



2050 Metropolitan Transportation Plan

Appendix D | System Performance Report



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CONTENTS

4 4
0
c
MAQ) 13
17
20
6
6
10
12
15
15
16
5
5
8
9
11
11
14
14
17
18

Table D-11 FTA TAM Targets for SunRail	19
Table D-12 Transit Safety Performance Targets	21
·	
Table D-13 Transit Safety Performance Targets for SunRail	21

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D.1 Introduction

The Infrastructure Investment and Jobs Act (IIJA) continued reforms made under previous federal transportation reauthorization acts (MAP-21 and the FAST Act) addressing the transition to a performance-based program and establishing national performance goals for federal-aid highway programs, incorporating performance goals, measures, and targets into the process of identifying needed improvements and project selection. Performance measurements and their respective targets are set and implemented to transform the federal-aid highway network. This aims to provide a means to the most efficient investment of federal transportation funds, to refocus on national transportation goals, to increase the accountability and transparency of the federal-aid highway program, and to improve decision-making through performance-based planning and programming. As proposed in 23 CFR 490, transportation performance measures focus around seven (7) core areas to assess the:

- Highway Safety Improvement Program (HSIP);
- Transit Asset Management (TAM) and Transit Safety
- Pavement and Bridge Condition;
- Performance of the National Highway System (NHS);
- Freight Movement on the Interstate System;
- Traffic Congestion of the Congestion Mitigation and Air Quality (CMAQ) Program; and
- On-Road Mobile Source Emissions of the Congestion Mitigation and Air Quality (CMAQ) Program.

In complying with federal requirements, MetroPlan Orlando's 2050 Metropolitan Transportation Plan (MTP) incorporates the National Performance Management Measures into the long-range metropolitan planning process as applicable, while outside of the MTP process, MetroPlan Orlando will annually monitor and document the National Performance Management Measures as part of the MPO's larger Congestion Management Process and Tracking the Trends: A System Performance Report; and as part of the Transportation Improvement Program (TIP) as required by guidance.

D.2 System Performance Measures

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 which modified 23 CFR Part 450 and 49 CFR Part 613. Through revisions to the Code of Federal Regulations, this rule detailed how state DOTs and MPOs must implement a suite of related transportation planning and transportation performance management provisions of MAP-21 and the FAST Act.

This document is consistent with the Transportation Performance Measures Consensus Planning Document developed jointly by FDOT and the Metropolitan Planning Organization Advisory Council. This document outlines the roles of FDOT, the MPOs, and the public transportation providers int eh MPO planning areas to ensure consistency to the maximum extent practicable in satisfying the transportation performance management requirements promulgated by the United States in Title 23 Parts 450, 490, 625, and 673 of the Code of Federal Regulations (23 CFR).

D.2.1 SAFETY MEASURES

The FHWA established five highway safety performance measures to carry out the Highway Safety Improvement Program (HSIP).

- Number of fatalities;
- Rate of fatalities per 100 million vehicle miles traveled (VMT);
- Number of serious injuries;
- Rate of serious injuries per 100 million VMT; and
- Number of non-motorized fatalities and non-motorized serious injuries.

FDOT publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. The current safety targets, established in the 2023 HSIP annual report, are set at "0" for each performance measure to reflect Florida's vision of zero deaths. This System Performance Report discusses the performance for each measure as well as progress achieved in meeting targets over time.

The MetroPlan Orlando Board most recently voted and agreed to support FDOT's highway safety targets at their meeting on February 12, 2025. By adopting the statewide targets, MetroPlan Orlando agrees to plan and program projects that help FDOT achieve these targets. Table D-1 presents statewide performance for each PM1 measure in recent years and the 2025 targets established by FDOT.

Table D-2 presents performance in the MPO planning area for each safety measure in recent years. At their meeting on February 12, 2025, the MetroPlan Orlando Board voted and established the 2025 targets shown in Table D-2 for the MPO's planning area.

Table D-1 | Statewide Highway Safety (PM1) Conditions and Performance

Performance Measures		Florida			
renormance measures	2016 - 2020	2017 - 2021	2018 - 2022	2019 - 2023	2025 Target
Number of Fatalities	3,190.0	3,304.8	3,391.2	3,441.8	0
Rate of Fatalities per 100 million VMT	1.466	1.516	1.543	1.543	0
Number of Serious Injuries	18,978.4	18,012.4	17,137.2	16,380.6	0
Rate of Serious Injuries per 100 million VMT	8.708	8.243	7.786	7.344	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,159.4	3,153.2	3,153.8	3,148.2	0

Source: FDOT Source Book, Signal Four Analytics

Table D-2 | MetroPlan Orlando Highway Safety (PM1) Conditions and Performance

Performance Measures		MPO			
l criormance measures	2016 - 2020	2017 - 2021	2018 - 2022	2019 - 2023	2025 Target
Number of Fatalities	279.6	289.8	297.4	300.4	0
Rate of Fatalities per 100 million VMT	1.197	1.242	1.265	1.258	0
Number of Serious Injuries	2,208.8	2,041.0	1,900.2	1,763.4	0
Rate of Serious Injuries per 100 million VMT	9.493	8.746	8.096	7.431	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	348.8	338.2	336.2	333.4	0

Source: FDOT Source Book, Signal Four Analytics, MetroPlan Orlando

MetroPlan Orlando has adopted a "Vision Zero" approach that sets a target of zero fatalities and serious injuries for road users. As part of its effort to meet this target, MetroPlan Orlando worked alongside 22 county and municipal governments in the MPO planning area and completed a Regional Safety Action Plan, 3 county safety action plans, and 19 local safety action plans in 2024.

As shown in Figure D-1, both the number and rate of transportation-related fatalities in the MPO planning area have increased since 2012. From the 2012-2016 time period to the 2019-2023 period, the total number of fatalities increased by 32.9% and the fatality rate increased by 5.1%. While increasing, the 2019-2023 crash rate of 1.258 is much lower than the statewide total of 1.543.



Figure D-1| Number and Rate of Fatalities (Five Year Rolling Averages)

Source: FDOT Source Book, Signal Four Analytics

Figure D-2 shows an overall decrease in both the total number of serious injuries and the rate of serious injuries in the MPO planning area since the 2012-2016 time period. However, the MPO planning area has a slightly higher serious injury rate than the state as a whole, with an MPO figure of 7.431 serious injuries per million vehicle miles traveled compared to the statewide rate of 7.344.

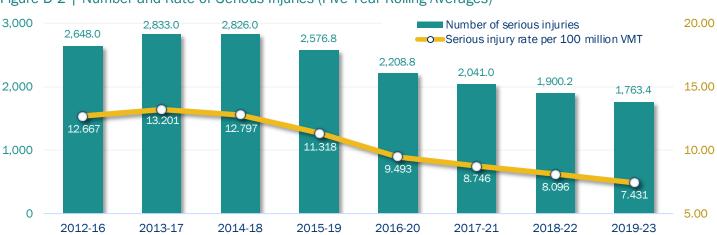


Figure D-2 | Number and Rate of Serious Injuries (Five Year Rolling Averages)

Source: FDOT Source Book, Signal Four Analytics

MetroPlan Orlando recognizes the importance of linking goals, objectives, and investment priorities to establish performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the MetroPlan Orlando 2050 MTP 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).

- Florida's Strategic Highway Safety Plan (SHSP), published in March 2021, specifically embraces Target Zero and identifies strategies to achieve zero traffic deaths and serious injuries. The SHSP was updated in coordination with Florida's 27 MPOs and the MPOAC. The SHSP development process included review of safety-related goals, objectives, and strategies in MPO plans. The SHSP guides FDOT, MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the state. Florida's transportation safety partners have focused on reducing fatalities and serious injuries through the 4Es of engineering, education, enforcement, and emergency response. To achieve zero, FDOT and other safety partners will expand beyond addressing specific hazards and influencing individual behavior to reshaping transportation systems and communities to create a safer environment for all travel. The updated SHSP calls on Florida to think more broadly and inclusively by addressing four additional topics, which could be referred to as the 4ls: information intelligence, innovation, insight into communities, and investments and policies
- The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The program is managed by the Central Office with District staff performing project activities such as conducting safety studies, project scoping, public involvement, and coordinating with production staff on programming safety projects. To be eligible for HSIP funds, safety improvement projects must address a SHSP emphasis area, be identified through a data-driven process, and contribute to a reduction in fatalities and serious injuries
- 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.

The MetroPlan Orlando 2050 MTP increases the safety of the transportation system for motorized and non-motorized users as required. The 2050 MTP 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 MTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. Additional information about the identification, prioritization, and funding of safety improvements is included in Chapters 9, 16, and 19 of the 2050 MTP, respectively.

MetroPlan Orlando has also taken additional actions to elevate safety planning throughout the region. The MPO fine-tuned its regional Context Sensitive planning (Complete Streets) policy report in 2020 and has since completed numerous context sensitive corridor studies. Additionally, the MPO completed a Speed Management Network Analysis (2022), a Regional Active Transportation Plan (2024), and a Vision Zero Action Plan (2024) that prioritizes safety and provides support to vulnerable road users. Concurrent to this work, "safety for all users" was incorporated as a goal in the Transportation Systems Management and Operations Master Plan. Candidate projects from each of these completed plans are prioritized as part of the 2050 MTP update, as shown in Chapter 13.

D.2.2 PAVEMENT AND BRIDGE CONDITION MEASURES

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

- 1. Percent of 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.

Closely monitoring pavement and bridge conditions is a central component to implementing timely and effective investments in infrastructure upgrades. Pavement condition is assessed based on roughness, cracking, rutting and faulting; and pavement in poor condition requires investment to ensure network quality and structural soundness. Bridge condition is critically important in a state with numerous water bodies, wetlands, limited access highways, railroads, and other features that require an overpass. Inspection of bridges includes a multi-faceted analyses of the bridge deck, superstructure, substructure, and culverts, and bridges in poor condition are considered first for investments in reconstruction or replacement.

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 two-year and four-year statewide targets for the PM2 measures. 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 2023 and 2025, respectively.

This System Performance Report discusses performance for each measure as well as progress achieved in meeting targets over time. Table D-3 and Table D-4 present performance measures for pavement condition and the 2023 and 2025 targets. These tables represent performance measures and targets for the entire state and the MetroPlan Orlando region, respectively.

Table D-3 | Statewide Pavement Condition (PM2) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	2023 Statewide Target	2025 Statewide Target
Percent of Interstate pavements in good condition	68.5%	68.8%	70.5%	73.4%	67.6%	60%	60%
Percent of Interstate pavements in poor condition	0.2%	0.6%	0.3%	0.2%	0.2%	5%	5%
Percent of non-Interstate NHS pavements in good condition	41.0%	N/A	47.5%	48.8%	50.8%	40%	40%
Percent of non-Interstate NHS pavements in poor condition	0.2%	N/A	0.6%	0.6%	0.5%	5%	5%

Source: FDOT Source Book

Table D-4 | MetroPlan Orlando Pavement Condition (PM2) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	MetroPlan Orlando 2023 Target	MetroPlan Orlando 2025 Target
Percent of Interstate pavements in good condition	41.7%	43.9%	47.7%	76.9%	77.9%	60%	60%
Percent of Interstate pavements in poor condition	3.2%	2.0%	2.4%	2.6%	0.8%	5%	5%
Percent of non-Interstate NHS pavements in good condition	42.4%	N/A	54.6%	59.5%	61.5%	40%	40%
Percent of non-Interstate NHS pavements in poor condition	0.1%	N/A	0.4%	0.2%	0.2%	5%	5%

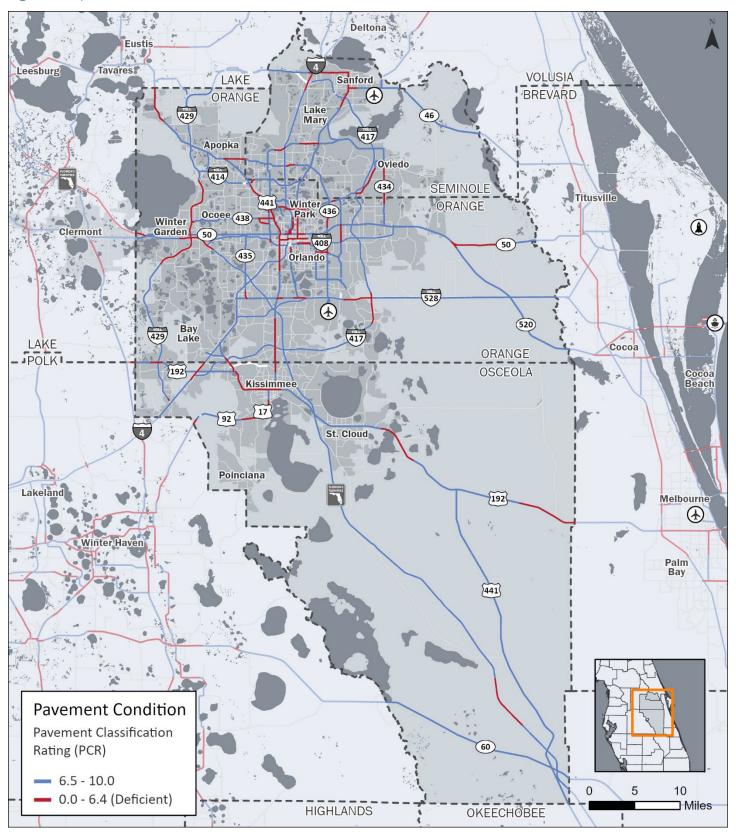
Source: FDOT Source Book, MetroPlan Orlando

As shown in Table D-4, roadways in the MPO planning area have met the MetroPlan Orlando 2023 and 2025 targets since 2022. The planning area has seen a more than 50% relative increase in interstate pavement in good condition, while non-interstate national highway system pavement in good condition rose from 42.4% in 2019 to 61.5% in 2023.

The percentage of pavement in poor condition continues to remain within target levels, as just 0.8% of interstate pavement and 0.2% of non-interstate national highway system pavement in the MPO planning area were considered in poor condition in 2023. These figures are well-below the 2023 and 2025 MPO target thresholds of 5%.

Figure D-3 on the following page shows pavement conditions on the state highway system (SHS) in the MPO planning area. The pavement classification rating, or PCR, is a measure of the level of distress in pavement. The Florida Department of Transportation classifies roadways with a score less than or equal to 6.4 to be considered deficient. A "deficient" score using the PCR method does not indicate that the pavement is in "poor" condition.

Figure D-3 | Pavement Conditions



Note: A "deficient" score using the PCR method does not indicate that the pavement is in "poor" condition

Source: FDOT (2022-2024)

Table D-5 and Table D-6 present performance measures for bridge condition and the 2023 and 2025 targets. These tables represent performance measures and targets for the entire state and the MetroPlan Orlando region, respectively.

Table D-5 | Statewide Bridge Condition (PM2) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	2023 Statewide Target	2025 Statewide Target
Percent of NHS bridges (by deck area) in good condition	65.5%	63.7%	61.5%	58.2%	55.3%	50%	50%
Percent of NHS bridges (by deck area) in poor condition	0.5%	0.7%	0.9%	0.6%	0.6%	10%	5%

Source: FDOT Source Book

Table D-6 | MetroPlan Orlando Bridge Condition (PM2) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	MetroPlan Orlando 2023 Target	MetroPlan Orlando 2025 Target
Percent of NHS bridges (by deck area) in good condition	78.0%	81.3%	81.8%	75.1%	61.6%	50%	50%
Percent of NHS bridges (by deck area) in poor condition	0.00%	0.00%	0.1%	0.00%	0.00%	10%	5%

Source: FDOT Source Book, MetroPlan Orlando

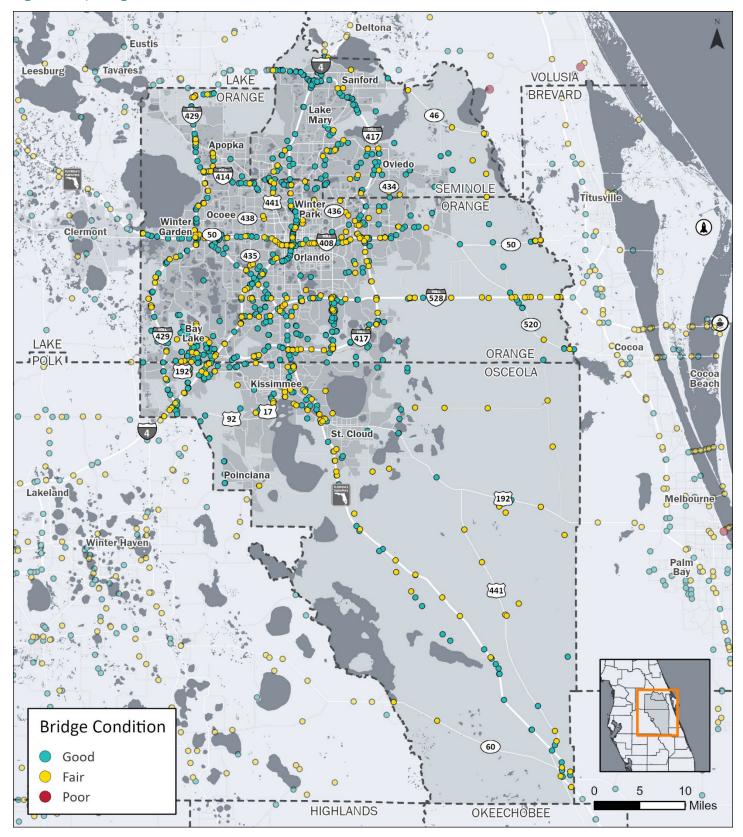
FDOT established the statewide PM2 targets on December 16, 2022, and in September of 2024 adjusted the 2025 target for percent of NHS bridges (by deck area) in poor condition. FDOT is mandated by Florida Statute 334.046 to preserve the state's pavement and bridges to specific standards. FDOT prioritizes funding allocations to ensure the current transportation system is adequately preserved and maintained before funding is allocated for capacity improvements. FDOT is also required by FHWA to develop a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP includes investment strategies to make progress toward achievement of the state's targets. FDOT's current TAMP was approved on December 20, 2022. The percentage of Florida's bridges in good condition is slowly decreasing, which is to be expected as the bridge inventory grows older.

As shown in Table D-6, bridges in the MPO planning area have exceeded statewide and MPO targets across the board over the five-year analysis period. The planning area peaked in 2021 at 81.8% of bridges in good condition, but this number had back-to-back percentage decreases in 2022 and 2023. The 2023 figure of 61.6% of bridges in good condition exceeds the MPO and statewide target of 50%.

Similarly, the MPO planning area consistently falls within the acceptable range for statewide and MPO targets for percentage of bridges in poor condition. This number remained at 0% during the latest analysis period in 2023, which is well-below the 2025 MPO and statewide target of 5%.

Figure D-4 on the following page shows bridge conditions in the MPO planning area. As shown in the map, no bridges in the MPO planning area are in poor condition using the latest available data.

Figure D-4 | Bridge Conditions



Source: U.S. Department of Transportation Bureau of Transportation Statistics (National Bridge Inventory, 2025)

MetroPlan Orlando Board most recently voted and agreed to support FDOT's pavement and bridge condition performance targets at their meeting on February 12, 2025. By adopting statewide targets, MetroPlan Orlando agrees to plan and program projects that help FDOT achieve these targets.

MetroPlan Orlando 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 MetroPlan Orlando 2050 MTP 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 2055 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 Ouality 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 MetroPlan Orlando 2050 MTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. Pavement and bridge maintenance projects within the three-county region are monitored in the Transportation Improvement Program (TIP) in coordination with the Florida Department of Transportation and other transportation partners.

D.2.3 SYSTEM PERFORMANCE, FREIGHT, AND CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM (CMAO) MEASURES

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

National Highway Performance Program (NHPP)

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

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.

The first two performance measures assess the percent of person-miles traveled on the Interstate or the non-Interstate NHS that are reliable. Reliability is defined as the ratio of longer travel times to a normal travel time. The third performance measure assesses the reliability of truck travel on the Interstate system by comparing the worst travel times for trucks against the travel time they typically experience. An increasing TTTR means performance is worsening. Because all areas in Florida meet current national air quality standards, the three CMAQ measures do not apply in Florida.

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 the PM3 measures. MPOs must establish four-year targets for the 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 reliability for calendar years 2023 and 2025, respectively.

The System Performance Report discusses the condition and performance of the transportation system for each applicable PM3 target as well as the progress achieved in meeting targets over time. Table D-7 presents recent statewide performance for each PM3 measure and the 2023 and 2025 targets established by FDOT. Table D-8 presents recent performance in the MPO planning area for the PM3 measures.

Table D-7 | Statewide System Performance and Freight Reliability (PM3) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	2023 Statewide Target	2025 Statewide Target
Percent of person miles traveled on the Interstate that are reliable	83.4%	92.3%	87.5%	85.7%	82.8%	75%	75%
Percent of person miles traveled on the non-Interstate NHS that are reliable	86.9%	93.5%	92.9%	92.1%	89.1%	50%	60%
Truck Travel Time Reliability (Interstate only)	1.45	1.34	1.38	1.46	1.48	1.75	2.00

Source: FDOT Source Book

Table D-8 | MetroPlan Orlando System Performance and Freight Reliability (PM3) Performance and Targets

Performance Measures	2019	2020	2021	2022	2023	MetroPlan Orlando 2023 Target	MetroPlan Orlando 2025 Target
Percent of person miles traveled on the Interstate that are reliable	54.6%	82.6%	64.8%	71.5%	70.7%	70%	70%
Percent of person miles traveled on the non-Interstate NHS that are reliable	85.9%	93.1%	94.4%	93.8%	91.2%	65%	65%
Truck Travel Time Reliability (Interstate only)	2.62	2.28	2.33	2.37	2.25	2.00	2.00

Source: FDOT Source Book, MetroPlan Orlando

FDOT established the statewide PM3 targets on December 16, 2022, and in September 2024, adjusted the 2025 targets for percent of person miles traveled on the Interstate and on the non-Interstate NHS that are reliable. In setting the statewide targets, FDOT reviewed several external and internal factors that affect reliability in the near term.

Statewide reliability decreased slightly from 2019 to 2023, while reliability on the non-Interstate NHS improved over that period. The truck travel time reliability index declined between 2019 and the pandemic years of 2020 and 2021 2050 Metropolitan Transportation Plan | Appendix D

and then increased in 2022 and 2023 to slightly higher levels than 2019. Actual performance for the three measures in 2023 was better than the 2023 targets.

Table D-8 shows that roadways in the MPO planning area have not completely met MPO and statewide targets across the board. The percent of person miles traveled on the interstate that are reliable tends to vary quite significantly within the five-year analysis window, but are currently above the MPO target of 70%. The 70.7% figure in 2023 is below the 82.8% statewide figure for the same year, although the presence of downtown Orlando and the attractions skews this number downward for the MPO planning area.

The statistics in Table D-8 have been visualized below and on the following page. In Figure D-5, Interstate reliability has increased since 2017, with a peak in 2020 as a result of the COVID-19 pandemic. Since 2020, interstate reliability has remained elevated above historic levels by approximately 10 to 20 percent.

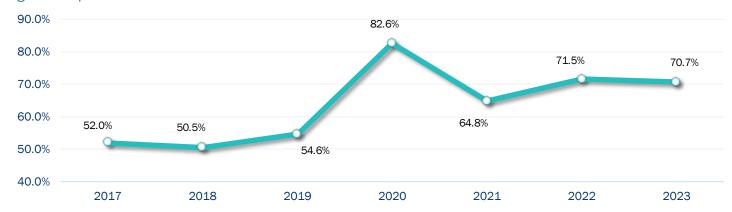


Figure D-5 | Percent of Person Miles Traveled on the Interstate that are Reliable

Source: FDOT Source Book

As seen in Figure D-6, Non-Interstate National Highway System roadways in the MPO planning area tend to be more reliable than interstates, coming in at 91.2% in 2023. Non-Interstate NHS reliability has generally increased since 2017. A noticeable increase occurred in 2020 and levels have remained above 90% since then despite two consecutive years of minor decreases in 2022 and 2023. Overall, this reliability statistic exceeds statewide and MPO targets comfortably.



Figure D-6 | Percent of Person Miles Traveled on the Non-Interstate NHS that are Reliable

Source: FDOT Source Book

Lastly, Figure D-7 shows Truck Travel Time Reliability (TTTR) from 2017 to 2023. TTTR has improved since 2017, decreasing by 14% over a seven-year period. While trending in the right direction, the MPO target of 2.00 has not been

met as of 2023. MPO planning area roadways have not met the 2025 statewide or MPO targets for truck travel time reliability during the five-year analysis window and are the only PM3 indicator not to meet the 2025 MPO target as of 2023.



Figure D-7 | Truck Travel Time Reliability

Source: FDOT Source Book

At their meeting on February 12, 2025, the MetroPlan Orlando Board voted and established the targets shown in Table D-8 for the MPO's planning area. The targets were selected by analyzing 5-year trends in travel time reliability data as part of MetroPlan Orlando's Congestion Management Process. Importantly, the targets take into account the highly-urbanized context of the MetroPlan Orlando planning area as well as its location at the intersection of Interstate-4 and Florida's Turnpike, two of Florida's most-highly-traveled corridors.

MetroPlan Orlando 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 MetroPlan Orlando 2050 MTP 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), Florida's Strategic Intermodal System (SIS), and the Florida Freight Mobility and Trade Plan.

- The 2055 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 FTP goals is Efficient and Reliable Mobility for People and Freight.
- Florida's Strategic Intermodal System (SIS) is composed of transportation facilities of statewide and interregional significance. The SIS is a primary focus of FDOT's capacity investments and is Florida's primary network for ensuring a strong link between transportation and economic competitiveness. These facilities, which span all modes and include highways, are the workhorses of Florida's transportation system and account for a dominant share of the people and freight movement to, from and within Florida. The SIS includes 92 percent of NHS lane miles in the state. Thus, FDOT's focus on improving performance of the SIS goes hand-in-hand with improving the NHS, which is the focus of the FHWA's TPM program. The SIS Policy Plan was updated in early 2022 consistent with the updated FTP. It defines the policy framework for designating which facilities are part of the SIS, as well as how SIS investments needs are identified and prioritized. The development of the SIS Five-Year Plan by FDOT considers scores on a range of measures including mobility, preservation, safety, and economic competitiveness as part of FDOT's Strategic Investment Tool (SIT).
- 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. FDOT also developed and refined a methodology to

identify freight bottlenecks on Florida's SIS on an annual basis using vehicle probe data and travel time reliability measures. Identification of bottlenecks and estimation of their delay impact aids FDOT in focusing on relief efforts and ranking them by priority. In turn, this information is incorporated into FDOT's SIT to help identify the most important SIS capacity projects to relieve congestion

The MetroPlan Orlando 2050 MTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements.

In order to monitor network reliability on a granular level, MetroPlan Orlando invests in travel data accounting for metrics such as travel time reliability, average vehicular speeds, and cost of congestion along highly segmented roadways including local roadways. The MPO also uses travel demand models and other projections to forecast outcomes of potential infrastructure investment decisions, ensuring that alternative strategies are assessed before moving ahead with a project. As it pertains to implementing the goals of the 2050 MTP, this data allows the MPO and its partners to incorporate highly accurate monitoring and assessment capabilities into the Congestion Management Process (CMP).

Such data also assists in developing transportation system management and operations plans, corridor and interchange studies, and other projects. In combination with traffic demand models, this data is critical for identifying projects, planning alternatives, implementing network improvements, and monitoring effectiveness over time in line with FHWA guidance and the CMP.

Reliability metrics equate to 20% of the weighting for projects prioritized in the 2050 MTP. As documented in Chapter 16 of the 2050 MTP, indicators factoring into the reliability score include existing travel time reliability, proportional change in AADT, evacuation route designation, and the presence of fiber optic cables along project extents. The calculated daily cost of congestion is also incorporated into project prioritization as part of the prosperity goal area.

D.2.4 TRANSIT ASSET MANAGEMENT MEASURES

FTA's Transit Asset Management (TAM) regulations apply to all recipients and subrecipients of FTA funding that own, operate, or manage public transportation capital assets. The regulations require that public transportation providers develop and implement TAM plans and establish state of good repair standards and performance measures. Table D-9 identifies the TAM performance measures.

Table D-9 | 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 FTA Transit Economic Requirements Model (TERM) Scale.

Public transportation providers are required to establish TAM targets annually for the following fiscal year and must share its targets with each MPO in which the transit provider's projects and services are programmed in the MPO's TIP. MPOs are not required to establish TAM targets annually when the transit provider establishes targets. Instead, MPO targets must be established when the MPO updates the MTP (although it is recommended that MPOs reflect the most current transit provider targets in the TIP if they have not yet taken action to update MPO targets).

When establishing TAM targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional TAM targets for the MPO planning area. MPO targets may differ from the targets established by a provider, especially if there are multiple providers in the MPO planning area. Public transit providers, states, and MPOs must coordinate with each other in the selection of performance targets.

FTA defines two tiers of public transportation providers based on number of vehicles and mode parameters. Tier I transit agencies, which are generally larger providers, establish their own TAM targets, while Tier II providers, generally smaller agencies, may participate in a group plan where targets are established by a plan sponsor (FDOT) for the entire group.

MetroPlan Orlando's planning areas is served by two (2) Tier I Transit Service Providers – LYNX and SunRail. 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. The table summarizes existing conditions for the most recent year available and the 2025 targets.

The Central Florida Regional Transit Authority (also known as LYNX) established the transit asset targets identified in Table D-10 on January 27, 2025. The Central Florida Commuter Rail Commission (also known as SunRail) established the transit asset targets identified in Table D-11 on May 30, 2023.

Table D-10 | FTA TAM Targets for LYNX

Asset Category Performance Measure	Asset Class	FY 2024 Asset Condition	FY 2025 Target
Rolling Stock			
	Articulated Bus	3.70%	0.00%
	Bus	26.64%	12.42%
Age - % of revenue vehicles within a particular	Cutaway	25.66%	55.22%
asset class that have met or exceeded their ULB	Minivan	100.00%	100.00%
	SUV	14.29%	16.81%
	Van	85.25%	64.44%
Equipment			
Age - % of non-revenue vehicles within a particular	Automobiles	80.00%	80.00%
asset class that have met or exceeded their ULB	Trucks & Other Vehicles	37.61%	35.71%
Facilities			
	Administration	0.00%	0.00%
Condition - % of facilities with a condition rating	Maintenance	0.00%	0.00%
below 3.0 on the FTA Transit Economic	Parking	0.00%	0.00%
Requirements Model (TERM) Scale	Passenger Facilities	0.00%	0.00%
	Storage Facilities	N/A	N/A

Source: LYNX A-90 Narrative Report 2025

Table D-11 | FTA TAM Targets for SunRail

Asset Category Performance Measure	Asset Class	FY 2023 Asset Condition	FY 2025 Target
Rolling Stock			
ge - % of revenue vehicles within a particular	Locomotives	0.00%	0.00%
asset class that have met or exceeded their ULB	Coach Cars	0.00%	0.00%
sset class that have thet of exceeded their OLD	Cab Cars	0.00%	0.00%
Equipment			
Age 0/ of non-revenue vehicles within a nerticular	Non-Revenue/Service-Auto	N/A *	N/A *
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Trucks & Other Vehicles	N/A *	N/A *
asset class that have met of exceeded their OLB	Maintenance Equipment	N/A *	N/A *
Infrastructure			
	Guideway Elements	1.50% - 2.00%	3.00%
% of track segments with performance restrictions	Power & Signal Elements	N/A	N/A
	Track Elements	N/A	N/A
Facilities			
	Administration	0.00%	0.00%
Condition - % of facilities with a condition rating	Maintenance	0.00%	0.00%
below 3.0 on the FTA Transit Economic	Parking Structures	N/A	N/A
Requirements Model (TERM) Scale	Passenger Facilities	0.00%	0.00%
	Storage Facilities	N/A	N/A

Source: FDOT, CFCRC, SunRail Transit Asset Management Plan 2023

During their meeting on February 12, 2025, the MetroPlan Orlando Board voted and agreed to support LYNX's and SunRail's transit asset management targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

As described in the A-90 Narrative Report, LYNX continues to make investments in different vehicle classes and has flexibility to meet asset shortages using its cutaway fleet. In fiscal year 2024, 25 new buses were added to the fleet to replace buses past their useful life. However, an estimated 12.42% of the bus fleet will be beyond their useful life in FY 2025.

An investment in 42 non-revenue vehicles by LYNX substantially reduced the number of non-revenue vehicles beyond their useful life in 2024. Additionally, vanpool vehicles at or near their useful lives are reprogrammed to assist in non-revenue roles.

All LYNX facilities exceed the 3.0 condition rating using the TERM scale, and no facilities are expected to fall below the 3.0 threshold in 2025.

None of SunRail's revenue vehicles were beyond their useful life benchmark in 2023, and all of its facilities rated above a 3.0 on the TERM scale during the 2023 assessment. On the infrastructure side, SunRail reports that 1.50 to 2.00% of its track segments have performance restrictions, which is below the FY 2025 target of 3.00%.

The LYNX A-90 Narrative Report and SunRail Transit Asset Management Plan referenced in Table D-10 and Table D-11 aim to ensure that the transit providers are able to reliably move passengers to their destinations in a safe manner, which directly aligns with the safety and reliability goal areas of the 2050 MTP.

^{*} Service vehicles that support SunRail operations are provided by SunRail contractors for their own use. FDOT pays for usage of this equipment through its operating contract. ULBs and target setting for contractor supplied vehicles are not applicable for target setting nor for NTD reporting.

To this end, MetroPlan Orlando 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 MTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including the LYNX Transit Development Plan (TDP) and A-90 Narrative Report, SunRail Transit Asset Management Plan, MetroPlan Orlando 2050 Transit Vision Master Plan, and the current MetroPlan Orlando 2050 MTP.

D.2.5 TRANSIT SAFETY PERFORMANCE MEASURES

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

The regulation 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 PTASP regulations do not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

D.2.5.1TRANSIT SAFETY PERFORMANCE MEASURES

The provider's PTASP must include targets for the performance measures established by FTA in the <u>National Public Transportation Safety Plan</u>, which was published on January 26, 2017, and updated in April 2024. The transit safety performance measures are:

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

In Florida, each Section 5307 or 5311 public transportation provider must develop a System Safety Program Plan (SSPP) under Chapter 14-90, Florida Administrative Code. FDOT technical guidance recommends that Florida's transit agencies revise their existing SSPPs to be compliant with the FTA PTASP requirements. ¹

Each provider of public transportation that is subject to the PTASP regulation must certify that its SSPP meets the requirement for a PTASP, including transit safety targets for the federally required measures. Providers were required to certify their initial PTASP and transit safety targets by July 20, 2021. Once the public transportation provider establishes safety targets it must make the targets available to MPOs to aid in the planning process. MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, MPO targets must be established when the MPO updates the MTP (although it is recommended that MPOs reflect the current transit provider targets in their TIPs).

When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional transit safety targets for the MPO planning area. In addition, MetroPlan Orlando must reflect those targets in MTP and TIP updates.

FDOT Public Transportation Agency Safety Plan Guidance Document for Transit Agencies. Available at ptasp-14-90-guidance-document_09112019.docx (live.com)

D.2.5.2TRANSIT AGENCY SAFETY TARGETS

The following transit provider(s) operate in MetroPlan Orlando planning area: Central Florida Regional Transit Authority (LYNX) and the Central Florida Commuter Rail Commission (SunRail). These transit agencies are responsible for developing a PTASP and establishing transit safety performance targets annually. LYNX established the transit safety targets identified in Table D-12 on August 25, 2022, and SunRail established the transit safety targets identified in Table D-13 on July 27, 2023.

Table D-12 | Transit Safety Performance Targets

Transit Mode	Fatalities Total	Fatalities Per VRM	Injuries ^{Total}	Injuries Per VRM	Safety Events _{Total}	Safety Events Per VRM	System Reliability
Fixed Route Bus	2	0.00	112	0.00	89	0.00	9,199
Bus Rapid Transit	0	0.00	5	0.00	2	0.00	N/A
ADA / Paratransit	0	0.00	0	0.00	0	0.00	N/A
Demand Response	0	0.00	14	0.00	11	0.00	N/A
VanPool	0	0.00	0	0.00	0	0.00	N/A

Source: LYNX (2023)

Table D-13 | Transit Safety Performance Targets for SunRail

Transit Mode	Fatalities Total	Fatalities Per VRM	Injuries Total	Injuries Per VRM	Safety Events _{Total}	Safety Events Per VRM	System Reliability
Commuter Rail	3	0.00	14	0.00	4	0.00	51,974

Source: SunRail (2024)

At their meeting on February 12, 2025, the MetroPlan Orlando Board voted and agreed to support LYNX's transit safety targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the targets.

D.2.5.3TRANSIT SAFETY PERFORMANCE

MetroPlan Orlando 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 MTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including the LYNX PTASP and the current MetroPlan Orlando 2050 MTP. FTA funding, as programmed by the region's transit providers and FDOT, is used for programs and products to improve the safety of the region's transit systems.

In 2024, SunRail recorded three fatalities and fourteen serious injuries. SunRail has implemented several safety awareness campaigns to educate the public on the dangers of trespassing on tracks and stopping vehicles on tracks. Since the founding of the system, SunRail's safety records continue to improve as the general public becomes accustomed to rail safety.





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