

FY 2023/2024 – FY 2027/28

Transportation Improvement Program

for Orange, Osceola, and Seminole Counties, Florida

Adopted by the MetroPlan Orlando Board on July 12, 2023



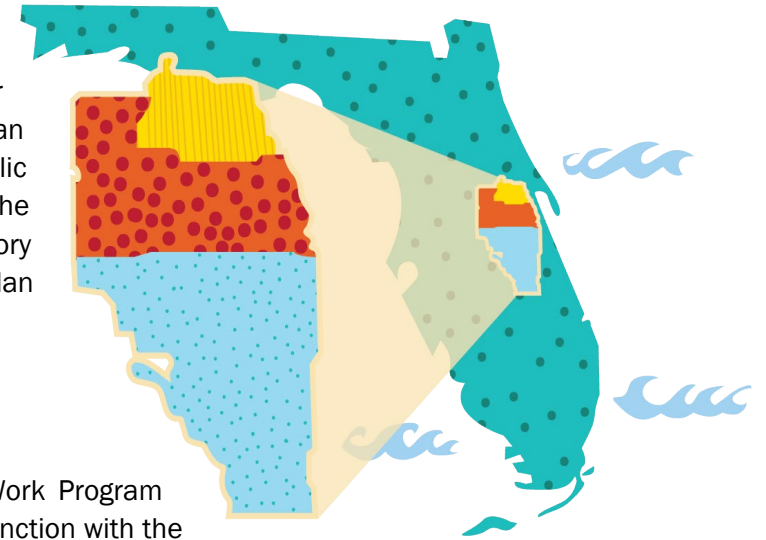
What is this document?

Updated annually, the Transportation Improvement Program (TIP) sets the schedule for improvements to the region's transportation system over the next five years. This short-term plan assigns available funding to specific projects and covers all modes of transportation. Public involvement is an important part of the planning process for each of our plans, including the Transportation Improvement Program. The draft TIP is taken through MetroPlan Orlando's advisory committees for feedback, and a public meeting is held to listen to community input before the plan is officially approved by the board.

Document prepared by MetroPlan Orlando.

Adopted by the MetroPlan Orlando Board on July 12, 2023.

This report was prepared under the FY 2022/2023 Orlando Urban Area Unified Planning Work Program Element 120. It was financed by a grant through the U.S. Department of Transportation in conjunction with the Florida Department of Transportation and local governments of the Orlando and Kissimmee Urban Areas.



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Board Resolution



metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

APPROVED BY
METROPLAN ORLANDO
S. Smith 7/12/23

RESOLUTION NO. 23-07

SUBJECT:
Endorsement of FY 2023/24 - 2027/28
Transportation Improvement Program

WHEREAS, MetroPlan Orlando is the organization designated by the Governor as being responsible, together with the State, for carrying out the provisions of 23 U.S.C. 134, as provided in 23 U.S.C. 104 (f) (3), and capable of meeting the requirements of Section 3 (a) (2) and (e) (1), and 4 (a), and 5 (9) (1) and (1) of the Federal Transit Act 49 U.S.C. 1602 (a) (2) and (e) (1), 1603 (a) and 1604 (9) (1) and (1); and

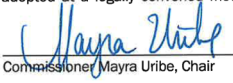
WHEREAS, the Transportation Improvement Program, including the annual element, shall be endorsed annually by the MetroPlan Orlando Board and submitted (1) to the Governor and the Federal Transit Administrator and (2) through the State to the Federal Highway Administrator as provided in 23 U.S.C. 450.316;

NOW, THEREFORE, BE IT RESOLVED by the MetroPlan Orlando Board that the FY 2023/24 - 2027/28 Orlando Urban Area Transportation Improvement Program (TIP) is hereby endorsed as an accurate representation of the area's priorities as developed through a continuing, comprehensive planning process carried on cooperatively by the State and local communities in accordance with the provisions of 23 U.S.C. 134.


Passed and duly adopted this 12th day of July, 2023.

CERTIFICATE

The undersigned duly qualified as Chairwoman of the MetroPlan Orlando Board certifies that the foregoing is a true and correct copy of a Resolution adopted at a legally convened meeting of the MetroPlan Orlando Board.


 Commissioner Mayra Uribe, Chair

Attest:


 Lisa Smith, Sr. Board Services Coordinator
 and Recording Secretary

Section 1: Introduction & Overview

Purpose of the TIP

The Transportation Improvement Program (TIP) is a five-year plan created for the Orlando Urban Area (Orange, Osceola, and Seminole Counties) that shapes the transportation system. MetroPlan Orlando develops the TIP to identify and evaluate all federal and state funded transportation projects that have been scheduled for implementation in the Orlando Urban Area during the FY 2023/2024 – 2027/2028 timeframe. Projects in the TIP must also be consistent with the Metropolitan Transportation Plan's (MTP) 20-year vision. The state requires the TIP to be updated annually and is subject to approval by state and federal reviewers.

The TIP is a critically important plan for the community – not only because it ensures we are striving to achieve the vision laid out in the MTP, but because only projects listed in the TIP are eligible for funding from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). These projects include improvements to the area's highway, transit, rail, and aviation systems. All regionally significant projects requiring FHWA or FTA approval are included in the TIP. Additionally, some locally funded projects are included for planning consistency as well.

The TIP has been prepared in cooperation with the Florida Department of Transportation and the local public transit operator, LYNX, in accordance with Title 23 Code of Federal Regulation (CFR) 450.326a, Title 49 U.S.C. Chapter 52 and Florida Chapter 339.175(8).

Key Points

- The TIP is created with help from the public! MetroPlan Orlando makes the TIP available for review and seeks comments from the public every year. To aid in the review of the TIP, **Appendix A** provides a listing of commonly used acronyms and funding codes.
- Projects listed in the TIP must be coordinated with FDOT, counties, local municipalities, public transportation, expressway authorities, and aviation authorities. This ensures all agencies are working together.
- The priorities must be consistent with local comprehensive plans and the adopted 2045 MTP. The project descriptions and state/federal funding sources need to match, and funded projects must refer to a specific policy, project or page number in the MTP. **Appendix B** includes the FY 2027/28 – FY 2035/36 Prioritized Project List used to prepare the TIP.
- This document is not a “wish list.” All projects in the TIP must make progress toward achieving specific performance targets and are selected based on available funding. Each phase includes a description, estimated cost, source of funding, and the agency responsible. Performance targets are located in the FDOT Transportation Improvement Program System Performance Report located in **Appendix C**.
- The TIP must include a description of costs and revenues and list any improvements to Transportation Disadvantaged (TD) services.
- The TIP is governed by federal and state requirements and the State of Florida requires the TIP to be updated annually by July 15th.



Regulations & Requirements

At a minimum, federal and state regulations require the TIP shall:

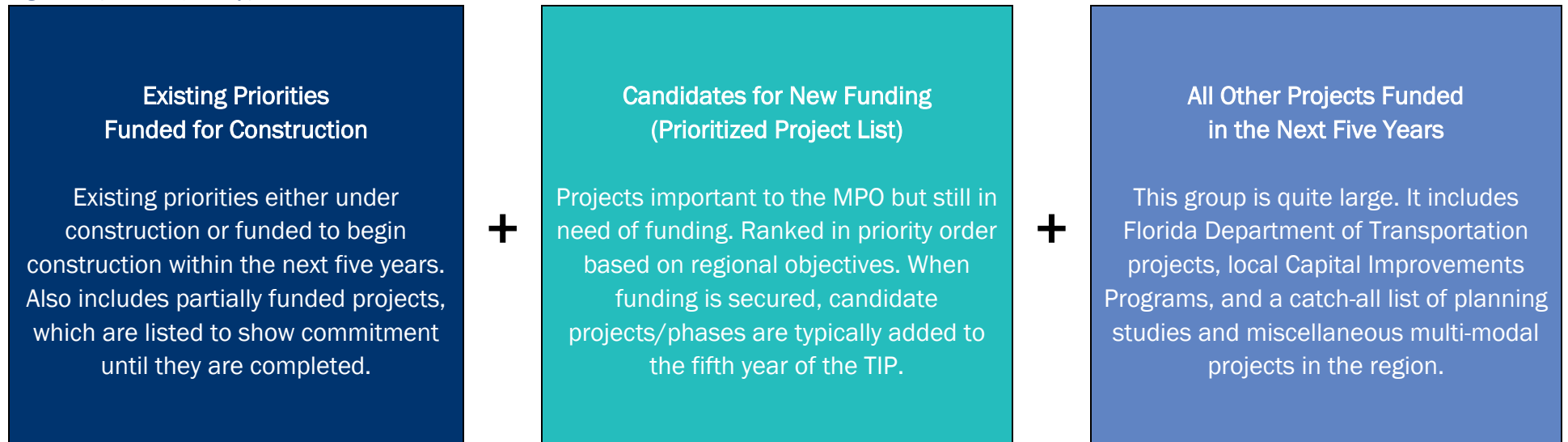
- Cover a period of at least five (5) years and be updated annually.
- Consist of regionally significant projects to economic growth and prosperity.
- Include realistic cost and revenue estimates and project status for all projects.
- Reflect the region's transportation needs and priorities identified through performance-based planning processes and meaningful public participation.



Types of Projects

There are three different types of projects which are in the TIP, as described in **Figure 1**. The second item listed in the figure is one of the most important, as it includes candidate projects for new funding from the Prioritized Project List (PPL). Projects in the TIP are evaluated and categorized into specific funding programs based on agency, network, and financial eligibility requirements.

Figure 1 | TIP Project Types



Project Selection

MetroPlan Orlando develops a long-range Metropolitan Transportation Plan (MTP) for the Orlando-Sanford and Kissimmee Urban Areas that describes what transportation projects will be funded over the next 20 years and beyond. The TIP brings the MTP to life in five-year increments. It shows the priorities, impact, and spells out the projects in detail. The process used in prioritizing the projects is described in the “How are projects prioritized?” section and is consistent with federal requirements in Title 23 CFR Part 450.330(c). These prioritized projects were approved by the MetroPlan Orlando Board in July 2022 and were forwarded to the Florida Department of Transportation (FDOT) to be used in developing the FY 2023/24 – FY 2027/28 Tentative Five-Year Work Program.

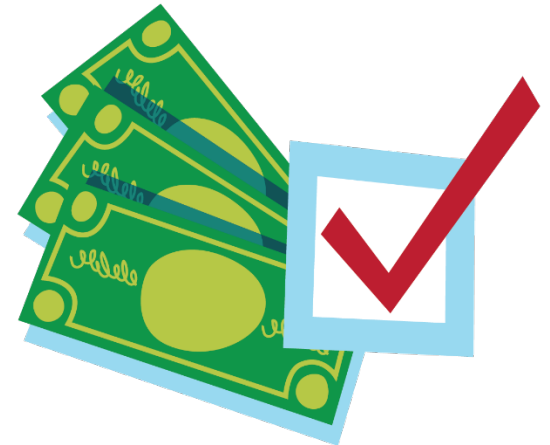


Planning Consistency

All projects included in the TIP have been drawn from MetroPlan Orlando's adopted 2045 MTP, as stated above. The TIP projects must be consistent with the Florida Department of Transportation's (FDOT) Adopted Work Program and other statewide plans (i.e. FDOT's Strategic Intermodal System plans). The TIP must also be consistent with the transit authority's transit development plan, the airport authorities' master plans, the expressway authority's master plan, and the approved comprehensive plans of local governments partners.

How are projects funded?

- Funding for priority projects primarily comes from either federal or state sources. Local funding is often required for implementation to cover ineligible costs and matching expenses.
- For each priority, MetroPlan Orlando identifies a funding source that best matches the goals of the project, jurisdiction, and facility type, consistent with the MetroPlan Orlando Board policy on federal funding allocation. With few exceptions, FDOT ultimately decides which projects it funds in its Work Program, and from what state funding source.
- Transportation investment by local governments is critical in accomplishing our regional transportation vision. Section 10 of the TIP includes a list of transportation improvement projects scheduled for implementation by local government agencies using local sources of funding.



Financial Plan

The projects within the TIP are financially feasible and the TIP is financially constrained for each fiscal year. MetroPlan Orlando developed cost and revenue estimates in cooperation with the FDOT and the local public transportation service providers (LYNX) considering only revenues that are reasonably expected to be available (reflected in FDOT’s Work Program or locally dedicated transportation revenues).

The TIP is developed with coordination and review of representatives from other relevant agencies including aviation and expressway authorities and local governments, to ensure consistency with masterplans and comprehensive plans. The federal and state funded projects included in the TIP are reviewed against the FDOT’s Five Year Work Program which is financially constrained. Project costs reported in the TIP are in Year of Expenditure (YOE) dollars, which considers the expected inflation over the five years covered by the TIP. These cost estimates from each project are therefore inflated to the year that the funds are expended based on reasonable inflation factors developed by the state and its partners. **Figure 2** shows a summary of total federal and state funding programmed.

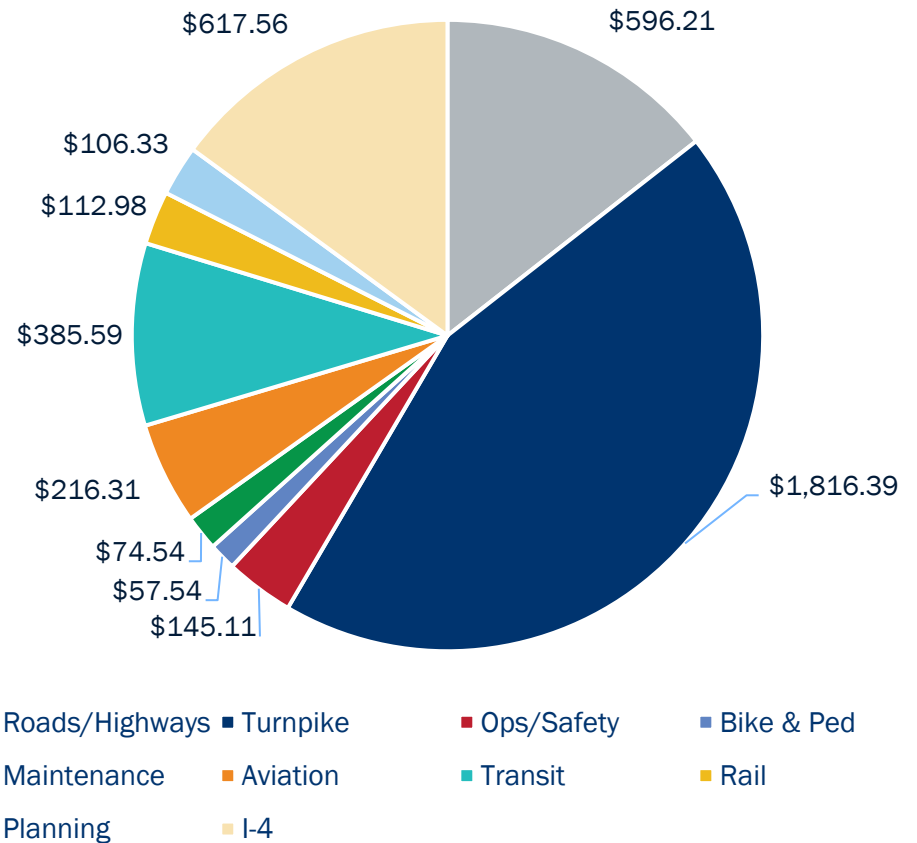
TMA Funding Allocation

Consistent with the adopted 2045 MTP, MetroPlan Orlando’s policy is to divide the TMA (Transportation Management Area) funding allocation for the TIP based on a percentage split of:

- 32% for Complete Streets projects,
- 30% for Transit projects,
- 21% for TSM&O projects, and
- 17% for Bicycle and Pedestrian projects.

The projects included in the TIP are consistent with FDOT’s Five-Year Work Program and are financially feasible based on the availability of the funds in each funding category.

Figure 2 | Federal/ State/ Turnpike Funding Programmed in FY 23/24 – FY 27/28



Source: FDOT 5 Year Work Plan; CFCR 5 Year Work Plan

Note: Federal & State funding shown in millions of dollars

How are projects prioritized?

Consistent with FHWA’s Transportation Performance Management guidance, MetroPlan Orlando uses a data-driven and context-sensitive approach to identify and assess candidate transportation projects. The intent of this process is to select and fund projects which best address regional transportation goals, objectives, and targets. The criteria considered for prioritization are shown in **Figure 3**.

The process of compiling each TIP begins with the development of the Prioritized Project List (PPL) the previous year. This document, which is updated annually, contains a list of unfunded projects that have been prioritized as candidates for funding using the specific performance criteria described at right. The FY 2027/28 – FY 2035/36 PPL (included in Appendix A) was adopted by MetroPlan Orlando in July 2022 and was used by FDOT in developing the FY 2023/24 – FY 2027/28 Tentative Five-Year Work Program. That Five-Year Work Program was then used to develop this TIP. With the adoption of the 2045 Metropolitan Transportation Plan in December 2020, MetroPlan Orlando follows a performance-based project selection process that accounts for multi-modal tradeoffs in project evaluation and selection. The project categories and methodology used in developing the PPL reflect the 2045 Metropolitan Transportation Plan and its goals and objectives.

While project priorities were unchanged from the previous year, it should be noted, while priority programming determines the order in which projects are pursued, several factors such as available funding and the need for additional analysis or design can influence the order in which projects are implemented.

For information about MetroPlan Orlando’s project evaluation and prioritization process, visit: <https://metroplanorlando.org/plans/prioritized-project-list/>.

Figure 3 | Project Evaluation Criteria

Goal Area	Criteria
Safety & Security	Crash Rate
	Fatal & Serious Injury Crash Rates
	Number of Pedestrian & Bicycle Crashes
	Evacuation Route Designation
Reliability & Performance	Travel Time Reliability (Auto)
	Unreliability on Constrained Corridor
	Fiber Optic Presence
	Segment Actively Monitored/Managed
	Relative Change: Future Congested Speeds
Access & Connectivity	Transit System Headways
	Population: ½ Mile of Non-Transit Corridor
	Jobs: ½ Mile of Non-Transit Corridor
	Food & Healthcare Locations: ½ Mile of Corridor
	Cultural & Recreational Locations: ½ Mile of Corridor
	MTP Centrality Analysis Score (Critical Sidewalk Need)
Health & Environment	Bicycle Level of Traffic Stress
	Residential Density: ¼ Mile of Multimodal Facility
	Non-Residential Density: ¼ Mile of Multimodal Facility
	Public Health Indicator Rates
	Intensity & Proximity: Environmental Justice Populations
	Relative Change: Vehicle Miles Traveled (2020 vs. 2045)
Investment & Economy	Percentage of Commercial Vehicle Traffic
	Statewide Truck Bottlenecks
	Intensity & Proximity: Freight Intensive Land Uses
	Relative Change: Vehicle Hours Traveled
	Cost Burdened Households: ¼ Mile of Corridor
	Percentage of Visitor Traffic
	Cost of Congestion

Source: MetroPlan Orlando Prioritized Project List, Appendix A

Congestion Management Process

MetroPlan Orlando has a Congestion Management Process (CMP) element in the 2045 MTP, which was adopted in December 2020. CMP projects are designed to get the greatest efficiency out of the existing transportation network. CMP strategies include such techniques as freeway ramp metering, frontage roads, parking management, freeway lane restrictions, and lane pricing. Other strategies include Intelligent Transportation System (ITS) techniques such as computerized traffic signals and advanced traveler information systems, as well as intersection improvements. CMP strategies are directly incorporated into the TIP once funded for implementation. These projects are shown in Section 7: Traffic Operation and Safety projects. The CMP also includes monitoring of transportation system performance. MetroPlan Orlando reports this information regularly as part of the *Tracking the Trends* program. Consistent with FHWA and FDOT guidelines, **Appendix C** includes a *Systems Performance Report* summarizing federal performance management requirements, regional conditions and adopted targets.

Previous Conforming Projects

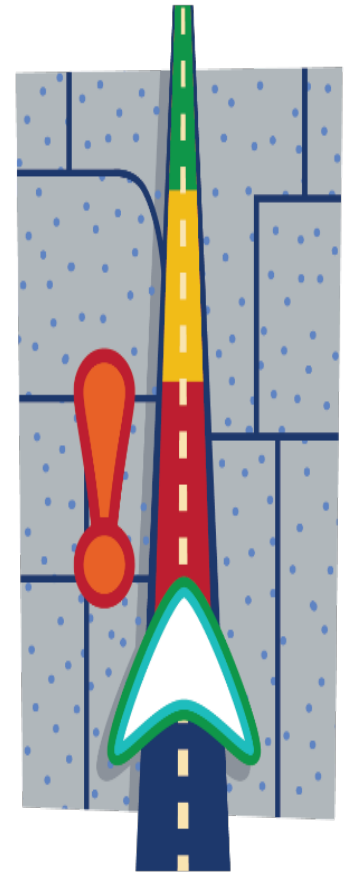
This does not apply, as the MetroPlan Orlando urban area is currently in attainment for all air pollutants and has been since before the 1990 Clean Air Act Amendments were enacted.

Regionally Significant Projects

The list of federal and state-funded highway projects considered by MetroPlan Orlando to be of regionally significant size and scope, along with their implementation status, are shown in Section 2 of the TIP. In addition, the implementation of the projects contained in the TIP is monitored in reports published by FDOT on a quarterly basis.

Strategic Intermodal System Projects

MetroPlan Orlando's TIP also includes projects on Florida's Strategic Intermodal System (SIS). The SIS is a network of high priority transportation facilities which include interstate highways, major toll roads and other designated highways, as well as Florida's largest and most significant commercial service airports, deep-water seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and the spaceport.



Transportation Disadvantaged Services

Each county in the state has a Transportation Disadvantaged program to provide transportation to those who, because of physical or mental disability, income status, or age, are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk.

In Orange, Osceola, and Seminole Counties, LYNX serves as the Community Transportation Coordinator and is responsible for coordinating the trips in the Transportation Disadvantaged program. While MetroPlan Orlando, as required under Chapter 427.015 of the Florida Statutes, serves as the designated official planning agency in coordinating transportation services for the transportation disadvantaged in Orange, Osceola, and Seminole Counties.



MetroPlan Orlando has a Transportation Disadvantaged Local Coordinating Board (TDLCB) to oversee the transit agency providing the services to the transportation disadvantaged population. This board is comprised of a cross-sector of users or user representatives including, but not limited to, state social service agencies, local agencies, users of the system, elderly citizens, and school board representatives.

Every year the TDLCB approves the Transportation Disadvantaged Service Plan (TDSP) which consists of a minor update annually and a major update every five years. For information about the TDSP, visit https://metroplanorlando.org/wp-content/uploads/2022-LYNX-TDSP-Minor-Update_FINAL.pdf.

Figure 4 | FY 2022/23 Transportation Disadvantaged Program Funding

Trip & Equipment (T&E) Grant	Orange County	Osceola County	Seminole County	3-County Total
Allocation	\$2,342,193	\$799,777	\$770,326	\$3,912,296
Local Match (10%)	\$260,243	\$88,863	\$85,591	\$434,697
T&E Total Funding	\$2,602,436	\$888,640	\$855,917	\$4,346,993
TD Planning Grant	Orange County	Osceola County	Seminole County	3-County Total
TD Planning Total Funding	\$2,342,193	\$799,777	\$770,326	\$3,912,296

Source: LYNX Transportation Disadvantage Service Plan, May 2022

Public Participation

MetroPlan Orlando has a Community Advisory Committee (CAC) that meets on a regular basis. Members of the CAC are private citizens with an interest and passion in transportation issues affecting the area. These individuals receive information on transportation topics from the MetroPlan Orlando staff and other agencies and provide input regarding these issues. The CAC provides regular public feedback to the MetroPlan Orlando Board. The meetings of the MetroPlan Orlando Board and its advisory committees are all open to the public and include opportunities for public comments. In addition, public meetings are held during the development of the Metropolitan Transportation Plan to give the community an opportunity to provide input on the Plan before it is approved by the MetroPlan Orlando Board. For more information on MetroPlan Orlando's public involvement process, please view the organization's *Public Participation Plan* on MetroPlanOrlando.org.



Your participation is critical to creating the TIP

Input from the public can and does lead to important changes. The draft TIP will be available for a public review and comment period prior to board action. Messages encouraging participation will be posted on our website and social media platforms. Comments or suggestions can be emailed directly to: comment@metroplanorlando.org.

Copies of the draft TIP are available for review at the MetroPlan Orlando office and are accessible on the MetroPlan Orlando website, visit: <https://metroplanorlando.org/plans/transportation-improvement-program>.

For project-specific questions about the TIP, please contact MetroPlan Orlando's TIP program manager Jason Sartorio at: Jsartorio@metroplanorlando.org.

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Amending the TIP

This TIP can be amended at any time during the year in which it is adopted. MetroPlan Orlando uses the criteria for amending the TIP included in the FDOT Metropolitan Planning Organization (MPO) Program Management Handbook. Under these criteria, the TIP must be amended if:

- The change adds new individual projects to the current TIP.
- The changes affect air quality conformity.
- The change adversely impacts financial constraints.
- The change results in major project scope changes.
- The change removes or deletes individually-listed projects from the TIP.

All amendments to the TIP are presented to the MetroPlan Orlando's advisory committees for their recommendations and to the Board for final approval. Once TIP amendments are approved by the MetroPlan Orlando Board, the amendments are incorporated into the adopted TIP shown on MetroPlan Orlando's website, and the Board resolution documenting the approval of the amendments are submitted to FDOT.

In the case where a TIP amendment must be approved prior to the next MetroPlan Orlando Board meeting for the amended project to receive funding, MetroPlan Orlando's Internal Operating Procedures authorize the Board Chairperson to approve the amendment and sign the corresponding resolution on behalf of the Board without having to call an emergency meeting of the MPO Board. The Chairperson's approval of the amendment will then be ratified at the next regularly scheduled MPO Board meeting.

During the TIP amendment process, members of the public are provided opportunities to address their concerns about the requested amendments. At each advisory committee meeting or Board meeting where a TIP amendment is being requested, the meeting agenda includes a time for comments from the public on any action item on the agenda. Concerns about TIP amendments may be addressed at that time. If an individual has a concern about a TIP amendment but is unable to attend MetroPlan Orlando's regularly scheduled committee or Board meeting where the amendment will be acted on, the individual may send his or her comments to MetroPlan Orlando prior to the meeting through email or by phone. These comments will be entered into the meeting record for consideration by the committee or Board at the time they take action on the amendment.



How to Read the TIP



The TIP format is illustrated in the example table shown in **Figure 4**. Each component of the table is also defined below.

- **FPN** is a seven (7) digit Work Program Financial Management number assigned by FDOT.
- **Project Name or Designation** is the name designated to the project by FDOT or Local Agency Partner.
- **From/To** describes the project roadway and the beginning and ending locations of the project.
- **Project Length** is the length of the work area in miles, not available for all projects.
- **Work Description** is a brief description of the project to be implemented.
- **MTP Reference** identifies the project's inclusion in the adopted 2045 MTP. The link to the 2045 MTP on MetroPlan Orlando's website is: <https://metroplanorlando.org/plans/metropolitan-transportation-plan/>.
- **Historic Cost** is the historical cost information for projects having expenditures paid by FDOT prior to FY 2023/2024.
- **Project Status and Cost** is the amount programmed in the FDOT Work Program by Fiscal Year in thousands of dollars inflated to the year that the funds are expended based on reasonable inflation factors. Costs shown in thousands of dollars (\$000's).
- **Funding Source** describes the funding source for Federal, State, or Local funds. See Section XV.
- **Project Phase** is the primary phase of the project, e.g. Project Development and Environment (PD&E), Design (PE), Right of Way (ROW), and a Construction Phase (CST).
- **Estimated Future Cost** consist of five years of programming in the FDOT Work Program for Non-SIS and ten years of programmed costs for Strategic Intermodal System (SIS) Projects.
- **Total Project Cost** represents ten years of programming in the FDOT Work Program for projects on the SIS, and five years of programming in the FDOT Work Program for Non-SIS projects, plus historical cost information for all projects having expenditures paid by FDOT prior to FY 2023/2024.
- **Responsible Agency** is the agency responsible for managing the project.
- **SIS Project** is a designation of projects in the TIP which are located on the FDOT Strategic Intermodal System (SIS). Each project on the SIS will have an identifier (SIS Project) in the far-right column on the TIP table on which the project is located.

Figure 5 | TIP Table Example

FPN: 12345-1		From: Example A Road		MTP Ref.: CFP Table 18					
Project Name: MetroPlan Example Project		To: Example B Road		Managed by: FDOT					
Description: Widen to 4 Lanes		Length: 1 Mile							
Historic Costs	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated	Total Cost
Prior to	DDR	PE	\$ 200	\$ -	\$ -	\$ -	\$ -	Future Costs	\$ 200
FY 2023/24	DIH	ROW	\$ -	\$ 100	\$ 100	\$ -	\$ -	After	\$ 200
	DS	CST	\$ -	\$ -	\$ 200	\$ 300	\$ -	FY 2027/28	\$ 500
\$ 100.00			\$ 200	\$ 100	\$ 300	\$ 300	\$ -	\$ 1,000	\$ 2,000

Note: Project example for illustrative purposes only.

Major projects fully funded for construction in the TIP not specifically identified in the MTP have an MTP reference shown as Technical Series 12, Page 12-6, E+C (Existing plus Committed). Non-capacity/system preservation projects such as resurfacing, lighting, drainage improvements, bridge repair, etc. have their MTP reference shown as Cost Feasible Plan, Page 17, since there is a section on that page describing this FDOT program/type of project.

Obligated Federal Funds

To meet federal requirements for MPOs, MetroPlan Orlando annually publishes a list of transportation projects for which federal funds were obligated during the preceding federal fiscal year (October 1st through September 30th). The information for the FY 2022/23 documents can be found at this link: <https://metroplanorlando.org/wp-content/uploads/Fed.-Funds-2022.pdf>



Certification

The annual FDOT certification review for MetroPlan Orlando was conducted in February 2023, no corrective actions were identified. The most recent federal certification review of MetroPlan Orlando's transportation planning process by USDOT (FHWA and FTA) was conducted in March 2023, their final report is anticipated to be received by August 2023.

TIP Review & Distribution

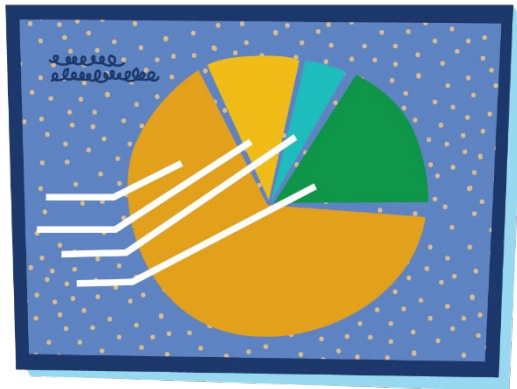
In addition to the review of the draft FY 2023/24 – FY 2027/28 TIP by the MetroPlan Orlando advisory committees and Board and by the public at the TIP public meeting, as described in the Public Involvement section, MetroPlan Orlando annually distributes its TIP for review and comment to the following federal state, and local agencies:

- Federal Highway Administration
- Federal Transit Administration
- Federal Aviation Administration
- Environmental Protection Agency
- Florida Department of Transportation
- Florida Department of Economic Opportunity
- East Central Florida Regional Planning Council
- Central Florida Expressway Authority
- LYNX
- Greater Orlando Aviation Authority
- Orlando Economic Partnership
- Kissimmee/Osceola County Chamber of Commerce
- Space Coast TPO; River-to Sea TPO; Lake Sumter MPO; Ocala/Marion TPO; Polk TPO
- Central Florida members of Florida Senate and Florida House of Representatives

Section 2: Regionally Significant Projects

This section provides a detailed list of federal and state-funded highway projects considered by MetroPlan Orlando to be of regionally significant size and scope, along with their implementation status. The implementation of these projects is monitored in reports published by FDOT on a quarterly basis.





Section 3: Financial Summary by Funding Categories (\$000's)

This section provides a five-year summary of federal, state, and local funding categories within the TIP. Funding categories are broken down into the three counties within the MetroPlan Orlando Region. All funds are displayed in thousands (\$000's).

Section 4: Interstate Highway Projects

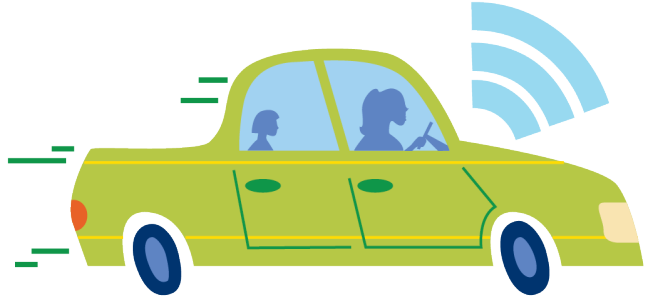
This section contains projects on the Interstate Highway System (IHS), Strategic Intermodal System (SIS), and National Highway Freight Network (NHFN). These improvements are programmed and are implemented directly by FDOT in coordination with local agencies and MetroPlan Orlando.





Section 5: State Highway / Roadway Improvement Projects

This section encompasses projects of all types on the State Highway System. This includes capacity improvements, Complete Streets, safety, operations, and ITS investments. These improvements are programmed and implemented by FDOT in coordination with local agencies and MetroPlan Orlando.

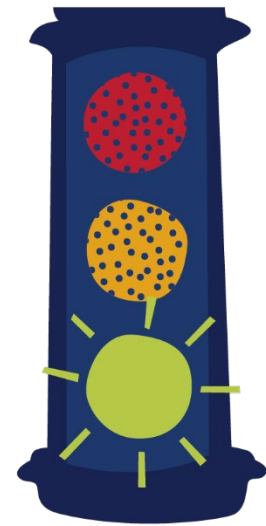


Section 6: Toll Road Projects

This section of the TIP includes projects funded and implemented by Florida's Turnpike Enterprise (FTE) and the Central Florida Expressway Authority (CFX). Projects included in this section are funded with toll revenues rather than federal and state funding sources and are therefore not subject to approval by the MetroPlan Orlando Board. Consistent with federal law and state statute, these projects are required to be shown in the TIP for informational purposes.

Section 7: Traffic Operations & Safety Projects

This section includes projects that use innovative strategies or leverage existing technology deployments to improve travel time reliability on existing roadways without adding capacity and use such methods as adding turn lanes at intersections, computerized traffic signal systems, integrated corridor management, traveler information, etc. The TSM&O category includes projects pertaining to incident management, Transportation Demand Management, and other related activities. Safety projects are also included in this section of the TIP. These projects are prioritized and programmed by MetroPlan Orlando and implemented by local agencies, in coordination with FDOT.





Section 8: Maintenance & Fixed Capital Outlay Projects

This section includes maintenance projects and fixed capital expenses designed to support, operate, and maintain the state highway system including safety, resurfacing, bridge, product support, operations and maintenance, and administration.



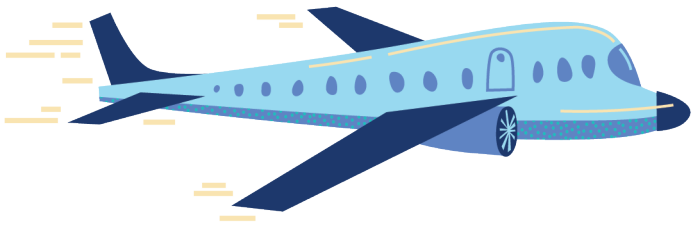
Section 9: Bicycle & Pedestrian Projects

The bicycle and pedestrian projects included in this section are funded with federal and/or state funds in FDOT's Five Year Work Program. This section includes standalone bicycle/pedestrian improvement projects, although it is important to note that sidewalk, bike lanes, and other bicycle and pedestrian improvements are also often included as elements of other projects included on the State Highway/Roadway list and Traffic Operation/Safety list, and also incorporated as part of FDOT's Roadway Resurfacing and Rehabilitation program.

Section 10: Locally Funded Projects

Transportation investment by local governments is critical in accomplishing our regional transportation vision. This section includes a list of transportation projects that are funded and implemented by local government agencies using local revenue sources. Consistent with federal law and state statute, these projects are required to be shown in the TIP for informational purposes.





Section 11: Aviation Projects

This section includes aviation projects located at the three commercial service airports within the MetroPlan Orlando Region. The aviation projects within this section are funded with federal and/or state funds in FDOT's Five Year Work Program.



Section 12: Transit & Transportation Disadvantaged Projects

The transit & transportation disadvantaged projects in this section are funded with federal and/or state funds in FDOT's Five Year Work Program. This section includes operations and capital projects for the regional transportation authority (LYNX).

Section 13: Commuter Rail Projects

This section includes commuter rail projects for the Central Florida Commuter Rail System (SunRail). The projects within this section are funded with federal and/or state funds in the Central Florida Commuter Rail System Five Year Work Program.





Section 14: Planning Projects

Consistent with federal requirements and state statute, this section includes a summary of federal and state transportation planning funds included in MetroPlan Orlando's adopted Unified Planning Work Program (UPWP).

Appendix A: Abbreviations & Acronyms

Federal Funding Codes

AC Advanced construction funds for federally funded projects; combined with federal funding codes (i.e. ACBR, ACFP, ACNH, ACNP, ACSA, ACSS, ACSU)

ARPA American Rescue Plan Act (federal stimulus funds)

CAR Carbon Reduction Program (i.e. CARB, CARL, CARM, CARN, CARU)

CM Congestion Mitigation funds

CD Congressional Discretionary Funds (i.e. CD22, S125, S129, TGR)

DFTA FHWA funds transferred to FTA

DU FTA pass-through funds

DUCA Federal CARES Act funding for COVID-19 issues

EB Equity Bonus funds

FAA Federal Aviation Administration funds

FCO Federal Fixed Capital Outlay funds

FEMA Federal Emergency Management Agency

FTA Federal Transit Administration funds

FTAT FHWA Transfer to FTA

GFEV General Funds National Electric Vehicle Program

GFNP General Surface NP Federal Relief funds

GFSA General Surface Transportation Planning funds for any area

GFSU General Surface Transportation Planning funds for urban areas >200,000 population

HSID Intersection Crashes funds

HSP Highway Safety Program funds

NH National Highway System funds for principal arterials (i.e. NH, NHEX, NHPP, NHRE, ACNR)

PL Federal planning funds

RED Federal redistribution of funds

RHH/RHP Federal Rail-Highway Crossing funds

SA Surface Transportation Program Block Grant funds with no population restrictions

SL Surface Transportation Program Block Grant funds for urban areas with a population under 200,000 which may be used for highway, transit, or bicycle/pedestrian projects at the discretion of the MPO

SR2S Federal Safe Routes to School – Infrastructure funds

SR2T Federal Safe Routes to School – Transfer funds

STIC FHWA State Transportation Innovation Council grant funds

SU Surface Transportation Program Block Grant funds for urban areas with a population over 200,000 which may be used for highway, transit, or bicycle/pedestrian projects at the discretion of the MPO

TALT Transportation Alternative funds – any area

TALU Transportation Alternative funds – population >200,000

TSM Transportation System Management funds

State Funding Codes

BN Intrastate ROW & Bridge bonds (i.e. BNBR, BNCA, BNDS, BNIR, BNPK)

BRP Bridge Replacement funds (i.e. BRP, BRRP, BRRR, RBRP)

BRRP Bridge Repair and Rehabilitation Program funds

CIGP County Incentive Grant Program funds

D Unrestricted State Primary funds

DDR State District Dedicated Revenue funds

DDRF State District Dedicated Revenue matching funds

DEM State Environmental Mitigation funds

DI State Inter/Intrastate Highway funds (i.e. DI, DRA)

DIH State Designated In-House funds

DIS State funds for projects on Strategic Intermodal System (SIS) facilities

DITS State Intelligent Transportation System funds

DPTO State Public Transportation Office funds

DS State Primary funds for highways and public transit (i.e. DS, DSBH, DSBW)

FCO Fixed Capital Outlay

FINC I-4 Beyond the Ultimate financing Corporation funds

GMR State General Revenue funds for projects on Strategic Intermodal System (SIS) facilities

LF Local funds used for federal/state funded projects (i.e. LF, LFB, LFD, LFF, LFI, LFP, LFR, LFRF)

NSTP New Starts Transit Program

PK Florida's Turnpike Enterprise funding (i.e. PKBD, PKBR, PKED, PKLF, PKM1, PKYI, PKYO, PKYR)

SIB1 State Infrastructure Bank funds

SIWR Senate Bill 2514A Strategic Intermodal System funds

SR0M SunRail Revenues for Operations and Maintenance

STED Strategic Economic Corridors funds

TLWR Senate Bill 2514A Trail Network funds

TM State maintenance funds for Central Florida Expressway Authority (i.e. TM05, TM11)

TO Toll Operations - Central Florida Expressway Authority system (i.e. TO11, TO05)

TOBH I-4 Managed Lanes Toll Operations

TOBW, TMBW Wekiva Pkwy. Toll Operations

TRIP/TRWR State Transportation Regional Incentive Program funds which require a 50% funding match from local agency/operator

WKOC 2012 SB1998-Repayment OOC Debt

Local Funding Codes

CIP Capitol Improvement Program (Orange Co.)

CRA Community Redevelop Agency fund (City of Maitland, Orange Co., City of Winter Park, City of Winter Springs)

Gas Tax Local Option Gas Tax funds (Orange Co.)

GF Grant funding (federal/state/interlocal agreement; Osceola Co., City of Belle Isle, City of Maitland, City of St. Cloud)

I-Drive CRA International Drive Community Redevelop Agency fund (Orange Co.)

IFT Transportation Impact Fees (City of Orlando)

Local/LFS Local funding sources (City of Kissimmee, City of Longwood, Osceola Co., City of St. Cloud)

PIF Park Impact Fees (Orange Co.)

RIF Road Impact Fees (City of Maitland, Seminole Co.)

Sales Tax One-cent Sales Tax (City of Longwood Seminole County, City of Sanford)

Stormwater Stormwater Impact Fees (City of Sanford)

TIF Transportation Impact Fees (Orange County); Tax Incremental Financing (City of Orlando, City of Casselberry)

Project Phase Abbreviations

ADM Administration

CST Construction -- highway project phase

DSB Design/build

ENV Environmental Mitigation - FDOT highway project phase pertaining to filing permits with the St. Johns Water Management District and the Florida Department of Environmental Protection regarding the acquisition of environmentally sensitive land for highway improvements.

INC Incentive funds paid to contractors by FDOT for early project completion

MNT Maintenance
OPS Operations
PD&E Project Development and Environment Study – the project phase scheduled prior to preliminary engineering for highway projects.
PE Preliminary Engineering (design)
PLN Planning
RCA Roadway Conceptual Analysis (Orange Co.)
ROW Right-of-Way Acquisition
RRU Relocation of Railroad Utilities

Agency Abbreviations

CFX Central Florida Expressway Authority
CFRTA Central Florida Regional Transportation Authority (operates under the name LYNX)
ECFRPC East Central Florida Regional Planning Council
FAA Federal Aviation Administration
FDOT Florida Department of Transportation
FHWA Federal Highway Administration
FTA Federal Transit Administration
FTE Florida's Turnpike Enterprise
GOAA Greater Orlando Aviation Authority
RCID Reedy Creek Improvement District

Miscellaneous Abbreviations

AA Alternatives Analysis

CMS Congestion Management System – projects that improve the traffic flow on existing roadways without adding lanes to the roadways. May include such projects as intersection improvements, adding turn lanes, computerized traffic signals, etc.

CR County Road

DEIS Draft Environmental Impact Statement

FEIS Final Environmental Impact Statement

ETDM Efficient Transportation Decision Making – a state program designed to initiate the social and environmental review of major highway and rail projects at an earlier stage that was done previously in order to alleviate potential conflicts before a project goes into production

HOV High-Occupancy Vehicle - special lanes on a limited access freeway set aside for vehicles with two or more occupants during morning and afternoon peak travel times

IIJA Infrastructure Investment & Job Act – Federal Infrastructure Bill of passed in 2021; also known as the Bipartisan Infrastructure Law (BIL)

ITS Intelligent Transportation System - - a system of safety and congestion management devices being utilized on I-4. Consists of surveillance cameras used by the Florida Highway Patrol to locate and clear accidents, etc., as well as electronic signs that notified drivers of traffic conditions

MTP Metropolitan Transportation Plan (also referred to as Long-Range Transportation Plan)

OUATS Orlando Urban Area Transportation Study model- - the formal transportation planning process/model for the Orlando Urban Area

PPL Prioritized Project List

SIS Strategic Intermodal System – Transportation facilities considered by FDOT to be essential to Florida's economy, such as limited access freeways, major commercial airports, rail lines, and stations, bus terminals, intermodal centers, waterways, seaports, and spaceports.

Appendix B: Prioritized Project List

Each year, MetroPlan Orlando updates the Prioritized Project List (PPL), a document that includes all the upcoming highway, bicycle, pedestrian, transit, aviation, and other transportation-related projects in our three-county region (Orange, Osceola, and Seminole Counties) that have been deemed cost feasible in the near term but may still have unfunded phases. The Prioritized Project List shows which projects are next in line for federal and state funding.

The process of developing the FY 2027/28 – FY 2035/36 Prioritized Project List (PPL), which was adopted by the MetroPlan Orlando Board on July 27, 2022, is discussed in the *How are projects prioritized?* section.

This list of projects was used by the Florida Department of Transportation in developing the FY 2023/24 – FY 2027/28 Five-Year Work Program based on the priority phases of each project. The Five-Year Work Program was then utilized by MetroPlan Orlando staff to develop this TIP.

The currently adopted PPL can be accessed at:

<https://metroplanorlando.org/plans/prioritized-project-list/>



Appendix C: System Performance Report

The document is consistent with the Transportation Performance Measures (TPM) 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 federal transportation performance management requirements.

This System Performance Report is organized as follows:

- Background
- Highway Safety Measures (PM1)
- Pavement and Bridge Condition Measures (PM2)
- System Performance, Freight, and Congestion Management and Air Quality Improvement Program Measures (PM3)
- Transit Asset Management Measures
- Transit Safety Performance



Background

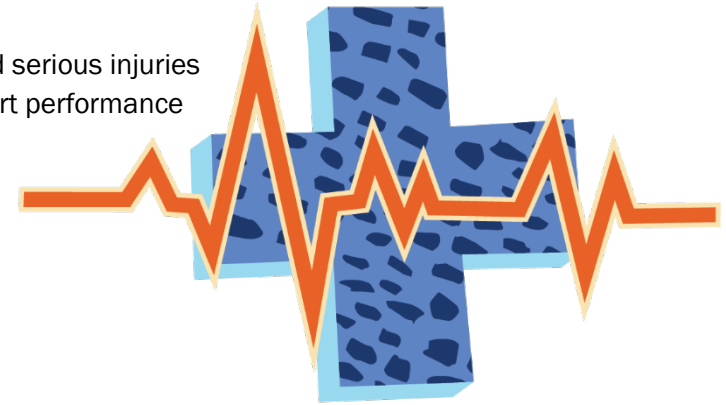
Transportation Performance Management (TPM) is a strategic approach to connect transportation investment and policy decisions to help achieve performance goals. Performance measures are quantitative expressions used to evaluate progress toward goals. Performance targets are quantifiable levels of performance to be achieved within a time period. Federal transportation law requires state departments of transportation (DOT), MPOs, and public transportation providers to conduct performance-based planning by tracking performance and establishing data-driven targets to assess progress toward achieving goals. Performance-based planning supports the efficient investment of transportation funds by increasing accountability, providing transparency, and linking investment decisions to key outcomes related to seven national goals established by Congress:

- Improving safety;
- Maintaining infrastructure condition;
- Reducing traffic congestion;
- Improving the efficiency of the system and freight movement;
- Protecting the environment; and
- Reducing delays in project delivery.

Federal law requires FDOT, the MPOs, and public transportation providers to coordinate when selecting performance targets. FDOT and the MPOAC developed the TPM Consensus Planning Document to describe the processes through which these agencies will cooperatively develop, and share information related to transportation performance management and target setting.

Highway Safety Measures (PM1)

The first of FHWA’s performance management rules establishes measures to assess fatalities and serious injuries on all public roads. The rule requires state DOTs and MPOs to annually establish targets and report performance and progress toward targets to FHWA for the following safety-related performance measures:



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 Nonmotorized Fatalities and Serious Injuries.

Highway Safety Targets

FDOT publishes statewide safety performance targets in the Highway Safety Improvement Plan (HSIP) Annual Report that it transmits to FHWA each year. FDOT adopted a vision of zero traffic-related fatalities in 2012. This, in effect, became FDOT’s target for zero traffic fatalities and quantified the policy set by Florida’s Legislature more than 35 years ago (Section 334.046(2), Florida Statutes, emphasis added): “The mission of the Department of Transportation shall be to provide a safe statewide transportation system...”

MetroPlan Orlando agrees to plan and program projects so they contribute toward the accomplishment of the FDOT safety target of zero and has adopted the same vision-zero target for the MPO planning area.

Safety performance measure targets are required to be adopted on an annual basis. MPOs are required to establish safety targets annually within 180 days of when FDOT established targets. MPOs establish targets by either agreeing to program projects that will support the statewide targets or establish their own quantitative targets for the MPO planning area. In August of each calendar year (CY), FDOT reports targets to FHWA for the following calendar year. On August 31, 2022, FDOT established statewide safety performance targets for calendar year 2023. **Table C.1** presents FDOT’s statewide targets.

Table C.1 | Statewide and MetroPlan Orlando Highway Safety Performance Targets

Performance Measure	CY 2023 Statewide Target	CY 2023 MPO Target
Number of fatalities	0	0
Rate of fatalities per 100 million vehicle miles traveled (VMT)	0	0
Number of serious injuries	0	0
Rate of serious injures per 100 million vehicle miles traveled (VMT)	0	0
Number of non-motorized fatalities and serious injuries	0	0

Source: FDOT and MetroPlan Orlando

FDOT and Florida’s traffic safety partners are committed to eliminating fatalities and serious injuries. As stated in the Safe System approach promoted by the FHWA, the death or serious injury of any person is unacceptable. The Florida Transportation Plan (FTP), the state’s long-range transportation plan, identifies eliminating transportation-related fatalities and serious injuries as the state’s highest transportation priority. Therefore, FDOT established zero (0) as the only acceptable target for all five federal safety performance measures.

MetroPlan Orlando, along with FDOT and other traffic safety partners, shares a high concern about the unacceptable number of traffic fatalities, both statewide and nationally. As such, on February 8, 2023, MetroPlan Orlando agreed to support FDOT’s statewide safety performance targets for calendar year 2023, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets (Board Resolution #23-02). The safety initiatives within this TIP are intended to contribute toward achieving these targets.

Safety Trends in the MPO Area

After FDOT set its Safety Performance Measures targets in 2018, both FDOT and MetroPlan Orlando established Baseline Safety Performance Measures using the most recently published data at the time (2017). To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2015-2019) of crash data and VMT were utilized. **Table C.2** presents the Baseline Safety Performance Measures for Florida and the MetroPlan Orlando study area.

Table C.2 | Baseline Safety Performance Measures (2017)

Performance Measure	State of Florida	MetroPlan Orlando
Number of fatalities	2,685.6	300
Rate of fatalities per 100 million vehicle miles traveled (VMT)	1.3	1.28
Number of serious injuries	20,830	2,329
Rate of serious injures per 100 million vehicle miles traveled (VMT)	10.2	9.95
Number of non-motorized fatalities and serious injuries	3,253	348

Source: FDOT 2017 FHWA Performance Measures per MPO

Note: MetroPlan Orlando study area includes Orange, Osceola, and Seminole Counties

The MPO uses crash data tracking fatalities and serious injuries to analyze past trends and identify regional safety issues. Monitoring these measures helps estimate the effectiveness of future transportation investment, as reflected in the TIP. **Table C.3** shows the changes in Safety Performance Measures for the MetroPlan Orlando region from 2016 through 2020. The measures shown were calculated by following the same methodology as that used to calculate the baseline conditions.

Table C.3 | Trends in MetroPlan Orlando Safety Performance Measures

Performance Measure	2016	2017	2018	2019	2020	2021
Number of Fatalities	268	300	284	292	250	281
Rate of Fatalities per 100 Million Vehicle Miles Traveled	1.19	1.28	1.19	1.19	1.21	1.366
Number of Serious Injuries	2,931	2,329	2,040	1,855	1,400	1,656
Rate of Serious Injuries per 100 Million Vehicle Miles Traveled	13.05	9.95	8.55	7.59	7.85	9.39
Number of Non-motorized Fatalities and Serious Injuries	419	348	348	344	305	362
Vehicle Miles Traveled	22,461,314,520	23,395,625,825	23,857,174,165	24,445,180,770	22,544,180,835	22,544,308,220

Source: Signal Four Analytics, FDOT Mileage Reports

Note: MetroPlan Orlando study area includes Orange, Osceola, and Seminole Counties

FDOT Safety Planning and Programming

Florida’s Strategic Highway Safety Plan (SHSP), published in March 2021, identifies strategies to achieve zero traffic deaths and serious injuries. The SHSP was updated in coordination with Florida’s 27 MPOs and the MPOAC, as well as other statewide traffic safety partners. 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 are referred to as the 4Is: information intelligence, innovation, insight into communities, and investments and policies. The SHSP also embraces an integrated “Safe System” approach that involves designing and managing road infrastructure to keep the risk of a mistake low and to ensure that when a mistake leads to a crash, the impact on the human body does not result in a fatality or serious injury. The five Safe System elements together create a holistic approach with layers of protection: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care.

The SHSP also expands the list of emphasis areas for Florida’s safety programs to include six evolving emphasis areas, which are high-risk or high-impact crashes that are a subset of an existing emphasis area or emerging risks and new innovations, where safety implications are unknown. These evolving emphasis areas include work zones, drowsy and ill driving, rail grade crossings, roadway transit, micro mobility, and connected and automated vehicles.

Florida's Highways Safety Improvement Program

While the FTP and the SHSP both highlight the statewide commitment to a vision of zero deaths, the Florida Highway Safety Improvement Program (HSIP) Annual Report documents statewide performance and progress toward that vision. It also lists all HSIP projects that were obligated during the reporting year and the relationship of each project to the SHSP.

As discussed above, in the 2022 HSIP Annual Report, FDOT reported 2023 statewide safety performance targets at zero (0) for each safety performance measure to reflect the vision of zero deaths. Annually, FHWA determines whether Florida has met the targets or performed better than baseline for at least four of the five measures. If this does not occur FDOT must submit an annual implementation plan with actions it will take to meet targets in the future.

On April 21, 2022, FHWA reported the results of its 2020 safety target assessment. FHWA concluded that Florida had not met or made significant progress toward its 2020 safety targets, noting that zero had not been achieved for any measure and that only three out of five measures (number of serious injuries, serious injury rate, and number of non-motorized fatalities and serious injuries) were better than baseline. Subsequently, FDOT developed an HSIP Implementation Plan to highlight additional strategies it will undertake in support of the safety targets. This plan was submitted with the HSIP Annual Report to FHWA on August 31, 2022 and is available at: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/safety/11a-safetyengineering/fhwa-reports-plans/2022-hsip-implementation-plan_august-2022_final.pdf?sfvrsn=4bf94921_2.

Consistent with FHWA requirements, the HSIP Implementation Plan focuses specifically on implementation of the HSIP as a core federal-aid highway program and documents the continued enhancements planned for Florida's HSIP to better leverage the benefits of this program. However, recognizing that FDOT already allocates all HSIP funding to safety programs - and building on the integrated approach that underscores FDOT's safety programs - the HSIP Implementation Plan also documents how additional FDOT, and partner activities may contribute to progress toward zero. Building on the foundation of prior HSIP Implementation Plans, the 2022 HSIP Implementation Plan identifies the following key commitments:

- Improve partner coordination and align safety activities.
- Maximize HSIP infrastructure investments.
- Enhance safety data systems and analysis.
- Focus on safety marketing and education on target audiences.
- Capitalize on new and existing funding opportunities.



Florida conducts extensive safety data analysis to understand the state's traffic safety challenges and identify and implement successful safety solutions. Florida's transportation system is evaluated using location-specific analyses that evaluate locations where the number of crashes or crash rates are the highest and where fatalities and serious injuries are most prominent. These analyses are paired with additional systemic analyses to identify characteristics that contribute to certain crash types and prioritize countermeasures that can be deployed across the system as a whole. As countermeasures are implemented, Florida also employs predictive analyses to evaluate the performance of roadways (i.e., evaluating results of implemented crash modification factors against projected crash reduction factors).

FDOT's State Safety Office works closely with FDOT Districts and regional and local traffic safety partners to develop the annual HSIP updates. Historic, risk-based, and predictive safety analyses are conducted to identify appropriate proven countermeasures to reduce fatalities and serious injuries associated with Florida's SHSP emphasis areas, resulting in a list of projects that reflect the greatest needs and are anticipated to achieve the highest benefit. While these projects and the associated policies and standards may take years to be implemented, they are built on proven countermeasures for improving safety and addressing serious crash risks or safety problems identified through a data-driven process. Florida continues to allocate all available HSIP funding to safety projects. [FDOT's HSIP Guidelines](#) provide detailed information on this data-driven process and funding eligibility.

Florida received an allocation of approximately \$189 million in HSIP funds for use during the 2021 state fiscal year from July 1, 2021 through June 30, 2022, and fully allocated those funds to safety projects. FDOT used these HSIP funds to complete projects that address intersections, lane departure, pedestrian and bicyclist safety, and other programs representing the remaining SHSP emphasis areas. This year's HSIP allocated \$159.7 million in infrastructure investments on state-maintained roadways and \$22.1 million in infrastructure investments on local roadways. The remaining \$7.2 million included supporting activities such as transportation safety planning, preliminary engineering, traffic engineering studies, transportation statistics, and public information or education. A list of HSIP projects can be found in the [HSIP 2021 Annual Report](#).

Beginning in fiscal year 2024, HSIP funding will be distributed among FDOT Districts based on statutory formula to allow the Districts to have more clearly defined funding levels for which they can better plan to select and fund projects. MPOs and local agencies coordinate with FDOT Districts to identify and implement effective highway safety improvement projects on non-state roadways.

Additional FDOT Safety Planning Activities

In addition to HSIP, safety is considered as a factor in FDOT planning and priority setting for projects in preservation and capacity programs. Data is analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The [Florida PD&E Manual](#) requires the consideration of safety when preparing a proposed project's purpose and need as part of the analysis of alternatives. Florida design and construction standards include safety criteria and countermeasures, which are incorporated in every construction project. FDOT also recognizes the importance of the American Association of State Highway Transportation Official (AASHTO) Highway Safety Manual (HSM). Through dedicated and consistent training and messaging over the last several years, the HSM is now an integral part of project development and design.

FDOT holds Program Planning Workshops annually to determine the level of funding to be allocated over the next five (5) to ten (10) years to preserve and provide for a safe transportation system. Certain funding types are further analyzed and prioritized by FDOT Central Offices, after projects are prioritized collaboratively by the MPOs, local governments, and FDOT Districts; for example, the Safety Office is responsible for the HSIP and Highway Safety Program (HSP) and the Systems Implementation Office is responsible for the Strategic Intermodal System (SIS). Both the Safety and SIS programs consider the reduction of traffic fatalities and serious injuries in their criteria for ranking projects.

Safety Investments in the TIP

Improving bicycle and pedestrian safety is also a high priority in the MetroPlan Orlando region and includes adding infrastructure such as sidewalks and bicycle lanes as well as conducting education programs on bicycle and pedestrian safety. One example of this is the Best Foot Forward program which is a safety initiative designed to improve pedestrian safety through evaluation, education, engineering, and enforcement. The list of bicycle and pedestrian projects is shown in Section 9 in the TIP.

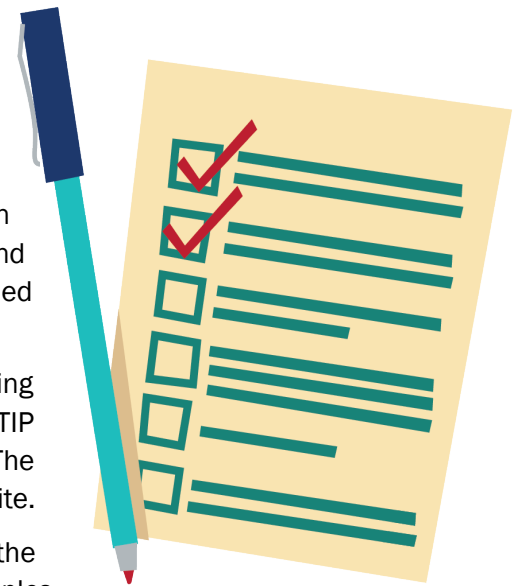
In recent years, MetroPlan Orlando and its partner jurisdictions and agencies have emphasized the implementation of Complete Streets projects in the region. These projects can include a combination of adding bicycle and pedestrian facilities, transit improvements such as bus pull-outs, and intersection improvements that are designed to improve traffic flow and safety along existing roadways without adding capacity.

The TIP includes specific investment priorities that support all of MetroPlan Orlando's goals, including safety, using a prioritization and project selection process established in the 2045 MTP. MetroPlan Orlando has developed a TIP project evaluation process that identifies and prioritizes projects aimed at improving transportation safety. The ranking criteria are reviewed and updated annually and are described in the PPL on the MetroPlan Orlando website.

The program of projects identified through this process are anticipated to contribute toward achievement of the safety targets. The safety infrastructure investments are targeted at specific opportunities to improve safety. Examples of such projects in MetroPlan Orlando's TIP include:

- Adding turn lanes at intersections.
- Signing and pavement markings.
- Traffic signal and pedestrian crossing time improvements.
- Additional roadway lighting along roadways and at intersections throughout the three counties.
- Filling gaps in sidewalks, especially in the vicinity of schools and transit facilities.

These projects, as well as other safety-related projects are included in Section 7 (Traffic Operations and Safety). In addition to the specific safety programs included in the TIP, other programs also consider safety as a key factor. Safety impacts are considered in the evaluation of proposed preservation, capacity, and operations projects, including projects on Florida's Strategic Intermodal System as well as regionally significant facilities identified in the MTP. All projects in this TIP inherently support progress toward achieving the safety performance targets, through their adherence to the MPOs policies, programs, and standards related to safety.



Bridge and Pavement Condition Measures (PM2)

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 NHS bridges (by deck area) classified as in good condition;
2. Percent of NHS bridges (by deck area) classified as in poor condition;
3. Percent of Interstate pavements in good condition;
4. Percent of Interstate pavements in poor condition;
5. Percent of non-Interstate National Highway System (NHS) pavements in good condition; and
6. Percent of non-Interstate NHS pavements in poor condition.

For the pavement measures, five pavement metrics are used to assess condition:

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

Bridge and Pavement Condition Targets

Federal rules require state DOTs to establish two-year and four-year targets for the bridge and pavement condition measures. On December 16, 2022, FDOT established statewide bridge and pavement targets for the second performance period ending in 2025. These targets are identical to those set for 2019 and 2021, respectively. Florida's performance through 2021 exceeds the targets. The two-year targets represent bridge and pavement condition at the end of calendar year 2023, while the four-year targets represent condition at the end of 2025.

MPOs must set four-year targets for the six bridge and pavement condition measures within 180 days of when FDOT established targets. 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 for one or more measures. *On February 8, 2023, MetroPlan Orlando agreed to support FDOT's statewide bridge and pavement performance targets*, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets (Board Resolution #23-02). **Table C.4** presents the statewide and MetroPlan Orlando targets.

Table C.4 | Statewide and MetroPlan Orlando Pavement and Bridge Condition Performance Targets

Performance Measure	2023 Statewide Target	2025 Statewide Target	MetroPlan Orlando 2025 Target
Percent of NHS bridges (by deck area) in good condition	50.0%	50.0%	50.0%
Percent of NHS bridges (by deck area) in poor condition	10.0%	10.0%	10.0%
Percent of Interstate pavements in good condition	60.0%	60.0%	60.0%
Percent of Interstate pavements in poor condition	5.0%	5.0%	5.0%
Percent of non-Interstate pavements in good condition	40.0%	40.0%	40.0%
Percent of non-Interstate pavements in poor condition	5.0%	5.0%	5.0%

Source: FDOT, February 2023

For comparative purposes, the statewide baseline (2021) conditions are as follows:

- 61.3 percent of NHS bridges (by deck area) is in good condition and 0.5 percent is in poor condition;
- 70.5 percent of the Interstate pavement is in good condition and 0.7 percent is in poor condition; and
- 47.5 percent of the non-Interstate NHS pavement is in good condition and 1.1 percent is in poor condition.

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

In addition, FDOT develops 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’s targets for asset condition and performance of the NHS. FDOT’s first TAMP was approved on June 28, 2019. The TAMP has since been updated in 2022 and is waiting final approval from FHWA.

Further, the federal pavement condition measures require a methodology that is different from the methods historically used by FDOT. For bridge condition, the performance is measured in deck area under the federal measure, while 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. For pavement condition, the methodology uses different ratings and pavement segment lengths, and FDOT only has one year of data available for non-Interstate NHS pavement using the federal methodology.

FDOT collects and reports bridge and pavement data to FHWA each year to track performance and progress toward the targets. The percentage of Florida’s bridges in good condition is slowly decreasing, which is to be expected as the bridge inventory grows older. Reported bridge and pavement data through 2021 exceeded the established targets. Based on anticipated funding levels, FDOT believes the previous targets are still appropriate for 2023 and 2025.

In early 2021, FHWA determined that FDOT made significant progress toward the 2019 targets; FHWA's assessment of progress toward the 2021 targets is anticipated to be released in March 2023.

Bridge and Pavement Investments in the TIP

MetroPlan Orlando's TIP reflects investment priorities established in the 2045 MTP. The focus of MetroPlan Orlando's investments in bridge and pavement condition includes improvements to the NHS system within the MetroPlan Orlando region such as the I-4 Ultimate and Beyond the Ultimate projects. These projects involve adding two managed toll lanes and three travel lanes in each direction throughout the three-county area, as well as interchange and bridge improvements. Segments of I-4 are also being resurfaced. Detailed information on the I-4 projects is included in Section 4 of the TIP. Florida's Turnpike Enterprise (FTE) is funding several major capacity projects on Florida's Turnpike, SR 528, and SR 417 as well as major interchange projects on Florida's Turnpike and resurfacing and safety projects on FTE facilities. Detailed information on FTE projects is included in Section 6 of the TIP.

By advancing these projects, and other system preservation projects included in the MetroPlan Orlando TIP, it is expected that progress will be made towards achieving the targets set in this section. The TIP devotes a significant amount of resources to projects that will maintain pavement and bridge condition performance. Investments in pavement and bridge condition include pavement replacement and reconstruction, bridge replacement and reconstruction, and new bridge and pavement capacity.

The TIP will fund an estimated \$41 million for bridges and \$399 million for resurfacing from FY 2023/24 through FY 2027/28.

The projects included in the TIP are consistent with FDOT's Five Year Work Program, and therefore to FDOT's approach to prioritize funding to ensure the transportation system is adequately preserved and maintained. Per federal planning requirements, the state selects projects on the NHS in cooperation with the MPO from the approved TIP. Given the significant resources devoted in the TIP to pavement and bridge projects, the MPO anticipates that once implemented, the TIP will contribute to progress towards achieving the statewide pavement and bridge condition performance targets.

System Performance, Freight, and Congestion Mitigation + Air Quality Improvement Program Measures (PM3)

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 traveled on the Interstate system that are reliable;
2. Percent of person-miles traveled 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 (NO_x, VOC, CO, PM₁₀, and PM_{2.5}) for CMAQ funded projects.

Because all areas in Florida meet current national air quality standards, the three CMAQ measures do not apply in Florida. A description of the first three measures is below.

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 over of all applicable roads, across four time periods between the hours of 6 a.m. and 8 p.m. each day.

The third performance measure assesses the reliability of truck travel on the Interstate system. The TTTR assesses how reliable the Interstate network is by comparing the worst travel times for trucks against the travel time they typically experience.

System Performance and Freight Targets

Federal rules require state DOTs to establish two-year and four-year targets for the system performance and freight targets. On December 16, 2022, FDOT established statewide performance targets for the second performance period ending in 2025. These targets are identical to those set for 2019 and 2021, respectively. Florida's performance through 2021 exceeds the targets. The two-year targets represent performance at the end of calendar year 2023, while the four-year targets represent performance at the end of 2025. MPOs must establish four-year targets for all three performance 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 for one or more measures. *On February 8, 2023, MetroPlan Orlando agreed to support FDOT’s statewide system performance and freight targets*, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets (Board Resolution #23-02). **Table C.5** presents the statewide and MetroPlan Orlando targets.

Table C.5 | Statewide and MetroPlan Orlando System Performance and Freight Targets

Performance Measure	2023 Statewide Target	2025 Statewide Target	MetroPlan Orlando 2025 Target
Percent of person-miles traveled on the Interstate system that are reliable	75.0%	70.0%	70.0%
Percent of person-miles traveled on the non-Interstate NHS that are reliable	50.0%	50.0%	50.0%
Truck travel time reliability (Interstate)	1.75	2.00	2.00

Source: FDOT

For comparative purposes, baseline (2021) statewide conditions are as follows:

- 87.5 percent of person-miles traveled on the Interstate are reliable;
- 92.9 percent of person-miles traveled on the non-Interstate are reliable; and
- 1.38 truck travel time reliability index.

In establishing these targets, FDOT reviewed external and internal factors that may affect reliability, analyzed travel time data from the National Performance Management Research Dataset (NPMRDS), and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable.

FDOT collects and reports reliability data to FHWA each year to track performance and progress toward the reliability targets. Performance for all three measures improved from 2017 to 2021, with some disruption in the trend during the global pandemic in 2020. Actual performance in 2019 was better than the 2019 targets, and in early 2021 FHWA determined that FDOT made significant progress toward the 2019 targets. FHWA’s assessment of progress toward the 2021 targets is anticipated to be released in March 2023.

The methodologies for the PM3 measures are still relatively new, and the travel time data source has changed since the measures were first introduced. As a result, FDOT only has three years (2017-2019) of pre-pandemic travel reliability trend data as a basis for future forecasts. Based on the current data, Florida’s performance continues to exceed the previous targets. Given the uncertainty in future travel behavior, FDOT believes the previous targets are still appropriate for 2023 and 2025.

System performance and freight are addressed through several statewide initiatives:

- 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 includes 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. The SIS Policy Plan 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, safety, preservation, and economic competitiveness as part of FDOT's Strategic Investment Tool (SIT).

- In addition, FDOT's Freight Mobility and Trade Plan (FMTP) defines policies and investments that will enhance Florida's economic development efforts into the future. The FMTP identifies truck bottlenecks and other freight investment needs and defines the process for setting priorities among these needs to receive funding from the National Highway Freight Program (NHFP). Project evaluation criteria tie back to the FMTP objectives to ensure high priority projects support the statewide freight vision. In May 2020, FHWA approved the FMTP as FDOT's State Freight Plan.
- 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.

System Performance and Freight Investments in the TIP

MetroPlan Orlando's TIP reflects investment priorities established in the 2045 MTP. MetroPlan Orlando includes reliability and system performance measures in its project selection and prioritization criteria. Criteria considered include changes in travel time reliability for car, trucks and commercial vehicles, solving existing freight/truck bottlenecks, cost of congestion, and relative change in future congested speeds. These criteria and others are detailed in MetroPlan Orlando's adopted Prioritized Project List.

The focus of MetroPlan Orlando's investments support goods movement and address system performance and reliability includes improvements to the NHS system within the MetroPlan Orlando region such as the I-4 Ultimate and Beyond the Ultimate projects. These projects involve adding two managed toll lanes and three travel lanes in each direction throughout the three-county area, as well as interchange and bridge improvements. Segments of I-4 are also being resurfaced. Detailed information on the I-4 projects is included in Section 4 of the TIP. Florida's Turnpike Enterprise (FTE) is funding several major capacity projects on Florida's Turnpike, SR 528, and SR 417 as well as major interchange projects on Florida's Turnpike and resurfacing and safety projects on FTE facilities. Detailed information on FTE projects is included in Section 6 of the TIP.

The TIP will fund an estimated \$2.6 billion in system performance, capacity and reliability improvement projects from FY 2023/24 through FY 2027/28.

By advancing these projects, and other system preservation projects included in the MetroPlan Orlando TIP, it is expected that progress will be made towards achieving the targets set in this section. The TIP devotes a significant amount of resources to projects that will maintain pavement and bridge condition performance. Investments in pavement and bridge condition include pavement replacement and reconstruction, bridge replacement and reconstruction, and new bridge and pavement capacity.

The projects included in the TIP are consistent with FDOT's Five Year Work Program, and therefore to FDOT's approach to prioritize funding to address performance goals and targets. Per federal planning requirements, the state selects projects on the NHS in cooperation with the MPO from the approved TIP. Given the significant resources devoted in the TIP to programs that address system performance and freight, the MPO anticipates that once implemented, the TIP will contribute to progress towards achieving the statewide reliability performance targets.

Transit Asset Management Measures

Transit Asset Performance Measures

FTA's Transit Asset Management (TAM) regulations apply to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The regulations define the term "state of good repair," require that public transportation providers develop and implement TAM plans, and established state of good repair standards and performance measures for four asset categories: equipment, rolling stock, transit infrastructure, and facilities.

Table C.6 identifies the TAM performance measures.

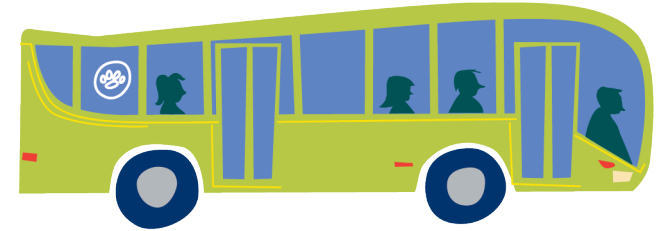


Table C.6 | FTA TAM Performance Measures

Asset Category	Performance Measure
Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their Useful Life Benchmark
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their Useful Life Benchmark
Infrastructure	Percentage of track segments with performance restrictions
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, service frequency, etc.

Public transportation providers are required to establish and report TAM targets annually for the following fiscal year. Each public transportation provider or its sponsors must share its targets with each MPO in which the public transportation provider's projects and services are programmed in the MPO's TIP. MPOs are not required to establish TAM targets annually each time the transit provider establishes targets. Instead, MPO targets must be established when the MPO updates the LRTP (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 agency targets, especially if there are multiple transit agencies in the MPO planning area. To the maximum extent practicable, public transit providers, states, and MPOs must coordinate with each other in the selection of performance targets.

LYNX and SunRail are considered Tier I providers as they 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 I providers must establish their own TAM targets, as well as report performance and other data to FTA.

Transit Asset Management Targets

The following providers operate in the MetroPlan Orlando planning area: LYNX (CFRTA) and SunRail (CFCRC); both considered Tier I providers. The following tables (Tables C.7 and C.8) represent the transit data reported by each transit agency for each of the applicable Asset Categories along with the established targets set by those agencies and supported by the MPO. *On February 8, 2023, MetroPlan Orlando support LYNX and SunRail TAM performance targets.* thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the providers' targets.

Table C.7 | LYNX and MetroPlan Orlando TAM Targets

Asset Category Performance Measure	Asset Class	FY 2022 Asset Condition	FY 2023 Target
Rolling Stock			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB	Articulated Bus	0%	0%
	Bus	35.29%	30.45%
	Cutaway	12.26%	58.71%
	Demand Response Van	0%	100%
	Vanpool Van	46.94%	81.63%
Equipment			
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Automobiles	62.50%	87.50%
	Trucks and other Rubber Tire Vehicles	75.96%	79.81%
	Other Systems	N/A	N/A
Infrastructure			
% of track segments with performance restrictions (applicable only for Tier I providers)	Bus Guideway	N/A	N/A
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration and Maintenance	0%	0%
	Passenger Facilities	0%	0%

Source: LYNX TAM Plan, 2023

Table C.8 | SunRail and MetroPlan Orlando TAM Targets

Asset Category Performance Measure	Asset Class	FY 2022 Asset Condition	FY 2023 Target
Rolling Stock			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB	Locomotives	0%	0%
	Coach Cars	0%	0%
	Cab Cars	0%	0%
Equipment ¹			
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Non-Revenue / Service Automobile	-	-
	Trucks and other Rubber Tire Vehicles	-	-
	Maintenance Equipment	-	-
	Etc.	-	-
Infrastructure			
% of track segments with performance restrictions (applicable only for Tier I providers)	Guideway Elements	1.5%-2%	3%
	Power & Signal Elements	1.5%-2%	3%
	Track elements	1.5%-2%	3%
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Maintenance Facility (VSMF) and OCC	0%	0%
	Parking Structures Maintenance Facility (VSLMF)	0%	0%
	Passenger Facilities Stations	0%	0%
	Shelter Park and Ride Lots	0%	0%

Source: SunRail TAM Plan, 2023

Transit Asset Management Investments in the TIP

MetroPlan Orlando’s TIP was developed and is managed in cooperation with LYNX and SunRail. It reflects the investment priorities established in the 2045 MTP and region’s Transit Development Plan. *The investments addressing transit state of good repair are included in Section 12 of the TIP (Transit & Transportation Disadvantaged Projects).* Projects in this section of the TIP include the funding of equipment, vehicles, infrastructure, maintenance and/or facilities in the MetroPlan Orlando planning area.

Transit asset condition and state of good repair is a consideration in the methodology used by the public transit providers and MetroPlan Orlando to select projects for inclusion in the TIP. As such, the TIP includes specific investment priorities that support all the MPO’s goals, including transit state of good repair, using priorities established in the MTP. This includes the allocation of up to 30% of the Transportation Management Area (TMA) funding available to MetroPlan Orlando to support the replacement of capital assets. MetroPlan Orlando works with LYNX to evaluate, prioritizes and funds transit projects that, once implemented, are anticipated to improve state of good repair in the MetroPlan Orlando’s planning area. MetroPlan Orlando’s goal of supporting local transit providers to achieve transit asset condition targets is linked to this investment plan, and the process used to prioritize the projects within the TIP is consistent with federal requirements.

Transit Safety Performance

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

The regulations apply 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.

The PTASP must include performance targets for the performance measures established by FTA in the National Public Transportation Safety Plan, which was published on January 28, 2017. 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.
- 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 new FTA PTASP requirements.

Each public transportation provider that is subject to the PTASP regulations must certify that its SSPP meets the requirements for a PTASP, including transit safety targets for the federally required measures. Providers were required to certify their initial PTASP and 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 LRTP (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 the MTP/LRTP and TIP updates.

Transit Safety Targets

The following public transportation provider(s) operate in the MetroPlan Orlando planning area: LYNX and SunRail. Of these, LYNX is responsible for developing a PTASP and establishing transit safety performance targets annually. LYNX established the transit safety targets identified in **Table C.9** on December 15, 2022.



Table C.9 | Transit Safety Performance Targets for LYNX

Performance Indicator	Definition	Target	Events Per 100K
Fatalities	Total number of reportable fatalities and rate per total vehicle revenue miles by mode (Fixed Route)	0	0
Injuries	Total number of reportable injuries and rate per total vehicle miles by mode	Fixed Route 0.59 LYMMO 1.1 Paratransit 0.9 NeighborLink 0.0 Vanpool 0.0	Fixed Route 0.69 LYMMO 0.73 Paratransit 0.07 NeighborLink 0 Vanpool 0
Preventable Accident per 100k miles	Total number of preventable accidents and rate per total vehicle miles by mode	Fixed Route 0.56 LYMMO 1.13 Paratransit 0.1 NeighborLink 0.0 Vanpool 0.0	Fixed Route 0.48 LYMMO 0.36 Paratransit 0.04 NeighborLink 0 Vanpool 0
System Reliability	Mean distance between major mechanical failures Bus-Road (fixed route service)	14,369	8,471

Source: LYNX, 2023

As previously discussed, MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, MPO’s must revisit targets each time the MPO updates the LRTP. MPOs can either agree to program projects that will support the transit provider targets or establish separate regional transit safety targets for the MPO planning area. MPO targets may differ from agency targets, especially if there are multiple transit agencies in the MPO planning area. *On February 8, 2023, MetroPlan Orlando 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 provider’s targets.

Transit Safety Investments in the TIP

The MetroPlan Orlando TIP was developed and is managed in cooperation with LYNX and SunRail. It reflects the investment priorities established in the 2045 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. The focus of MetroPlan Orlando’s investments that address transit safety include funding to maintain positive train control systems on the SunRail corridor, funding to maintain capital transit assets in a state of good repair, and projects that address the safety of transit riders including lighting, signal retiming, and bicycle and pedestrian improvements at or near stations and bus stops.

Transit safety is a consideration in the methodology MetroPlan Orlando uses to select projects for inclusion in the TIP. The TIP includes specific investment priorities that support all the MPO’s goals, including transit safety and accessibility. The TIP has been evaluated and the anticipated effect of the overall program is that, once implemented, progress will be made towards achieving the transit safety performance targets. MetroPlan Orlando will continue to coordinate with LYNX and SunRail to maintain and improve the safety of the region’s transit system and maintain transit assets in a state of good repair. For more information on these programs and projects, see Section 7 (Transportation Systems Management & Operations Projects), Section 9 (Bicycle & Pedestrian Projects), Section 12 (Transit & Transportation Disadvantaged Projects), and Section 13 (Commuter Rail Projects) of the TIP.

Looking Forward

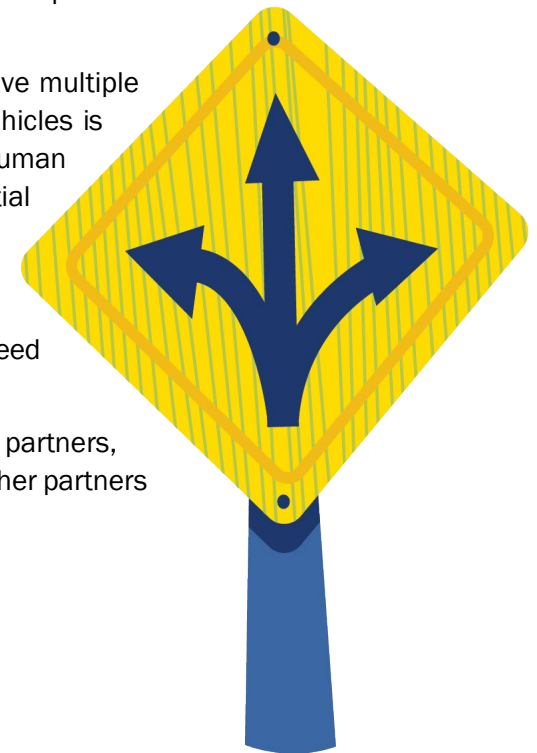
The region's ability to meet its federally required performance targets — all of which are established to address performance over periods between one to four years – will primarily reflect current trends, rather than the long-term changes and uncertainties explored in MetroPlan Orlando's long range planning process. In particular, the region's progress toward its annual safety and transit asset management targets, as well as the bridge/pavement and system reliability targets for the first federal performance period ending in 2021, is influenced by past and current investment strategies.

The disruptions experienced by the region's transportation system and economy due to the pandemic provides an opportunity for a deeper understanding of how significant external events could impact system performance in the region. MetroPlan Orlando will continue to collect and review available real-time data to help understand the transportation impacts of the pandemic and rebound, which will assist with preparedness for future disruptions.

From a long-term perspective, a key determinant of the region's progress toward its performance goals is growth in travel, including the distribution among travel modes for both people and freight. Growth in VMT for both cars and trucks are correlated with potential performance with regards to safety, pavement/bridge, and system reliability, and growth in transit ridership is a key factor in transit asset management and safety performance. It will be important to understand how travel choices will evolve after the global pandemic to help inform future performance and needs analyses.

Transportation system performance reflects many different factors, and in some cases a single trend may have multiple impacts, potentially in different directions. For example, an increase in use of automated and connected vehicles is anticipated to significantly improve safety (due to dramatic reduction in the number of crashes associated with human error) and system efficiency (due to the ability to accommodate more vehicles on a single roadway and the potential to reduce nonrecurring delay due to crashes). However, automated and connected vehicles could significantly increase VMT in parts of the region by providing mobility options for seniors, students, disabled persons, and others who have limited options today and enabling more extreme commutes for people who wish to live on the fringes of the urban area in surrounding areas and commute into Central Florida. In addition, the region may need to accommodate empty vehicles that are searching for parking or circulating after dropping off passengers.

Because transportation system performance reflects the cumulative impacts of decisions by multiple partners, MetroPlan Orlando must continue proactive coordination with FDOT, transit providers, local governments, and other partners to coordinate decisions and investments to accomplish regional goals and objectives.





250 South Orange Avenue • Suite 200 • Orlando, Florida 32801

www.MetroPlanOrlando.org

407-481-5672