

**Bay County Transportation Planning Organization
2045 Long-Range Transportation Plan
System Performance Report**

Prepared for:

**Florida Department of Transportation
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1 - PURPOSE

This document provides language that Florida’s transportation planning organizations (TPO) 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.

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. This document outlines the minimum roles of FDOT, the TPOs, and the public transportation providers in the TPO planning areas to ensure consistency to the maximum extent practicable 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 (DOT) and transportation planning organizations (TPOs) 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.

Performance Management is a strategic approach to connect investment and policy decisions to help achieve performance goals. Performance measures are quantitative criteria used to evaluate progress. Performance measure targets are the benchmarks against which collected data is gauged. The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires State DOTs and TPOs to conduct performance-based planning by tracking performance measures and setting data-driven targets to improve those measures. Performance-based planning ensures the most efficient investment of federal transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to seven national goals:

- Improving Safety;
- Maintaining Infrastructure Condition;
- Reducing Traffic Congestion;
- Improving System Reliability;
- Improving the Efficiency of the System and Freight Movement;
- Protecting the Environment; and,
- Reducing Delays in Project Delivery.

The Fixing America's Surface Transportation (FAST) Act supplements the MAP-21 legislation by establishing timelines for State DOTs and TPOs to comply with the requirements of MAP-21. State DOTs are required to establish statewide targets and TPOs have the option to support the statewide targets or adopt their own.

The System Performance Report for Bay County Transportation Planning Organization includes performance measures for: Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), Transit Asset Management and Transit Safety Performance.

The Bay County Transportation Planning Organization's 2040 Long-Range Transportation Plan was adopted on June 22, 2016. The System Performance Report is part of the Bay County TPO 2045 Long Range Transportation Plan (LRTP) that was adopted on June 16, 2021.

The Bay County TPO 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, including the current Bay County TPO 2045 LRTP.



The Bay County TPO FY 2021-2025 Transportation Improvement Program (TIP) considers potential projects that fall into specific investment priorities. Federally funded projects identified in the state TIP can be implemented using current and proposed revenue sources based on the Florida Department of Transportation's (FDOT's) Tentative Work Program and locally designated transportation revenues. The Bay County TPO 2021-2025 TIP includes the following investment priorities:

Safety. For the Bay County TPO, this includes the Safe Routes to School, Bridge, Capacity, Bicycle/Pedestrian, Transportation Alternative, Transportation System Management, Public Transportation, Resurfacing, Aviation, Port, and other Miscellaneous categories in the TIP. The expectation of the TIP projects in each of these categories is to improve safety and to reduce fatalities once these projects are constructed.

Bridge and Pavement. The Bridge Projects identified in the TIP will maintain the bridges classified in Good Condition and assist in improving the bridges classified in Poor Condition. Resurfacing Projects in the TIP will assist in improving the Interstate and Non-Interstate National Highway System pavements that are classified in Poor Condition as well as improving reliability of freight movement for interstate and Non-Interstate National Highway System roadways.

System Performance. The Bay County TPO will use the performance of interstate and non-interstate system, freight movement, traffic congestion, and mobile source emissions to address system reliability and congestion mitigation.

Transit Asset Management (TAM). The Transit Projects identified in the TIP will assist in keeping the transit vehicles and facilities in State of Good Repair.

The TIP includes specific investment priorities that support the TPO's goals including safety, efficiency, connectivity, economic vitality, security, quality of life, and the planning process which guide the Evaluation Criteria. The Evaluation Criteria in the LRTP filters down to Project Priorities, and the TIP.

Safety, Bridge and Pavement, and Transit Asset Management performance measures are described in the sections below.

3 - HIGHWAY SAFETY MEASURES (PM1)

Safety was the first national goal identified in the FAST Act. In March of 2016, the Highway Safety Improvement Program (HSIP) and Safety Performance Management Measures Rule (Safety PM Rule) was finalized and published in the Federal Register. The rule requires TPOs to set targets for the following safety-related performance measures and report progress to the State DOT:

- Number of Fatalities;
- Number of Serious Injuries;
- Number of Nonmotorized Fatalities and Serious Injuries;
- Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT); and
- Rate of Serious Injuries per 100 Million VMT.

The Florida Department of Transportation Highway Safety Improvement Plan (HSIP) focused on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The HSIP development process included review of safety-related goals, objectives, and strategies in TPO plans. The HSIP guides FDOT, TPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout each State. Safety Targets are established annually by the TPO.

The HSIP highlights the commitment to a vision and initiative of zero deaths. The HSIP annual report documents the statewide performance measures toward that zero deaths vision and initiative. As such, the TPO supported the adoption of the HSIP safety performance measures, FDOT's 2018, 2019, 2020, 2021 safety targets, which set the target at "0" for each performance measure to reflect FDOT's goal of zero deaths. The TPO supported the FDOT targets by approving Resolution 18-01 on February 21, 2018, Resolution 19-01 on February 6, 2019, Resolution 20-01 on February 5, 2020, and Resolution 21-03 on February 24, 2021. Statewide system conditions for each safety performance measure are included in Table 3.1.



Table 3.1. Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average)			Calendar Year 2021 Florida Performance Targets
	2018 (2012-2016)	2019 (2013-2017)	2020 (2014-2018)	
Number of Fatalities	2,688.2	2,825.4	2,972.0	0
Rate of Fatalities per 100 Million VMT	1.33	1.36	1.39	0
Number of Serious Injuries	20,844.2	20,929.2	20,738.4	0
Rate of Serious Injuries per 100 Million VMT	10.36	10.13	9.77	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,294.4	3,304.2	3,339.6	0

Baseline Conditions

Bay County TPO supports the state Baseline Safety Performance Measures.

Trends Analysis

The process used to develop Bay County TPO's Long-Range Transportation Plan includes analysis of safety data trends, including the location and factors associated with crashes with emphasis on fatalities and serious injuries. These data are used to help identify regional safety issues and potential safety strategies for the LRTP and TIP.

Between 2014 and 2018, 2,972 people died on Florida's roadways and an additional 20,738 people were seriously injured. The Florida Department of Transportation (FDOT) and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries. Zero Deaths is the safety performance target. Data forecast indicates Florida's five-year rolling average for fatalities could continue to trend upward in 2019 and 2020, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities. The data forecast indicates Florida's five-year rolling average of serious injuries will continue to trend downward in 2019 and 2020.

A recent impacting trend is the direct effect of the Covid-19 pandemic on the transportation system. Although data is not currently available on Florida DOT websites to substantiate a decrease, freight, vehicle, and transit use, and therefore volume, is assumed to have moderately decreased in 2020. An important local economic driver, tourism and hospitality services also experienced a decrease with tourist destinations closed for a brief period, resulting in lower demand for transportation services and use. This trend is expected to increase as tourist destinations, retail, restaurants, and businesses continue to reopen.

Coordination with Statewide Safety Plans and Processes

The Bay County TPO 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 Bay County TPO 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 transportation (metropolitan) planning organizations (TPOs) through Florida's Metropolitan Planning Organization Advisory Council (MPOAC). The SHSP guides FDOT, TPOs, 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 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.

LRTP Safety Priorities

The Bay County TPO 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 Bay County TPO has developed a project selection process using evaluation criteria to rank the established five safety performance measures.

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

The Bay County 2045 LRTP emphasizes the TPO's commitment to safety through the goals identified in the plan. The first LRTP goal is "A multi-modal transportation system that is safe." The goal has the following objectives:

- Develop projects that increase safety for all motorized and non-motorized users,
- Consider clearance times on roads that function as evacuation routes when establishing roadway improvement priorities,
- Implement techniques and road design to reduce fatalities and serious injuries from common intersection crashes and lane departures,
- All future planning will incorporate appropriate measures for the safe transportation of hazardous materials,



- Insure roadway maintenance activities consider the human, vehicular, and roadway factors to provide safe facilities for the community, and
- Provide accurate and updated public transportation information such as wayfinding signage programs, online map tools, and informational brochures.

The safety goal and objectives support the Moving Ahead for Progress in the 21st Century Act (MAP-21) Planning Factors and the 2060 Florida Transportation Plan goals.

An Evaluation Criteria document was developed as a tool to measure whether potential projects are aligned with the policy goals of the Bay County TPO. The goals and objectives of the LRTP were translated into Key Performance Indicators. The indicators are measured numerically. Each indicator was assigned a score of 0 to 1 with 0 being the least desirable result and 1 point describing the most desirable result. The project with the highest total cumulative score is most aligned with the LRTP goals and objectives. The Key Performance Indicator carrying the most weight is Transportation Safety and Congestion Management both with 20%.

The evaluation criteria and percentages of each indicator are:

- Transportation Safety 20%
- Multimodal Choices and Connections 15%
- System Efficiency and Preservation 10%
- System Sustainability and Livability 10%
- Economic Vitality 15%
- Transportation Security 10%
- Congestion Management 20%

The Bay County TPO 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, including the current Bay County TPO 2045 LRTP.

4 - PAVEMENT AND BRIDGE CONDITION MEASURES (PM2)

Pavement and Bridge Condition Performance Measures and Targets Overview

Bridge and Pavement (PM2) was the second national goal identified in the FAST Act and was finalized in May 2017 and published in the Federal Register. The rule requires TPOs to set targets for the following bridge and pavement related performance measures and report progress to the State DOT:

- Percent of Interstate Pavements in Good Condition;
- Percent of Interstate Pavements in Poor Condition;
- Percent of Non-Interstate National Highway System (NHS) Pavements in Good Condition;
- Percent of Non-Interstate NHS Pavements in Poor Condition;
- Percent of NHS bridges (by deck area) classified as in Good Condition; and
- Percent of NHS bridges (by deck area) classified as in Poor Condition.

Targets for Pavement and Bridge System Performance were adopted on September 12, 2018 by Resolution 18-24 for targets in 2021 which supported the DOT targets and will need to be adopted again by April 1, 2023 since they are four-year targets. FDOT targets for 2021 for Pavement are: >60 for Percent of Interstate Pavements in Good Condition, <5 for Percent of Interstate Pavements in Poor Condition; >40 for Percent of Non-Interstate National Highway System Pavements in Good Condition; and <5 for Percent on Non-Interstate National Highway System Pavements in Poor Condition. FDOT targets for 2021 for Bridges are: >50 for Percent of National Highway System Bridges Classified as in Good Condition by Deck Area and <10 for Percent of National Highway System Bridges Classified as in Poor Condition by Deck Area.

The four pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate NHS that are in good condition or poor condition. The PM2 rule defines NHS pavement types as asphalt, jointed concrete, or continuous concrete. Five metrics are used to assess pavement condition:

- International Roughness Index (IRI) - an indicator of roughness; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Cracking percent - percentage of the 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.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Using these metrics and thresholds, 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. Asphalt pavement is assessed using the IRI, cracking, and rutting metrics, while jointed concrete is assessed using IRI, cracking, and faulting. For these two



pavement types, a pavement section is rated good if the rating for all three metrics are good, and poor if the ratings for two or more metrics are poor.

Continuous concrete pavement is assessed using the IRI and cracking metrics. For this pavement type, a pavement section is rated good if both metrics are rated good, and poor if both metrics are rated poor.

If a state collects and reports PSR for any applicable segments, those segments are rated according to the PSR scale. For all three pavement types, sections that are not good or poor are rated 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 TPOs 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.

TPOs must establish four-year targets for all six measures. TPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the TPO'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 TPO 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 Bay County TPO 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 4.1 presents baseline performance for each PM2 measure for the State and for the TPO planning area as well as the two-year and four-year targets established by FDOT for the State.

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

Performance Measures	Statewide (2017 Baseline)	Statewide (2019 Actual)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)*
Percent of Interstate Pavements in Good Condition	66.0%	68.0%	Not Required	≥60*
Percent of Interstate Pavements in Poor Condition	0.1%	0.5%	Not Required	≤5%
Percent of non-Interstate NHS Pavements in Good Condition	44.0%	41.0%	≥40%	≥40%
Percent of Non-Interstate NHS Pavements in Poor Condition	3.6%	3.6%	≤5%	≤5%
Percent of NHS bridges (By Deck Area) in Good Condition	67.7%	65.6%	≥50%	≥50%
Percent of NHS Bridges (By Deck Area) in Poor Condition	1.2%	0.5%	≤10%	≤10%

* TPO only required to adopt 4-year targets.

NOTE: No Interstates in Bay County

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. 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 and the final TAMP was approved on June 28, 2019.

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 Bay County TPO agreed to support FDOT's pavement and bridge condition performance targets on September 26, 2018. By adopting FDOT's targets, the Bay County TPO agrees to plan and program projects that help FDOT achieve these targets.

The Bay County TPO 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 Bay County TPO 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 Bay County TPO 2045 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. Many of the Goals and Objectives in the 2045 LRTP are established for a transportation system that is maintained and operated efficiently, with objectives to direct resources to preserve the existing infrastructure and replace deficient infrastructure.

5 - SYSTEM PERFORMANCE (PM3)

System Performance Measures and Targets Overview

System Performance (PM3) was the third national goal identified in the FAST Act was also finalized in May 2017 and published in the Federal Register. The rule requires TPOs to set targets for the following system performance related performance measures and report progress to the State DOT.

- Percent of Person Miles Traveled on Interstate System that is reliable;
- Percent of Person Miles Traveled on Non-Interstate National Highway System that is reliable; and
- Truck Travel Time Reliability Index.

The data used to calculate 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 TPOs 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 reliable¹; and
- Two-year and four-year targets for truck travel time reliability.

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 TPO 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 Bay County TPO 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 5.1 presents baseline performance for each PM3 measure for the state as well as the two-year and four-year targets established by FDOT for the state.

¹ 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.

Table 5.1. System Performance and Freight (PM3) - Performance and Targets

Performance Measures	Statewide (2017 Baseline)	Statewide (2019 Actual)	Statewide 2- year Target (2019)	Statewide 4- year Target (2021)*
Percent of person-miles on the Interstate system that are reliable	82.2%	83.4%	75.0%	70.0%
Percent of person-miles on the non-Interstate NHS that are reliable	84.0%	87%	Not Required	50.0%
Truck travel time reliability index (TTTR)	1.43	1.45	1.75	2.00

* TPO only required to adopt 4-year targets.

NOTE: No Interstates in Bay County

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 Bay County TPO agreed to support FDOT's PM3 targets on September 26, 2018. By adopting FDOT's targets, the Bay County TPO agrees to plan and program projects that help FDOT achieve these targets.

The Bay County TPO 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 Bay County TPO 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 Bay County TPO 2045 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion, operational improvements, the Congestion Management Process major update, and Transportation System Management.

FDOT provided FHWA and the Bay County TPO a detailed report of performance for the PM3 measures covering the period of January 1, 2018 to December 31, 2019.

6 - TRANSIT ASSET MANAGEMENT MEASURES

Transit Asset Performance

The TPO is also required to adopt State of Good Repair Performance Measures for Transit Asset Management (TAM). The TAM rule from the Federal Transit Administration became effective on October 1, 2016. The rule requires TPOs to set targets for transit related performance measures and report progress to the State DOT.

Table 6.1 below identifies performance measures for transit asset management.

Table 6.1. FTA TAM Performance Measures

Asset Category	Performance Measure and Asset Class
1. Equipment	Percentage of service vehicles that have met or exceeded their Useful Life Benchmark
2. Rolling Stock	Percentage of revenue vehicles that have met or exceeded their Useful Life Benchmark
3. Infrastructure	Percentage of track segments with performance restrictions
4. Facilities	Percentage of facilities within an asset class rated below condition 3 on the Transit Economics Requirements Model Scale (TERM)

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.

TAM targets were adopted by the TPO on September 26, 2018 by Resolution 18-13 which supported the DOT targets and will need to be adopted again by October 1, 2022. The Infrastructure category does not apply to the TPO since there is no rail fixed guideway track in the TPO area. For Florida, the Rolling Stock category consists of Vans, Cutaway Buses, Body on Chassis, and Full-Size Buses.

The Bay County TPO adopted the following TAM Performance Measures:

Rolling Stock:

Buses- 20 percent or less

Cutaway Buses- 20 percent or less

Equipment:

Vans- 20 percent or less

Trucks- 20 percent or less

Facilities (based on a condition rating below 2.0 (Marginal) on the TERM:

Administration- 25 percent or less

Maintenance- 25 percent or less



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 TPO in which the transit provider's projects and services are programmed in the TPO's TIP.

To the maximum extent practicable, transit providers, states, and TPOs 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 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.

A total of 20 transit 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). The participants in the FDOT Group TAM Plan are comprised of the Section 5311 Rural Program and open-door Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities FDOT subrecipients. The Group TAM Plan was adopted in October 2018 and covers fiscal years 2018-2019 through 2021-2022. Updated targets were submitted to NTD in 2019.

Table 6.2. Florida Group TAM Plan Participants

District	Participating Transit Providers
1	Good Wheels, Inc. ² Central Florida Regional Planning Council DeSoto County Transportation
2	Suwannee Valley Transit Big Bend Transit Baker County Transit Nassau County Transit ³ Ride Solutions Levy County Transit Suwannee River Economic Council
3	Tri-County Community Council Big Bend Transit ⁴ Gulf County ARC Calhoun Transit Liberty County Transit JTRANS Wakulla Transit
4	<i>No participating providers</i>
5	Sumter Transit Marion Transit
6	Key West Transit
7	<i>No participating providers</i>

² No longer in service.

³ Provider service area covers portions of Districts 1 and 2

⁴ Provider service area covers portions of Districts 1 and 2



The TPO has the following Tier I and Tier II providers operating in the region:

- Tier I: none
- Tier II: Bay Town Trolley (BTI) and Bay Area Transportation (BAT)

The Bay County TPO is served by two Tier II transit service providers: Bay Town Trolley (BTI) and Bay Area Transportation (BAT). These providers are not part of the FDOT Group TAM Plan and, therefore are responsible for reporting targets to NTD.

The statewide group TAM targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities over the next year. The targets reflect the most recent data available on the number, age, and condition of transit assets, and expectations and capital investment plans for improving these assets during the next fiscal year.

As required by FTA, FDOT will update their respective TAM Plan at least once every four years. FDOT will update the statewide performance targets for the participating agencies on an annual basis and will notify the participating transit agencies and the TPOs in which they operate when the targets are updated. Florida group TAM targets are shown in Table 6.3

Table 6.3. Florida Group Transit Asset Management Targets for Tier II Providers

Asset Category - Performance Measure	Asset Class	FY 2019 Asset Conditions	FY 2020 Performance Target
Revenue Vehicles			
Percent of revenue vehicles that have met or exceed their Useful Life Benchmark (ULB)	Automobile	27.3%	≤27%
	Bus	9.1%	≤9%
	Cutaway Bus	15.6%	≤15%
	School Bus	25%	≤25%
	Mini-Van	13.8%	≤13%
	SUV	10.0%	≤10%
	Van	30.1%	≤30%
Equipment			
Percent of service vehicles that have met or exceed their Useful Life Benchmark (ULB)	Non-Revenue Automobile	20%	≤20%
	Trucks and other Rubber Tire Vehicles	4%	≤4%



Asset Category - Performance Measure	Asset Class	FY 2019 Asset Conditions	FY 2020 Performance Target
Facilities			
Percent of FTA-funded facilities with a condition rating below 3.0 (Good) on the FTA Transit Economic Requirements Model (TERM) Scale	Passenger/Parking Facilities	0%	≤0%
	Administration/Maintenance Facilities	0%	≤0%

On behalf of the Bay County TPO and the Bay County Board of County Commissioners, the Transit Division oversees BTT and BAT services. The TPO includes representation from all municipalities and Bay County, and owns the fixed route system (BTT). On behalf of the Bay County Board of County Commissioners, the TPO also oversees the Demand Response System (BAT).

The BTT is the fixed-route service that serves 8 routes throughout the urbanized areas of Bay County and provides approximately 630,000 trips per year. The service maintains 10 transit vehicles with over 300 transit stops. The BAT is a curb-to-curb, shared ride service for transportation disadvantaged individuals who do not have access to transportation to medical appointments, work, school, shopping or adult day care facilities. BAT provides approximately 93,000 trips per year and maintains over 30 vehicles.

On September 26, 2018 in Resolution 18-13, the Bay County TPO established transit asset targets for the TPO planning area, as summarized in Table 6.4:

Table 6.4. Bay County TPO Transit Asset Management Targets*

Asset Category - Performance Measure	Asset Class	FY 2017 Asset Condition	FY2021 Target
Revenue Vehicles			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB	Buses	X	≤20%
	Cutaway Buses	X	≤20%
Equipment			
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Non-Revenue/Service Vans	X	≤20%
	Non-Revenue/Service Trucks	X	≤20%

Asset Category - Performance Measure	Asset Class	FY 2017 Asset Condition	FY2021 Target
Facilities			
Condition - % of facilities with a condition rating below 2.0 (Marginal) on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	n/a	≤25%
	Maintenance	n/a	≤25%

*TPO only required to adopt 4-year targets.

These targets for the TPO planning area reflect the targets established by Bay Town Trolley (BT) and Bay Area Transportation (BAT) through their Transit Asset Management Plans, as well as the statewide targets established by FDOT for those providers participating in the Group Transit Asset Management Plan, which includes the following provider(s) in the TPO planning area: Bay Town Trolley (BT) and Bay Area Transportation (BAT).



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.

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.

Each provider of public transportation that is subject to the rule must certify it has a PTASP, including transit safety targets for the above measures, in place no later than July 20, 2020. However, on April 22, 2020, FTA issued a Notice of Enforcement Discretion that extends the PTASP deadline to December 31, 2020 due to the extraordinary operational challenges presented by the COVID-19 public health emergency.

Once the public transportation provider establishes targets, it must make the targets available to TPOs to aid in the planning process. TPOs have 180 days after receipt of the PTASP targets to establish transit safety targets for the TPO planning area. In addition, the Bay County TPO must reflect those targets in any LRTP and TIP updated on or after July 20, 2021.

In Florida, each Section 5307 and 5311 transit 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.

TAM Safety Performance Baselines and Targets

The Bay Town Trolley (BTT) is a deviated fixed route transit system. Bay TPO established safety targets for the fixed-route transit service on February 24, 2021 (Resolution 21-06) Bay Area Transportation (BAT) is a demand response service that does not receive FTA Urbanized Area Formula Grant funding, therefore, safety plans that include the process and procedures to implement Safety Management Systems (SMS) are not required. BTT and BAT TAM baseline and target safety performance goals are shown in Table 7.1.

Table 7.1 BTT and BAT Safety Performance Targets

Mode of Transit Service	Fatalities (Total)	Fatalities Per Total Revenue Mile (Rate)	Injuries (Total)	Injuries Per Total Revenue Mile (Rate)	Reportable Events (Total)	Reportable Events per Total Revenue Mile (Rate)	Mean Distance Between Major Mechanical Failures
Fixed Route	0	0/0	7	1/177,228	5	1/106,337	27,179 miles
Demand Response	0	0/0	1	1/229,935	0	0/0	86,768 miles

In future LRTP updates, additional TAM performance data and targets will be available to allow a fuller discussion of trends and progress toward achieving targets.

The Bay County TPO 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, including the Bay County TPO FY 2021-2025 TIP and the current Bay County TPO 2045 LRTP.

Transit Provider Coordination with States and TPOs

Key considerations for TPOs 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 TPOs to aid in the planning process, along with its safety plans.
- To the maximum extent practicable, a transit agency must coordinate with states and TPOs in the selection of state and TPO safety performance targets.



- TPOs are required to establish initial transit safety targets within 180 days of the date that public transportation providers establish initial targets. TPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, subsequent TPO targets must be established when the TPO updates the TIP or LRTP. When establishing transit safety targets, the TPO can either agree to program projects that will support the transit provider targets or establish its own regional transit targets for the TPO planning area. In cases where two or more providers operate in an TPO planning area and establish different targets for a given measure, the TPO has the option of coordinating with the providers to establish a single target for the TPO planning area, or establishing a set of targets for the TPO planning area that reflects the differing transit provider targets.
- TPOs and states must reference those targets in their long-range transportation plans. States and TPOs must each describe the anticipated effect of their respective transportation improvement programs toward achieving their targets.

The Bay County TPO will coordinate with public transportation providers in the planning area on the development and establishment of transit safety targets. LRTP amendments or updates after July 20, 2021 will include the required details about transit safety performance data and targets.