DRAFT AMENDMENT #4 TO THE 2040 LONG RANGE TRANSPORTATION PLAN (LRTP)

Purpose

The purpose of this amendment is to achieve planning consistency between the FY2020/21-2024/25 Transportation Improvement Program (TIP) and the 2040 LRTP Cost Feasible Plan (CFP) with regard to FDOT-led projects on SR 29.

Cost Feasible Plan

- *See Exhibit 1: Amendment to Table 6-4 Partially Funded Highway Improvements and Table 6-2 Highway Improvements Completed 2026-2030*
- *See Exhibit 2: Amendment to Appendix C - YOE Detail Costing Summary*

Additional Planning Factors

There are two new Planning Factors which are hereby amended into the 2040 LRTP:

1. Improve the ***Resiliency*** *and* ***Reliability*** of the Transportation system and ***Reduce*** **or** ***Mitigate stormwater*** impacts of surface transportation
2. Enhance ***Travel*** **and** ***Tourism.***

The MPO's efforts in addressing these new planning factors are noted in our participation on the Urban Resilience Focus Group for the Web-Based Interactive Decision-Support Tool for Adaptation of Coastal Urban and Natural Ecosystems (ACUNE) in Southwest Florida led by Professor Y. Peter Sheng, University of Florida and Michael Savarese, Florida Gulf Coast University. The project received funding from NOAA to create inundation, salinity distribution, habitat distribution, beach and barrier islands vulnerability and economic impact maps for various climate and sea level rise scenarios integrated into a web-based interactive decision-support tool that enables users to identify areas of high vulnerability. The publication of the interactive mapping tool has been delayed due to the COVID-19 pandemic.

Our recent update to our Continuity of Operations Plan (COOP), Public Participation Plan updates, and completion of our Local Roads Safety Plan are intended to improve the resiliency and reliability of the transportation system by ensuring that the planning process continues despite the occurrence of manmade and natural disasters, including flooding, hurricanes and pandemics. Improving safety performance enhances travel time reliability. Enhancing Travel and Tourism is evident in the emphasis placed on conserving natural areas, wetlands and water resources (such as the Everglades) and the area's beaches which attract millions of visitors annually. Providing multimodal transportation options supports the quality of the visitor experience.

System Performance Report

See Exhibit 3 – System Performance Report

Exhibit 1

2040 LRTP AMENDMENT #4 ADD THE FOLLOWING TO TABLE 6-4 HIGHWAY COST FEASIBLE PLAN - Highway Improvements: partially Funded pages 6-15 and 6-16 **Additions Are In Red**
AND TO TABLE 6-2 Highway Improvements Completed 2026-2030 pp 6-7 to 6-8

MAP ID & OR FPN	Improvement	Limits From	Limits To	2021-2040 Total Cost	Funding Allocated in LRTP 2021-2025*			Funding Allocated in LRTP 2026-2030**			Funding Allocated in LRTP 2031-2040			LRTP funding YOE (CST)$	Unfunded Phase Costs	Funding Source
					PE	ROW	CST	PE	ROW	CST	PE	ROW	CST			
4175405	SR 29 [includes Immokalee Bypass]	CR846 (Airport Rd)	N of New Market Rd N	$ 6.74	$ 0.06	$ 6.68										ACNP (SIS), DDR
4175404	SR 29	S of Agriculture Way	CR 845 (Airport Rd)	$ 0.27	$ 0.27											DS, TALT
4175403	SR 29	Sunniland Nursery Rd	S of Agriculture Way	$ 0.50	$ 0.50											SU, TALT
4175402	SR 29	Oil Well Rd	Sunniland Nursery Rd	$ 8.33	$ 8.33											ACNP (SIS), DI
43 4178784	SR 29	North of SR 82	Collier/Hendry Line	$1.36	$0.05	$1.31	~~$10.02~~									ACNP (SIS)
60 4344901	SR 29	I-75 (SR93)	Oil Well	$20.67	$20.67		-									

**Per MPO FY 2021-2025 TIP & FDOT Work Program*

***Per CFP FY2028/29 - FY2044/45 SIS (2018 Edition)*

2040 LRTP AMENDMENT #4 ADD THE FOLLOWING TO TABLE 6-2 HIGHWAY COST FEASIBLE PLAN - Highway Improvements Completed 2026-2030 pp 6-7 to 6-8 **Additions Are In Red**

MAP ID & OR FPN	Improvement	Limits From	Limits To	2021-2040 Total Cost	Funding Allocated in LRTP 2021-2025*			Funding Allocated in LRTP 2026-2030**			Funding Allocated in LRTP 2031-2040			LRTP funding YOE (CST)$	Unfunded Phase Costs	Funding Source
					PE	ROW	CST	PE	ROW	CST	PE	ROW	CST			
4175406	SR 29	N of New Market Rd N	SR 82	$ 31.41	$ 0.38	$ 1.09				$ 29.94				$ 29.94		ACNP (SIS), TALT

**Per MPO FY 2021-2025 TIP & FDOT Work Program*

***Per CFP FY2028/29 - FY2044/45 SIS (2018 Edition)*

Collier MPO 2040 LRTP, Cost Affordable Plan as Previously Amended APPENDIX C

DRAFT AMENDMENT 10/9/20 BOARD MEETING, 9/28 CAC/TAC

Additions Are in Red

Draft Amended 2040 Cost Feasible Plan - Summary of Funded Projects Grouped by Funding Source with Costs Shown in Future Year of Expenditure (YOE) in Millions of Dollars

CF# &/or FPN	Facility	From	To	# of Existing Lanes	Project Length (Miles)	Project Type	CST PDC	2021-2025 PER FY2020/21-2024/25 TIP adopted 6/12/20 & FDOT Work Program			2026-2030 SIS 2028/29 to 2044/45 (2018 Edition)			2031-2040 (2040 LRTP)			2017 - 2040	2041-2050
								PE/ENV	ROW	CST	PE	ROW	CST	PE	ROW	CST	Project Totals	YOE CST
4175405	SR 29 [includes Immokalee Bypass]	CR846 (Airport Rd)	N of New Market Rd N	2		add 2 to build 4 lanes [on existing SR29]; and build 2 lanes for new Bypass - New road construction		$ 0.06	$ 6.68								$ 6.74	
4175406	SR 29	N of New Market Rd N	SR 82	2		add 2 to build 4 lanes		$ 0.38	$ 1.09				$29.94				$31.41	$9.94
4175404	SR 29	S of Agriculture Way	CR 845 (Airport Rd)	2		add 2 to build 4 lanes		$ 0.27									$ 0.27	
4175403	SR 29	Sunniland Nursery Rd	S of Agriculture Way	2		add 2 to build 4 lanes		$ 0.50									$ 0.50	
4175402	SR 29	Oil Well Rd	Sunniland Nursery Rd	2		add 2 to build 4 lanes		$ 8.33									$ 8.33	
43 4178784	SR 29	North of SR 82	Collier/Hendry Line	2	2.4	2-Lane Roadway to 4 Lanes with Paved Shoulders (Includes milling and resurfacing of existing pavement)	$7.89	$0.05	$1.31	~~$10.02~~							$ 1.36	
60 4344901	SR 29	I-75 (SR 93)	Oil Well Rd	2	10.2	2-Lane Roadway to 4 Lanes with Paved Shoulders (Includes milling and resurfacing of existing pavement)	n/a	$20.67						$6.19	$3.63		$30.49	

Exhibit 3

Metropolitan Planning Organization
Long-Range Transportation Plan
System Performance Report Template

Office of Policy Planning

Florida Department of Transportation

June 2020

COLLIER MPO

AMENDMENT #4

2040 LONG RANGE TRANSPORTATION PLAN

OCTOBER 9, 2020

TABLE OF CONTENTS

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.

MPOs may incorporate this template language and adapt it as needed as they update their LRTPs. In most sections, there are two options for the text, to be used by MPOs supporting statewide targets or MPOs establishing their own targets. Areas that require MPO input are highlighted in grey. Input will range from simply adding the MPO name and adoption dates to providing MPO-specific information such as descriptions of strategies and processes.

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 MPOs, and the public transportation providers in the MPO 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 metropolitan planning organizations (MPO) 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 Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule).[1] 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 Collier 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]

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 Collier MPO 2040 Long-Range Transportation Plan was amended on October 9, 2020 to add the XXXX SIS projects to the Cost Feasible Plan. Per the Planning Rule, the System Performance Report for the Collier MPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), Transit Asset Management, and Transit Safety targets adopted by the MPO Board on September 11, 2020.

[1] The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613.

[2] Guidance from FHWA/FTA for completing the preferred scenario analysis is expected in the future. As of June 2020, no guidance has been issued.

3 - HIGHWAY SAFETY MEASURES (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures[3] 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 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 2020. For the 2020 HSIP annual report, FDOT established statewide at "0" for each performance measure to reflect Florida's vision of zero deaths.

The Collier MPO adopted safety performance targets on November 8, 2019. Table 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 3.1. Highway Safety (PM1) Targets

Performance Target	**Collier MPO agrees to plan and program projects so that they contribute toward the accomplishment of the FDOT safety target of zero**
Number of fatalities	✓
Rate of fatalities per 100 million VMT	✓
Number of serious injuries	✓
Rate of serious injuries per 100 million VMT	✓
Number of non-motorized fatalities and non-motorized serious injuries.	✓

Statewide system conditions for each safety performance measure are included in Table 3.2, along with system conditions in the Collier MPO metropolitan planning area. System conditions reflect baseline performance (2013-2017). The latest safety conditions will be updated annually on a rolling five-year window and reflected

[3] 23 CFR Part 490, Subpart B

within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

Table 3.2. Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average) 2012-2016	2013-2017	2014-2018	Calendar Year 2020 Florida Performance Targets
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

After FDOT set its Safety Performance Measures targets in 2018, both FDOT and the Collier MPO established 2017 Baseline Safety Performance Measures. To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2013-2017) of crash data and VMT were utilized. Table 3-2 presents the Baseline Safety Performance Measures for Florida and Collier MPO.

Table 3.2 – Baseline Safety Performance Measures – 2013-2017 Rolling Five-Year Average

Performance Measure	Florida	Collier MPO
Number of Fatalities	2,979.0	36.2
Number of Serious Injuries	20,653.6	186.2
Fatality Rate per 100 million Vehicle Miles Traveled (VMT)	1.398	1.038
Serious Injury Rate per 100 million Vehicle Miles Traveled (VMT)	9.732	5.263
Total number of non-motorized fatalities and serious injuries	3,267.0	39.2

Trends Analysis

The process used to develop the MPO'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

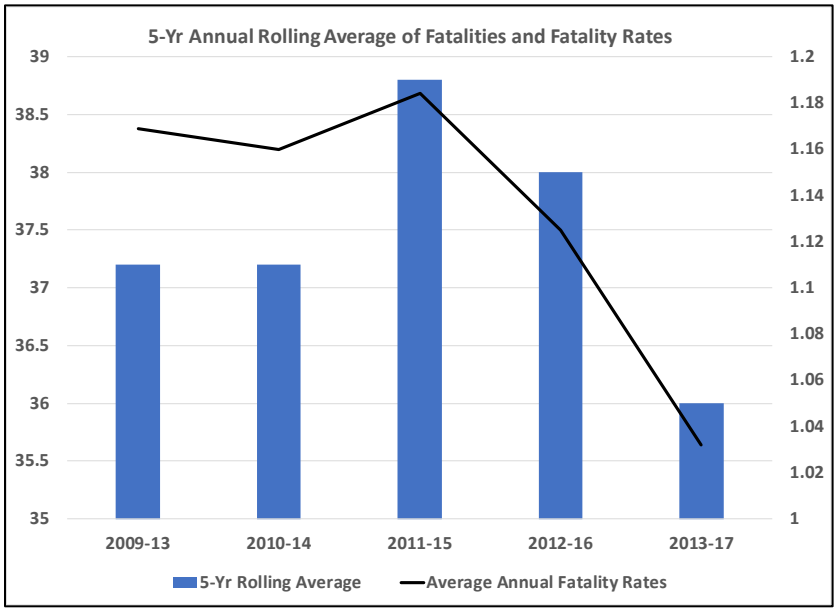
injuries. These data are used to help identify regional safety issues and potential safety strategies for the LRTP and TIP.

The MPO uses crash data tracking fatalities and serious injuries in Collier County to analyze past trends and identify regional safety issues. Tracking these measures will help to estimate the effectiveness of future MPO transportation investment, as reflected

in the TIP. Table 3-3 shows the changes in Safety Performance Measures for Collier MPO from 2009 through 2017. The measures shown in Table 3-3 were calculated by following the same methodology as that used to calculate the baseline conditions.

Table 3-3 Safety Performance Measure Trends in Collier County

Performance Measure	2009-2013	2010-2014	2011-2015	2012-2016	2013-2017
Number of Fatalities	37.2	37.2	38.8	38.0	36.2
Number of Serious Injuries	184.0	174.0	175.2	177.2	186.2
Fatality Rate per 100 million Vehicle Miles Traveled (VMT)	1.169	1.160	1.184	1.125	1.038
Serious Injury Rate per 100 million Vehicle Miles Traveled (VMT)	5.790	5.445	5.388	5.252	5.263
Total number of non-motorized fatalities and serious injuries	37.2	38.6	37.6	40.0	39.2



Coordination with Statewide Safety Plans and Processes

The Collier 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 Collier MPO 2040 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 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

The Collier MPO 2040 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 Collier MPO has developed a project selection process that incorporates safety in its Project Selection Criteria (see Appendix B 2040 Needs Assessment with Cost Feasible Plan Selection Criteria) The 2040 LRTP includes a Goal to Increase the Safety of the Transportation System for Users p3-4:

"The safety of the users of the transportation system is an important factor in the MPO's planning and project development process. Although not used as a measurable project selection criteria due to the la ck of a consistent correlation between the primary goal of increasing highway capacity and improving system safety, the need for safety-related improvements is none-the-less addressed by the MPO through a variety of practices, including walkable community studies, its CMS/ITS and pathways implementation programs and by ensuring that bicycle and pedestrian-friendly features are incorporated into new highway and transit projects."

The Collier MPO 2040 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.

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.

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 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 Collier 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 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 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)	Collier MPO 2017 Baseline	Collier MPO 2018 Actual
Percent of Interstate pavements in good condition	66.0%		n/a	≥60%	36.2%	38.1%
Percent of Interstate pavements in poor condition	0.1%		n/a	<5%	0%	0%
Percent of non-Interstate NHS pavements in good condition	76.4%		≥40%	≥40%	50.2%	47.1%
Percent of non-Interstate NHS pavements in poor condition	3.6%		<5%	<5%	0%	0%
Percent of NHS bridges (by deck area) in good condition	67.7%		≥50%	≥50%	83.58%	82.21%
Percent of NHS bridges (by deck area) in poor condition	1.2%		<10%	<10%	0%	0%

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 Collier MPO agreed to support FDOT's pavement and bridge condition performance targets on October 12, 2018. By adopting FDOT's targets, the Collier MPO agrees to plan and program projects that help FDOT achieve these targets.

The Collier 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 Collier MPO 2040 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 Collier MPO 2040 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. The Collier MPO 2040 LRTP incorporates Goal 7 of the Metropolitan and Statewide Planning Factors as shown on p3-7 and as follows:

"Emphasize the preservation of the existing transportation system. The MPO works with FDOT and with its local governments, which are responsible for maintenance and preservation of the transportation system."

On or before October 1, 2020, FDOT will provide FHWA and the Collier MPO a detailed report of pavement and bridge condition performance covering the period of January 1, 2018 to December 31, 2019. FDOT and the Collier 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)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

4. Annual hours of peak hour excessive delay per capita (PHED);
5. Percent of non-single occupant vehicle travel (Non-SOV); and
6. 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 consider 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]; 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 Collier MPO 2040 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 and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state

[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.

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)	Collier MPO 2017 Baseline	Collier MPO 2018 Actual
Percent of person-miles on the Interstate system that are reliable	82.2%		≥75.0%	≥70.0%	100%	100%
Percent of person-miles on the non-Interstate NHS that are reliable	84.0%		n/a	≥50.0%	97%	98%
Truck travel time reliability index (TTTR)	1.43		≤1.75	≤2.00	1.12	1.15

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 Collier MPO agreed to support FDOT's PM3 targets on October 12, 2018. By adopting FDOT's targets, the Collier MPO agrees to plan and program projects that help FDOT achieve these targets.

The Collier 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 Collier MPO 2040 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 Collier MPO 2040 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements. The 2040 LRTP incorporates the following Goal: Reduce Roadway Congestion, p3-3 with the following language:

"Congestion, and the delay that accompanies it, is a serious cost to the residents of Collier County. It reduces their ability to access jobs, shopping, recreation and other activities. The Collier 2040 LRTP places a great deal of emphasis on reducing congestion, thereby enhancing the quality of life of County residents. During the ranking of projects., this Goal received a weighting factor of 2.

Objective: Reduce the aggregate lane miles with volume to capacity ratio (v/c) exceeding 1.0, based on the 2040 traffic assignment to the existing plus committed (E+C) network.

Project Selection Criteria:

- Improvement to an existing deficient facility, or improvement to a new or neighboring facility intended to relieve an existing deficient facility with v/c greater than 1.3=5
- Improvement to an existing deficient facility, or improvement to a new of neighboring facility intended to relieve an existing deficient facility with v/c greater than 1.15=3
- Improvement to an existing deficient facility, or improvement to a new of neighboring facility intended to relieve an existing deficient facility with v/c greater than 1.0=1"

On or before October 1, 2020, FDOT will provide FHWA and the Collier MPO a detailed report of performance for the PM3 measures covering the period of January 1, 2018 to December 31, 2019. FDOT and the Collier 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: equipment, rolling stock, infrastructure, and facilities. The rule became effective on October 1, 2018.

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

Table 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
2. Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either 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 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.

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 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 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 Central Florida Regional Planning Council	DeSoto County Transportation
2	Suwannee Valley Transit Big Bend Transit Baker County Transit Nassau County Transit	 Ride Solutions Levy County Transit Suwannee River Economic Council
3	Tri-County Community Council Big Bend Transit Gulf County ARC	Calhoun Transit Liberty County Transit JTRANS Wakulla Transit
4	*No participating providers*	
5	Sumter Transit Marion Transit	
6	Key West Transit	
7	*No participating providers*	

Collier Area Transit (CAT), a Tier II provider, is the only transit provider within the MPO region. CAT does not participate in the FDOT Group TAM Plan as it has too few busses to meet the criteria. On November 9, 2018, the Collier MPO agreed to support the Collier County Board of County Commissioners (BCC) / Collier Area Transit (CAT) transit asset management targets which were adopted on October 23, 2018, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets. Table 6.3 displays the TAM performance measures targets for CAT and the current conditions within the Collier MPO.

The transit asset management targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities. The targets reflect the most recent data available on the number, age, and condition of transit assets, and expectations and capital investment plans for improving these assets. Table 6.3 summarizes both existing conditions for the most recent year available, and the targets.

Table 6.3. FTA TAM Targets for Collier Area Transit (CAT)

Asset Category	FDOT and MPO Transit Targets	Current Conditions within Collier MPO	Met or Exceed Target
Equipment	10% have met or exceeded their Useful Like Benchmark (ULB)	0% exceed ULB	Yes
Rolling Stock	10% have met or exceeded their ULB	50% exceed ULB	No
Infrastructure	n/a	n/a	n/a
Facilities	25% of facilities less than 3.0 on the TERM scale	0% at or above 3.0 TERM	Yes

TAM Performance

The Collier 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, including the System-wide Transit Needs Assessment beginning on p4-27, which builds upon the Collier County FY 2016-2025 Transit Development Plan (TDP) Major Update, the Collier 2034 LRTP and the 2013 Collier Area Transit Comprehensive Operations Analysis (COA) as well as public input, regional model ridership projections and transit market assessments.

To support progress towards TAM performance targets, transit investment and maintenance funding in the 2040 LRTP Transit Cost Feasible Plan totals approximately $402.5 million (see Table 6-7 p6-32), approximately 34 percent of total LRTP funding. and 100% percent of requested CAT funding for transit preservation. Improving the State of Good Repair (SGR) of capital assets is an overarching goal of this process.

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 MPOs to aid in the planning process. MPOs have 180 days after receipt of the PTASP targets to establish transit safety targets for the MPO planning area. In addition, the Collier MPO 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.

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.

Over the course of 2020-2021, the Collier MPO 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.