



# Lake-Sumter MPO

## 2045 Long Range Transportation Plan Summary/Adoption Report

**DRAFT**

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prepared for:

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# Introduction

Transportation 2045 is the Long Range Transportation Plan (LRTP) prepared by the Lake~Sumter MPO and serves as the primary guidance for developing transportation system improvements and additions in the MPO's planning area over the next 25 years.

The LRTP is a federally-required short- and long-term plan addressing multimodal transportation needs within the MPO's planning area. The plan is required to be updated every five years and must cover a 20-year horizon. Transportation 2045 is a financially constrained plan that includes projects to best meet the identified needs of the transportation system within the limits of projected revenues. It is important that the LRTP accurately reflects transportation needs as it is utilized by local and state planning officials use select projects for inclusion in their capital improvement and work programs. Notably, the eligibility of these transportation projects to receive federal funding is dependent on their inclusion in the Cost Feasible Plan.

The intent and purpose of an LRTP is to encourage and promote the safe and efficient management, operation, and development of a cost-feasible intermodal transportation system that enhances mobility and freight movement. The LRTP considers how projects could affect the resiliency and reliability of the transportation system, as well as enhance travel and tourism in the area.

## Goals, Objectives, and Performance Measures

Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state departments of transportation (DOT) and metropolitan planning organizations (MPO) must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning Final Rule (The Planning Rule). This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the Lake~Sumter MPO must include a description of the performance targets that apply to the MPO planning area and a System Performance Report as an element of its LRTP. The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports. For MPOs that elect to develop multiple scenarios, the System Performance Report must also include an analysis of how the preferred scenario has improved the performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified targets.

## GOAL 1 – SUPPORT ECONOMIC SUCCESS AND COMMUNITY VALUES

- › **Objective 1.1** – Reduce congestion and improve travel reliability for the traveling public and freight users on highways and major arterials.
- › **Objective 1.2** – Enhance access to major employment centers.
- › **Objective 1.3** – Coordinate regional transportation planning efforts and local comprehensive planning efforts.
- › **Objective 1.4** – Minimize negative environmental impacts associated with transportation investments.
- › **Objective 1.5** – Address Environmental Justice in all appropriate aspects of MPO planning.

## GOAL 2 – PROMOTE SAFETY AND SECURITY

- › **Objective 2.1** – Prioritize investments to reduce crash related Fatalities for all modes of transportation.
- › **Objective 2.2** – Prioritize investments to reduce crash related Serious Injuries for all modes of transportation.
- › **Objective 2.3** – Prioritize investments to reduce Bicycle and Pedestrian crash related Fatalities and Serious Injuries.
- › **Objective 2.4** – Prioritize investment on evacuation routes.
- › **Objective 2.5** – Invest in Transit security.

## GOAL 3 – IMPROVE TRANSPORTATION OPERATIONS

- › **Objective 3.1** – Invest in Intelligent Transportation Systems (ITS).
- › **Objective 3.2** – Invest in Vehicle to Infrastructure Communication.
- › **Objective 3.3** – Invest in cost effective Congestion Management strategies.

## GOAL 4 – IMPROVE MOBILITY

- › **Objective 4.1** – Improve transportation options available.
- › **Objective 4.2** – Invest in Bicycle and Pedestrian infrastructure.
- › **Objective 4.3** – Maintain or enhance Transit service.
- › **Objective 4.4** – Balance regional capacity needs with human scale accessibility needs (Complete Streets).
- › **Objective 4.5** – Invest in Context Sensitive/Complete Street investments in multimodal corridors.

## GOAL 5 – SYSTEM PRESERVATION

- › **Objective 5.1** – Maintain Transportation infrastructure
- › **Objective 5.2** – Maintain Transit assets

## Development of the Goals, Objectives, and Performance Measures

The Transportation 2045 LRTP Goals, Objectives, and Performance Measures have been updated based on federal, state, and local guidance. This section highlights the requirements and guidance used to develop the Goals, Objectives, and Performance Measures for the plan.

### Fixing America's Surface Transportation (FAST) Act

Enacted in 2015, the Fixing America's Surface Transportation (FAST) Act (Public Law No. 114-94), provides support and enhancement to the Moving Ahead for Progress in the 21st Century Act (MAP-21). The FAST Act is the first federal law to provide long-term funding to infrastructure planning and investment for surface transportation since the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) became law in 2005.

The FAST Act supports MAP-21 by continuing to create a streamlined, performance-based surface transportation program that builds on many of the multimodal transportation policies first established under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Establishing a performance- and outcome-based program requires investment of financial resources in projects that will collectively make progress toward achieving national multimodal transportation goals. The 2045 LRTP has been developed to ensure compliance with the requirements of the FAST Act and includes a performance-based approach to the transportation decision-making process.

The FAST Act has established specific planning factors that call for the recognition and address the relationship between transportation, land use, and economic development. The federal planning factors form the cornerstone for the 2045 LRTP and include:

1. Supporting the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increasing the **safety** of the transportation system for motorized and non-motorized users.
3. Increasing the **security** of the transportation system for motorized and non-motorized users.
4. Increasing **accessibility and mobility** of people and freight.
5. Protecting and enhancing the **environment**, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local growth and economic development patterns.
6. Enhancing the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
7. Promoting **efficient system management** and operation.
8. Emphasizing the **preservation** of the existing transportation system.
9. Improving the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhancing **travel and tourism**.

A matrix showing consistency between the goals of Connect 2045 and the ten planning factors from the FAST Act is shown in **Table 1**.

**Table 1: Lake~Sumter MPO 2045 LRTP Goals and FAST Act Planning Factors Comparison**

2045 LRTP Goals	FAST Act Planning Factors									
	Economic Vitality	Safety	Security	Movement of People and Freight	Environment and Quality of Life	Integration/Connectivity	System Management and Operation	System Preservation	Resiliency	Tourism
<b>Economic Success and Community Values</b>	●		●	●	●	●	●		●	●
<b>Safety and Security</b>	●	●	●	●	●		●		●	●
<b>Transportation Options</b>	●	●	●	●	●	●	●	●	●	
<b>Mobility</b>	●	●	●	●	●	●	●	●	●	●
<b>System Preservation</b>	●	●	●	●	●	●	●	●	●	

## Florida Transportation Plan (FTP)

The Florida Transportation Plan (FTP) is the single overarching statewide plan guiding Florida’s transportation future. The plan was created by, and provides direction to, FDOT and all organizations that are involved in planning and managing Florida’s transportation system, including statewide, regional, and local partners.

This includes the Lake~Sumter MPO. The FTP Policy Element is Florida’s long-range transportation plan as required by both state and federal law and this element points toward a future transportation system that embraces all modes of travel, innovation, and change.

MPOs are required to address the goals included in the FTP. These goals include the following:

- › **Safety and security** for residents, visitors, and businesses
- › Agile, **resilient**, and quality infrastructure
- › **Efficient and reliable** mobility for people and freight
- › More **transportation choices** for people and freight
- › Transportation solutions that support Florida’s global **economic competitiveness**
- › Transportation solutions that support **quality places** to live, learn, work, and play
- › Transportation solutions that enhance Florida’s **environment and conserve energy**

MPOs must also incorporate any performance targets which may be included in the Statewide Freight Plan and Asset Management Plan. Current guidance from FDOT indicates that no additional performance targets will be included in these plans. A matrix showing consistency between the LRTP Goals and the planning factors from the (FTP) is shown in **Table 2**.

**Table 2: Lake~Sumter 2045 LRTP Goals and FTP Goals Comparison**

2045 LRTP Goals	Florida Transportation Plan Goals						
	Safety and Security	Infrastructure	Mobility	Transportation Choices	Economy	Communities	Environment
Economic Success and Community Values			●	●	●	●	
Safety and Security	●	●	●	●	●	●	
Transportation Options	●	●	●	●	●	●	●
Mobility	●		●	●	●	●	
System Preservation	●	●	●	●	●	●	●



# SYSTEM PERFORMANCE REPORT

Performance Management is a strategic approach to connect investment and policy decisions to help achieve performance goals. Performance measures are quantitative criteria used to evaluate progress against adopted performance targets.

MAP-21 requires State DOTs and MPOs to conduct performance-based planning by tracking performance measures and setting data-driven targets to improve those measures. Performance-based planning ensures the most efficient investment of federal transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to the national goals:

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

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

The 2045 LRTP System Performance Report providing more details related to Lake~Sumter MPO's performance measures can be found in **Appendix A**.

## Safety Performance Targets (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

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

The Lake~Sumter MPO supports the adoption of the FDOT statewide HSIP safety performance measures and FDOT's target of "0" for each safety performance measure to reflect the FDOT goal of zero deaths. The Lake~Sumter MPO and statewide safety performance measures and targets are listed in **Table 3**.

Table 3: Lake~Sumter MPO Safety Performance Measure and Targets (PM1)

Performance Measures	FDOT Statewide Targets	Lake~Sumter MPO Targets
Number of fatalities	0	0
Rate of fatalities per 100 million VMT	0	0
Number of serious injuries	0	0
Rate of serious injuries per 100 million VMT	0	0
Number of non-motorized fatalities and non-motorized serious injuries	0	0

### Bridge and Pavement Condition Performance Targets (PM2)

The second of the performance measures rules issued by Federal Highway Administration (FHWA) became effective on May 20, 2017, establishing measures to assess pavement and bridge condition on the National Highway System (NHS). Requirements involve measuring the condition of these facilities and reporting conditions that are considered “Good” and those considered “Poor.” Facilities rated as “Good” suggest that no major investments are needed. Facilities rated as Poor indicate major investments will be needed in the near term.

FDOT has the capability to collect and maintain data regarding bridge and pavement condition. On September 18, 2018, the MPO adopted pavement and bridge condition performance targets in support of the measures and targets set by FDOT. (see **Table 4**).

**Table 4: Lake~Sumter MPO Bridge and Pavement Performance Targets (PM2)**

<b>Performance Measures</b>	<b>Florida 2-year Targets 1/1/2018 to 12/31/2019</b>	<b>Florida 4-year Targets 1/1/2018 to 12/31/2021</b>
Percent of Interstate NHS Pavement in Good Condition	Not Required	≥ 60%
Percent of Interstate NHS Pavement in Poor Condition	Not Required	≤ 5%
Percent of Non-Interstate NHS Pavement in Good Condition	≥ 40%	≥ 40%
Percent of Non-Interstate NHS Pavement in Poor Condition	≤ 5%	≤ 5%
Percent of NHS Bridges by Deck Area in Good Condition	≥ 50%	≥ 50%
Percent of NHS Bridges by Deck Area in Poor Condition	≤ 10%	≤ 10%

### **System Performance Targets (Travel Time Reliability) (PM3)**

The third set of Performance Measures were established in January 2017 by the USDOT. These measures assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS). Federal rules require MPOs to establish four-year performance targets for the Level of Travel Time Reliability (LOTTR) and Truck Travel Time Reliability (TTTR) performance measures.

LOTTR is the percent of person-miles on the Interstate system that are reliable. It is defined as the ratio of longer travel times (80th percentile) to normal travel times (50th percentile) during four time periods throughout the day.

TTTR is defined as the ratio of longer truck travel times (95th percentile) to a normal travel time (50th percentile) over the Interstate during five time periods throughout the day.

On September 18, 2018, the MPO adopted Resolution 2018-10 to support the FDOT Performance Targets. By adopting FDOT’s targets, the Lake~Sumter MPO agrees to plan and program projects that help FDOT achieve these targets. **Table 6** presents baseline performance for each PM3 measure for the state and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state.

Table 6: Lake~Sumter MPO System Performance Targets (PM3)

Performance Measure	Statewide Performance (2017 Baseline)	Florida 2-year Targets 1/1/2018 to 12/31/2019	Florida 4-year Targets 1/1/2018 to 12/31/2021
Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR)	82.2%	75.0%	70.0%
Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR)	84.0%	Not Required	50.0%
Truck travel time reliability index (TTTR)	1.43	1.75	2.00

## Transit Asset Management Performance Measures

The FTA published the final Transit Asset Management rule in July 2016. The rule applies to recipients of Federal transit funds and requires that public transit providers develop and maintain a Transit Asset Management (TAM) plan, establish state of good repair standards, and performance measures for the assets as described below.

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 3.0 on the TERM scale

The MPO’s planning area is served by two transit service providers: LakeXpress and Sumter County Transit. LakeXpress and Sumter County Transit are considered Tier II providers. LakeXpress has developed its own TAM Plan; however, Sumter County Transit is included in a group TAM plan developed by the FDOT Public Transit Office.

On September 12, 2018, MPO adopted the performance targets and measures identified in LakeXpress Asset Management Plan. These targets are depicted in **Table 7**.

**Table 7: FTA TAM Targets for LakeXpress**

<b>Asset Class</b>	<b>2018 Performance</b>	<b>2019 Target</b>	<b>2020 Target</b>	<b>2021 Target</b>	<b>2022 Target</b>
<b>Rolling Stock</b>					
Buses	31%	19%	31%	31%	0%
Cutaways	23%	6%	61%	61%	48%
Minivans	0%	0%	0%	100%	0%
Vans	60%	0%	0%	0%	40%
<b>Equipment</b>					
Non Revenue/Service Automobile	43%	0%	0%	0%	0%
<b>Facilities</b>					
Administrative Office	0%	0%	0%	0%	0%

Sumter County Transit is part of the Group TAM Plan for Fiscal Years 2018/2019-2022/2023 developed by FDOT for Tier II providers in Florida and coordinates with FDOT on reporting of group targets to the National Transit Database. The FY 2019 asset conditions and 2020 targets for the Tier II providers are shown in **Table 8**.

**Table 8: Group Transit Asset Management Targets for Tier II Providers**

Asset Category Performance Measure	Asset Class	FY 2019 Asset Condition	FY 2020 Target
<b>Revenue Vehicles</b>			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Automobile	55%	45%
	Bus	15%	13%
	Cutaway Bus	28%	28%
	Mini-Bus	31%	28%
	Mini-Van	13%	11%
	SUV	0%	0%
	Van	47%	34%
<b>Equipment</b>			
Age - % of equipment or non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life	Non Revenue Automobile	67%	67%
	Trucks and other Rubber Tire Vehicles	50%	40%
<b>Facilities</b>			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	0%	9%
	Maintenance	6%	12%

# Transportation 2045 Revenue Forecast

An important focus of long range transportation planning is the forecasting of revenues reasonably expected for use in prioritizing the Needs Plan and in developing a Cost Feasible Plan. Projected revenues are a snapshot in time of the current revenue picture and anticipated trends. An important aspect of the revenue forecast is determining transportation revenues spent on capital versus operations and maintenance (O&M). Maintaining transportation infrastructure into the future will be a continuing and central focus.

This memorandum documents the financial resources projected to be available for the Lake-Sumter Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP). Coordination was conducted with the following agencies and local governments in the preparation of this forecast:

- › Florida Department of Transportation;
- › Lake County and Sumter County staff;
- › Lake-Sumter MPO Staff; and,
- › MPO Technical Advisory Committee (TAC).

This memorandum outlines the projected financial resources available for transportation improvements in the Lake~Sumter MPO area for the period of 2025 to 2045. Financial resources for the period prior to 2025 are identified in the MPO's current Transportation Improvement Program (TIP). The projected financial resources include funds from the federal and state governments, as well as revenues generated locally, such as local fuel taxes and transportation impact fees

## Overview of Financial Resources

The available revenues for the long range transportation plan can be categorized into two major categories:

- › Federal and state revenues
- › Local revenues

Federal and state revenues for roadway were obtained from the 2045 MPO Revenue Forecast provided by FDOT. Federal and state revenues for transit were sourced from the most recent Lake County and Sumter County Transit Development Plans (TDPs). Input from Lake County and Sumter County staff was helpful in developing local revenue projections.

Federal and state revenues for roadway are derived from sources such as State fuel taxes, State tourism driven surcharges, vehicle related taxes, documentary stamp taxes, Turnpike tolls, and federal distributions. The revenue estimates for capacity projects presented in this document considered the following funding programs:

- › Strategic Intermodal System (SIS) Highways Construction and Right-of-Way
- › Other Roads Construction and Right-of-Way (ROW)

- › Transportation Regional Incentive Program (TRIP)
- › Transportation Alternatives Program (TAP) funds listed under FDOT codes TALL and TALT
- › Federal/State Revenues and Grants for Transit
- › Contributions from local revenues

The TRIP and TALT funds are shown as illustrative only and are not used in the development of cost feasible projects. FDOT only estimates TRIP funds at the District level and not at the county level; hence, the actual amount allocated to the Lake-Sumter MPO is unknown. The TRIP funds identified in Section 3 are based on the population percentage of Lake and Sumter counties within FDOT District 5 and represent a reasonable estimate of TRIP funds that may be captured within the MPO area.

Local revenue forecasts considered the following sources:

- › Fuel taxes
  - ›› 6-Cent Local Option Fuel Tax
  - ›› 9th Cent Fuel Tax (charged on diesel only)
  - ›› Constitutional Fuel Tax
  - ›› County Fuel Tax
- › Traffic impact fees
- › 1-Cent Local Option Sales Tax

Revenue sources for transit are detailed in Table 11.

## Financial Projections

### Revenue Estimates for Roadway Capacity Projects

**Table 9** provides a summary of the roadway revenue totals by revenue source estimated for capital projects for the 2025-2045 period. This forecast assumes that revenues from the Lake County discretionary sales surtax will be reserved for capacity projects only. Revenues are provided in Year of Expenditure (YOE) dollars, which takes into account inflation on the current estimates. The Lake-Sumter MPO will assume that 15% of their estimates for the Other Roads Construction & ROW program can be used for “off-system” roads according to FDOT guidance.

The SIS funds are listed separate from the other State funds as SIS funds are programmed specifically for SIS projects



**Table 9: Total Revenue for Roadway Capital Projects (2025-2045) (Year of Expenditure)**

	<b>Category</b>	<b>Total Projected Revenues 2025-2045</b>
<b>State and Federal</b>	Other Roads Construction and ROW	\$780,180,000
	Other Roads – Product Support	\$171,640,000
	TALL	\$2,220,000
	TALT	\$1,916,000
	TRIP	\$12,200,000
<b>Lake County</b>	Impact Fees	\$252,490,000
	Infrastructure Sales Tax (1%)	\$80,570,000
<b>Sumter County</b>	Impact Fees	\$258,570,000
	<b>Subtotal (Non-SIS)</b>	<b>\$1,584,486,000</b>
	Strategic Intermodal System	\$608,228,000
	<b>Total</b>	<b>\$2,192,714,000</b>

### Revenue Estimates for Roadway Operations and Maintenance Projects

O&M includes activities that support and maintain transportation infrastructure once it is constructed. As directed by FDOT policy, the Department places primary emphasis on safety and preservation of the transportation system by providing adequate funding in the Revenue Forecast to meet established maintenance performance standards. As such, funding for O&M on the State Highway System (SHS) are allocated before revenues are subsequently allocated for capacity improvement projects.

The Lake-Sumter MPO also allocates local resources for ensuring acceptable operating conditions on the county major roadway network. This forecast assumes that all fuel tax revenues, including both State/Federal and local, will be committed for O&M expenditures. **Table 10** provides a summary of the estimated revenues for O&M on the SHS and local roadways.

**Table 10: Total Revenue for Roadway Operations and Maintenance (2025-2045)  
(Year of Expenditure)**

	<b>Category</b>	<b>Total Projected Revenues 2025-2045</b>
<b>State and Federal</b>	Districtwide SHS	\$12,480,400,000
<b>Lake County</b>	County Gas Tax	\$43,073,000
	Constitutional Gas Tax	\$96,453,000
	First Local Option Gas Tax	\$151,097,000
	9th Cent Gas Tax	\$40,856,000
<b>Sumter County</b>	County Gas Tax	\$22,915,000
	Constitutional Gas Tax	\$51,509,000
	First Local Option Gas Tax	\$132,926,000
	9th Cent Gas Tax	\$27,525,000
	<b>Local Subtotal</b>	<b>\$566,354,000</b>

## Revenue Estimates for Transit Projects

The Cost Feasible Plan for transit includes funding the existing transit service in Lake and Sumter counties. State/Federal and local transit revenues were forecast using the 10-year revenue projections included in the most recent Lake County and Sumter County Transit Development Plans. The funding sources used to forecast revenue for Lake County and Sumter County transit are presented in **Table 11**.

**Table 11: State/Federal and Local Funding Sources for Transit**

Lake County	Sumter County
<b>State/Federal Sources</b>	
<ul style="list-style-type: none"> <li>› FTA 5307</li> <li>› FTA 5310</li> <li>› FTA 5311</li> <li>› FTA 5339</li> <li>› Service Development Grant</li> <li>› State Block Grant</li> <li>› CTD funds</li> </ul>	<ul style="list-style-type: none"> <li>› FTA 5307</li> <li>› FTA 5310</li> <li>› FTA 5311</li> <li>› Service Development Grant</li> <li>› Medical Non-Emergency Transportation funds</li> <li>› Community Care for Elderly/Title III funds</li> <li>› CTD funds</li> </ul>
<b>Local Sources</b>	
<ul style="list-style-type: none"> <li>› General Fund</li> <li>› Fare revenue</li> <li>› County Motor Fuel Tax Reimbursement</li> <li>› Miscellaneous revenue sources</li> </ul>	<ul style="list-style-type: none"> <li>› Miscellaneous revenue sources</li> </ul>

**Table 12** and **Table 13** present the revenues forecasted to be available for Lake County and Sumter County transit services for the 2025-2045 period, respectively.

**Table 12: Total Revenue for Lake County Transit (2025-2045) (Year of Expenditure)**

	<b>Category</b>	<b>Total Projected Revenues 2025-2045</b>
<b>State and Federal</b>	For capital	\$35,117,000
	For O&M	\$185,340,000
<b>Local</b>	For capital	\$9,933,000
	For O&M	\$51,508,000
	<b>Total</b>	<b>\$281,898,000</b>

**Table 13: Total Revenue for Sumter County Transit (2025-2045) (Year of Expenditure)**

	<b>Category</b>	<b>Total Projected Revenues 2025-2045</b>
<b>State and Federal</b>	For O&M	\$29,093,000
<b>Local</b>	For O&M	\$13,381,000
	<b>Total</b>	<b>\$42,474,000</b>

## Revenue Summary

The Lake-Sumter 2045 LRTP revenue forecast is summarized in **Table 14**. It is estimated that the MPO will receive a total of \$780.2 million in federal and state funding for SHS and off-system roads, as well as \$171.6 million in funds for product support (PD&E and Engineering Design). An additional \$4.1 million is projected to be available through the TALU and TALL programs. In addition, an estimated \$608.2 million will be spent on SIS projects during the plan horizon. Finally, Lake and Sumter counties are estimated to generate a combined \$1.15 billion in local revenues during the LRTP period, as well as a combined \$324.4 million in transit revenues.

**Table 14: Summary of Total MPO Transportation Revenues (2025-2045) (Year of Expenditure)**

<b>Category</b>	<b>Total Projected Revenues 2025-2045</b>
<b>Projected State and Federal Revenues</b>	
Other Roads Construction & ROW	\$780,180,000
Other Roads – Product Support	\$171,640,000
TALU	\$2,220,000
TALL	\$1,916,000
<b>Strategic Intermodal System Projects</b>	
SIS Revenues	\$608,228,000
<b>Projected Local Revenues</b>	
Lake County Revenues	\$664,539,000
Sumter County Revenues	\$493,445,000
<b>Projected Transit Revenues (Federal, State, and local)</b>	
Lake County Transit Revenues	\$281,898,000
Sumter County Transit Revenues	\$42,474,000
<b>Total</b>	<b>\$3,046,540,000</b>

# Transportation Plan

## Cost Feasible Plan Development

In long range transportation planning, a Cost Feasible Plan (CFP) identifies financially viable improvements to an area's transportation network. The CFP builds upon the needs assessment, financial resources, and LRTP Goals and Objectives by prioritizing transportation improvements necessary to maintain satisfactory mobility conditions to the year 2045. The CFP is fiscally constrained; both costs of transportation improvements and revenues expected to be available to fund transportation improvements are taken into consideration.

## Needs Assessment

An integral part of the Lake~Sumter MPO 2045 LRTP was the identification, evaluation, and analysis of the capacity deficiencies on the transportation network to identify the initial roadway needs. The purpose of a Needs Assessment is to identify the transportation infrastructure that is essential for accommodating future travel demand, addressing safety issues, and meeting the community's needs for the next 25 years. A Needs Assessment is fiscally unconstrained, meaning that funding requirements for improvements are not considered. The Needs Assessment serves as the basis for the development of the Cost Feasible Plan, which is constrained by anticipated funding throughout the 25-year planning range.

The Central Florida Regional Planning Model Version 7 (CFRPM v7) was used to forecast future transportation conditions with the aid of socioeconomic data, which includes population and employment, and roadway network attributes. The CFRPM v7 is a regional travel demand model that includes the nine counties represented by FDOT's District Five as follows: Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia counties. The model also contains all of Polk County and part of Indian River County for purposes of interactions with these areas.

The 2045 Existing + Committed (E+C) roadway deficiencies serve as the starting point for the development of the roadway improvement project needs. In addition to the 2045 E+C roadway deficiencies, roadways listed in the previously adopted Transportation 2040 LRTP were included. It should be noted that adjustments were made to the limits of the needs projects to provide logical termini. The final roadway Needs Assessment is shown in **Figure 1** and listed in **Table 15**.

Table 15: 2045 Final Roadway Needs Projects

Map ID	Facility	From	To	Improvement
<b>New Interchange/Modify Intersection</b>				
1	US-301		@ CR-525E	Modify Intersection
2	US-301		@ C-472	Modify Intersection
3	US-301		@ E CR-462	Modify Intersection
4	Old 441 / CR-19A		@ Eudora Rd	Modify Intersection
5	SR-44		@ US-27	Modify Intersection
6	Florida's Turnpike		@ US-301	Modify Interchange
<b>Widen to 4 Lane (or equivalent capacity)*</b>				
7	SR-44	SR-44 & Orange Ave	CR-46A	Widen to 4 Lanes
8	SR-44	US-441	E Orange Ave	Widen to 4 Lanes
9	US-301	CR-470	CR-525E	Widen to 4 Lanes
10	US-301	CR-525E	SR-44	Widen to 4 Lanes
11	SR-19	SR-50	CR-455	Widen to 4 Lanes
12	CR-470	SR-471 (CR-527)	Florida's Turnpike	Widen to 4 Lanes
13	CR-470	TPKE West Ramps	SR-33/CR-33	Widen to 4 Lanes
14	E Co Rd 466	I-75	US-301	Widen to 4 Lanes
15	CR-219	SR-44	CR-44A	Widen to 4 Lanes
16	CR-468/US-301	Commercial St	CR-507	Widen to 4 Lanes
17	CR-475	Old Airport Rd	CR-470	Widen to 4 Lanes
18	CR-466A	E of Timbertop Ln	Poinsettia Ave	Widen to 4 Lanes
19	Rolling Acres Rd	Co Rd 466	Griffin Ave	Widen to 4 Lanes
20	CR-455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	Widen to 4 Lanes
21	CR-48	SR-33/CR-33	E of US-27 Bridge	Widen to 4 Lanes
22	SR-50	E of CR-478A	SR-33/CR-33	Widen to 4 Lanes
23	SR-50	Hernando/Sumter Co Line	E of CR-478A	Widen to 4 Lanes

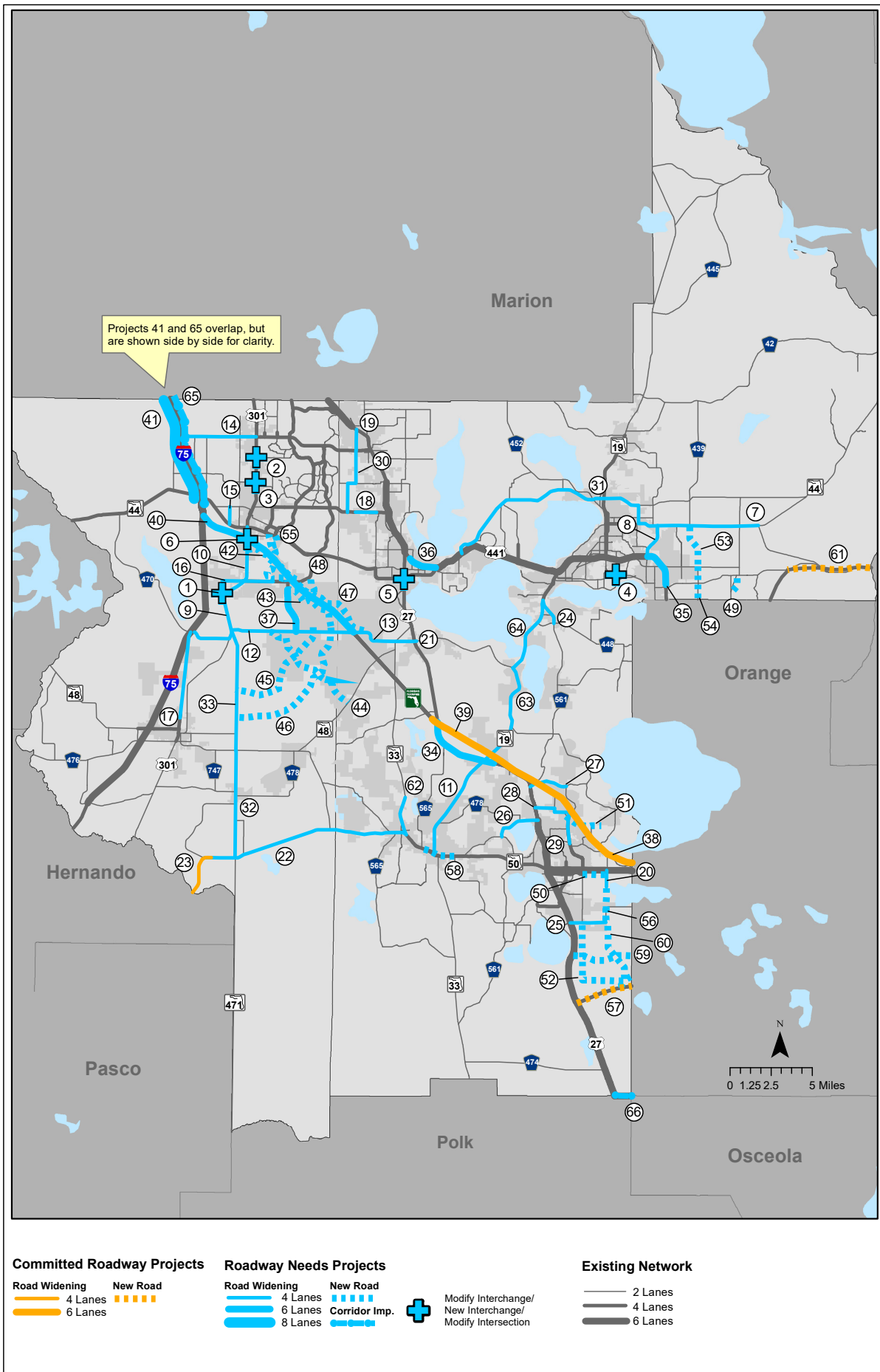
Map ID	Facility	From	To	Improvement
24	CR-561	CR-448	SR-19	Widen to 4 Lanes
25	Hartwood Marsh Rd	US-27	CR-455	Widen to 4 Lanes
26	CR-561A	CR-565A	US-27	Widen to 4 Lanes
27	CR-561/561A	US-27	N Hancock Rd	Widen to 4 Lanes
28	Citrus Grove Rd	US-27	N Hancock Rd	Widen to 4 Lanes
29	N Hancock Rd	Old Hwy 50 W	Turkey Farm Rd	Widen to 4 Lanes
30	Micro Racetrack Rd. & Rolling Acres Rd.	CR-466A	US 27/US441	Widen to 4 Lanes
31	CR-44	SR-44	US 441	Widen to 4 Lanes
32	SR-471	SR-50	SR-48	Widen to 4 Lanes
33	SR-471	SR-48	US 301	Widen to 4 Lanes
<b>Widen to 6 or 8 Lane (or equivalent capacity)*</b>				
34	US-27	Florida's Turnpike Ramps - N	South of SR 19	Widen to 6 Lanes
35	US-441 (SR-500)	SR-44	N of SR-46	Widen to 6 Lanes
36	US-441 (SR-500)	Perkins Street	SR-44	Widen to 6 Lanes
37	Marsh Bend Trail	C470	Corbin Trail	Widen to 6 Lanes
38	Florida's Turnpike	Minneola (274-279.14)	Orange/Lake County Line	Widen to 6 Lanes
39	Florida's Turnpike	US27 (MP279-289.3)	Minneola INTCHG	Widen to 6 Lanes
40	Florida's Turnpike	CR 470	I-75	Widen to 6 Lanes
41	I-75	SR-44	Sumter/Marion County Line	Widen to 8 Lanes
<b>New Roadway</b>				
42	Marsh Bend Trail (New Road)	US-301	Warm Springs Ave	New 2 Lanes
43	Corbin Trail (New Road)	Warm Springs Ave	E C-470	New 2 Lanes
44	Rd A (New Road)	E C-470	CR-48	New 2 Lanes
45	Rd B (New Road)	SR-471	E C-470	New 2 Lanes
46	Rd C (New Road)	SR-471	E C-470	New 2 Lanes



Map ID	Facility	From	To	Improvement
47	Meggison Rd (New Road)	SR-44	E C-470	New 2 Lanes
48	Morse Blvd Ext. (New Road)	Meggison Rd	CR-468	New 2 Lanes
49	CR-437 Realignment	Oak Tree Dr	SR-46	New 2 Lanes
50	Hooks St Ext.	Hancock Rd	CR-455/Hartle Rd	New 2 Lanes
51	Citrus Grove Rd.	N. Hancock Rd.	Blackstill Lake Rd	New 2/4 Lanes
52	Schofield Rd	US-27	SR-429	New 4 Lanes
53	Round Lake Rd Ext. (A)	Wolf Branch Rd.	SR-44	New 4 Lanes
54	Round Lake Rd Ext. (B)	Orange/Lake Co Line	Wolf Branch Rd.	New 4 Lanes
55	Buena Vista Blvd Ext.	Meggison Rd	SR-44	New 4 Lanes
56	CR-455/Hartle Rd	Hartwood Marsh	Lost Lake	New 4 Lanes
57	CFX Connector	US-27	SR-429	New 4 Lanes
58	SR-50	CR-565 (Villa City)	CR-565A (Montevista)	Realignment
59	Wellness Way	US-27	SR-429	New 4 Lanes
60	CR-455 Extension	CFX Connector	Hartwood/Marsh Rd	New 4 Lanes
61	SR-429 (Wekiva Pkwy)	SR-429	Lake/Seminole County Line	New 6 Lanes
<b>Other</b>				
62	CR-33	SR-50	Simon Brown Rd	Strategic Improvements
63	SR-19	CR-455	CR-48	Strategic Improvements
64	SR-19	CR-48	CR-561	Strategic Improvements
65	I-75	Florida's Turnpike	Sumter/Marion County Line	Managed Lanes
66	US-192	US-27	Orange/Lake County Line	Corridor Improvements

\* If/when the projects advance to the Project Development and Environment (PD&E) or design phase, determine if alternative strategies such as two-way left-turn lanes, intersection improvements, operational enhancements, or multimodal solutions would effectively address level of service and mobility needs in lieu of the recommended road widening.

Figure 1: Final Roadway Needs Projects



## Cost Feasible Plan

Detailed tables of the Cost Feasible Plan projects are included in **Appendix C** and **Appendix D** of this document. Appendix B includes the projects with the Year-of-Expenditure (YOE) costs, while Appendix C includes the projects in terms of Present Day Cost (PDC).

**Table 17** includes Cost Feasible projects. The maps in **Figure 2** and **Figure 3** illustrate the projects shown in Table 16. The Map ID listed for each project in Table 17 are used to label the corresponding projects in Figure 2 and Figure 3. Unfunded projects are depicted in **Figure 4** and listed in both Appendix C and Appendix D. Local unfunded projects have been organized into tiers based on each county’s investment priorities for local capital funds. No priority has been assigned to unfunded state or multijurisdictional projects.

### Transportation Improvement Program (TIP)

The adopted Fiscal Year (FY) 2020/21 – 2024/25 Transportation Improvement Program (TIP) guided the content of the first five years of the long range transportation plan. The TIP is incorporated into the LRTP in order to capture revenues for the entire duration of time from plan adoption (2020) through the plan’s horizon year of 2045.

Table 16 summarizes the roadway capacity projects included in the Lake~Sumter MPO FY 2020/2021 – FY 2024/2025 TIP and includes both SIS and non-SIS projects. A detailed version of this table including associated costs and timeframes is located in **Appendix B**.

**Table 16: Summary of TIP\* Roadway (Capacity) Projects for FY 2020/21 - 2024/25**

FM#	Project	From	To	Improvement
<b>Non-SIS</b>				
4293561	SR 500 (US 441)	SR 44	North of SR 46	Add Lanes and Rehabilitate Pavement
<b>SIS</b>				
4357861	Widen Florida’s Turnpike	Minneola Interchange	US 27	Add Lanes and Reconstruct
4357851	Widen Florida’s Turnpike	Orange/Lake County Line	Minneola	Add Lanes and Reconstruct
4358593	Widen SR 50	Hernando/ Sumter County Line	West of CR 757	Add Lanes and Reconstruct
4270561	Realignment of SR 50	CR 565 (Villa City)	CR 565A (Montevista)	Realignment

\*Information as found in the June 24, 2020 version of the TIP

Table 17: 2045 Cost Feasible Plan Projects

2045 Capacity Projects: Fully Funded						
Map ID	Location	On Street	From	To	Improvement Type	Implementation Timeframe
<b>Strategic Intermodal System (SIS) Projects - Figure 2</b>						
1	Lake	SR-50/SR33	CR-565 (Villa City)	CR-565A (Montevista)	Realignment	2026-2030
2	Lake	US-27	Florida's Turnpike Ramps - N	South of SR 19	Widen to 6 Lanes	2036-2045
3	Sumter	I-75	Florida's Turnpike	Sumter/Marion Co Line	Managed Lanes	2036-2045
4	Sumter	I-75	SR-44	Sumter/Marion Co Line	Widen to 8 Lanes	2036-2045
<b>State Projects - Figure 3</b>						
5	Lake	SR-19	SR-50	CR-455	Widen to 4 Lanes	2036-2045
6	Lake	SR-44	SR-44 & Orange Ave	CR-46A	Widen to 4 Lanes	2036-2045
7	Lake	SR-44	US-441	E Orange Ave	Widen to 4 Lanes	2036-2045
8	Sumter	SR-471	SR-48	US 301	Widen to 4 Lanes	2036-2045
9	Lake	US-192	US-27	Orange/Lake County Line	Corridor Improvements	2026-2030
10	Lake	US-441 (SR-500)	Perkins Street	SR-44	Widen to 6 Lanes	2025
11	Lake	US-441 (SR-500)	SR-44	N of SR-46	Widen to 6 Lanes	2026-2030
12	Sumter	US-301	CR-525E	SR-44	Widen to 4 Lanes	2031-2035
13	Sumter	US-301	CR-470	CR-525E	Widen to 4 Lanes	2036-2045
14	Sumter	US-301	@ CR-525E		Modify Intersection	2036-2045
15	Sumter	US-301	@ E CR-462		Modify Intersection	2036-2045
--	Lake/Sumter	Intelligent Transportation Systems/ Autonomous, Connected, Electric, and Shared Vehicles				2025

2045 Capacity Projects: Fully Funded						
Map ID	Location	On Street	From	To	Improvement Type	Implementation Timeframe
--	Lake/Sumter	Intelligent Transportation Systems/ Autonomous, Connected, Electric, and Shared Vehicles				2026-2030
--	Lake/Sumter	Intelligent Transportation Systems/ Autonomous, Connected, Electric, and Shared Vehicles				2031-2035
--	Lake/Sumter	Intelligent Transportation Systems/ Autonomous, Connected, Electric, and Shared Vehicles				2036-2040
Local Projects - Figure 3						
16	Lake	CR-466A	E of Timbertop Lane	Poinsettia Ave	Widen to 4 Lanes	2026-2030
17	Lake	CR-437 Realignment	Oak Tree Drive	SR-46	New 2 Lanes	2031-2035
18	Lake	CR-455/ Hartle Rd	Lost Lake Road	Good Hearth Blvd	Widen to 4 Lanes	2026-2030
19	Lake	CR-455/ Hartle Rd	Hartwood Marsh	Lost Lake	New 4 Lanes	2026-2030
20	Lake	Rolling Acres Rd	Co Rd 466	Griffin Ave	Widen to 4 Lanes	2036-2045
21	Lake	Round Lake Rd Ext. (A)	Wolf Branch Rd.	SR-44	New 4 Lanes	2036-2045

2045 Capacity Projects: Partially Funded						
Map ID	Location	On Street	From	To	Improvement Type	Implementation Timeframe
State Projects - Figure 3						
22	Lake	SR-19	CR-455	CR-48	Strategic Improvement*	2036-2045
23	Lake	SR-19	CR-48	CR-561	Strategic Improvement*	2036-2045
Local Projects - Figure 3						
24	Lake	CR-33	SR-50	Simon Brown Rd	Strategic Improvement*	2026-2030

\*Operational capacity improvements to be determined

\*\* Use of funds may not correspond to a specific project phase shown here

Figure 2: Strategic Intermodal System (SIS) Cost Feasible Projects

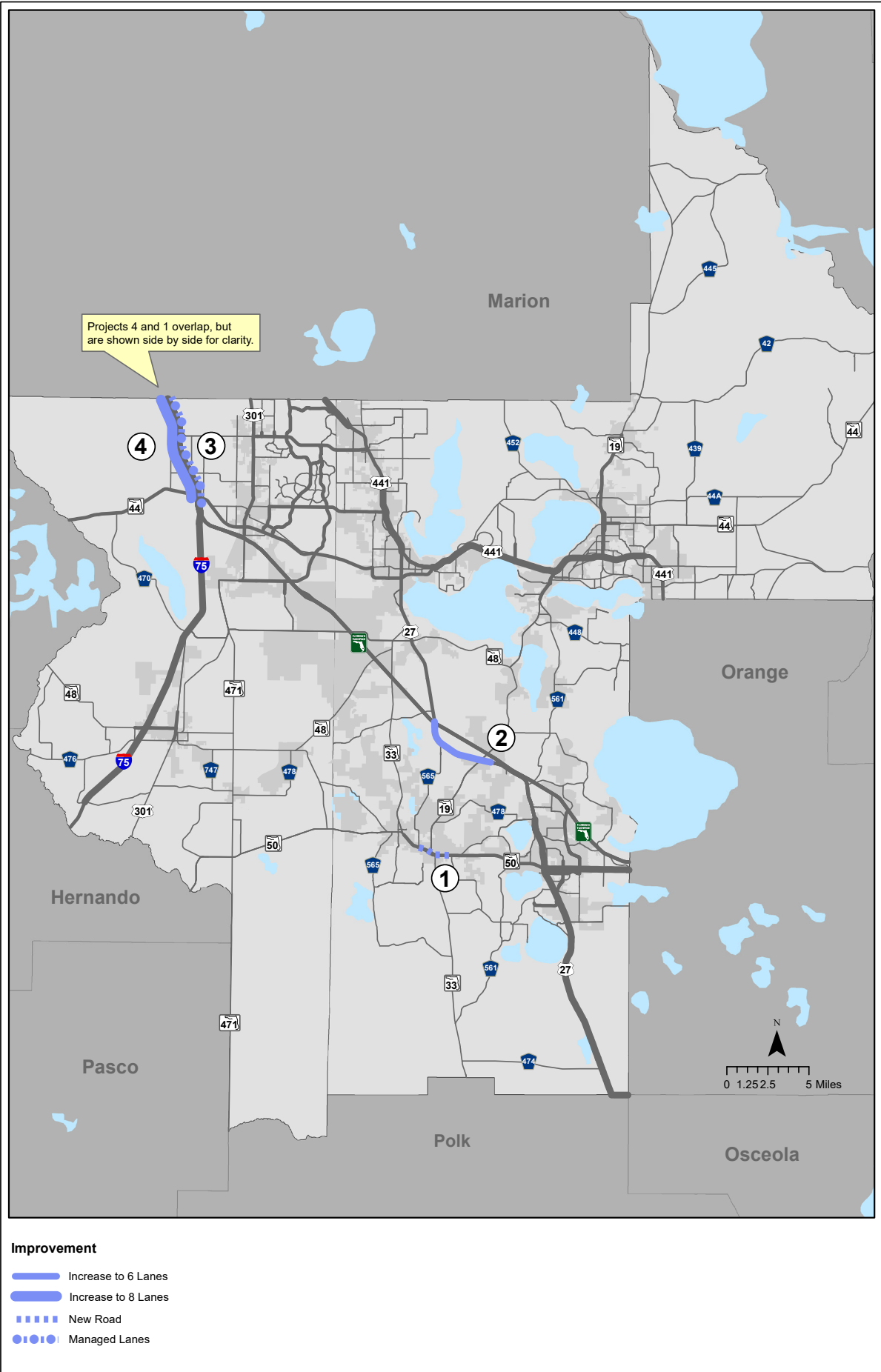


Figure 3: State and Local Cost Feasible Projects

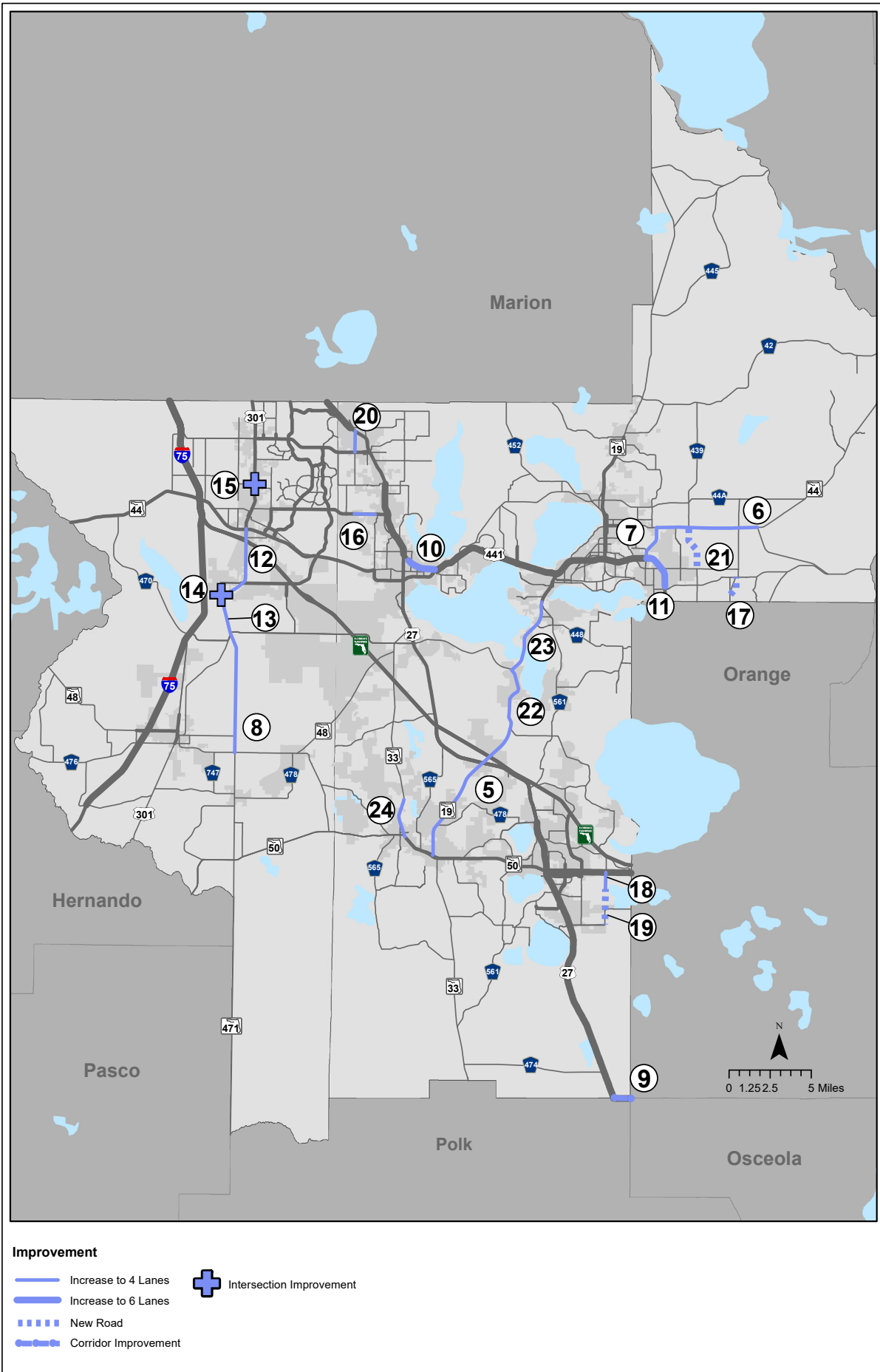
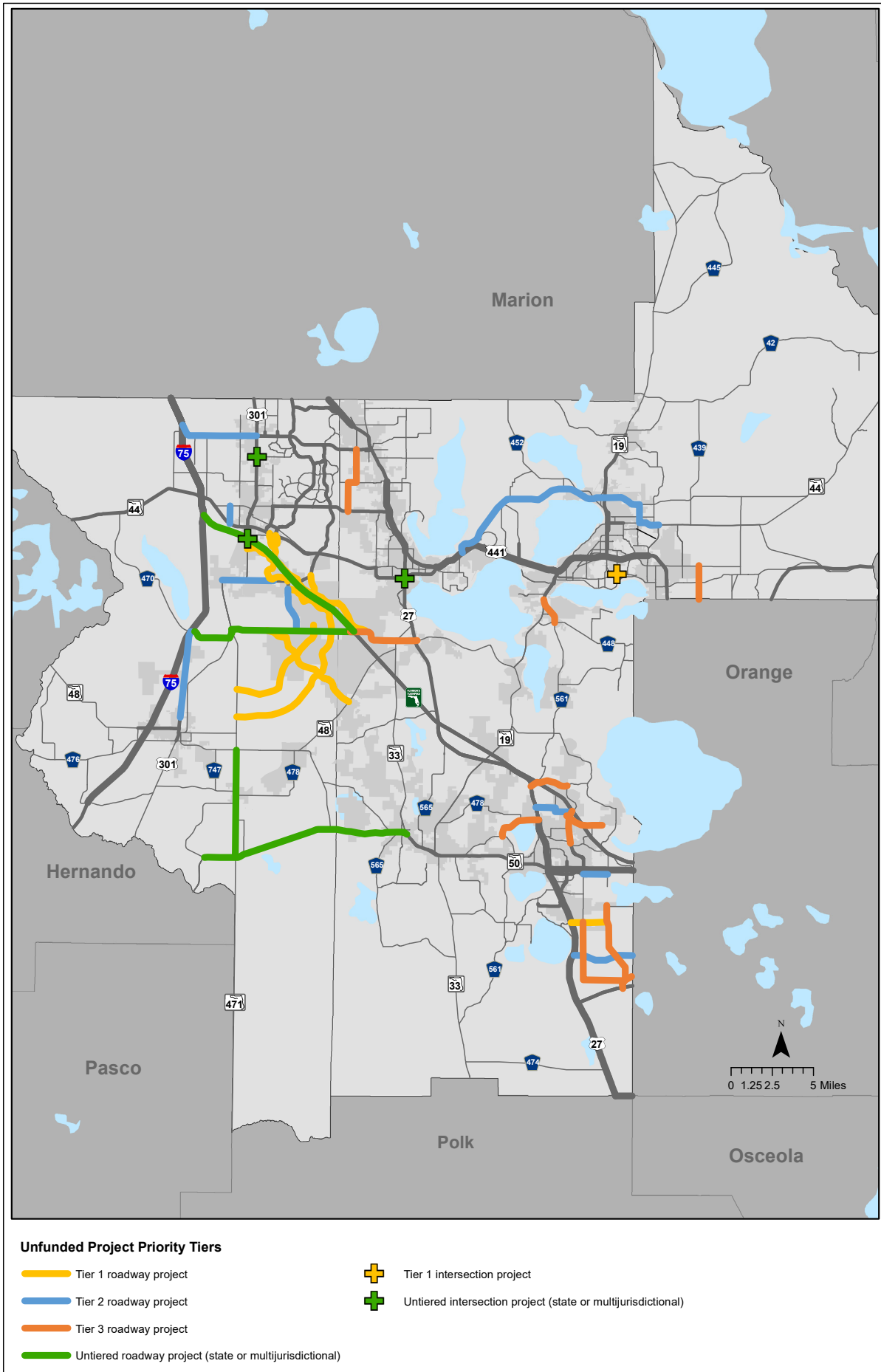


Figure 4: Unfunded Needs Projects





## Bicycle and Pedestrian Needs

The Lake~Sumter MPO has been actively engaged in identifying needs and opportunities for supporting the development of bicycle, pedestrian, and regional trails. Bicycle and pedestrian facility improvements may be implemented as part of overall roadway improvement projects or as standalone projects. Considering the needs of cyclists and pedestrians is instrumental in the development of an LRTP.

On an annual basis, the Lake~Sumter MPO prioritizes bicycle, pedestrian, and, trails projects which may be eligible for funding. These projects are included in the List of Priority Projects (LOPP) which serves as the bridge between the 5-year program of projects funded in the TIP and the long range plans and programs supported by the MPO.

## Complete Streets

The MPO supports Complete Streets as an alternative transportation strategy to balance quality of life and mobility issues. Complete Streets are roadways designed to accommodate all users and may include elements such as sidewalks, bicycle lanes/paved shoulders, dedicated bus lanes, pedestrian crossings, and roundabouts. A number of Complete Streets studies in the planning area have been recently been completed, or are currently underway. These include: US 27 Traffic Calming & Complete Streets Study, US 301 Complete Streets Study (CR 466A to CR 44A), Central Avenue (SR 19) Corridor Planning Study, East Ave. Complete Streets Study, and SR 50 Corridor Planning Study (Bloxam Avenue to 12th Street, Clermont).

Additional new corridors have been identified for Complete Streets studies including SR 471 in Webster, SR 19 in Eustis, and Main Street in Leesburg.

## Regional Trails

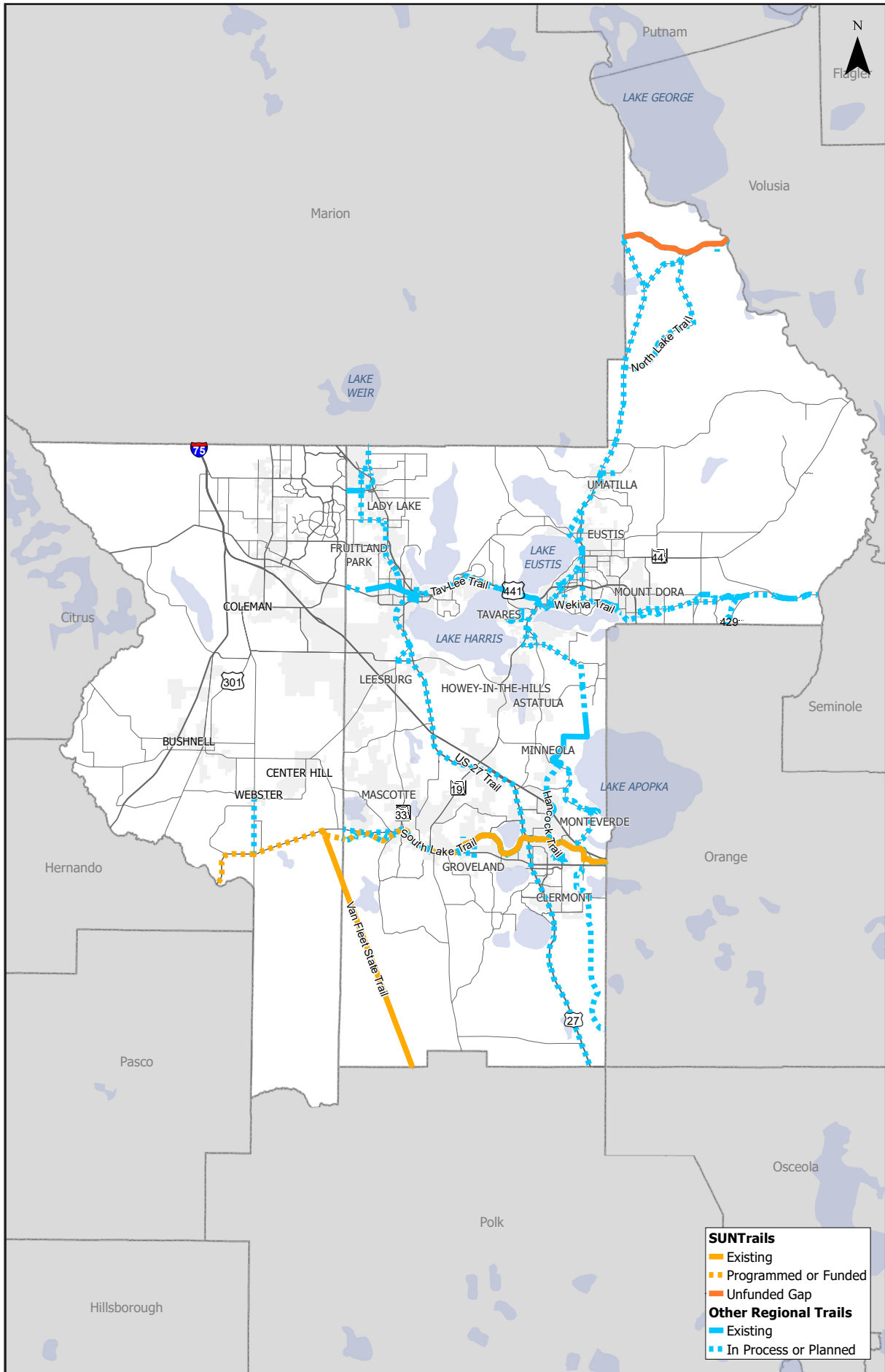
The MPO continues to be a strong advocate of a robust regional trail system. There is an expanding trail network throughout the state and the MPO continues to plan for a series of paved multi-use trails that connect to other regional trails in Florida, including the Coast-to-Coast Trail, the Heart of Florida Loop, and the Wekiva Trail. The MPO's List of Priority Projects includes a combined list of all trail priorities in Tier 1 and Tier 2 with additions such as SUN Trail/Coast to Coast Connector trail segments and includes a separate ranking of trail projects as a group.

**Figure 5** depicts existing, planned, programmed, and conceptual trail locations within the planning area, as well as unfunded gaps in the SUN Trail network.

## Safe Routes to School

The Safe Routes to School (SRTS) Program helps communities address school transportation needs while encouraging more students to walk or bicycle to school. The SRTS Program funds projects such as the construction and installation of sidewalks, shared-use paths, and other infrastructure enhancements. The MPO completed the Safe School Access Transportation Study (SSATS) which included the development of transportation master plans for each school in the study area, focusing on a 10-year planning horizon.

Figure 5: Bicycle and Pedestrian Facilities/Trails



## Transit Improvements

The Lake-Sumter MPO planning area is served by two transit service providers: LakeXpress and Sumter County Transit. LakeXpress is a fixed route system that provides public transit service throughout Lake County on a regular “fixed” schedule at designated bus stops. Sumter County Transit operates as a by-request door-to-door transportation service, available to all qualified transportation disadvantaged residents.

The primary development of transit needs occurs through the Transit Development Plan (TDP). Similar to a long-range transportation plan, the TDP identifies and prioritizes the transit plans and needs of transit agencies throughout their respective service areas. TDPs also include revenue estimates that are anticipated to support the transit operations and capital expenses over a ten-year time frame. In Florida, a TDP is required for all transit providers that receive State Public Transit Block Grant funds and a major update of the system’s TDP every five years.

In August 2018, LakeXpress prepared the 2019-2028 Major Update to its TDP, which identifies potential new service (Route 1A Connection to Marion County, Express Service on US 27, and US 441 Flex Service), as well as improvements to existing routes (enhanced frequency on Routes 1, 1A, 2, 3 and 4; extending weekday services on select routes until 9:00 PM; and implementation of Saturday service on select routes).

**Figure 6** illustrates existing transit routes and the 10-Year Needs Plan for LakeXpress including potential new future service and expansion of existing services.

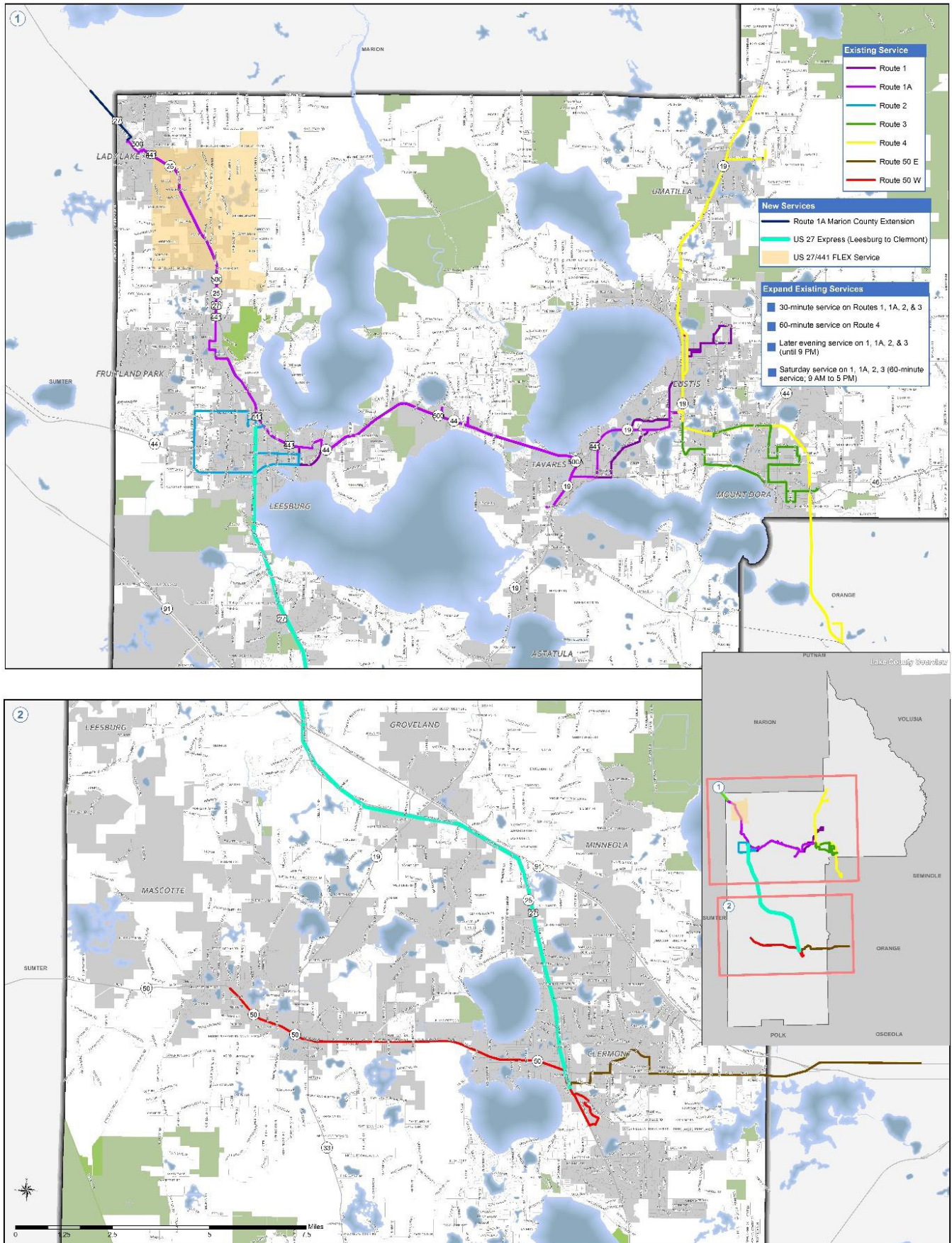
The MPO continues to collaborate with LakeXpress and Sumter County Transit supports their respective efforts to improve access to transit, improve existing service, and plan for future expansion.

## Regional Transit Opportunities

### Regional Transit Study

The MPO continues to support efforts to link high-priority transit elements throughout the region. Led by the Central Florida Metropolitan Planning Organization Alliance (CFMPOA), the Regional Transit Study, completed in October 2018, is a ten-county effort to establish a regional transit vision and create a consensus on regional transit priorities in Central Florida. The study includes a list of improvements were developed as a representative list of short-term, high-priority regional transit improvements to advance the long term Regional Transit Vision. For Lake and Sumter County, the recommended investments include additional cross-jurisdictional service (e.g. connections to SunTran and LYNX) and an intermodal facility near the Turnpike/SR 50. The study also includes a survey of intercity bus services such as Red Coach that provide expanded mobility options within and beyond the MPO area.

Figure 6: LakeXpress 10-Year Needs Plan



# Transportation Operations and Management Strategies

## TSM&O

Transportation Systems Management and Operations (TSM&O) is a program based on actively managing the multimodal transportation network, measuring performance, streamlining and improving the existing system, promoting effective cooperation/collaboration, and delivering positive safety and mobility outcomes to the traveling public. The TSM&O program includes five different areas and a recent addition of a new Connected Vehicle initiative. The Connected Vehicle initiative and the five standard TSM&O program areas are summarized as follows:

<b>Connected Vehicles (New Initiative)</b>	<ul style="list-style-type: none"> <li>› Coordinate with vehicle technology to quickly identify roadway hazards and alert drivers</li> <li>› Use technologies such as wireless communications, Signal Phase and Timing (SPaT), roadside units, on-board units, signal priorities, emergency vehicle preemption, vehicle sensors, GPS navigation</li> </ul>
<b>Management/ Deployments</b>	<ul style="list-style-type: none"> <li>› Promote ITS deployments on Florida's roadways, develop standards, maintain the ITS Strategic Plan, and implement a systems engineering process to support procurement and deployment of ITS</li> <li>› Deploy advanced traveler information systems and 511</li> <li>› Develop and update the ITS standards and specifications</li> <li>› Provide technical support and assistance to FDOT's District Offices and other partners</li> <li>› Promote and coordinate the statewide use of robust, non-proprietary ITS standards.</li> </ul>
<b>ITS Communications</b>	<ul style="list-style-type: none"> <li>› Guide deployment of a communications backbone to serve ITS deployments on major corridors</li> <li>› Manage and update the Statewide ITS Communications Network to support ITS deployments</li> <li>› Manage the maintenance program for the Statewide ITS Communications Network to support ITS deployments and various ITS research and development initiatives</li> <li>› Manage the Federal Communications Commission statewide radio license database</li> <li>› Manage the Wireless General Manager Agreement, a resource sharing public/private partnership which places commercial wireless carriers on FDOT rights-of-way, with American Tower Corporation</li> </ul>
<b>Statewide Arterial Management Program</b>	<ul style="list-style-type: none"> <li>› A Technical Memorandum on Adaptive Signal Control Technologies</li> <li>› Traffic Signal Maintenance and Compensation Agreement</li> </ul>

<p><b>ITS Software and Architecture</b></p>	<ul style="list-style-type: none"> <li>› Manage the SunGuide® Software System for freeway and incident management, transportation management center interoperability, and data archiving.</li> <li>› Manage the Statewide ITS Architecture to promote integrated ITS regions, corridors, and projects.</li> <li>› Coordinate ITS training to enhance the quality and quantity of the State's ITS workforce.</li> <li>› Unified traffic information and management system for the State of Florida ITS traffic data.</li> </ul>
<p><b>Managed Lanes</b></p>	<ul style="list-style-type: none"> <li>› Statewide Policy, Procedures, Manuals, and Guidance for Managed Lanes Which Includes Express Lanes</li> <li>› Statewide Toll and Express Lane Team</li> <li>› Regional Concept of Transportation Operations</li> <li>› Express Lane Concept of Operations</li> <li>› Change Management Process for Statewide Express Lane Software</li> <li>› Statewide Methodology for Determining Ingress/Egress To/From Express Lanes</li> </ul>

## Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems include a variety of communications and other computer technologies focused on detecting and relieving congestion and improving safety within the transportation system by enabling drivers to make well-informed travel choices. ITS technology enables information to be shared with travelers in real-time regarding traffic issues and can provide alternative routes or modes to aid in the mitigation of congestion. ITS may also alert officials to of the presence of crashes and request assistance in clearing the accident, which helps efficiently restore traffic flow. Examples of ITS strategies include:

- › **Dynamic Messaging:** Dynamic messaging uses changeable message signs to warn motorists of downstream queues; it provides travel time estimates, alternate route information, and information on special events, weather, or accidents.
- › **Advanced Traveler Information Systems (ATIS):** ATIS provide an extensive amount of data to travelers, such as real-time speed estimates on the Web or over wireless devices and transit vehicle schedule progress. It also provides information on alternative route options.
- › **Integrated Corridor Management (ICM):** This strategy, built on an ITS platform, provides for the coordination of the individual network operations between parallel facilities creating an interconnected system. A coordinated effort between networks along a corridor can effectively manage the total capacity in a way that will result in reduced congestion.
- › **Transit Signal Priority (TSP):** This strategy uses technology located onboard transit vehicles or at signalized intersections to temporarily extend green time, allowing the transit vehicle to proceed without stopping at a red light

## Automated, Connected, Electric, and Shared-Use (ACES)

As technology continues to evolve and transform transportation at an accelerating pace, it is noted that ACES technologies will have significant impact on the MPO's future transportation systems.

ACES stands for Automated, Connected, Electric and Shared Mobility:

- › **Automated** – vehicles that drive without direct driver input
- › **Connected** – vehicles that communicate data to other vehicles and infrastructure
- › **Electric** – vehicles that use electric motor(s) instead of a gas-powered engine
- › **Shared Mobility** – shared use of a vehicle or other transportation mode, often in lieu of owning or using a personal vehicle

Personal and public vehicles alike are using increased levels of technology, and combined with shared mobility, are integrating into an existing transportation system that must be supportive of the technology. The FDOT developed guidance for ACES planning in September 2018, which will be utilized by the MPO.

## Congestion Management

Lake~Sumter MPO has developed a Congestion Management Process (CMP), which is a management system and process conducted to improve safety and reliability of traffic operations by providing strategies to reduce travel demand on the roadway network or providing improvements to the overall transportation network.

The CMP is intended to provide a benefit to the public by improving travel conditions with approaches that often may be implemented more quickly or at a lower cost than many capacity improvements such as adding travel lanes or creating new travel corridors. This can include a full range of activities, including demand management and transit/multimodal improvements that may reduce usage of personal vehicles as well as intersection improvements. The CMP was key in the development of this LRTP and continues to increase in importance to long range transportation planning in general, as populations and transportation systems grow. It is a helpful tool supportive of identifying congestion and selecting projects for prioritization implementation.

The Congestion Management Process - State of the System Report summarizes the evaluations for the CMP Network as identified within the CMP Policies and Procedures Handbook based on year 2019 data. This report identifies congested corridors within the MPO's planning area, which were considered in the development of Transportation 2045.

**Table 18** includes Extremely Congested Corridors, which are those corridors exceeding 108% of Level of Service (LOS) E (physical capacity) based on 2019 and 2024 traffic volumes, and are the highest priority segments in the CMP network.

**Table 18: Extremely Congested Corridors**

<b>County</b>	<b>Segment</b>	<b>Miles</b>
Lake	Florida's Turnpike – US 27 Interchange to Orange C/L	10.82
Lake	SR 19 – CR 561 to Lane Park Rd	0.90
Lake	SR 19 – Stevens Ave to Golf Links Ave	0.50
Lake	SR 44 – CR 437 to CR 46A	1.15
Lake	SR 44 – US 441 to Waycross Ave	0.45
Lake	SR 50 – East Ave to US 27	0.92
Lake	CR 44 – CR 473 to Apiary Rd	3.17
Lake	CR 44 – CR 452 to SR 19	0.68
Lake	CR 466A – Timbertop Lane to CR 468	1.38
Lake	S Hancock Rd – Hooks St to Johns Lake Rd	1.23
Lake	Hartwood Marsh Rd – US 27 to Hancock Rd	0.70
Lake	Micro Racetrack Rd – Lake Ella Rd to CR 466A	1.74
Lake	US 27 – SR 44 to CR 25A (N)	0.63
Lake	Wolf Branch Rd – US 441 to Britt Rd	1.16
Lake	Old Hwy 441 – CR 44C/Eudora Dr to Lakeshore Dr	1.06
Lake	CR 452 – CR 44/CR 452 to SR 19	0.99
Lake	Rolling Acres Rd – US 27 to CR 466	0.50
Lake	Donnelly St – 11th Ave to 5th Ave	0.38
Lake	CR 437 – Wolf Branch Rd to SR 46	0.49
Lake	Kurt St – W Lakeview Ave to David Walker Dr	0.25
Sumter	US 301 – Warm Springs Ave to Florida's Turnpike	2.73

**Table 19** includes Congested Corridors, which are those corridors exceeding their adopted service volume but not exceeding their physical capacity in either year 2019 or year 2024. These corridors will be monitored and potentially programmed for congestion management improvements.



**Table 19: Congested Corridors**

<b>County</b>	<b>Segment</b>	<b>Miles</b>
Lake	Florida's Turnpike – Sumter C/L to US 27 Interchange	12.60
Lake	Main St (Leesburg) – Thomas Ave to US 27	1.03
Lake	Main St (Leesburg) – US 27 to Canal St	0.84
Lake	SR 19 – CR 455 to CR 478	7.45
Lake	SR 33 – Anderson Rd to CR 561	9.92
Lake	SR 33 – CR 561 to CR 474	2.33
Lake	SR 44 – CR 46A to Overlook Dr	8.77
Lake	SR 46 – CR 46A to Seminole C/L	2.61
Lake	US 27 – CR 44A to US 27/US 441 Split	0.15
Lake	US 441 – Lee St to N Canal St	0.42
Lake	Lakeshore Dr (Clermont) – Harder Rd to Lake Louisa Rd	0.67
Lake	CR 46A – SR 44 to SR 46 (existing alignment)	5.59
Lake	CR 46A Realignment – SR 44 to SR 46	3.65
Lake	CR 25 – Marion C/L to Griffin Ave	1.53
Lake	SR 50 – CR 455 to Orange C/L	1.53
Lake	SR 44 – Waycross Ave to Orange Ave	1.65
Lake	SR 19(N) – Stevens Ave to CR 452	1.55
Lake	CR 474 – Green Swamp Rd to US 27	3.35
Lake	CR 452 – Marion C/L to Felkins Rd	3.93
Lake	CR 50 – CR 455 to Orange C/L	1.92
Lake	CR 561 – CR 48 to S Astatula City Limit	0.63
Lake	Hartwood Marsh Rd – Hancock Rd to bend	1.41
Sumter	I-75 – Hernando C/L to CR 673	1.78
Sumter	I-75 – C-470E to SR 44	7.71
Sumter	Florida's Turnpike – I-75 to Lake County Line	10.67
Sumter	SR 50 – SR 471 to Lake C/L	6.43
Sumter	SR 50 – Hernando C/L to C-478A	2.40
Sumter	CR 104 – US 301 to CR 101	1.31

## FREIGHT

Freight and goods movement is a top priority for the region and the MPO. It is important that existing trade and future economic development are supported by an effective freight network. There are a number of existing and planned commercial, manufacturing, and warehousing operations in the two-county area.

Transportation 2045 is consistent with the Central Florida Regional Freight Mobility Study and the MPO continues to support the state's freight planning process and the objectives of FDOT's Freight Mobility and Trade Plan (FMTP), which was recently updated in April 2020.

## M-CORES

### Program Overview

The Multi-use Corridors of Regional Economic Significance (M-CORES) Program was created by Section 338.2278, Florida Statutes (F.S.) to revitalize rural communities, encourage job creation and provide regional connectivity while leveraging technology, enhancing quality of life and public safety, and protecting the environment and natural resources. The Florida Department of Transportation (FDOT) was charged with assembling task forces to study three specific corridors:

- › The Suncoast Corridor, extending from Citrus County to Jefferson County
- › The Northern Turnpike Corridor, extending from the northern terminus of Florida's Turnpike northwest to the Suncoast Parkway
- › The Southwest-Central Florida Corridor, extending from Collier County to Polk County

The objective of the M-CORES Program is to advance the construction of regional corridors that will accommodate multiple modes of transportation and multiple types of infrastructure. The Program benefits include, but are not limited to, addressing issues such as hurricane evacuation; congestion mitigation; trade and logistics; broadband, water, and sewer connectivity; energy distribution; autonomous, connected, shared, and electric vehicle technology; other transportation modes, such as shared-use non-motorized trails, freight and passenger rail, and public transit; mobility as a service; availability of a trained workforce skilled in traditional and emerging technologies; protection or enhancement of wildlife corridors or environmentally sensitive areas; and protection or enhancement of primary springs protection zones and farmland preservation. Additional information is available at [www.floridamcores.com](http://www.floridamcores.com).

### Northern Turnpike Corridor Study Area

The Northern Turnpike Corridor study area spans four (4) counties—Citrus, Sumter, Marion, and Levy (as shown in the map). Lake~Sumter MPO area is part of the Northern Turnpike Corridor study area.

## L RTP Considerations

M-CORES projects are considered to be projects of regional significance and therefore are required by Title 23 of the Code of Federal Register (CFR), Section 450.324(d) and Section 339.175(7), F.S. to be included in the MPO/ TPO Long-Range Transportation Plan (LRTP), Transportation Improvement Program (TIP), and the State Transportation Improvement Program (STIP).

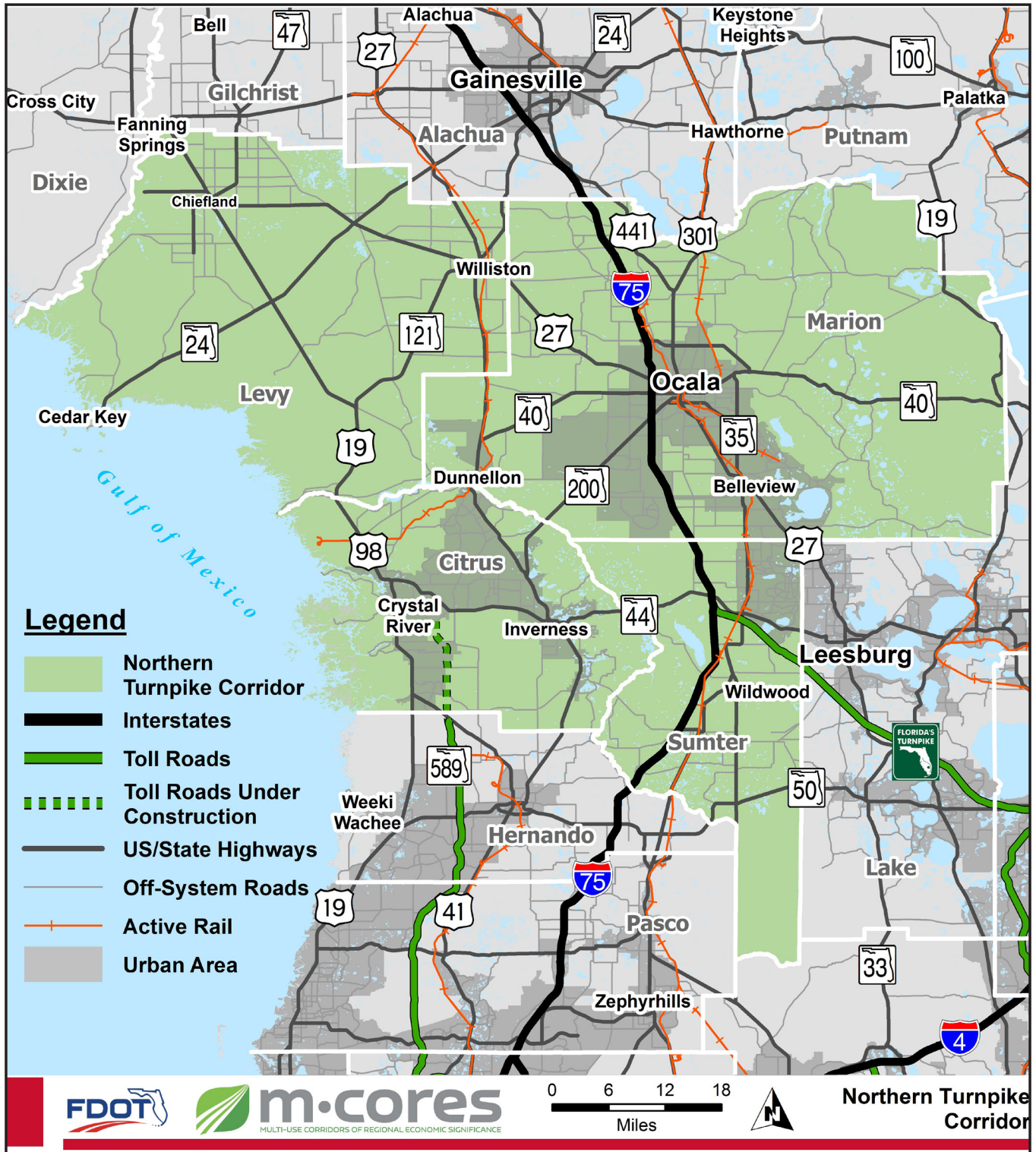
MPOs and TPOs are responsible for actively involving all affected parties in an open, cooperative, and collaborative process when developing LRTPs and TIPs. Regional coordination is required since M-CORES projects affect more than one MPO. Public participation required for the development of LRTP and TIP is neither affected nor replaced by the public engagement activities conducted as part of the M-CORES corridor development process.

Lake~Sumter MPO will use travel demand forecasts generated by the Florida Turnpike Statewide Model for M-CORES projects. As such, Lake~Sumter MPO will coordinate all M-CORES related analyses with FDOT for consistency purposes.

The proposed projects within the Northern Turnpike Corridor will be tolled facilities and will be part of the Florida's Turnpike system and the Strategic Intermodal System (SIS). The projects will be included in the LRTP and TIP/STIP in accordance with guidance provided in the FDOT MPO Program Management Handbook, as information on the projects becomes available. FDOT worked with the Northern Turnpike Corridor Task Force to develop purpose and need, guiding principles, and potential paths/courses. Lake~Sumter MPO was a member of the Northern Turnpike Corridor Task Force and was actively engaged in pertinent aspects of planning and corridor analysis through the Task Force activities. The Task Force submitted its evaluation report to the Governor, the President of the Senate, and the Speaker of the House of Representatives on November 15, 2020.

As the M-CORES Program progresses to Project Development and Environment (PD&E), design and construction phases, FDOT will identify projects, prepare cost estimates, and coordinate with Lake~Sumter MPO to add identified projects into the LRTP and TIP. Subject to the economic and environmental feasibility statement requirements of Section 337.25, F.S., projects may be funded through Turnpike revenue bonds or right-of-way and bridge construction bonds or financing by the Florida Department of Transportation Financing Corporation; by advances from the State Transportation Trust Fund; with funds obtained through the creation of public-private partnerships; or any combination thereof. FDOT also may accept donations of land for use as transportation rights-of-way or to secure or use transportation rights-of-way for such projects in accordance with Section 337.25, F.S. To the maximum extent feasible, construction of the M-CORES projects will begin no later than December 31, 2022, and the corridors will be open to traffic no later than December 31, 2030.

Figure 7: Northern Turnpike Corridor



# Environmental Mitigation

## Environmental Consultation

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands, and groundwater resources. In situations where impacts cannot be completely avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs. The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts. This plan addresses these potential activities as required by federal regulations [23 C.F.R. 450.322]. In order to understand the environmental mitigation opportunities and issues within the metropolitan planning area, the MPO conducted direct outreach to appropriate federal, state and local land management, resource, environmental, and historic preservation agencies to obtain comments and consultation on the following:

- › Potential environmental impacts from the draft plan of projects
- › Environmental factors to consider as part of the plan
- › Considerations from applicable conservation plans
- › Potential environmental mitigation activities, and areas to carry out these activities, including those with the greatest potential to restore and maintain environmental functions

When addressing mitigation, there is a general rule to avoid all impacts, minimize impacts, and mitigate impacts when impacts are unavoidable. This rule can be applied at the planning level, when MPOs are identifying areas of potential environmental concern due to the development of a transportation project. A typical approach to mitigation that MPOs can follow is to:

- › Avoid impacts altogether
- › Minimize a proposed activity/project size or its involvement
- › Rectify the impact by repairing, rehabilitating, or restoring the affected environment
- › Reduce or eliminate the impact over time by preservation and maintenance operation during the life of the action
- › Compensate for environmental impacts by providing appropriate or alternate environmental resources of equivalent or greater value, on or off-site

Sections 373.47137 and 373.4139, F.S. require that impacts to habitat be mitigated through a variety of mitigation options, which include mitigation banks and mitigation through the Water Management District(s) and the Florida Department of Environmental Protection. Potential environmental mitigation opportunities that could be considered when addressing environmental impacts from future projects proposed by MPOs may include, but are not limited to, the items presented in **Table 20**.

Table 20: Potential Environmental Mitigation Opportunities

Resource/Impacts	Potential Mitigation Strategy
Wetlands and Water Resources	<ul style="list-style-type: none"> <li>› Restore degraded wetlands</li> <li>› Create new wetland habitats</li> <li>› Enhance or preserve existing wetlands</li> <li>› Improve storm water management</li> <li>› Purchase credits from a mitigation bank</li> </ul>
Forested and other natural areas	<ul style="list-style-type: none"> <li>› Use selective cutting and clearing</li> <li>› Replace or restore forested areas</li> <li>› Preserve existing vegetation</li> </ul>
Habitats	<ul style="list-style-type: none"> <li>› Construct underpasses, such as culverts</li> <li>› Other design measures to minimize potential habitat fragmentation</li> </ul>
Streams	<ul style="list-style-type: none"> <li>› Stream restoration</li> <li>› Vegetative buffer zones</li> <li>› Strict erosion and sedimentation control measures</li> </ul>
Threatened or Endangered Species	<ul style="list-style-type: none"> <li>› Preservation</li> <li>› Enhancement or restoration of degraded habitat</li> <li>› Creation of new habitats</li> <li>› Establish buff areas around existing habitat</li> </ul>

## Public Involvement

The 2045 LRTP was developed in a manner consistent with the MPO's Public Participation Plan (PPP) and included the use of the MPO's committee/Board structure and meetings. In addition, ongoing coordination took place between the Lake~Sumter MPO and neighboring MPOs in the region. Multiple stakeholders were involved in the development of the plan including environmental and community representatives, as well as organizations that serve the traditionally transportation-disadvantaged.

During the development of an LRTP, there are typically a number of in-person public meetings, forums, and/or workshops. However, In March 2020, the spread of COVID-19 (Coronavirus) in the United States prompted directives from federal, state, and local agencies to limit in-person gatherings and interaction. Due to COVID-19, previously planned in-person workshops related to the 2045 LRTP were replaced with virtual workshops to engage the public, partner organizations, and other stakeholders.

An online survey was also developed by the MPO to provide additional opportunities for the public and stakeholders to provide input on the plan.





# **Appendix A: System Performance Report**



**Lake~Sumter Metropolitan Planning Organization**

**Long-Range Transportation Plan  
System Performance Report**

October 2020

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# 1 – PURPOSE AND BACKGROUND

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Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) Act enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state departments of transportation (DOT) and MPOs must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule).<sup>1</sup> This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the Lake~Sumter MPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its LRTP. The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports.

The Lake~Sumter MPO 2040 Long-Range Transportation Plan was adopted on December 9, 2015. This plan will be superseded by the 2045 LRTP in December 2020. Per the Planning Rule, the System Performance Report for the Lake~Sumter MPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management.

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

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<sup>1</sup> The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613.

## 2 - HIGHWAY SAFETY MEASURES (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures<sup>2</sup> to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

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

FDOT publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2020. For the 2020 HSIP annual report, FDOT established statewide at “0” for each performance measure to reflect Florida’s vision of zero deaths.

The Lake~Sumter MPO agreed to support FDOT’s statewide safety performance targets on December 11, 2019.

Statewide system conditions for each safety performance measure are included in Table 2.1, along with system conditions in the Lake~Sumter MPO metropolitan planning area. System conditions reflect baseline performance. The latest safety conditions will be updated annually on a rolling five-year window and reflected within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

**Table 2.1. Highway Safety (PM1) Conditions and Performance**

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

<sup>2</sup> 23 CFR Part 490, Subpart B

## Baseline Conditions

After FDOT set its Safety Performance Measures targets in 2018, both FDOT and the MPO established Baseline Safety Performance Measures. To evaluate baseline Safety Performance Measures, the MPO utilized the most recent five-year rolling average (2012-2016) of crash data and VMT. Table 2.3 presents the Baseline Safety Performance Measures for Florida and Lake~Sumter MPO.

**Table 2.3. Baseline Safety Performance Measures**

<b>Performance Measures</b>	<b>Florida Baseline Performance</b>	<b>Lake~Sumter MPO Baseline Performance</b>
Number of Fatalities	2,688.2	66.4
Rate of Fatalities per 100 Million VMT	1.33	1.423
Number of Serious Injuries	20,844.2	364.6
Rate of Serious Injuries per 100 Million VMT	10.36	7.742
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,294.4	40.8

## Trends Analysis

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

## Coordination with Statewide Safety Plans and Processes

The Lake~Sumter MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Lake~Sumter 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are available and described in other state and public transportation plans and processes; specifically, the Florida Strategic Highway Safety Plan (SHSP), the Florida Highway Safety Improvement Program (HSIP), and the Florida Transportation Plan (FTP).

- The 2016 Florida Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP was developed in coordination with Florida's 27 metropolitan planning organizations (MPOs) through Florida's Metropolitan Planning Organization Advisory Council (MPOAC). The SHSP guides FDOT, MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the state.
- The FDOT HSIP process provides for a continuous and systematic process that identifies and reviews traffic safety issues around the state to identify locations with potential for improvement. The goal of the HSIP process is to reduce the number of crashes, injuries, and fatalities by eliminating certain predominant types of crashes through the implementation of engineering solutions.

- Transportation projects are identified and prioritized with the MPOs and non-metropolitan local governments. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The FDOT Project Development and Environment Manual requires the consideration of safety when preparing a proposed project's purpose and need, and defines several factors related to safety, including crash modification factor and safety performance factor, as part of the analysis of alternatives. MPOs and local governments consider safety data analysis when determining project priorities.

## **L RTP Safety Priorities**

The Lake~Sumter 2045 LRTP increases the safety of the transportation system for motorized and non-motorized users as required. The LRTP aligns with the Florida SHSP and the FDOT HSIP with specific strategies to improve safety performance focused on prioritized safety projects, pedestrian and/or bicycle safety enhancements, and traffic operation improvements to address our goal to reduce fatalities and serious injuries.

The LRTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The MPO's emphasis on leveraging transportation investment to increase safety is reflected in the LRTP Goals and Objectives. For example, Goal 2 is to provide "Promote Safety and Security", and includes the following objectives:

- Prioritize investments to reduce crash related Fatalities for all modes of transportation.
- Prioritize investments to reduce crash related Serious Injuries for all modes of transportation.
- Prioritize investments to reduce Bicycle and Pedestrian crash related Fatalities and Serious Injuries.
- Prioritize investment on evacuation routes.
- Invest in Transit security.

There are numerous projects listed in the 2045 LRTP that will help improve safety of the Lake~Sumter transportation system, including: capacity and operational improvements, intersection improvements, grade separations, transportation systems management and operation (TSM&O), roadway and access improvements, and reconstruction projects. For a complete list of projects, please see the Transportation Plan section of the 2045 LRTP.

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

## 3 - PAVEMENT AND BRIDGE CONDITION MEASURES (PM2)

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### Pavement and Bridge Condition Performance Measures and Targets Overview

In January 2017, USDOT published the Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 rule. This rule establishes the following six performance measures:

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

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

- International Roughness Index (IRI) - an indicator of roughness; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Cracking percent - percentage of the pavement surface exhibiting cracking; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Rutting - extent of surface depressions; applicable to asphalt pavements only;
- Faulting - vertical misalignment of pavement joints; applicable to jointed concrete pavements only; and
- Present Serviceability Rating (PSR) – a quality rating applicable only to NHS roads with posted speed limits of less than 40 miles per hour (e.g., toll plazas, border crossings). States may choose to collect and report PSR for applicable segments as an alternative to the other four metrics.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Using these metrics and thresholds, pavement condition is assessed for each 0.1 mile section of the through travel lanes of mainline highways on the Interstate or the non-Interstate NHS. Asphalt pavement is assessed using the IRI, cracking, and rutting metrics, while jointed concrete is assessed using IRI, cracking, and faulting. For these two pavement types, a pavement section is rated good if the rating for all three metrics are good, and poor if the ratings for two or more metrics are poor.

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

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

The good/poor measures are expressed as a percentage and are determined by summing the total lane-miles of good or poor highway segments and dividing by the total lane-miles of all highway segments on the applicable system. Pavement in good condition suggests that no major investment is needed and should be considered for preservation treatment. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

The bridge condition measures refer to the percentage of bridges by deck area on the NHS that are in good condition or poor condition. The measures assess the condition of four bridge components: deck, superstructure, substructure, and culverts. Each component has a metric rating threshold to establish good, fair, or poor condition. Each bridge on the NHS is evaluated using these ratings. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

The bridge measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on; however, it is nearing a point where substantial reconstruction or replacement is needed.

Federal rules require state DOTs and MPOs to coordinate when setting pavement and bridge condition performance targets and monitor progress towards achieving the targets. States must establish:

- Four-year statewide targets for the percent of Interstate pavements in good and poor condition;
- Two-year and four-year targets for the percent of non-Interstate NHS pavements in good and poor condition; and
- Two-year and four-year targets for the percent of NHS bridges (by deck area) in good and poor condition.

MPOs must establish four-year targets for all six measures. MPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the MPO's planning area.

The two-year and four-year targets represent pavement and bridge condition at the end of calendar years 2019 and 2021, respectively.

### **Pavement and Bridge Condition Baseline Performance and Established Targets**

This System Performance Report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this first Lake~Sumter MPO LRTP System Performance Report highlights performance for the baseline period, which is 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

Table 3.1 presents baseline performance for each PM2 measure for the State and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the State.



**Table 3.1. Pavement and Bridge Condition (PM2) Performance and Targets**

<b>Performance Measures</b>	<b>Statewide (2017 Baseline)</b>	<b>Statewide 2019 Actual</b>	<b>Statewide 2-year Target (2019)</b>	<b>Statewide 4-year Target (2021)</b>	<b>Lake~Sumter MPO (2017 Baseline)</b>	<b>Lake~Sumter MPO 2019 Actual</b>
Percent of Interstate pavements in good condition	66.0%	68.5%	n/a	≥60%	98.6%	86.6%
Percent of Interstate pavements in poor condition	0.1%	0.2%	n/a	<5%	0%	0%
Percent of non-Interstate NHS pavements in good condition	76.4%	41.0%	≥40%	≥40%	47.4%	50.9%
Percent of non-Interstate NHS pavements in poor condition	3.6%	0.2%	<5%	<5%	0.1%	0.1%
Percent of NHS bridges (by deck area) in good condition	67.7%	74.19%	≥50%	≥50%	TBD	85.4%
Percent of NHS bridges (by deck area) in poor condition	1.2%	0.40%	<10%	<10%	TBD	0%

FDOT established the statewide PM2 targets on May 18, 2018. In determining its approach to establishing performance targets for the federal pavement and bridge condition performance measures, FDOT considered many factors. FDOT is mandated by Florida Statute 334.046 to preserve the state’s pavement and bridges to specific standards. To adhere to the statutory guidelines, FDOT prioritizes funding allocations to ensure the current transportation system is adequately preserved and maintained before funding is allocated for capacity improvements. These statutory guidelines envelope the statewide federal targets that have been established for pavements and bridges.

In addition, MAP-21 requires FDOT to develop a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP must include investment strategies leading to a program of projects that would make progress toward achievement of the state DOT targets for asset condition and performance of the NHS. FDOT’s TAMP was updated to reflect MAP-21 requirements in 2018 and the final TAMP was approved on June 28, 2019.

Further, the federal pavement condition measures require a new methodology that is a departure from the methods currently used by FDOT and uses different ratings and pavement segment lengths. For bridge condition, the performance is measured in deck area under the federal measure, while the FDOT programs its bridge repair or replacement work on a bridge by bridge basis. As such, the federal measures are not directly comparable to the methods that are most familiar to FDOT.

In consideration of these differences, as well as the unfamiliarity associated with the new required processes, FDOT took a conservative approach when setting its initial pavement and bridge condition targets.

The Lake~Sumter MPO agreed to support FDOT's pavement and bridge condition performance targets on September 18, 2018 (Resolution 2018-10). By adopting FDOT's targets, the Lake~Sumter MPO agrees to plan and program projects that help FDOT achieve these targets.

The Lake~Sumter MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Lake~Sumter 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Transportation Asset Management Plan.

- The FTP is the single overarching statewide plan guiding Florida's transportation future. It defines the state's long-range transportation vision, goals, and objectives and establishes the policy framework for the expenditure of state and federal funds flowing through FDOT's work program. One of the seven goals defined in the FTP is Agile, Resilient, and Quality Infrastructure.
- The Florida Transportation Asset Management Plan (TAMP) explains the processes and policies affecting pavement and bridge condition and performance in the state. It presents a strategic and systematic process of operating, maintaining, and improving these assets effectively throughout their life cycle.

The Lake~Sumter 2045 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. Goal 5 of the 2045 LRTP is System Preservation, which includes the following objectives and policies:

- Objective 5.1 – Maintain Transportation infrastructure
- Objective 5.2 – Maintain Transit asset

On or before October 1, 2020, FDOT will provide FHWA and the Lake~Sumter MPO a detailed report of pavement and bridge condition performance covering the period of January 1, 2018 to December 31, 2019. FDOT and the Lake~Sumter MPO also will have the opportunity at that time to revisit the four-year PM2 targets.

# 4 - SYSTEM PERFORMANCE, FREIGHT, AND CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM MEASURES (PM3)

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## System Performance/Freight/CMAQ Performance Measures and Targets Overview

In January 2017, USDOT published the System Performance/Freight/CMAQ Performance Measures Final Rule to establish measures to assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS), and traffic congestion and on-road mobile source emissions in areas that do not meet federal National Ambient Air Quality Standards (NAAQS). The rule, which is referred to as the PM3 rule, requires MPOs to set targets for the following six performance measures:

### *National Highway Performance Program (NHPP)*

1. Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
2. Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);

### *National Highway Freight Program (NHFP)*

3. Truck Travel Time Reliability index (TTTR);

### *Congestion Mitigation and Air Quality Improvement Program (CMAQ)*

4. Annual hours of peak hour excessive delay per capita (PHED);
5. Percent of non-single occupant vehicle travel (Non-SOV); and
6. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NO<sub>x</sub>, VOC, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) for CMAQ funded projects.

In Florida, only the two LOTTR performance measures and the TTTR performance measure apply. Because all areas in Florida meet current NAAQS, the last three measures listed measures above pertaining to the CMAQ Program do not currently apply in Florida.

LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, Mid-day, PM peak, and weekends) that cover the hours of 6 a.m. to 8 p.m. each day. The LOTTR ratio is calculated for each roadway segment, essentially comparing the segment with itself. Segments with LOTTR  $\geq 1.50$  during any of the above time periods are considered unreliable. The two LOTTR measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles consider the number of people traveling in buses, cars, and trucks over these roadway segments. To obtain person miles traveled, the vehicle miles traveled (VMT) for each segment are multiplied by the average vehicle occupancy for each type of vehicle on the roadway. To calculate the percent of person miles traveled that are reliable, the sum of the number of reliable person miles traveled is divide by the sum of total person miles traveled.

TTTR is defined as the ratio of longer truck travel times (95<sup>th</sup> percentile) to a normal travel time (50<sup>th</sup> percentile) over the Interstate during five time periods (AM peak, Mid-day, PM peak, weekend, and overnight) that cover all hours of the day. TTTR is quantified by taking a weighted average of the maximum TTTR from the five time periods for each Interstate segment.

The maximum TTTR is weighted by segment length, then the sum of the weighted values is divided by the total Interstate length to calculate the Travel Time Reliability Index.

The data used to calculate these PM3 measures are provided by FHWA via the National Performance Management Research Data Set (NPMRDS). This dataset contains travel times, segment lengths, and Annual Average Daily Travel (AADT) for Interstate and non-Interstate NHS roads.

The PM3 rule requires state DOTs and MPOs to coordinate when establishing performance targets for these measures and to monitor progress towards achieving the targets. FDOT must establish:

- Two-year and four-year statewide targets for percent of person-miles on the Interstate system that are reliable;
- Four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable<sup>3</sup>; and
- Two-year and four-year targets for truck travel time reliability

MPOs must establish four-year performance targets for all three measures within 180 days of FDOT establishing statewide targets. MPOs establish targets by either agreeing to program projects that will support the statewide targets or setting quantifiable targets for the MPO's planning area.

The two-year and four-year targets represent system performance at the end of calendar years 2019 and 2021, respectively.

### **PM3 Baseline Performance and Established Targets**

The System Performance Report discusses the condition and performance of the transportation system for each applicable PM3 target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this Lake~Sumter MPO LRTP System Performance Report highlights performance for the baseline period, which is 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

Table 4.1 presents baseline performance for each PM3 measure for the state and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state.

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<sup>3</sup> Beginning with the second performance period covering January 1, 2022 to December 31, 2025, two-year targets will be required in addition to four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable measure.

**Table 4.1. System Performance and Freight (PM3) - Performance and Targets**

Performance Measures	Statewide (2017 Baseline)	Statewide 2019 Actual	Statewide	Statewide	Lake~Sumter MPO (2017 Baseline)	Lake~Sumter MPO 2019 Actual
			2-year Target (2019)	4-year Target (2021)		
Percent of person-miles on the Interstate system that are reliable	82.2%	83%	≥75.0%	≥70.0%	100%	100%
Percent of person-miles on the non-Interstate NHS that are reliable	84.0%	87%	n/a	≥50.0%	99%	97%
Truck travel time reliability index (TTTR)	1.43	1.45	≤1.75	≤2.00	1.26	1.32

FDOT established the statewide PM3 targets on May 18, 2018. In setting the statewide targets, FDOT reviewed external and internal factors that may affect reliability, conducted a trend analysis for the performance measures, and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable within the time period for setting targets. One key conclusion from this effort is that there is a lack of availability of extended historical data with which to analyze past trends and a degree of uncertainty about future reliability performance. Accordingly, FDOT took a conservative approach when setting its initial PM3 targets.

The Lake~Sumter MPO agreed to support FDOT’s PM3 targets on September 18, 2018 (Resolution 2018-10). By adopting FDOT’s targets, the Lake~Sumter MPO agrees to plan and program projects that help FDOT achieve these targets.

The Lake~Sumter MPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the Lake~Sumter MPO 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Freight Mobility and Trade Plan.

- The FTP is the single overarching statewide plan guiding Florida’s transportation future. It defines the state’s long-range transportation vision, goals, and objectives and establishes the policy framework for the expenditure of state and federal funds flowing through FDOT’s work program. One of the seven goals of the FTP is Efficient and Reliable Mobility for People and Freight.
- The Florida Freight Mobility and Trade Plan presents a comprehensive overview of the conditions of the freight system in the state, identifies key challenges and goals, provides project needs, and identifies funding sources. Truck reliability is specifically called forth in this plan, both as a need as well as a goal.

The Lake~Sumter MPO 2045 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements. Goal 1 of the 2045 LRTP is to Support Economic Success and Community Values and includes the objective of reducing congestion and improving travel reliability for the traveling public and freight users on highways and major arterials. The MPO prepared a State of the System Report for its Congestion Management Process in December 2019 which summarizes the evaluations for the CMP Network as identified within the CMP Policies and Procedures Handbook based on year 2019 data. This report identifies congested corridors within the MPO's planning area, which were considered in the development of the 2045 LRTP.

On or before October 1, 2020, FDOT will provide FHWA and the Lake~Sumter MPO a detailed report of performance for the PM3 measures covering the period of January 1, 2018 to December 31, 2019. FDOT and the Lake~Sumter MPO also will have the opportunity at that time to revisit the four-year PM3 targets.

## 5 - TRANSIT ASSET MANAGEMENT MEASURES

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### Transit Asset Performance

On July 26, 2016, FTA published the final Transit Asset Management (TAM) rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement TAM plans, and establishes state of good repair standards and performance measures for four asset categories: equipment, rolling stock, infrastructure, and facilities. The rule became effective on October 1, 2018.

Table 5.1 below identifies performance measures outlined in the final rule for transit asset management.

**Table 5.1. FTA TAM Performance Measures**

Asset Category	Performance Measure and Asset Class
1. Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
2. Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
3. Infrastructure	Percentage of track segments with performance restrictions
4. Facilities	Percentage of facilities within an asset class rated below condition 3 on the TERM scale

For equipment and rolling stock classes, useful life benchmark (ULB) is defined as the expected lifecycle of a capital asset, or the acceptable period of use in service, for a particular transit provider’s operating environment. ULB considers a provider’s unique operating environment such as geography and service frequency.

Public transportation agencies are required to establish and report transit asset management targets annually for the following fiscal year. Each public transit provider or its sponsors must share its targets, TAM, and asset condition information with each MPO in which the transit provider’s projects and services are programmed in the MPO’s TIP.

MPOs are required to establish initial transit asset management targets within 180 days of the date that public transportation providers establish initial targets. However, MPOs are not required to establish transit asset management targets annually each time the transit provider establishes targets. Instead, subsequent MPO targets must be established when the MPO updates the LRTP.

When establishing transit asset management targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate regional transit asset management targets for the MPO planning area. In cases where two or more providers operate in an MPO planning area and establish different targets for a given measure, the MPO has the option of coordinating with the providers to establish a single target for the MPO planning area, or establishing a set of targets for the MPO planning area that reflects the differing transit provider targets.

To the maximum extent practicable, transit providers, states, and MPOs must coordinate with each other in the selection of performance targets.

The TAM rule defines two tiers of public transportation providers based on size parameters. Tier I providers are those that operate rail service or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in one non-fixed route mode. Tier II providers are those that are a subrecipient of FTA 5311 funds, or an American Indian Tribe, or have 100 or less vehicles across all fixed route modes, or have 100 vehicles or less in one non-fixed route mode. A Tier I provider must establish its own transit asset management targets, as well as report performance and other data to FTA. A Tier II provider has the option to establish its own targets or to participate in a group plan with other Tier II providers whereby targets are established by a plan sponsor, typically a state DOT, for the entire group.

A total of 20 transit providers participated in the FDOT Group TAM Plan and continue to coordinate with FDOT on establishing and reporting group targets to FTA through the National Transit Database (NTD) (Table 5.2). The participants in the FDOT Group TAM Plan are comprised of the Section 5311 Rural Program and open-door Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities FDOT subrecipients. The Group TAM Plan was adopted in October 2018 and covers fiscal years 2018-2019 through 2021-2022. Updated targets were submitted to NTD in 2019.

**Table 5.2. Florida Group TAM Plan Participants**

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

<sup>1</sup>no longer in service

<sup>2</sup>provider service area covers portions of Districts 1 and 2

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

The Lake~Sumter MPO planning area is served by two transit service providers: LakeXpress and Sumter County Transit. LakeXpress and Sumter County Transit are considered Tier II providers. LakeXpress has developed its own TAM Plan; however, Sumter County Transit is included in a group TAM plan developed by the FDOT Public Transit Office.



On August 20, 2018, Lake~Sumter MPO agreed to support the LakeXpress transit asset management targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

### **Lake County – LakeXpress**

LakeXpress is a TAM Tier II transit agency operated by the Lake County Board of County Commissioners in Lake County, Florida. The Lake County transit system consists of seven fixed-routes and additional Paratransit service called Lake County Connection. LakeXpress Routes 4 and 50 each travel into Orange County, providing opportunities for regional connectivity via Lynx transit, which primarily serves Orange, Seminole, and Osceola Counties.

LakeXpress established the transit asset targets identified in Table 5.3 on September 20, 2018:

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

**Table 5.3. FTA TAM Targets for LakeXpress**

<b>Asset Category Performance Measure</b>	<b>Asset Class</b>	<b>FY 2018 Asset Condition</b>	<b>FY 2019 Target</b>	<b>FY 2020 Target</b>	<b>FY 2021 Target</b>	<b>FY 2022 Target</b>
<b>Rolling Stock</b>						
Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB	Buses	31%	19%	31%	31%	0%
	Cutaways	23%	6%	61%	61%	48%
	Minivans	0%	0%	0%	100%	0%
	Vans	60%	0%	0%	0%	40%
<b>Equipment</b>						
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Non-Revenue Vehicles	43%	0%	0%	0%	0%
<b>Facilities</b>						
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administrative Office	0%	0%	0%	0%	0%

**Sumter County – Sumter County Transit**

Sumter County Transit is part of the Group TAM Plan for Fiscal Years 2018/2019-2022/2023 developed by FDOT for Tier II providers in Florida and coordinates with FDOT on reporting of group targets to NTD. The FY 2019 asset conditions and 2020 targets for the Tier II providers are shown in Table 5.4.

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

As required by FTA, FDOT will update this TAM Plan at least once every four years. FDOT will update the statewide performance targets for the participating agencies on an annual basis and will notify the participating transit agencies and the MPOs in which they operate when the targets are updated.

**Table 5.4. FDOT Group Plan Transit Asset Management Targets for Tier II Providers**

<b>Asset Category - Performance Measure</b>	<b>Asset Class</b>	<b>FY 2019 Asset Conditions</b>	<b>FY 2020 Performance Target</b>
<b>Revenue Vehicles</b>			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Automobile	55%	≤45%
	Bus	15%	≤13%
	Cutaway Bus	28%	≤28%
	School Bus	31%	≤28%
	Mini-Van	13%	≤11%
	SUV	0%	≤0%
	Van	47%	≤34%
<b>Equipment</b>			
Age - % of equipment or non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/Service Automobile	67%	≤67%
	Trucks and other Rubber Tire Vehicles	50%	≤40%
	Maintenance Equipment	50%	50%
	Routing and Scheduling Software	100%	100%
<b>Facilities</b>			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	0%	≤9%
	Maintenance	6%	≤12%

These targets for the MPO planning area reflect the targets established by LakeXpress through their Transit Asset Management Plan, as well as the statewide targets established by FDOT for those providers participating in the Group Transit Asset Management Plan, which includes Sumter County Transit.

## **TAM Performance**

The Lake~Sumter MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the LRTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including the Lake-Sumter Transit Development Plan and the current Lake~Sumter MPO 2045 LRTP.

To support progress towards TAM performance targets, transit investment and maintenance funding in the 2045 LRTP totals \$324.4 million, approximately 11 percent of total LRTP funding. Improving the State of Good Repair (SGR) of capital assets is an overarching goal of this process.

## 6 - TRANSIT SAFETY PERFORMANCE

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The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTASP) rule and related performance measures as authorized by Section 20021 of the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP- 21). The PTASP rule requires operators of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53 to develop and implement a PTASP based on a safety management systems approach. Development and implementation of PTASPs is anticipated to help ensure that public transportation systems are safe nationwide.

The rule applies to all operators of public transportation that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program. The rule does not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations that are regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

### **Transit Safety Performance Measures**

The transit agency sets targets in the PTASP based on the safety performance measures established in the National Public Transportation Safety Plan (NPTSP). The required transit safety performance measures are:

1. Total number of reportable fatalities.
2. Rate of reportable fatalities per total vehicle revenue miles by mode.
3. Total number of reportable injuries.
4. Rate of reportable injuries per total vehicle revenue miles by mode.
5. Total number of reportable safety events.
6. Rate of reportable events per total vehicle revenue miles by mode.
7. System reliability - Mean distance between major mechanical failures by mode.

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

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

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

## **Transit Provider Coordination with States and MPOs**

Key considerations for MPOs and transit agencies:

- Transit operators are required to review, update, and certify their PTASP annually.
- A transit agency must make its safety performance targets available to states and MPOs to aid in the planning process, along with its safety plans.
- To the maximum extent practicable, a transit agency must coordinate with states and MPOs in the selection of state and MPO safety performance targets.
- MPOs are required to establish initial transit safety targets within 180 days of the date that public transportation providers establish initial targets. MPOs are not required to establish transit safety targets annually each time the transit provider establishes targets. Instead, subsequent MPO targets must be established when the MPO updates the TIP or LRTP. When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own regional transit targets for the MPO planning area. In cases where two or more providers operate in an MPO planning area and establish different targets for a given measure, the MPO has the option of coordinating with the providers to establish a single target for the MPO planning area, or establishing a set of targets for the MPO planning area that reflects the differing transit provider targets.
- MPOs and states must reference those targets in their long-range transportation plans. States and MPOs must each describe the anticipated effect of their respective transportation improvement programs toward achieving their targets.

Over the course of 2020-2021, the Lake~Sumter MPO will coordinate with public transportation providers in the planning area on the development and establishment of transit safety targets. LRTP amendments or updates after July 20, 2021 will include the required details about transit safety performance data and targets.



**Appendix B:  
Summary of TIP Roadway  
(Capacity) Projects for  
FY 2020/21 - 2024/25**

# Summary of TIP\* Roadway (Capacity) Projects for FY 2020/21 - 2024/25

Lake-Sumter MPO

FM #	Project	From Street	To Street	Mi.	Improv Type	PD&E Time	PD&E Cost (YOE)	PD&E Source	PE Time	PE Cost (YOE)	PE Source	ROW Time	ROW Cost (YOE)	ROW Source	CST Time	CST Cost (YOE)	CST Source	Total Cost (YOE)	Funded Level	2025-2045 Project ID**
<b>Non-SIS</b>																				
4293561	SR 500 (US 441)	SR 44	NORTH OF SR 46	2.39	ADD LANES & REHABILITATE PVMNT	< 2020/21	N/A	N/A	< 2020/21	N/A	N/A	2020/21-2024/25	\$ 2,208,556	DIH, SL, DDR	TBD	TBD	TBD	\$ 2,208,556	PARTIAL	11
<b>SIS</b>																				
4357861	WIDEN FLORIDA'S TURNPIKE	MINNEOLA INTCHG	US 27	10.33	ADD LANES & RECONSTRUCT	< 2020/21	N/A	N/A	2020/21-2024/25	\$ 1,500,000	PKYI	2020/21-2024/25	\$ 11,558,097	PKYI, PKBD	2020/21-2024/25	\$ 271,878,576	PKBD, PKYI	\$ 284,936,673	FULL	N/A
4357851	WIDEN FLORIDA'S TURNPIKE	ORANGE/LAKE C/L	MINNEOLA	5.14	ADD LANES & RECONSTRUCT	< 2020/21	N/A	N/A	< 2020/21	N/A	N/A	2020/21-2024/25	\$ 2,438,000	PKYI	2020/21-2024/25	\$ 124,945,865	PKBD	\$ 127,383,865	FULL	N/A
4358593	Widen State Road (S.R.) 50	HERNDO/SUMTER COUNTY LINE	WEST OF CR 757	2.05	ADD LANES & RECONSTRUCT	< 2020/21	N/A	N/A	2020/21-2024/25	\$ 200,000	DDR	2020/21-2024/25	\$ 4,436,000	DIH, DDR	2020/21-2024/25	\$ 28,712,071	DI, DIH	\$ 33,348,071	FULL	N/A
4270561	Realignment of State Road (S.R.) 50	CR 565 (VILLA CITY)	CR 565A (MONTEVISTA)	2.10	Realignment	< 2020/21	N/A	N/A	< 2020/21	N/A	N/A	2020/21-2024/25	\$ 5,835,000	DDR	TBD	TBD	TBD	\$ 5,835,000	PARTIAL	1

\*Information as found in the June 24, 2020 version of the TIP

\*\*Please refer to the "ID" column in the Appendix C and Appendix D tables





# **Appendix C: Cost Feasible Projects Year of Expenditure (YOE)**

# 2045 LRTP Cost Feasible Capacity Projects (YOE)

Lake-Sumter MPO

## 2045 Capacity Projects: Fully Funded

ID	Location	On Street	From Street	To Street	Mi.	Improv	PD&E Time	PD&E Cost (YOE)	PD&E Source	PE Time	PE Cost (YOE)	PD&E Source	ROW Time	ROW Cost (YOE)	ROW Source	CST Time	CST Cost (YOE)	CST Source	**CEI Cost (YOE)	Funded Level
<b>Strategic Intermodal System (SIS) Projects</b>																				
1	Lake	SR-50	CR-565 (Villa City)	CR-565A (Montevista)	2.10	Realign	COMPLETE	\$ 1,603,000	SIS	COMPLETE	\$ 3,206,000	SIS	2020-2024	\$ 25,645,000	SIS	2026-2030	\$ 42,314,000	SIS	N/A	Fully Funded
2	Lake	US-27	Florida's Turnpike Ramps - N	South of SR 19	4.71	4D-6D	2031-2035	\$ 9,378,000	SIS	2031-2035	\$ 5,348,000	SIS	2036-2045	\$ 62,092,000	SIS	2036-2045	\$ 106,522,000	SIS	N/A	Fully Funded
3	Sumter	I-75	Florida's Turnpike	Sumter/Marion Co Line	6.95	MGLANE	2031-2035	\$ 3,920,000	SIS	2031-2035	\$ 12,400,000	SIS	2036-2045	\$ 51,250,000	SIS	2036-2045	\$ 410,000,000	SIS	N/A	Fully Funded
4	Sumter	I-75	SR-44	Sumter/Marion Co Line	6.37	6D-8D	2031-2035	\$ 21,295,000	SIS	2031-2035	\$ 8,813,000	SIS	2036-2045	\$ 14,571,000	SIS	2036-2045	\$ 76,650,000	SIS	N/A	Fully Funded
<b>State Projects</b>																				
5	Lake	SR-19	SR-50	CR-455	9.33	2U-4D	2026-2030	\$ 3,299,000	Prod. Sup.	2031-2035	\$ 7,748,000	Prod. Sup.	2026-2030	\$ 7,055,000	OA	2036-2045	\$ 96,840,000	OA	\$ 5,636,000	Fully Funded
													2031-2035	\$ 52,929,000	OA					
													2036-2045	\$ 1,021,000	OA					
6	Lake	SR-44	SR-44 & Orange Ave	CR-46A	6.15	2U-4D	2025	\$ 1,960,000	Prod. Sup.	2026-2030	\$ 4,348,000	Prod. Sup.	2026-2030	\$ 34,787,000	OA	2036-2045	\$ 63,817,000	OA	\$ 3,714,000	Fully Funded
7	Lake	SR-44	US-441	E Orange Ave	2.10	2U-4D	COMPLETE	\$ 1,325,000	Prod. Sup.	COMPLETE	\$ 2,650,000	Prod. Sup.	2026-2030	\$ 1,287,000	OA	2036-2045	\$ 51,337,000	OA	\$ 2,988,000	Fully Funded
8	Sumter	SR-471	SR-48	US 301	7.17	2U-4D	2026-2030	\$ 1,385,000	Prod. Sup.	2026-2030	\$ 2,770,000	Prod. Sup.	2026-2030	\$ 19,392,000	OA	2036-2045	\$ 40,657,000	OA	\$ 2,366,000	Fully Funded
9	Lake	US-192	US-27	Orange/Lake County Line	1.04	Corr. Imp.	2025	\$ 107,000	Prod. Sup.	2026-2030	\$ 238,000	Prod. Sup.	2026-2030	\$ 1,900,000	OA	2026-2030	\$ 2,245,000	OA	\$ 131,000	Fully Funded
10	Lake	US-441 (SR-500)	Perkins Street	SR-44	1.71	4D-6D	COMPLETE	\$ 690,000	Prod. Sup.	COMPLETE	\$ 1,379,000	Prod. Sup.	COMPLETE	\$ 11,036,000	OA	2025	\$ 15,513,000	OA	\$ 903,000	Fully Funded
11	Lake	US-441 (SR-500)	SR-44	N of SR-46	2.39	4D-6D	COMPLETE	\$ 1,112,000	Prod. Sup.	COMPLETE	\$ 2,223,000	Prod. Sup.	2020-2024	\$ 2,209,000	OA	2026-2030	\$ 27,733,000	OA	\$ 1,614,000	Fully Funded
12	Sumter	US-301	CR-525E	SR-44	5.43	2U-4D	COMPLETE	\$ 4,993,000	Prod. Sup.	2026-2030	\$ 7,690,000	Prod. Sup.	2026-2030	\$ 25,456,000	OA	2031-2035	\$ 85,336,000	OA	\$ 4,967,000	Fully Funded
13	Sumter	US-301	CR-470	CR-525E	2.32	2U-4D	2026-2030	\$ 9,406,000	Prod. Sup.	2026-2030	\$ 2,772,000	Prod. Sup.	2026-2030	\$ 10,844,000	OA	2036-2045	\$ 40,721,000	OA	\$ 2,370,000	Fully Funded
14	Sumter	US-301		@ CR-525E	N/A	Int. Imp.	2026-2030	\$ 338,000	Prod. Sup.	2026-2030	\$ 677,000	Prod. Sup.	2026-2030	\$ 5,415,000	OA	2031-2035	\$ 7,512,000	OA	\$ 437,000	Fully Funded
15	Sumter	US-301		@ E CR-462	N/A	Int. Imp.	2026-2030	\$ 338,000	Prod. Sup.	2026-2030	\$ 677,000	Prod. Sup.	2026-2030	\$ 5,415,000	OA	2031-2035	\$ 7,512,000	OA	\$ 437,000	Fully Funded
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2025	\$ 45,000	Prod. Sup.	2025	\$ 90,000	Prod. Sup.	N/A		2025	\$ 903,000	OA	\$ 45,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2026-2030	\$ 183,000	Prod. Sup.	2026-2030	\$ 367,000	Prod. Sup.	N/A		2026-2030	\$ 3,666,000	OA	\$ 183,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2031-2035	\$ 315,000	Prod. Sup.	2031-2035	\$ 631,000	Prod. Sup.	N/A		2031-2035	\$ 6,309,000	OA	\$ 315,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2036-2045	\$ 1,070,000	Prod. Sup.	2036-2045	\$ 2,141,000	Prod. Sup.	N/A		2036-2045	\$ 21,405,000	OA	\$ 1,070,000	Fully Funded	
<b>Local Projects</b>																				
16	Lake	CR-466A	E of Timbertop Ln	Poinsettia Ave	1.29	2U-4D	COMPLETE	\$ 361,000	OA	COMPLETE	\$ 722,000	OA	COMPLETE	\$ 3,612,000	OA	2026-2030	\$ 9,010,000	OA	\$ 524,000	Fully Funded
17	Lake	CR-437 Realignment	Oak Tree Dr	SR-46	1.12	00-2U	COMPLETE	\$ 274,000	OA	2020-2024	\$ 874,000	OA	2031-2035	\$ 5,802,000	OA	2031-2035	\$ 8,035,000	OA	\$ 468,000	Fully Funded
18	Lake	CR-455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	1.02	2U-4D	COMPLETE	\$ 61,000	OA	COMPLETE	\$ 121,000	OA	COMPLETE	\$ 607,000	OA	2026-2030	\$ 1,515,000	OA	\$ 88,000	Fully Funded
19	Lake	CR-455/Hartle Rd	Hartwood Marsh	Lost Lake	2.16	00-2U	COMPLETE	\$ 651,000	OA	2025	\$ 744,000	OA	2031-2035	\$ 4,650,000	OA	2026-2030	\$ 16,241,000	OA	\$ 945,000	Fully Funded
20	Lake	Rolling Acres Rd	Co Rd 466	Griffin Ave	1.28	2U-4D	2026-2030	\$ 1,188,000	OA	2026-2030	\$ 849,000	OA	2025	\$ 3,825,000	OA	2036-2045	\$ 12,455,000	OA	\$ 725,000	Fully Funded
21	Lake	Round Lake Rd Ext. (A)	Wolf Branch Rd.	SR-44	2.61	00-4D	COMPLETE	\$ 1,070,000	OA	2020-2024	\$ 1,288,000	OA	2031-2035	\$ 9,445,000	OA	2036-2045	\$ 41,465,000	OA	\$ 2,413,000	Fully Funded

## 2045 Capacity Projects: Partially Funded (Map A2)

ID	Location	On Street	From Street	To Street	Mi.	Improv	PD&E Time	PD&E Cost (YOE)	PD&E Source	PE Time	PE Cost (YOE)	PD&E Source	ROW Time	ROW Cost (YOE)	ROW Source	CST Time	CST Cost (YOE)	CST Source	CEI Cost (YOE)	Funded Level
<b>State Projects</b>																				
22	Lake	SR-19	CR-455	CR-48	3.93	Strat. Imp.*	2025	\$ 595,000	Prod. Sup.	2031-2035	\$ 775,000	Prod. Sup.	2031-2035	\$ -	OA	2036-2045	\$ 9,268,000	OA	\$ 539,000	Partially Funded
23	Lake	SR-19	CR-48	CR-561	4.76	Strat. Imp.*	COMPLETE	\$ -	Prod. Sup.	COMPLETE	\$ -	Prod. Sup.	2031-2035	\$ -	OA	2036-2045	\$ 11,225,000	OA	\$ 653,000	Partially Funded
<b>Local Projects</b>																				
24	Lake	CR-33	SR-50	Simon Brown Rd	2.37	Strat. Imp.*	2025	\$ 595,000	Prod. Sup.	2026-2030	\$ 660,000	Prod. Sup.	2031-2035	\$ -	OA	2026-2030	\$ 6,237,000	OA	\$ 363,000	Partially Funded

\*Operational capacity improvements to be determined

\*\*CEI provided by Product Support

\*\*\*System-wide Improvements

Note: YOE costs were developed using inflation factors provided in FDOT Revenue Forecasting Guidebook

# 2045 LRTP Cost Feasible Capacity Projects (YOE)

Lake-Sumter MPO

## State: Unfunded Needs

Priority*	ID	County	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
N/A	25	Sumter	Other State	US-301		@ C-472	N/A	Modify Intersection
	26	Lake	Other State	SR-44		@ US-27	N/A	Modify Intersection
	27	Sumter	Other State	SR-471	SR-50	SR-48	6.48	Widen to 4 Lanes
	28	Lake	SIS	Florida's Turnpike		@ US-301	N/A	Modify Interchange
	29	Lake/Sumter	SIS	Florida's Turnpike	CR-470	I-75	11.90	Widen to 6 Lanes
	30	Lake/Sumter	SIS	SR-50	CR-478A	SR-33/CR-33	14.99	Widen to 4 Lanes

## Lake County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
Tier 1	31	Non-State	Old 441 / CR-19A		@ Eudora Rd	N/A	Modify Intersection
	32	Non-State	Hartwood Marsh Rd	US-27	CR-455	2.17	Widen to 4 Lanes
	33	Non-State	Citrus Grove Rd. (Phase II)	E of US-27	Grassy Lake Road	1.00	New 4 Lanes
Tier 2	34	Non-State	Hooks St Ext.	Hancock Rd	CR-455/Hartle Rd	1.47	New 2 Lanes
	35	Non-State	CR-44	SR-44	US 441	15.39	Widen to 4 Lanes
	36	Non-State	Wellness Way	US-27	SR-429	3.59	New 4 Lanes
	37	Non-State	Citrus Grove Rd. (Phase IV)	Hancock Rd	W of Turnpike Bridge	1.00	New 4 Lanes
	38	Non-State	Citrus Grove Rd. (Phase V)	W of Turnpike Bridge	Blackstill Lake Rd	0.80	New 2 Lanes
Tier 3	39	Non-State	Round Lake Rd Ext. (B)	Orange/Lake Co Line	Wolf Branch Rd.	2.05	New 4 Lanes
	40	Non-State	Micro Racetrack Rd. & Rolling Acres Rd.	CR-466A	US 27/US441	4.29	Widen to 4 Lanes
	41	Non-State	CR-470	TPKE West Ramps	SR-33/CR-33	3.12	Widen to 4 Lanes
	42	Non-State	CR-48	SR-33/CR-33	E of US-27 Bridge	1.26	Widen to 4 Lanes
	43	Non-State	CR-561	CR-448	SR-19	1.62	Widen to 4 Lanes
	44	Non-State	CR-561A	CR-565A	US-27	2.79	Widen to 4 Lanes
	45	Non-State	CR-455 Extension	CFX Connector	Hartwood/Marsh Rd	5.55	New 4 Lanes
	46	Non-State	Schofield Rd	US-27	SR-429	5.55	New 4 Lanes
	47	Non-State	CR-561/561A	US-27	N Hancock Rd	2.37	Widen to 4 Lanes
	48	Non-State	N Hancock Rd	Old Hwy 50 W	Turkey Farm Rd	2.00	Widen to 4 Lanes

\*Priority is only specified for for non-state projects within a single county.

Tier 1 projects will be given priority in investment decisions using local capital revenues.

Tier 2 and Tier 3 projects will be considered for funding as funds becomes available.

## Sumter County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
Tier 1	49	Non-State	Marsh Bend Trail (New Road)	US-301	Warm Springs Ave	4.78	New 2 Lanes
	50	Non-State	Corbin Trail (New Road)	Warm Springs Ave	E C-470	4.81	New 2 Lanes
	51	Non-State	Rd A (New Road)	E C-470	CR-48	6.62	New 2 Lanes
	52	Non-State	Rd B (New Road)	SR-471	E C-470	6.68	New 2 Lanes
	53	Non-State	Rd C (New Road)	SR-471	E C-470	8.85	New 2 Lanes
	54	Non-State	Meggison Rd (New Road)	SR-44	E C-470	9.02	New 2 Lanes
	55	Non-State	Morse Blvd Ext. (New Road)	Meggison Rd	CR-468	1.08	New 2 Lanes
	56	Non-State	Buena Vista Blvd Ext.	Meggison Rd	SR-44	0.85	New 4 Lanes
Tier 2	57	Non-State	Marsh Bend Trail	C470	Corbin Trail	2.68	Widen to 6 Lanes
	58	Non-State	E Co Rd 466	I-75	US-301	4.87	Widen to 4 Lanes
	59	Non-State	CR-219	SR-44	CR-44A	1.08	Widen to 4 Lanes
	60	Non-State	CR-468/US-301	Commercial St	CR-507	3.12	Widen to 4 Lanes
	61	Non-State	CR-475	Old Airport Rd	CR-470	5.27	Widen to 4 Lanes

## Lake and Sumter County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
N/A	62	Non-State	CR-470	SR-471 (CR-527)	Florida's Turnpike	9.02	Widen to 4 Lanes



# **Appendix D: Cost Feasible Projects Present Day Cost (PDC)**

# 2045 LRTP Cost Feasible Capacity Projects (PDC)

Lake-Sumter MPO

## 2045 Capacity Projects: Fully Funded

ID	Location	On Street	From Street	To Street	Mi.	Improv	PD&E Time	PD&E Cost (PDC)	PD&E Source	PE Time	PE Cost (PDC)	PD&E Source	ROW Time	ROW Cost (PDC)	ROW Source	CST Time	CST Cost (PDC)	CST Source	**CEI Cost (PDC)	Funded Level
<b>Strategic Intermodal System (SIS) Projects</b>																				
1	Lake	SR-50	CR-565 (Villa City)	CR-565A (Montevista)	2.10	Realign	COMPLETE	\$ 1,603,000	SIS	COMPLETE	\$ 3,206,000	SIS	2020-2024	\$ 25,645,000	SIS	2026-2030	\$ 32,056,000	SIS	N/A	Fully Funded
2	Lake	US-27	Florida's Turnpike Ramps - N	South of SR 19	4.71	4D-6D	2031-2035	\$ 6,050,000	SIS	2031-2035	\$ 3,450,000	SIS	2036-2045	\$ 30,289,000	SIS	2036-2045	\$ 51,962,000	SIS	N/A	Fully Funded
3	Sumter	I-75	Florida's Turnpike	Sumter/Marion Co Line	6.95	MGLANE	2031-2035	\$ 2,529,000	SIS	2031-2035	\$ 8,000,000	SIS	2036-2045	\$ 25,000,000	SIS	2036-2045	\$ 200,000,000	SIS	N/A	Fully Funded
4	Sumter	I-75	SR-44	Sumter/Marion Co Line	6.37	6D-8D	2031-2035	\$ 13,739,000	SIS	2031-2035	\$ 5,686,000	SIS	2036-2045	\$ 7,108,000	SIS	2036-2045	\$ 37,390,000	SIS	N/A	Fully Funded
<b>State Projects</b>																				
5	Lake	SR-19	SR-50	CR-455	9.33	2U-4D	2026-2030	\$ 2,499,000	Prod. Sup.	2031-2035	\$ 4,999,000	Prod. Sup.	2026-2030	\$ 5,345,000	OA	2036-2045	\$ 47,239,000	OA	\$ 2,749,000	Fully Funded
												2031-2035	\$ 34,148,000	OA						
												2036-2045	\$ 498,000	OA						
6	Lake	SR-44	SR-44 & Orange Ave	CR-46A	6.15	2U-4D	2025	\$ 1,647,000	Prod. Sup.	2026-2030	\$ 3,294,000	Prod. Sup.	2026-2030	\$ 26,354,000	OA	2036-2045	\$ 31,130,000	OA	\$ 1,812,000	Fully Funded
7	Lake	SR-44	US-441	E Orange Ave	2.10	2U-4D	COMPLETE	\$ 1,325,000	Prod. Sup.	COMPLETE	\$ 2,650,000	Prod. Sup.	2026-2030	\$ 975,000	OA	2036-2045	\$ 25,043,000	OA	\$ 1,458,000	Fully Funded
8	Sumter	SR-471	SR-48	US 301	7.17	2U-4D	2026-2030	\$ 1,049,000	Prod. Sup.	2026-2030	\$ 2,099,000	Prod. Sup.	2026-2030	\$ 14,691,000	OA	2036-2045	\$ 19,832,000	OA	\$ 1,154,000	Fully Funded
9	Lake	US-192	US-27	Orange/Lake County Line	1.04	Corr. Imp.	2025	\$ 90,000	Prod. Sup.	2026-2030	\$ 180,000	Prod. Sup.	2026-2030	\$ 1,440,000	OA	2026-2030	\$ 1,701,000	OA	\$ 99,000	Fully Funded
10	Lake	US-441 (SR-500)	Perkins Street	SR-44	1.71	4D-6D	COMPLETE	\$ 690,000	Prod. Sup.	COMPLETE	\$ 1,379,000	Prod. Sup.	COMPLETE	\$ 11,036,000	OA	2025	\$ 13,036,000	OA	\$ 759,000	Fully Funded
11	Lake	US-441 (SR-500)	SR-44	N of SR-46	2.39	4D-6D	COMPLETE	\$ 1,112,000	Prod. Sup.	COMPLETE	\$ 2,223,000	Prod. Sup.	2020-2024	\$ 2,209,000	OA	2026-2030	\$ 21,010,000	OA	\$ 1,223,000	Fully Funded
12	Sumter	US-301	CR-525E	SR-44	5.43	2U-4D	COMPLETE	\$ 4,993,000	Prod. Sup.	2026-2030	\$ 5,826,000	Prod. Sup.	2026-2030	\$ 19,285,000	OA	2031-2035	\$ 55,056,000	OA	\$ 3,204,000	Fully Funded
13	Sumter	US-301	CR-470	CR-525E	2.32	2U-4D	2026-2030	\$ 7,126,000	Prod. Sup.	2026-2030	\$ 2,100,000	Prod. Sup.	2026-2030	\$ 8,215,000	OA	2036-2045	\$ 19,864,000	OA	\$ 1,156,000	Fully Funded
14	Sumter	US-301		@ CR-525E	N/A	Int. Imp.	2026-2030	\$ 256,000	Prod. Sup.	2026-2030	\$ 513,000	Prod. Sup.	2026-2030	\$ 4,103,000	OA	2031-2035	\$ 4,846,000	OA	\$ 282,000	Fully Funded
15	Sumter	US-301		@ E CR-462	N/A	Int. Imp.	2026-2030	\$ 256,000	Prod. Sup.	2026-2030	\$ 513,000	Prod. Sup.	2026-2030	\$ 4,103,000	OA	2031-2035	\$ 4,846,000	OA	\$ 282,000	Fully Funded
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2025	\$ 38,000	Prod. Sup.	2025	\$ 76,000	Prod. Sup.	N/A		2025	\$ 759,000	OA	\$ 38,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2026-2030	\$ 139,000	Prod. Sup.	2026-2030	\$ 278,000	Prod. Sup.	N/A		2026-2030	\$ 2,777,000	OA	\$ 139,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2031-2035	\$ 204,000	Prod. Sup.	2031-2035	\$ 407,000	Prod. Sup.	N/A		2031-2035	\$ 4,070,000	OA	\$ 204,000	Fully Funded	
***	Lake/Sumter	Intelligent Transportation Systems/Autonomous, Connected, Electric, and Shared Vehicles					2036-2045	\$ 522,000	Prod. Sup.	2036-2045	\$ 1,044,000	Prod. Sup.	N/A		2036-2045	\$ 10,442,000	OA	\$ 522,000	Fully Funded	
<b>Local Projects</b>																				
16	Lake	CR-466A	E of Timbertop Ln	Poinsettia Ave	1.29	2U-4D	COMPLETE	\$ 361,000	OA	COMPLETE	\$ 722,000	OA	COMPLETE	\$ 3,612,000	OA	2026-2030	\$ 6,826,000	OA	\$ 397,000	Fully Funded
17	Lake	CR-437 Realignment	Oak Tree Dr	SR-46	1.12	00-2U	COMPLETE	\$ 274,000	OA	2020-2024	\$ 874,000	OA	2031-2035	\$ 3,743,000	OA	2031-2035	\$ 5,184,000	OA	\$ 302,000	Fully Funded
18	Lake	CR-455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	1.02	2U-4D	COMPLETE	\$ 61,000	OA	COMPLETE	\$ 121,000	OA	COMPLETE	\$ 607,000	OA	2026-2030	\$ 1,148,000	OA	\$ 67,000	Fully Funded
19	Lake	CR-455/Hartle Rd	Hartwood Marsh	Lost Lake	2.16	00-2U	COMPLETE	\$ 651,000	OA	2025	\$ 625,000	OA	2031-2035	\$ 3,000,000	OA	2026-2030	\$ 12,304,000	OA	\$ 716,000	Fully Funded
20	Lake	Rolling Acres Rd	Co Rd 466	Griffin Ave	1.28	2U-4D	2026-2030	\$ 900,000	OA	2026-2030	\$ 643,000	OA	2025	\$ 3,215,000	OA	2036-2045	\$ 6,076,000	OA	\$ 354,000	Fully Funded
21	Lake	Round Lake Rd Ext. (A)	Wolf Branch Rd.	SR-44	2.61	00-4D	COMPLETE	\$ 1,070,000	OA	2020-2024	\$ 1,288,000	OA	2031-2035	\$ 6,094,000	OA	2036-2045	\$ 20,227,000	OA	\$ 1,177,000	Fully Funded

## 2045 Capacity Projects: Partially Funded

ID	Location	On Street	From Street	To Street	Mi.	Improv	PD&E Time	PD&E Cost (PDC)	PD&E Source	PE Time	PE Cost (PDC)	PD&E Source	ROW Time	ROW Cost (PDC)	ROW Source	CST Time	CST Cost (PDC)	CST Source	CEI Cost (PDC)	Funded Level
<b>State Projects</b>																				
22	Lake	SR-19	CR-455	CR-48	3.93	Strat. Imp.*	2025	\$ 500,000	Prod. Sup.	2031-2035	\$ 500,000	Prod. Sup.	2031-2035	\$ -	OA	2036-2045	\$ 4,521,000	OA	\$ 263,000	Partially Funded
23	Lake	SR-19	CR-48	CR-561	4.76	Strat. Imp.*	COMPLETE	\$ -	Prod. Sup.	COMPLETE	\$ -	Prod. Sup.	2031-2035	\$ -	OA	2036-2045	\$ 5,476,000	OA	\$ 319,000	Partially Funded
<b>Local Projects</b>																				
24	Lake	CR-33	SR-50	Simon Brown Rd	2.37	Strat. Imp.*	2025	\$ 500,000	Prod. Sup.	2026-2030	\$ 500,000	Prod. Sup.	2031-2035	\$ -	OA	2026-2030	\$ 4,725,000	OA	\$ 275,000	Partially Funded

\*Operational capacity improvements to be determined

\*\*CEI provided by Product Support

\*\*\*System-wide Improvements

# 2045 LRTP Cost Feasible Capacity Projects (PDC)

Lake-Sumter MPO

## State: Unfunded Needs

Priority*	ID	County	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
N/A	25	Sumter	Other State	US-301		@ C-472	N/A	Modify Intersection
	26	Lake	Other State	SR-44		@ US-27	N/A	Modify Intersection
	27	Sumter	Other State	SR-471	SR-50	SR-48	6.48	Widen to 4 Lanes
	28	Lake	SIS	Florida's Turnpike		@ US-301	N/A	Modify Interchange
	29	Lake/Sumter	SIS	Florida's Turnpike	CR-470	I-75	11.90	Widen to 6 Lanes
	30	Lake/Sumter	SIS	SR-50	CR-478A	SR-33/CR-33	14.99	Widen to 4 Lanes

## Lake County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
Tier 1	31	Non-State	Old 441 / CR-19A		@ Eudora Rd	N/A	Modify Intersection
	32	Non-State	Hartwood Marsh Rd	US-27	CR-455	2.17	Widen to 4 Lanes
	33	Non-State	Citrus Grove Rd. (Phase II)	E of US-27	Grassy Lake Road	1.00	New 4 Lanes
Tier 2	34	Non-State	Hooks St Ext.	Hancock Rd	CR-455/Hartle Rd	1.47	New 2 Lanes
	35	Non-State	CR-44	SR-44	US 441	15.39	Widen to 4 Lanes
	36	Non-State	Wellness Way	US-27	SR-429	3.59	New 4 Lanes
	37	Non-State	Citrus Grove Rd. (Phase IV)	Hancock Rd	W of Turnpike Bridge	1.00	New 4 Lanes
	38	Non-State	Citrus Grove Rd. (Phase V)	W of Turnpike Bridge	Blackstill Lake Rd	0.80	New 2 Lanes
Tier 3	39	Non-State	Round Lake Rd Ext. (B)	Orange/Lake Co Line	Wolf Branch Rd.	2.05	New 4 Lanes
	40	Non-State	Micro Racetrack Rd. & Rolling Acres Rd.	CR-466A	US 27/US441	4.29	Widen to 4 Lanes
	41	Non-State	CR-470	TPKE West Ramps	SR-33/CR-33	3.12	Widen to 4 Lanes
	42	Non-State	CR-48	SR-33/CR-33	E of US-27 Bridge	1.26	Widen to 4 Lanes
	43	Non-State	CR-561	CR-448	SR-19	1.62	Widen to 4 Lanes
	44	Non-State	CR-561A	CR-565A	US-27	2.79	Widen to 4 Lanes
	45	Non-State	CR-455 Extension	CFX Connector	Hartwood/Marsh Rd	5.55	New 4 Lanes
	46	Non-State	Schofield Rd	US-27	SR-429	5.55	New 4 Lanes
	47	Non-State	CR-561/561A	US-27	N Hancock Rd	2.37	Widen to 4 Lanes
	48	Non-State	N Hancock Rd	Old Hwy 50 W	Turkey Farm Rd	2.00	Widen to 4 Lanes

\*Priority is only specified for for non-state projects within a single county.

Tier 1 projects will be given priority in investment decisions using local capital revenues.

Tier 2 and Tier 3 projects will be considered for funding as funds becomes available.

## Sumter County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
Tier 1	49	Non-State	Marsh Bend Trail (New Road)	US-301	Warm Springs Ave	4.78	New 2 Lanes
	50	Non-State	Corbin Trail (New Road)	Warm Springs Ave	E C-470	4.81	New 2 Lanes
	51	Non-State	Rd A (New Road)	E C-470	CR-48	6.62	New 2 Lanes
	52	Non-State	Rd B (New Road)	SR-471	E C-470	6.68	New 2 Lanes
	53	Non-State	Rd C (New Road)	SR-471	E C-470	8.85	New 2 Lanes
	54	Non-State	Meggison Rd (New Road)	SR-44	E C-470	9.02	New 2 Lanes
	55	Non-State	Morse Blvd Ext. (New Road)	Meggison Rd	CR-468	1.08	New 2 Lanes
	56	Non-State	Buena Vista Blvd Ext.	Meggison Rd	SR-44	0.85	New 4 Lanes
Tier 2	57	Non-State	Marsh Bend Trail	C470	Corbin Trail	2.68	Widen to 6 Lanes
	58	Non-State	E Co Rd 466	I-75	US-301	4.87	Widen to 4 Lanes
	59	Non-State	CR-219	SR-44	CR-44A	1.08	Widen to 4 Lanes
	60	Non-State	CR-468/US-301	Commercial St	CR-507	3.12	Widen to 4 Lanes
	61	Non-State	CR-475	Old Airport Rd	CR-470	5.27	Widen to 4 Lanes

## Lake and Sumter County: Unfunded Needs

Priority*	ID	Jurisdiction	On Street	From Street	To Street	Mi.	Improvement
N/A	62	Non-State	CR-470	SR-471 (CR-527)	Florida's Turnpike	9.02	Widen to 4 Lanes



# **Appendix E: Cost Feasible Plan Financial Summary**

# 2045 LRTP Cost Feasible Plan - Financial Summary

Lake-Sumter MPO

Source	Total Forecast Revenues (PDC)	2025 (PDC)			2026-2030 (PDC)			2031-2035 (PDC)			2036-2045 (PDC)		
		Revs	Costs	Balance	Revs	Costs	Balance	Revs	Costs	Balance	Revs	Costs	Balance
SIS	\$ 423,259,000	\$ -	\$ -	\$ -	\$ 32,056,000	\$ 32,056,000	\$ -	\$ 39,454,000	\$ 39,454,000	\$ -	\$ 351,749,000	\$ 351,749,000	\$ -
OA	\$ 465,510,000	\$ 17,634,000	\$ 17,634,000	\$ -	\$ 136,543,000	\$ 136,543,000	\$ -	\$ 120,987,000	\$ 120,987,000	\$ -	\$ 190,346,000	\$ 190,346,000	\$ -
Product Support	\$ 102,412,000	\$ 3,880,000	\$ 3,648,000	\$ 232,000	\$ 30,039,000	\$ 29,544,000	\$ 495,000	\$ 26,617,000	\$ 10,383,000	\$ 16,234,000	\$ 41,876,000	\$ 12,530,000	\$ 29,346,000

Source	Total Forecast Revenues (YOE)	2025 (YOE)			2026-2030 (YOE)			2031-2035 (YOE)			2036-2045 (YOE)		
		Revs	Costs	Balance	Revs	Costs	Balance	Revs	Costs	Balance	Revs	Costs	Balance
SIS	\$ 824,553,000	\$ -	\$ -	\$ -	\$ 42,314,000	\$ 42,314,000	\$ -	\$ 61,154,000	\$ 61,154,000	\$ -	\$ 721,085,000	\$ 721,085,000	\$ -
OA	\$ 778,961,000	\$ 20,985,000	\$ 20,985,000	\$ -	\$ 180,236,000	\$ 180,236,000	\$ -	\$ 187,530,000	\$ 187,530,000	\$ -	\$ 390,210,000	\$ 390,210,000	\$ -
Product Support	\$ 171,371,000	\$ 4,617,000	\$ 4,341,000	\$ 276,000	\$ 39,652,000	\$ 38,999,000	\$ 653,000	\$ 41,257,000	\$ 16,094,000	\$ 25,163,000	\$ 85,846,000	\$ 25,686,000	\$ 60,160,000



