Appendix D
Goals and Objectives, Performance Measures, and Targets

VISION 2050

Long Range Transportation Plan

**Goals and Objectives,
Performance Measures, and Targets**

August 2024

Contents

Purpose

Performance management is a strategic approach to coordinate investment and policy decisions en route to achieving performance goals. Accordingly, performance goals are achieved by establishing performance measures and targets, adopted in the TPA's Long Range Transportation Plan (LRTP). The TPA's aim is to provide a data-driven, quantitative process with a clear and descriptive criteria to set and analyze achievable targets. The performance-based method ensures the most efficient investment of federal transportation funds by providing a mechanism for increased accountability, transparency, as well as provision for investment decisions to better focus on key outcomes.

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

This document is organized as follows:

- **Section 1** provides a brief background on transportation performance management;

- **Section 2** covers the Highway Safety measures (PM1);

- **Section 3** covers the Pavement and Bridge Condition measures (PM2);

- **Section 4** covers System Performance measures (PM3);

- **Section 5** covers Transit Asset Management (TAM) measures; and

- **Section 6** covers Transit Safety measures.

Section 1 – Background

To comply with the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Rule (The Planning Rule), 23 USC 450,[1] an MPO's long range transportation plan must include a description of the performance measures and targets that apply to its planning area and a System Performance Report. 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.

The Palm Beach TPA 2050 Long-Range Transportation Plan was adopted in December 2024. Per the Planning Rule, the System Performance Report for the Palm Beach TPA is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), Transit Asset Management, and Transit Safety targets.

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

Section 2 – Highway Safety Measures (PM1)

Safety is identified first in the national goals of the FAST Act as well as first in the Florida Transportation Plan (FTP), the state's long-range transportation plan, and the emphasis of Florida's Strategic Highway Safety Plan (SHSP). FDOT established statewide performance targets of zero fatalities and serious injuries in 2017, which were reaffirmed through 2023 in the 2022 Highway Safety Improvement Program (HSIP).

Table 1. Safety Performance Measures and Targets (Annual Averages)

Performance Measure	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021	2018-2022	2024 Target
Palm Beach County								
Number of Fatalities	152.8	157.8	167.6	176.0	175.6	182.8	198.2	0
Number of Serious Injuries	1,055.2	1,080.6	1,088.2	1,093.0	1,076.2	1,028.6	967.2	0
Fatality Rate per 100 million VMT*	1.181	1.188	1.227	1.243	1.241	1.314	1.40	0
Serious Injury Rate per 100 million VMT	8.203	8.162	7.975	7.712	7.591	7.371	6.80	0
Number of non-motorized Fatalities and serious injuries	203.0	203.8	203.2	207.8	206.8	205.6	204.2	0
100 million VMT	128.8	132.6	136.4	139.6	139.5	139.4	139.8	0
FDOT - Statewide								
Number of Fatalities	2,683.8	2,825.0	2,972.0	3,110.6	3,191.6	3,306.4	3,397.8	0
Number of Serious Injuries	20,832.8	20,917.2	20,728.8	20,181.0	18,993.8	18,029.8	17,165.2	0
Fatality Rate per 100 million VMT*	1.329	1.361	1.395	1.429	1.467	1.517	1.460	0
Serious Injury Rate per 100 million VMT	10.349	10.126	9.766	9.297	8.716	8.251	7.444	0
Number of non-motorized Fatalities and serious injuries	3,289.4	3,286.4	3,309.4	3,290.2	3,193.8	3,190.4	3,200.2	0
100 million VMT	2,011.9	2,067.9	2,126.1	2,175.5	2,177.2	2,183.1	2,200.9	

VMT = Vehicle Miles Traveled

Source: FDOT 2021 FHWA Safety Performance Measures

Section 3 – Pavement & Bridge Condition Measures (PM2)

On December 16, 2022, FDOT established statewide performance targets for the second four-year performance period (2022-2025) for pavement and bridge condition. The TPA adopted FDOT's statewide pavement and bridge performance targets on April 20, 2023. The table below shows the Palm Beach TPA and statewide performance targets.

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 to ensure the current transportation system is adequately preserved and maintained prior to funding being allocated for capacity improvements. The statutory guidelines and performance measure targets in this section cover the statewide federal targets established for pavements and bridges.

Table 2. Pavement and Bridge Condition Performance Targets

Performance Measure	2019	2020	2021	2022	2023	2023 Targets	2025 Targets
Palm Beach County (%)							
NHS bridges (by deck area) in good condition	87.44%	85.2%	82.2%	82.1%	Not available	≥50%	≥50%
NHS bridges (by deck area) in poor condition	1.04%	1.02%	1.0%	1.0%	Not available	≤10%	≤5%
Interstate pavements in good condition	61.2%	53.2%	59.5%	65.0%	Not available	≥60%	≥60%
Interstate pavements in poor condition	0.0%	0.2%	0.0%	0.0%	Not available	≤5%	≤5%
Non-interstate NHS pavements in good condition	44.0%	Not available	45.1%	53.3%	Not available	≥40%	≥40%
Non-interstate NHS pavements in poor condition	0.1%	Not available	1.2%	1.1%	Not available	≤5%	≤5%
FDOT – Statewide (%)							
NHS bridges (by deck area) in good condition	65.6%	64.1%	61.3%	58.2%	Not available	≥50%	≥50%
NHS bridges (by deck area) in poor condition	0.45%	0.67%	0.85%	0.63%	Not available	≤10%	≤10%
Interstate pavements in good condition	68.5%	68.8%	70.5%	73.4%	Not available	≥60%	≥60%
Interstate pavements in poor condition	0.2%	0.6%	0.3%	0.2%	Not available	≤5%	≤5%
Non-interstate NHS pavements in good condition	41.0%	Not available	47.5%	48.8%	Not available	≥40%	≥40%

Non-interstate NHS pavements in poor condition	0.2%	Not available	0.6%	0.5%	Not available	≤5%	≤5%

Section 4 – System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program Measures (PM3)

Travel time reliability provides a way to measure the unexpected congestion drivers experience on top of typical travel flow during specific parts of the day.

The level of travel time reliability (LOTTR) measures the percent of person-miles traveled on the Interstate or the non-Interstate NHS that are reliable. LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) of all applicable roads, across four time periods between the hours of 6 a.m. and 8 p.m. each day. The measure is expressed as the percent of person-miles traveled on the Interstate or Non-Interstate NHS system that are reliable. Person-miles assumes a people per vehicle estimate.

Truck travel time reliability (TTTR) measures the reliability index for trucks traveling on the interstate. A TTTR ratio divides the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over specific time periods throughout weekdays and weekends. This is averaged across the length of all Interstate segments in the state or metropolitan planning organization (MPO) planning area to determine the TTTR index.

On December 16, 2022, FDOT established statewide performance targets for 2023 and 2025 for the system performance measures that assess the performance of the Interstate and National Highway System (NHS) and freight movement on the Interstate System. On April 20, the TPA adopted FDOT's statewide system performance targets. The table below presents the statewide and TPA targets.

Performance Measure	2019	2020	2021	2022	2023 Targets	2025 Targets
Palm Beach County						
Percent of person-miles on the Interstate system that are reliable	78.0%	93.6%	83.1%	77.6%	≥75%	≥75%
Percent of person-miles on the non-Interstate NHS that are reliable	94.0%	98.0%	96.8%	92.4%	≥50%	≥60%
Truck travel time reliability	1.86	1.66	1.78	1.95	≤1.75	≤2.0
FDOT – Statewide						
Percent of person-miles on the Interstate system that are reliable	83.4%	92.3%	87.5%	85.7%	≥75%	≥70%
Percent of person-miles on the non-Interstate NHS that are reliable	86.9%	93.5%	92.9%	92.1%	≥50%	≥50%
Truck travel time reliability	1.43	1.45	1.38	1.46	≤1.75	≤2.0

Section 5 – Transit Asset Management Measures

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 the elements of a transit provider's unique operating environment including but not limited to geography and service frequency, which differs from an asset's useful life.

On September 19, 2019, the Palm Beach TPA incorporated transit asset targets that reflect the targets established by Palm Tran and SFRTA through their TAM Plans. The targets for the TPA planning area are shown in the below table. The Palm Beach TPA TIP is developed and managed in coordination with Palm Tran and SFRTA and reflects investment priorities established in the 2050 LRTP.

Palm Tran and the South Florida Regional Transportation Authority (SFRTA) initially established transit asset targets as part of their Transit Asset Management (TAM) Plans in September 2018 and have updated targets annually since. The transit asset management targets are based on the condition of existing transit assets and planned investments in equipment, infrastructure, rolling stock, and facilities. The targets reflect the most recent data available on the number, age, and condition of transit assets, and capital investment plans for improving these assets. The table below summarizes the asset conditions for each transit provider.

Table 4. Transit Asset Management Performance Measures Targets

Percentage of assets that meet or exceeds useful life for	
Palm Tran	**2022 Target**
Vehicles – Articulated Bus	≤10%
Vehicles – Fixed Route Bus	≤10%
Vehicles – Paratransit Bus	≤10%
Vehicles – Automobiles	≤0%
Equipment – Automobiles	≤20%
Equipment – Trucks	≤20%
Facilities	0%
South Florida Regional Transportation Authority	**2022 Target**
Rolling Stock – Locomotives, Coach Cars, Self-Propelled Cars (>39 yrs old)	≤25%
Rolling Stock – Cutaway Buses (>10 years old)	≤25%
Equipment – Support and Maintenance Vehicles (>8 yrs old)	≤56%
Equipment – Other Vehicles (<2.5 on 1-5 scale)	≤56%
Passenger Terminals (<2.5 on 1-5 scale)	≤5%
Maintenance Facilities (<2.5 on 1-5 scale)	≤5%
Administrative Offices (<2.5 on 1-5 scale)	≤5%
Rail fixed – guideway track with performance restrictions	≤3.5%

Section 6 – Transit Safety Performance

The Federal Transit Administration (FTA) established transit safety performance management requirements in the Public Transportation Agency Safety Plan (PTASP) final rule published on July 19, 2018. The rule requires public transit agencies that receive federal funding under 49 U.S.C. Chapter 53 to develop and implement a PTASP. Rail operators, such as SFRTA, fall under different rules and are not required to include the same measures. The PTASP must include the following performance measures with associated targets:

- Total number of reportable fatalities and rate per total vehicle revenue miles (VRM) by mode.
- Total number of reportable injuries and rate per total vehicle revenue miles (VRM) by mode.
- Total number of reportable safety events and rate per total vehicle revenue miles (VRM) by mode.
- System reliability – mean distance between major mechanical failures by mode.

Palm Tran adopted safety targets in their 2021 Public Transportation Agency Safety Plan. The Palm Beach TPA formally adopted Palm Tran's targets on February 18, 2022. Although Palm Tran is required to set targets annually, the TPA's re-adoption of targets is not required until an update of the next Long Range Transportation Plan (LRTP). Instead, the TPA is required to include Palm Tran's annually adopted targets into this TIP. Palm Tran's reported values for 2021 and new 2022 targets are indicated below.

Table 5. Transit safety Performance Measures and Targets

Performance Measure	Reported 2021	2022 Target
Palm Tran		
Fixed Route Bus		
• Number of Fatalities	1	0
• Fatality Rate per 100k VRM	0	0
• Number of Injuries	34	63
• Injury Rate per 100k VRM	0.5	0.9
• Number of Safety Events	23	43
• Safety Event Rate per 100k VRM	0.3	0.6
• Mean distance between mechanical failures (miles)	12,719	14,000
Paratransit (Palm Tran Connection)		
• Number of Fatalities	0	0
• Fatality Rate per 100k VRM	0	0
• Number of Injuries	17	34
• Injury Rate per 100k VRM	0.2	0.4
• Number of Safety Events	25	32
• Safety Event Rate per 100k VRM	0.3	0.3
• Mean distance between mechanical failures (miles)	15,581	7,700