1. Performance Measures and System Performance Report

Charlotte County-Punta Gorda   
Metropolitan Planning Organization   
Long-Range Transportation Plan   
System Performance Report

Office of Policy Planning

Florida Department of Transportation

August 2019

1 - Purpose

This document provides language that Florida’s metropolitan planning organizations (MPO) may incorporate in Long-Range Transportation Plan (LRTP) System Performance Reports to meet the federal transportation performance management rules. Updates or amendments to the LRTP must incorporate a System Performance Report that addresses these measures and related information no later than:

* May 27, 2018 for Highway Safety measures (PM1);
* October 1, 2018 for Transit Asset Management measures;
* May 20, 2019 for Pavement and Bridge Condition measures (PM2);
* May 20, 2019 for System Performance measures (PM3); and
* July 20, 2021 for Transit Safety measures. (Due to the emergency declaration resulting from the COVID-19 pandemic, FTA issued a Notice of enforcement discretion which delayed the initial deadline of July 20, 2020 for one-year)

The document is consistent with the Transportation Performance Measures Consensus Planning Document developed jointly by the Florida Department of Transportation (FDOT) and the Metropolitan Planning Organization Advisory Council (MPOAC). This 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 possible in satisfying the transportation performance management requirements promulgated by the United States Department of Transportation in Title 23 Parts 450, 490, 625, and 673 of the Code of Federal Regulations (23 CFR).

The document is organized as follows:

* Section 2 provides a brief background on transportation performance management;
* Section 3 covers the Highway Safety measures (PM1);
* Section 4 covers the Pavement and Bridge Condition measures (PM2);
* Section 5 covers System Performance measures (PM3);
* Section 6 covers Transit Asset Management (TAM) measures; and
* Section 7 covers Transit Safety measures.

2 - Background

Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) Act enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Non-metropolitan and Metropolitan Transportation Planning Final Rule (The Planning Rule).[[1]](#footnote-2) This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the Charlotte County-Punta Gorda MPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its Long-Range Transportation Plan (LRTP). The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports. For MPOs that elect to develop multiple scenarios, the System Performance Report also must include an analysis of how the preferred scenario has improved the performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified targets.[[2]](#footnote-3)

There are several milestones related to the required content of the System Performance Report:

* In any LRTP adopted on or after May 27, 2018, the System Performance Report must reflect Highway Safety (PM1) measures;
* In any LRTP adopted on or after October 1, 2018, the System Performance Report must reflect Transit Asset Management measures;
* In any LRTP adopted on or after May 20, 2019, the System Performance Report must reflect Pavement and Bridge Condition (PM2) and System Performance (PM3) measures; and
* In any LRTP adopted on or after July 20, 2021, the System Performance Report must reflect Transit Safety measures.

The Charlotte County-Punta Gorda MPO 2020-2045 Long-Range Transportation Plan was adopted on October 5, 2020. Per the Planning Rule, the System Performance Report for the Charlotte County-Punta Gorda MPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management, and Transit Safety targets.

3 - Highway Safety Measures (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures ~~[[3]](#footnote-4)~~ to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

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 vehicle miles traveled (VMT); and
5. Number of non-motorized fatalities and non-motorized serious injuries.

The Florida Department of Transportation (FDOT) publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2018 and are based on a five-year rolling average (2011-2015). For the 2018 HSIP annual report, FDOT established statewide HSIP interim safety performance measures and FDOT’s 2019 safety targets, which set the target at “0” for each performance measure to reflect the Department’s vision of zero deaths.

The Charlotte County-Punta Gorda MPO adopted/approved safety performance targets on October 28, 2019. **Table B-3.1** indicates the areas in which the MPO is expressly supporting the statewide target developed by FDOT, as well as those areas in which the MPO has adopted a target specific to the MPO planning area.

***Table B-3.1 Highway Safety (PM1) Targets***

|  |  |  |
| --- | --- | --- |
| **Performance Target** | **MPO agrees to plan and program projects so that they contribute toward the accomplishment of the FDOT safety target of zero** | **MPO has adopted a target specific to the MPO Planning Area** |
| Number of fatalities |  |  |
| Rate of fatalities per 100 million vehicle miles traveled (VMT) |  |  |
| Number of serious injuries |  |  |
| Rate of serious injuries per 100 million vehicle miles traveled (VMT) |  |  |
| Number of non-motorized fatalities and non-motorized serious injuries. |  |  |

Statewide system conditions for each safety performance measure are included in **Table B-3.2**, along with system conditions in the Charlotte County-Punta Gorda MPO metropolitan planning area. System conditions reflect baseline performance, which for this first system performance report is the same as the current reporting period (2011-2015). The latest safety conditions will be updated annually on a rolling 5-year window and reflected within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

***Table B-3.2 Highway Safety (PM1) Conditions and Performance***

|  |  |  |
| --- | --- | --- |
| **Performance Measures** | **Florida Statewide Baseline Performance**  **(Five-Year Rolling Average 2012-2016)** | **Calendar Year 2019 Florida Performance Targets** |
| Number of Fatalities | 2,533 | 0 |
| Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT) | 1.287 | 0 |
| Number of Serious Injuries | 20,552 | 0 |
| Rate of Serious Injuries per 100 Million VMT | 10.452 | 0 |
| Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries | 3,173 | 0 |

Trend and Baseline Conditions

To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2013-2017) of crash data and Vehicle Miles Traveled (VMT) were utilized. **Table B-3.3** presents the Baseline Safety Performance Measures for Charlotte County-Punta Gorda MPO. Trend data is also presented which covers the previous four reporting periods.

***Table B-3.3 Baseline and Trend Crash Data for Charlotte County-Punta Gorda MPO***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Performance Measures** | **2009-2013** | **2010-2014** | **2011-2015** | **2012-2016** | **2013-2017** |
| Number of Fatalities | 22.8 | 21.0 | 21.4 | 22.4 | 24.2 |
| Rate of Fatalities per 100 VMT | 1.048 | 0.964 | 0.969 | 0.990 | 1.041 |
| Number of Serious Injuries | 164.2 | 149.2 | 134.6 | 126.8 | 113.0 |
| Rate of Serious Injuries per 100 Million VMT | 7.555 | 6.864 | 6.128 | 5.668 | 4.898 |
| Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries | 24.2 | 23 | 21.4 | 20.4 | 20.6 |

Coordination with Statewide Safety Plans and Processes

The Charlotte County-Punta Gorda MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Route to 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are available and described in other state and public transportation plans and processes; specifically the Florida Strategic Highway Safety Plan (SHSP), the Florida Highway Safety Improvement Program (HSIP), and the Florida Transportation Plan (FTP).

* The 2016 Florida Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP was developed in coordination with Florida’s 27 metropolitan planning organizations (MPOs) through Florida’s Metropolitan Planning Organization Advisory Council (MPOAC). 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.
* The FDOT HSIP process provides for a continuous and systematic process that identifies and reviews traffic safety issues around the state to identify locations with potential for improvement. The ultimate goal of the HSIP process is to reduce the number of crashes, injuries and fatalities by eliminating certain predominant types of crashes through the implementation of engineering solutions.
* Transportation projects are identified and prioritized with the MPOs and non-metropolitan local governments. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The FDOT Project Development and Environment Manual requires the consideration of safety when preparing a proposed project’s purpose and need, and defines several factors related to safety, including crash modification factor and safety performance factor, as part of the analysis of alternatives. MPOs and local governments consider safety data analysis when determining project priorities.

LRTP Safety Priorities

Route to 2045 LRTP increases the safety of the transportation system for motorized and non-motorized users as required. The LRTP aligns with the Florida SHSP and the FDOT HSIP with specific strategies to improve safety performance focused on prioritized safety projects, pedestrian and/or bicycle safety enhancements, and traffic operation improvements to address our goal to reduce fatalities and serious injuries.

The LRTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The MPO has developed a project selection process that includes an assessment of crash hot spots based on frequency of crashes as well as addressing crash locations which resulted in serious injuries or fatalities that were identified as part of the Congestion Management Process.

The Route to 2045 LRTP will provide information from the FDOT HSIP annual reports to track the progress made toward the statewide safety performance targets. The MPO will document the progress on any safety performance targets established by the MPO for its planning area

Additionally, the MPO has coordinated with FDOT on the US 41 Corridor Vision Plan in setting aside funding for implementation of study recommendations. US 41 has routinely experienced the highest level of traffic crashes in Charlotte County. Addressing bicycle and pedestrian safety has also been a focus of the MPO for developing the Route to 2045 LRTP. Adoption of the Countywide Bicycle/Pedestrian Master Plan has identified more than 165 miles of proposed multimodal transportation facilities.

4 - Pavement and Bridge Condition Measures (PM2)

Pavement and Bridge Condition Performance Measures and Targets Overview

In January 2017, USDOT published the Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 rule. This rule establishes the following six performance measures:

1. Percent of Interstate pavements in good condition;
2. Percent of Interstate pavements in poor condition;
3. Percent of non-Interstate National Highway System (NHS) pavements in good condition;
4. Percent of non-Interstate NHS pavements in poor condition;
5. Percent of NHS bridges (by deck area) classified as in good condition; and
6. Percent of NHS bridges (by deck area) classified as 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 all asphalt and concrete pavements;
* Cracking percent - percentage of the pavement surface exhibiting cracking; applicable to all asphalt and concrete pavements;
* Rutting - extent of surface depressions; applicable to asphalt pavements;
* Faulting - vertical misalignment of pavement joints; applicable to certain types of concrete pavements; and
* Present Serviceability Rating (PSR) – a quality rating applicable only to certain lower speed roads.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Pavement condition is assessed for each 0.1 mile section of the through travel lanes of mainline highways on the Interstate or the non-Interstate NHS using these metrics and thresholds. A pavement section is rated as good if all three metric ratings are good, and poor if two or more metric ratings are poor. Sections that are not good or poor are considered fair.

The good/poor measures are expressed as a percentage and are determined by summing the total lane-miles of good or poor highway segments and dividing by the total lane-miles of all highway segments on the applicable system. Pavement in good condition suggests that no major investment is needed and should be considered for preservation treatment. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

The bridge condition measures refer to the percentage of bridges by deck area on the NHS that are in good condition or poor condition. The measures assess the condition of four bridge components: deck, superstructure, substructure, and culverts. Each component has a metric rating threshold to establish good, fair, or poor condition. Each bridge on the NHS is evaluated using these ratings. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

The bridge measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on; however, it is nearing a point where substantial reconstruction or replacement is needed.

Federal rules require state DOTs and MPOs to coordinate when setting pavement and bridge condition performance targets and monitor progress towards achieving the targets. States must establish:

* Four-year statewide targets for the percent of Interstate pavements in good and poor condition;
* Two-year and four-year targets for the percent of non-Interstate NHS pavements in good and poor condition; and
* Two-year and four-year targets for the percent of NHS bridges (by deck area) in good and poor condition.

MPOs must establish four-year targets for all six 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.

The two-year and four-year targets represent pavement and bridge condition at the end of calendar years 2019 and 2021, respectively.

Pavement and Bridge Condition Baseline Performance and Established Targets

This System Performance Report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this first Charlotte County-Punta Gorda MPO LRTP System Performance Report highlights performance for the baseline period, which is 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

**Table B-4.1** presents baseline performance for each PM2 measure for the State and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the State.

***Table B-4.1. Pavement and Bridge Condition (PM2) Performance and Targets***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Performance Measures** | **Statewide Performance (2017 Baseline)** | **Statewide 2-year Target (2019)** | **Statewide 4-year Target (2021)** | **MPO Performance (2017 Baseline)** |
| Percent of Interstate pavements in good condition | 67.5% | n/a | 60% | 70.6% |
| Percent of Interstate pavements in poor condition | 0.0% | n/a | 5% | 0.0% |
| Percent of non-Interstate NHS pavements in good condition | 44.0% | 40% | 40% | 47.1% |
| Percent of non-Interstate NHS pavements in poor condition | 0.5% | 5% | 5% | 1.1% |
| Percent of NHS bridges (by deck area) in good condition | 67.7% | 50% | 50% | 72% |
| Percent of NHS bridges (by deck area) in poor condition | 1.2% | 10% | 10% | 1% |

FDOT established the statewide PM2 targets on May 18, 2018. In determining its approach to establishing performance targets for the federal pavement and bridge condition performance measures, FDOT considered many factors. To begin with, FDOT is mandated by Florida Statute 334.046 to preserve the state’s pavement and bridges to specific 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 statutory guidelines envelope the statewide federal targets that have been established for pavements and bridges.

In addition, MAP-21 requires FDOT to develop 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 DOT targets for asset condition and performance of the NHS. FDOT’s TAMP was updated to reflect MAP-21 requirements in 2018.

Further, the federal pavement condition measures require a new methodology that is a departure from the methods currently used by FDOT and uses different ratings and pavement segment lengths. For bridge condition, the performance is measured in deck area under the federal measure, while the 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.

In consideration of these differences, as well as the unfamiliarity associated with the new required processes, FDOT took a conservative approach when setting its initial pavement and bridge condition targets.

The Charlotte County-Punta Gorda MPO agreed to support FDOT’s pavement and bridge condition performance targets on July 30, 2018. By adopting FDOT’s targets, the Charlotte County-Punta Gorda MPO agrees to plan and program projects that help FDOT achieve these targets.

Several resurfacing projects are underway or programmed in the MPO’s Transportation Improvement Program for maintaining and improving pavement conditions in Charlotte County. The eastbound SR 776 bridge of the Myakka River, built in 1959, has been a topic of concern for the MPO Board. In Coordination with FDOT, review of the bridge condition has determined that a replacement is not eminent. The MPO will continue to coordinate with FDOT regarding the appropriate timing for needed repairs or replacement of this bridge. As the only connection in Charlotte County across the Myakka River, this connection is a critical piece of the regional transportation network.

The Charlotte County-Punta Gorda MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Route to 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Transportation Asset Management Plan.

* The FTP is the single overarching statewide plan guiding Florida’s transportation future. It defines the state’s long-range transportation vision, goals, and objectives and establishes the policy framework for the expenditure of state and federal funds flowing through FDOT’s work program. One of the seven goals defined in the FTP is Agile, Resilient, and Quality infrastructure.
* The Florida Transportation Asset Management Plan (TAMP) explains the processes and policies affecting pavement and bridge condition and performance in the state. It presents a strategic and systematic process of operating, maintaining, and improving these assets effectively throughout their life cycle.

The Route to 2045 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements.

On or before October 1, 2020, FDOT will provide FHWA and the Charlotte County-Punta Gorda MPO a detailed report of pavement and bridge condition performance covering the period of January 1, 2018 to December 31, 2019. FDOT and the Charlotte County-Punta Gorda MPO also will have the opportunity at that time to revisit the four-year PM2 targets.

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

System Performance/Freight/CMAQ Performance Measures and Targets Overview

In January 2017, USDOT published the System Performance/Freight/CMAQ Performance Measures Final Rule to establish measures to assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS), and traffic congestion and on-road mobile source emissions in areas that do not meet federal National Ambient Air Quality Standards (NAAQS). The rule, which is referred to as the PM3 rule, requires MPOs to set targets for the following six performance measures:

National Highway Performance Program (NHPP)

1. Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
2. Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);

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.

In Florida, only the two LOTTR performance measures and the TTTR performance measure apply. Because all areas in Florida meet current NAAQS, the last three measures listed measures above pertaining to the CMAQ Program do not currently apply in Florida.

LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, Mid-day, PM peak, and weekends) that cover the hours of 6 a.m. to 8 p.m. each day. The LOTTR ratio is calculated for each roadway segment, essentially comparing the segment with itself. Segments with LOTTR ≥ 1.50 during any of the above time periods are considered unreliable. The two LOTTR measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles take into account the number of people traveling in buses, cars, and trucks over these roadway segments. To obtain person miles traveled, the vehicle miles traveled (VMT) for each segment are multiplied by the average vehicle occupancy for each type of vehicle on the roadway. To calculate the percent of person miles traveled that are reliable, the sum of the number of reliable person miles traveled is divide by the sum of total person miles traveled.

TTTR is defined as the ratio of longer truck travel times (95th percentile) to a normal travel time (50th percentile) over the Interstate during five time periods (AM peak, Mid-day, PM peak, weekend, and overnight) that cover all hours of the day. TTTR is quantified by taking a weighted average of the maximum TTTR from the five time periods for each Interstate segment. The maximum TTTR is weighted by segment length, then the sum of the weighted values is divided by the total Interstate length to calculate the Travel Time Reliability Index.

The data used to calculate these PM3 measures are provided by FHWA via the National Performance Management Research Data Set (NPMRDS). This dataset contains travel times, segment lengths, and Annual Average Daily Travel (AADT) for Interstate and non-Interstate NHS roads.

The PM3 rule requires state DOTs and MPOs to coordinate when establishing performance targets for these measures and to monitor progress towards achieving the targets. FDOT must establish:

* Two-year and four-year statewide targets for percent of person-miles on the Interstate system that are reliable;
* Four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable[[4]](#footnote-5); and
* Two-year and four-year targets for truck travel time reliability

MPOs must establish four-year performance targets for all three measures within 180 days of FDOT establishing statewide targets. MPOs establish targets by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the MPO’s planning area.

The two-year and four-year targets represent system performance at the end of calendar years 2019 and 2021, respectively.

PM3 Baseline Performance and Established Targets

The System Performance Report discusses the condition and performance of the transportation system for each applicable PM3 target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this first Charlotte County-Punta Gorda MPO LRTP System Performance Report highlights performance for the baseline period, which is 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

**Table B-5.1** presents baseline performance for each PM3 measure for the state and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state.

***Table B-5.1 System Performance and Freight (PM3) - Performance and Targets***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Performance Measures** | **Statewide Performance (2017 Baseline)** | **Statewide 2-year Target (2019)** | **Statewide 4-year Target (2021)** | **MPO Performance (2017 Baseline)** |
| Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR) | 82.2% | 75.0% | 70.0% | N/A |
| Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR | 84.0% | n/a | 50.0% | N/A |
| Truck travel time reliability index (TTTR) | 1.43% | 1.75 | 2.00% | N/A |

FDOT established the statewide PM3 targets on May 18, 2018. In setting the statewide targets, FDOT reviewed external and internal factors that may affect reliability, conducted a trend analysis for the performance measures, and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable within the time period for setting targets. One key conclusion from this effort is that there is a lack of availability of extended historical data with which to analyze past trends and a degree of uncertainty about future reliability performance. Accordingly, FDOT took a conservative approach when setting its initial PM3 targets.

The Charlotte County-Punta Gorda MPO agreed to support FDOT’s PM3 targets on July 30, 2018. By adopting FDOT’s targets, the Charlotte County-Punta Gorda MPO agrees to plan and program projects that help FDOT achieve these targets.

The Charlotte County-Punta Gorda MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Route to 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Freight Mobility and Trade Plan.

* The FTP is the single overarching statewide plan guiding Florida’s transportation future. It defines the state’s long-range transportation vision, goals, and objectives and establishes the policy framework for the expenditure of state and federal funds flowing through FDOT’s work program. One of the seven goals of the FTP is Efficient and Reliable Mobility for People and Freight.
* The Florida Freight Mobility and Trade Plan presents a comprehensive overview of the conditions of the freight system in the state, identifies key challenges and goals, provides project needs, and identifies funding sources. Truck reliability is specifically called forth in this plan, both as a need as well as a goal.

The Route to 2045 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements.

On or before October 1, 2020, FDOT will provide FHWA and the Charlotte County-Punta Gorda MPO a detailed report of performance for the PM3 measures covering the period of January 1, 2018 to December 31, 2019. FDOT and the Charlotte County-Punta Gorda MPO also will have the opportunity at that time to revisit the four-year PM3 targets.

6 - Transit Asset Management Measures

Transit Asset Performance

On July 26, 2016, FTA published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes state of good repair standards and performance measures for four asset categories: transit equipment, rolling stock, transit infrastructure, and facilities. The rule became effective on October 1, 2018.

**Table** **B-6.1** below identifies performance measures outlined in the final rule for transit asset management.

***Table B-6.1 FTA TAM Performance Measures***

| **Asset Category** | **Performance Measure and Asset Class** |
| --- | --- |
| 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 and service frequency and is not the same as an asset’s useful life.

Public transportation agencies are required to establish and report transit asset management targets annually for the following fiscal year. Each public transit provider or its sponsors must share its targets, TAM, and asset condition information with each MPO in which the transit provider’s projects and services are programmed in the MPO’s TIP.

MPOs are required to establish initial transit asset management targets within 180 days of the date that public transportation providers establish initial targets. However, MPOs are not required to establish transit asset management targets annually each time the transit provider establishes targets. Instead, subsequent MPO targets must be established when the MPO updates the TIP or LRTP.

When establishing transit asset management targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional transit asset management targets for the MPO planning area. In cases where two or more providers operate in an MPO planning area and establish different targets for a given measure, the MPO has the option of coordinating with the providers to establish a single target for the MPO planning area, or establishing a set of targets for the MPO planning area that reflects the differing transit provider targets.

To the maximum extent practicable, transit providers, states, and MPOs must coordinate with each other in the selection of performance targets.

The TAM rule 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 or more 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 vehicles or less in one non-fixed route mode. A Tier I provider must establish its own transit asset management 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 by a plan sponsor, typically a state DOT, for the entire group.

As a Tier II provider, Charlotte County Transit provides demand response service to Charlotte County residents and does not participate in the FDOT group TAM plan.

On October 29, 2018, the Charlotte County-Punta Gorda MPO agreed to support Charlotte County Transit’s transit asset management targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

For the purposes of complying with applicable federal regulations, Charlotte county Transit developed a TAM plan which includes the following required elements:

1. An inventory of the number and type of capital assets that includes all capital assets owed by the agency except “non-service vehicle” equipment with an acquisition value under $50,000.
2. A condition assessment of inventoried assets in a level of detail sufficient to:
   1. Monitor and predict the performance of the assets
   2. Inform the investment prioritization
3. A description of analytical processes or decision-support tools that allows CCT to estimate capital investment needs over time and develop an investment prioritization.
4. A project-based prioritization of investments developed in accordance with CFR 49 Section 625.33.

The Transit Asset Management targets set by Charlotte County Transit and adopted by the Charlotte County-Punta Gorda MPO are summarized in **Table B-6.2**.

***Table B-6.2 Charlotte County-Punta Gorda MPO Transit Asset Management Targets***

| Asset Category - Performance Measure | Asset Class | FY 2017 Asset Condition | FY2021 Target | FY2025 Target |
| --- | --- | --- | --- | --- |
| Revenue Vehicles | | | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB | Bus | X | 11%% | 4% |
| Mini-Bus | X | 0% | 0% |
| Van | X | 40% | 0% |
| Equipment | | | | |
| Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB | Bus Lift | X | 50% | 65% |
| Data Equipment | X | 0% | 60% |
| Facilities | | | |  |
| Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale | Parking Lot | n/a | 22%% | 30% |
| Bus Wash | n/a | 6% | 9% |

These targets for the MPO planning area reflect the targets established by Charlotte County Transit through their Transit Asset Management Plan.

7 - Transit Safety Performance

The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTSAP) rule and related performance measures as authorized by Section 20021 of the Moving Ahead for Progress in the 21st Century Act (MAP– 21). The PTASP rule requires operators of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53 to develop and implement a PTASP based on a safety management systems approach. Development and implementation of PTSAPs is anticipated to help ensure that public transportation systems are safe nationwide.

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

Rail operators subject to the rule, and operators of large bus systems (more than 100 vehicles in peak revenue service), must draft and implement their own PTASP. For small operators (defined as those operating 100 or fewer vehicles in peak revenue service) subject to the rule, states must draft and certify PTASPs on their behalf, unless a small provider opts to draft and certify its own safety plan and notifies the State that they will do so. FTA allows the state and small providers within the state to decide whether the state will develop a single statewide PTASP for all small providers, or whether it will draft and certify multiple individualized safety plans for each provider. FTA recommends as best practice that the state develop individualized PTASPs for each small provider. If a state drafts a single statewide PTASP, the state must ensure that the plan clearly identifies the specific safety information for each provider, including the safety performance targets. Regardless of whether the state or small transit provider drafts and certifies a safety plan, each transit provider is required to implement its own safety plan.

The PTASP rule was published on July 19, 2018 with an effective date of July 19, 2019. Transit operators subject to the rule must have a PTASP and safety targets in place by July 20, 2020. MPOs must then establish transit safety targets no later than 180 days after the transit operators establishes its targets. Due to the emergency declaration resulting from the COVID-19 pandemic, FTA issued a Notice of enforcement discretion which delayed the initial deadline of July 20, 2020 for one-year.

Transit Safety Performance Measures

The transit agency sets targets in the PTASP based on the safety performance measures established in the National Public Transportation Safety Plan (NPTSP). The required transit safety performance measures are:

1. Total number of reportable fatalities.
2. Rate of reportable fatalities per total vehicle revenue miles by mode.
3. Total number of reportable injuries.
4. Rate of reportable injuries per total vehicle revenue miles by mode.
5. Total number of reportable safety events.
6. Rate of reportable events per total vehicle revenue miles by mode.
7. System reliability - Mean distance between major mechanical failures by mode.

Transit Provider Coordination with States and MPOs

Key considerations for MPOs and transit agencies:

* Transit operators are required to review, update, and certify their PTASP annually.
* A transit agency must make its safety performance targets available to states and MPOs to aid in the planning process, along with its safety plans.
* To the maximum extent practicable, a transit agency must coordinate with states and MPOs in the selection of state and MPO safety performance targets.
* MPOs are required to establish initial transit safety targets within 180 days of the date that public transportation providers establish initial targets. MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, subsequent MPO targets must be established when the MPO updates the TIP or LRTP. When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own regional transit targets for the MPO planning area. In cases where two or more providers operate in an MPO planning area and establish different targets for a given measure, the MPO has the option of coordinating with the providers to establish a single target for the MPO planning area, or establishing a set of targets for the MPO planning area that reflects the differing transit provider targets.
* MPOs and states must reference those targets in their long-range transportation plans. States and MPOs must each describe the anticipated effect of their respective transportation improvement programs toward achieving their targets.

Transit Safety Targets in the Charlotte County-Punta Gorda MPO Area

On October 5, 2020, the Charlotte County-Punta Gorda MPO agreed to support Charlotte County Transit’s transit safety targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

The Charlotte County Transit established the transit safety targets identified in **Table B-7.1** on August 27, 2020. The transit safety targets are based on review of the previous 4 years of Charlotte County Transit’s safety performance data from 2016 to 2019. The table summarizes the targets for 2021 and the available data for existing safety performance for the most recent year.

Table B-7.1 Charlotte County Transit Safety Performance Targets

|  |  |  |
| --- | --- | --- |
| **Performance Measure** | **Baseline Performance (2019)** | **2021 Target** |
| Total number of reportable fatalities | 0 | 0 |
| Rate of reportable fatalities per total vehicle revenue miles by mode | 0 | 0 |
| Total number of reportable injuries | 0 | 7 |
| Rate of reportable injuries per total vehicle revenue miles by mode | 0 | 0.2 |
| Total number of reportable safety events | Not Available | 9 |
| Rate of reportable safety events per total vehicle revenue miles by mode | Not Available | 0.3 |
| Mean distance between major mechanical failures by mode | 18,002 | 19,768 |

Charlotte County-Punta Gorda MPO Programmatic Support to Transit Safety Performance Targets

The LRTP systems performance report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with performance recorded in previous reports. The FTA transit safety performance measures are new.

The Charlotte County-Punta Gorda MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the LRTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes and the current Charlotte County-Punta Gorda MPO 2045 LRTP.

1. The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613. [↑](#footnote-ref-2)
2. Guidance from FHWA/FTA for completing the preferred scenario analysis is expected in the future. As of August 2019, no guidance has been issued. [↑](#footnote-ref-3)
3. 23 CFR Part 490, Subpart B [↑](#footnote-ref-4)
4. Beginning with the second performance period covering January 1, 2022 to December 31, 2025, two year targets will be required in addition to four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable measure. [↑](#footnote-ref-5)