents the targets. Include Table 6.3 below to list TAM targets for Tier 1 provider(s) and Tier II providers that are not part of the Group TAM Plan, if applicable. Repeat the table for each transit provider. Note that transit providers establish targets only for the asset classes operated by the agency; therefore, different asset classes than those shown in the example tables may apply.

Use this language to identify targets established by Tier II provider(s) that are part of the FDOT Group TAM Plan: [Transit provider] is part of the Group TAM Plan for Fiscal Years 2018/2019-2021/2022 developed by FDOT for Tier II providers in Florida. The FY 2020 asset conditions and FY 2021 targets for the Tier II providers are shown in Table 6.4. *Note: FDOT will provide an update once FY 2021 conditions and FY 2022 targets are available.*

The transit provider’s TAM targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities. The targets reflect the most recent data available on the number, age, and condition of transit assets, and capital investment plans for improving these assets. The table summarizes both existing conditions for the most recent year available, and the current targets [augment text as needed].

**Table 6.3. Transit Asset Management Targets for [insert transit provider name]**

| Asset Category - Performance Measure | Asset Class | FY 20xx Asset Condition | FY 20xx Target |
| --- | --- | --- | --- |
| **Rolling Stock** | | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB | Articulated Bus | X | % |
| Bus | X | % |
| Mini-Bus | X | % |
| Van | X | % |
| Etc. | X | % |
| **Equipment** | | | |
| Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB | Non-Revenue/Service Automobile | X | % |
| Trucks and other Rubber Tire Vehicles | X | % |
| Maintenance Equipment | X | % |
| Etc. | X | % |
| **Infrastructure (this category is only applicable to Tier I providers with rail service)** | | | |
| % of track segments with performance restrictions | Guideway Elements | X | % |
| Power & Signal Elements | X | % |
| Track Elements | X | % |
| **Facilities** | | | |
| Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale | Administration | X | % |
| Maintenance | X | % |
| Parking Structures | X | % |
| Passenger Facilities | X | % |
| Shelter | X | % |
| Storage | X | % |
| Etc. | X | % |

**Table 6.4. FDOT Group Plan Transit Asset Management Targets for Tier II Providers**

| Asset Category - Performance Measure | Asset Class | FY 2021 Asset Conditions | FY 2022 Performance Target |
| --- | --- | --- | --- |
| **Revenue Vehicles** | | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | Automobile | 0% | 0% |
| Bus | 21.54% | 20.46% |
| Cutaway Bus | 9.81% | 9.32% |
| School Bus | 100.0% | 95% |
| Mini-Van | 19.59% | 18.61% |
| SUV | 20% | 19% |
| Van | 40.58% | 38.55% |
| **Equipment** | | | |
| Age - % of equipment or non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | Non-Revenue Automobile | 75% | 71.25% |
| Trucks and other Rubber Tire Vehicles | 6.25% | 5.94% |
| **Facilities** | | | |
| Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale | Passenger/Parking Facilities | 0% | 0% |
| Administration/ Maintenance Facilities | 6.67% | 6.34% |

### 6.2.2 MPO Transit Asset Management Targets

As discussed above, MPOs are not required to establish TAM targets annually each time the transit provider establishes targets. Instead, MPO’s must revisit targets each time the MPO updates the LRTP. MPOs can either agree to program projects that will support the transit provider targets or establish separate regional TAM targets for the MPO planning area. MPO targets may differ from agency targets, especially if there are multiple transit agencies in the MPO planning area.

[Use either Option A or Option B below. Option A is for MPOs that support all transit agency TAM targets. Option B is for MPOs that establish their own TAM targets.]

[OPTION A: For MPO that supports the transit agency targets]

On [insert date], the [insert MPO name] agreed to support the [insert transit agency’s name] TAM targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the provider’s targets. [The MPO may discuss the reasoning or analysis behind the decision to support the transit provider’s targets.]

[END OF OPTION A. Continue at section “6.3 Transit Asset Management Investments in the TIP”]

[OPTION B: For MPO that establishes its own TAM targets]

On [insert date], the [insert MPO name] established TAM targets for the MPO planning area. The targets are presented in Table 6.5.

**Table 6.5.[insert MPO name] Transit Asset Management Targets**

| Asset Category - Performance Measure | Asset Class | FY 20XX Asset Condition | FY20xx Target |
| --- | --- | --- | --- |
| **Revenue Vehicles** | | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB | Articulated Bus | X | % |
| Bus | X | % |
| Mini-Bus | X | % |
| Van | X | % |
| Etc. | X | % |
| **Equipment** | | | |
| Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB | Non-Revenue/Service Automobile | X | % |
| Trucks and other Rubber Tire Vehicles | X | % |
| Maintenance Equipment | X | % |
| Etc. | X | % |
| **Infrastructure** | | | |
| % of track segments with performance restrictions (applicable only for Tier I providers) | Guideway Elements | X | % |
| Power & Signal Elements | X | % |
| Track Elements | X | % |
| **Facilities** | | | |
| Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale | Administration | n/a | % |
| Maintenance | n/a | % |
| Parking Structures | n/a | % |
| Passenger Facilities | n/a | % |
| Shelter | n/a | % |
| Storage | n/a | % |
| Etc. | n/a | % |

The MPO’s TAM targets reflect the targets established by list names of individual transit providers(s) and/or contained in the FDOT Group TAM Plan. In establishing the MPO’s TAM targets, [insert MPO name] considered several factors. Include discussion of how the MPO established regional targets based on the individual provider and/or Group TAM Plan targets; for example, if there are multiple providers did the MPO weight targets by the relative size of each transit provider’s assets?

[END OF OPTION B. Continue below at “6.3 Transit Asset Management Investments in the TIP.”]

## 6.3 Transit Asset Management Investments in the TIP

The [insert MPO name] TIP was developed and is managed in cooperation with [insert name(s) of public transportation providers(s)]. It reflects the investment priorities established in the [insert name and year of the current LRTP].

[The TIP document must include a written narrative describing the anticipated effect of the TIP toward achieving the targets, linking investment priorities to those performance targets. MPOs could address this requirement by describing how the projects in the TIP were determined, including how performance targets were considered in this process. This section also could discuss how the TIP implements goals, objectives, strategies, and investment priorities from other performance-based plans and processes (for example, the Group TAM plan or individual provider TAM plan(s)). MPOs are required to describe the anticipated effect of the collective program of project activities, not the impact of individual projects in the TIP.]

FTA funding, as programmed by the region’s transit providers and FDOT, is used for programs and products to improve the condition of the region’s transit assets. The focus of [insert MPO name]’s investments that address transit state of good repair include [list projects, programs, and strategies funded in the TIP that address transit equipment, vehicles, infrastructure, or facilities in the MPO area, such as those in the following categories; list project selection criteria for the TIP consistent with the transit asset performance measures. These may include:

* Bus and other vehicle purchases and replacements
* Equipment purchases and replacements
* Retrofits
* Repair, rehabilitation, and replacement of transit facilities
* Repair, rehabilitation, and replacement of transit infrastructure]

Example below is from the Hillsborough MPO TIP:[[13]](#footnote-13)

*The Hillsborough MPO TIP was developed and is managed in cooperation with HART, TBARTA, and the Hillsborough County Sunshine Line. It reflects the investment priorities established in the It’s Time Hillsborough: 2045 Plan. FTA funding, as programmed by the region’s transit providers and FDOT, is used for programs and products to improve the condition of the region’s transit assets. The focus of Hillsborough TPO’s investments that address transit state of good repair include:*

* *Compressed Natural Gas (CNG) Vehicle Purchases*
* *Marion Transfer Center Infrastructure Improvements*
* *Bus Replacements with CNG Conversion*
* *Heavy Maintenance Facility replacement*
* *Satellite Maintenance Facility replacement*
* *Bus Mid-Life Overhaul*
* *CAD-AVL System Replacement*

Transit asset condition and state of good repair is a consideration in the methodology [insert MPO name] uses to select projects for inclusion in the TIP. The TIP includes specific investment priorities that support all of the MPO’s goals, including transit state of good repair, using a prioritization and project selection process established in the LRTP. This process evaluates projects that, once implemented, are anticipated to improve transit state of good repair in the MPO’s planning area. This prioritization process considers factors such as [include examples. Add language specific to the MPO’s consideration of transit state of good repair in the TIP project selection process. If applicable, note any data-driven, performance-based elements, scoring criteria, goals established in the LRTP, etc.]

Example: The TIP devotes resources to projects that will maintain and improve transit state of good repair. Investments in transit assets in the TIP include $xx million for vehicle purchases and $xx million for facility improvements.]

The [insert MPO name] TIP has been evaluated and the anticipated effect of the overall program is that, once implemented, progress will be made towards achieving the TAM performance targets. The [insert MPO name] will continue to coordinate with the [insert name(s) of transit provider(s)] to maintain the region’s transit assets in a state of good repair.

For more information on these programs and projects, see [insert name of TIP section that discusses transit projects and investments].

Example below is from the River to Sea TPO TIP:[[14]](#footnote-14)

*The River to Sea TPO FY 2022/23 to FY 2026/27 TIP was developed and is managed in cooperation with Flagler County Public Transit (FCPT), Votran, and SunRail. It reflects the investment priorities established in Connect 2045. The investments addressing transit state of good repair are included in Section VI - Transit & Transportation Disadvantaged Projects. Projects in this section of the TIP include the funding of equipment, vehicles, infrastructure, maintenance, and/or facilities in the TPO planning area.*

*Votran updated their Transit Development Plan (TDP) in August of 2021 and FCPT is currently updating their TDP. The River to Sea TPO will play a role in supporting these updates and monitoring potential changes that may impact transit planning, operations, capital asset management and state of good repair.*

*Transit asset condition and state of good repair is a consideration in the methodology used by the public transit providers and the River to Sea TPO to select projects for inclusion in the TIP. As such, the TIP includes specific investment priorities that support all of the TPO’s goals, including transit state of good repair, using priorities established in the LRTP. This includes the allocation of 30% of the Transportation Management Area (TMA) SU funding available to the TPO to support the replacement of capital assets. The River to Sea TPO evaluates, prioritizes, and funds transit projects that, once implemented, are anticipated to improve state of good repair in the TPO’s planning area. The TPO’s goal of supporting local transit providers to achieve transit asset condition targets is linked to this investment plan, and the process used to prioritize the projects within the TIP is consistent with federal requirements.*

Additional text that could be added to reflect Tier II providers participating in the Group TAM Plan:

Investment decisions for asset replacement in the FDOT Group TAM Plan inventory are made with the goal to maintain or improve the percentage of vehicles, equipment, and facilities in an adequate or better condition. FDOT and its subrecipient transit providers will monitor all assets for unsafe conditions. Identifying an opportunity to improve the safety of an asset, however, does not necessarily indicate an unsafe condition. If an unacceptable safety risk associated with an asset is identified, that asset will be ranked with higher investment priority to the extent practicable. The subrecipients prioritize the rehabilitation and replacement of vehicles that provide transit service over non-revenue vehicles and facilities.

# 7 - Transit Safety Performance

FTA’s Public Transportation Agency Safety Plan (PTASP) regulations established transit safety performance management requirements for providers of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53.

The regulations apply to all operators of public transportation that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA’s State Safety Oversight Program. The PTASP regulations do not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

The PTASP must include performance targets for the performance measures established by FTA in the National Public Transportation Safety Plan, which was published on January 28, 2017. The transit safety performance measures are:

* 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.

In Florida, each Section 5307 or 5311 public transportation provider must develop a System Safety Program Plan (SSPP) under Chapter 14-90, Florida Administrative Code. FDOT technical guidance recommends that Florida’s transit agencies revise their existing SSPPs to be compliant with the new FTA PTASP requirements.[[15]](#footnote-15)

Each public transportation provider that is subject to the PTASP regulations must certify that its SSPP meets the requirements for a PTASP, including transit safety targets for the federally required measures. Providers were required to certify their initial PTASP and safety targets by July 20, 2021. Once the public transportation provider establishes safety targets it must make the targets available to MPOs to aid in the planning process. MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, MPO targets must be established when the MPO updates the LRTP (although it is recommended that MPOs reflect the current transit provider targets in their TIPs). When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional transit safety targets for the MPO planning area. In addition, the [insert MPO name] must reflect those targets in LRTP and TIP updates.

## 7.1 Transit Safety Targets

The following public transportation provider(s) operate in the [insert MPO name] planning area: [list providers(s)]. Of these, [insert name of provider(s) subject to the PTASP requirements] is/are responsible for developing a PTASP and establishing transit safety performance targets annually.

Example from River to Sea TPO TIP:[[16]](#footnote-16)

*The following transit provider(s) operate in the River to Sea TPO planning area: Votran and Flagler County Public Transportation (FCPT) Of these, Votran is responsible for developing a PTASP and establishing transit safety performance targets annually.*

### 7.1.1 Transit Agency Safety Targets

The [insert name of transit agency or agencies] established the transit safety targets identified in Table 7.1 on [insert date]:

Include Table 7.1 to list the transit safety targets established by the transit provider(s). Note that this table is an example; the MPO should adapt the table to their specific situation. If more than one provider in the MPO area established transit safety targets, the MPO may include a separate table for each provider or one table that combines the providers, as shown in the example below. Because transit safety targets are established by transit mode, the table may include additional modes not shown below or may list fewer modes. Transit providers also choose the units they use to express the fatality rate, injury rate, and safety events rate measures. For example, a provider may use total annual vehicle revenue miles (VRM) or per 100,000 VRM. The units should be specified in the table. The MPO also may include relevant details from the provider’s PTASP, as needed.

**Table 7.1. Transit Safety Performance Targets for [insert names of transit provider(s)]**

| Transit Mode | Fatalities (total) | Fatalities (rate) | Injuries (total) | Injuries (rate) | Safety Events (total) | Safety Events (rate) | System Reliability |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Transit Provider 1** | | | | | | | |
| Fixed Route Bus |  |  |  |  |  |  |  |
| Community Bus |  |  |  |  |  |  |  |
| Etc. |  |  |  |  |  |  |  |
| **Transit Provider 2** | | | | | | | |
| Fixed Route Bus |  |  |  |  |  |  |  |
| Paratransit |  |  |  |  |  |  |  |

### 7.1.2 MPO Transit Safety Targets

As discussed above, MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, MPO’s must revisit targets each time the MPO updates the LRTP. MPOs can either agree to program projects that will support the transit provider targets or establish separate regional transit safety targets for the MPO planning area. MPO targets may differ from agency targets, especially if there are multiple transit agencies in the MPO planning area.

[Use either Option A or Option B below. Option A is for MPOs that support all transit agency safety targets. Option B is for MPOs that establish their own transit safety targets.]

[OPTION A: For MPO that supports the transit agency targets]

On [insert date], the [insert MPO name] agreed to support the [insert transit agency’s name] transit safety targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the provider’s targets. [The MPO may discuss the reasoning or analysis behind the decision to support the transit agency targets.]

[END OF OPTION A. Continue at section “7.2 Transit Safety Investments in the TIP”]

[OPTION B: For MPO that establishes its own transit safety targets]

On [insert date], the [insert MPO name] established transit safety targets for the MPO planning area. The targets are presented in Table 7.2.

**Table 7.2. [Insert MPO name] Transit Safety Performance Targets**

| Transit Mode | Fatalities (total) | Fatalities (rate) | Injuries (total) | Injuries (rate) | Safety Events (total) | Safety Events (rate) | System Reliability |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Fixed Route Bus |  |  |  |  |  |  |  |
| Community Bus |  |  |  |  |  |  |  |
| Etc. |  |  |  |  |  |  |  |

The MPO’s transit safety targets reflect the targets established by [list name(s) of individual transit providers(s)] through their Public Transportation Agency Safety Plan(s). In establishing the MPO’s targets, [insert MPO name] considered several factors. Add discussion of how/why the MPO established regional targets based on the individual provider targets; for example, if there are multiple providers did the MPO weight targets by the relative size of each transit provider’s ridership or other factors?

[END OF OPTION B. Continue below at section “7.2 Transit Safety Investments in the TIP.”]

## 7.2 Transit Safety Investments in the TIP

The [insert MPO name] TIP was developed and is managed in cooperation with [insert name(s) of public transportation providers(s) in the MPO area]. It reflects the investment priorities established in the [insert name and year of the current LRTP].

[The TIP document must include a written narrative describing the anticipated effect of the TIP toward achieving the targets, linking investment priorities to those performance targets. MPOs could address this requirement by describing how the projects in the TIP were determined, including how performance targets were considered in this process. This section also should discuss how the TIP implements goals, objectives, strategies, and investment priorities from the provider(s) PTASP. MPOs are required to describe the anticipated effect of the collective program of projects on targets, not the impact of individual projects in the TIP.]

FTA funding, as programmed by the region’s transit providers and FDOT, is used for programs and products to improve the safety of the region’s transit systems. The focus of [insert MPO name]’s investments that address transit safety include [list projects, programs, and strategies funded in the TIP that address transit safety and transit system reliability. The PTASP should identify safety issues and safety risk mitigation strategies that can be summarized here.

Transit safety is a consideration in the methodology [insert MPO name] uses to select projects for inclusion in the TIP. The TIP includes specific investment priorities that support all of the MPO’s goals, including transit safety, using a prioritization and project selection process established in the LRTP. This process evaluates projects that, once implemented, are anticipated to improve transit safety in the MPO’s planning area. This prioritization process considers factors such as [include examples. Add language specific to the MPO’s consideration of transit safety in the TIP project selection process, including criteria consistent with the transit safety performance measures. If applicable, note any data-driven analyses, performance-based elements, linkages to goals established in the LRTP, etc.]

The [insert MPO name] TIP has been evaluated and the anticipated effect of the overall program is that, once implemented, progress will be made towards achieving the transit safety performance targets. The [insert MPO name] will continue to coordinate with the [insert name(s) of transit provider(s)] to maintain and improve the safety of the region’s transit system and maintain transit assets in a state of good repair.

Example: The TIP devotes resources to projects that will maintain and improve transit safety. Investments in transit safety in the TIP include $xx million for [insert brief description of safety measures and programs].

For more information on these programs and projects, see [insert name of TIP section that discusses transit projects and investments].

Example from River to Sea TIP[[17]](#footnote-17)

*For more information on these programs and projects, see Section VI – Transit and Transportation Disadvantaged Projects of the TIP.*

1. Hillsborough MPO Transportation Improvement Program FY 2022/23 – 2026/27, Adopted June 8, 2022. TPM documentation provided in Appendix E [TIP-FY23-27-9-19-22.pdf (planhillsborough.org)](https://planhillsborough.org/wp-content/uploads/2022/09/TIP-FY23-27-9-19-22.pdf) [↑](#footnote-ref-1)
2. River to Sea TPO FY 2022/23 – FY 2026/27 Transportation Improvement Plan, adopted June 22, 2022, amended August 24, 2022 [FY-2022-23-to-FY-2026-27-TIP-Roll-Forward-Amendment-August-2022.pdf (r2ctpo.org)](https://www.r2ctpo.org/wp-content/uploads/FY-2022-23-to-FY-2026-27-TIP-Roll-Forward-Amendment-August-2022.pdf) [↑](#footnote-ref-2)
3. Sarasota/Manatee MPO Transportation Improvement Program, Fiscal Years 2022/23 – 2026/27. Adopted May 23, 2022. [TIP (mympo.org)](https://www.mympo.org/m/mandates/tip) [↑](#footnote-ref-3)
4. Broward MPO Transportation Improvement Plan, FY 2023-2027, approved July 14, 2022. [Final TIP FY 23-27\_7-14-2022.pdf (browardmpo.org)](https://www.browardmpo.org/images/WhatWeDo/TIP/2023_TIP/Final%20TIP%20FY%2023-27_7-14-2022.pdf) [↑](#footnote-ref-4)
5. MetroPlan Orlando Transportation Improvement Plan, FY 2022/23 – 2026/27, Adopted July 27, 2022, modified October 27, 2022 [Transportation-Improvement-Program-TIP-2023-2027-Revised-10-27-2022.pdf (metroplanorlando.org)](https://metroplanorlando.org/wp-content/uploads/Transportation-Improvement-Program-TIP-2023-2027-Revised-10-27-2022.pdf) [↑](#footnote-ref-5)
6. River to Sea TPO FY 2022/23 – FY 2026/27 Transportation Improvement Plan, adopted June 22, 2022, amended August 24, 2022. [FY-2022-23-to-FY-2026-27-TIP-Roll-Forward-Amendment-August-2022.pdf (r2ctpo.org)](https://www.r2ctpo.org/wp-content/uploads/FY-2022-23-to-FY-2026-27-TIP-Roll-Forward-Amendment-August-2022.pdf) [↑](#footnote-ref-6)
7. Broward MPO Transportation Improvement Program, Fiscal Years 2022/23 – 2026/27. Adopted July 14, 2022. [Final TIP FY 23-27\_7-14-2022.pdf (browardmpo.org)](https://www.browardmpo.org/images/WhatWeDo/TIP/2023_TIP/Final%20TIP%20FY%2023-27_7-14-2022.pdf) [↑](#footnote-ref-7)
8. Sarasota/Manatee MPO Transportation Improvement Program, Fiscal Years 2022/23 – 2026/27. Adopted May 23, 2022. [TIP (mympo.org)](https://www.mympo.org/m/mandates/tip) [↑](#footnote-ref-8)
9. Forward Pinellas TIP, FY 2022/23-2026/27, Adopted June 8, 2022, <https://forwardpinellas.org/programs/transportation-improvement-program/> [↑](#footnote-ref-9)
10. Space Coast TPO TIP, Fiscal Year 2023-2027, Adopted July 14, 2022

    <https://www.spacecoasttpo.com/what-we-do/planning/core-work-products/transportation-improvement-program> [↑](#footnote-ref-10)
11. Forward Pinellas TIP, FY 2022/23-2026/27, Adopted June 8, 2022, <https://forwardpinellas.org/document-portal/current-transportation-improvement-program/> [↑](#footnote-ref-11)
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