Lake-Sumter MPO
Metropolitan Planning Organization

Lake-Sumter MPO

2045 Long Range Transportation Plan
Final Plan Document

March 8, 2021

prepared for:

Lake-Sumter MPO
Metropolitan Planning Organization

prepared by:

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LAKE~SUMTER METROPOLITAN PLANNING ORGANIZATION

RESOLUTION 2020-13

RESOLUTION OF THE LAKE~SUMTER METROPOLITAN PLANNING ORGANIZATION ADOPTING THE 2045 LONG RANGE TRANSPORTATION PLAN AND AUTHORIZING TRANSMITTAL TO THE FLORIDA DEPARTMENT OF TRANSPORTATION AND THE FEDERAL HIGHWAY ADMINISTRATION

WHEREAS, the Lake~Sumter Metropolitan Planning Organization (MPO) is the duly designated and constituted body responsible for carrying out the urban transportation planning and programming process for Lake-Sumter Planning Area; and

WHEREAS, 23 CFR Section 450.322(a) and Florida Statute 339.175(6) require each Metropolitan Planning Organization to develop and approve a Long Range Transportation Plan, addressing at least a twenty-year planning horizon, at least every five years; and

WHEREAS, a Long Range Transportation Plan includes both long-range and short-range strategies and actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods; and

WHEREAS, after extensive public meetings and public presentations during the development of the plan and after review and recommendation by MPO committees, the draft document was approved by the Governing Board October 28, 2020, at which time a public comment period was opened and the formal draft document was made available for public review; and

WHEREAS, the Lake~Sumter MPO's 2045 Long Range Transportation Plan has been prepared in accordance with Chapter 4 of the Florida Department of Transportation MPO Program Management Handbook.

NOW, THEREFORE, BE IT RESOLVED by the Lake~Sumter MPO that:

1. The 2045 Long Range Transportation Plan is hereby endorsed and adopted; and
2. The Chairman of the MPO is hereby authorized and directed to transmit the 2045 Long Range Transportation Plan to the Florida Department of Transportation and the Federal Highway Administration.

DULY PASSED AND ADOPTED this 9th day of December, 2020.

Lake~Sumter Metropolitan Planning Organization

Josh Blake, Chairman
This 3rd day of March, 2021.

Approved as to form and legality:

for Melanie Marsh, MPO Attorney

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Technical Appendix

1 Introduction

Chapter 1 - Introduction

The Lake~Sumter MPO's 2045 Long Range Transportation Plan (LRTP) serves as the primary guidance for developing transportation improvements in the MPO's planning area over the next 25 years. The LRTP identifies the fiscally-constrained expenditure of federal and state transportation funds to enhance pedestrian, bicycle, transit, highway, and freight mobility. The development of Transporation 2045 was coordinated with local, regional, and state partners to be consistent with their respective visions; considered the input and guidance of multiple stakeholders and the community; provides benefits throughout the two counties without disproportionate adverse impacts; and is compliant with applicable state and federal requirements.

Purpose of the LRTP

The LRTP is a federally-required short- and long-term plan addressing multimodal transportation needs within the two counties in MPO's planning area. Per these requirements, the plan is required to be updated every five years and must cover a 20-year horizon. The 2045 LRTP 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.

Legislation and Guidance

This LRTP is governed by the Fixing Americas' Surface Transportation Act (FAST Act) which was signed into law on December 4, 2015, superseding the Moving Ahead for Progress in the 21st Century Act (MAP-21), which has guided previous plans. The FAST Act establishes a performance-based program for transportation planning, which supports economic growth and a comprehensive safety agenda, streamlines Federal Highway Administration transportation programs, and accelerates project delivery and innovation.

The FAST Act largely incorporates the policies and goals of MAP-21, with several updates as follows:

- Establishment of two new Federal planning Factors, for a total of ten, as described in Chapter 2. The new planning factors include:
  - Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
  - Enhance travel and tourism.

- Emphasis of multimodality of the transportation system
  - The FAST Act considers additional facilities such as intercity buses and commuter van pools that support intermodal transportation, [23 USC 134(c) (2) & (i)(2)].
- Enhanced participation by interested parties in the planning process
  - It is a requirement that stakeholders and the public are involved, and they must be given reasonable opportunity to provide their input. Under the FAST Act, public ports and additional private transportation service providers were added to the list of interested parties.
- Expanded consultation with additional officials
  - FAST Act adds required coordination with officials responsible for tourism activities, as well as those responsible for reducing potential risks of natural disasters.

Chapter 2 includes additional background and details on federal and state requirements related to the LRTP process.

COVID-19

It should be noted that the 2045 LRTP was primarily developed during 2020 when the Coronavirus-19 (COVID-19) initiated directives from federal, state, and local agencies to limit non-essential social gatherings and interaction. This unprecedented pandemic event caused the MPO to shift public involvment to virtual/technology-based approaches as alternatives to anticipated in-person activities. Please see **Chapter 5 - Public Involvement** for additional detail.

2 Goals, Objectives, and Performance Targets

Chapter 2 - Goals, Objectives, and Performance Targets

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 included 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 also includes an analysis of how the plan 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.

Goals and objectives reflecting the vision of the planning area were developed at the outset of the planning process. They are consistent with the guidance and requirements of the FAST Act, current federal transportation planning requirements, and the Florida Transportation Plan.

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 2045 LRTP's 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.

FAST ACT PLANNING FACTORS

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 2-1**.

Table 2-1: 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
Economic Success and Community Values	●		●	●	●	●	●		●	●
Safety and Security	●	●	●	●	●		●		●	●
Transportation Options	●	●	●	●	●	●	●	●	●	
Mobility	●	●	●	●	●	●	●	●	●	●
System Preservation	●	●	●	●	●	●	●	●	●	

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, as outlined in the May 2020 FTP Vision Element, are:

- Safety and security for residents, visitors, and businesses
- Agile, resilient, and quality transportation infrastructure
- Connected, efficient, and reliable mobility for people and freight
- Transportation choices that improve accessibility and equity
- Transportation solutions that strengthen Florida's economy
- Transportation solutions that enhance Florida's communities
- Transportation solutions that enhance Florida's environment

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 2-2.**

Local Government Comprehensive Plans

Recognizing the close link between land use and transportation, the 2045 LRTP has also been developed in manner consistent with comprehensive plans developed and adopted by local governments within the MPO's planning area.

Table 2-2: 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	●	●	●	●	●	●	●

Performance-Based Planning

Federal Guidance

The U.S. Secretary of Transportation established criteria for evaluation of the new performance-based planning processes. This included the identification of specific performance measures that all states and each MPO must evaluate. The process required FDOT to develop appropriate performance targets for these measures and to monitor the progress made toward achieving the targets. This also requires MPOs in Florida to either accept and support FDOT's performance targets or establish, formally adopt, and monitor their own performance targets. FDOT is providing performance data for all targets and MPOs have the option for using the data or developing their own. FDOT is also establishing targets in each category and MPOs have the option to select the same target or choose their own.

Overview of Statewide Performance Measures and Targets

FDOT worked in collaboration with MPOs and public transportation providers to establish statewide targets for the following:

Safety. Florida shares the national traffic safety vision "Toward Zero Deaths," and formally adopted its own version of the national vision, "Driving Down Fatalities," in 2012. FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero is the target for all the safety performance measures.

Pavement Condition. The pavement condition performance measures assess pavement conditions based on the international roughness index (IRI), cracking, rutting (for asphalt pavements), and faulting (for jointed concrete pavements). For asphalt and jointed concrete pavements, a 0.1-mile segment is considered in good condition if all three metrics are rated Good; if two or more metrics are considered poor, the condition is Poor. The federal rule requires a new methodology be used to measure rut depth and cracking that has not been historically used by FDOT. In consideration of the differences in the data collection requirements used by FDOT and those mandated by the rule, as well as other unknowns associated with the new required processes, initial 2- and 4-year targets were established.

Bridge Condition. The bridge condition performance measures for the percent of deck area classified as Good and Poor is determined using National Bridge Inventory (NBI) condition ratings for deck, superstructure, substructure, and culvert. Condition is determined by the lowest rating of these items using a scale of 1 to 9. If the NBI rating is 1 to 4, the bridge is classified as Poor; NBI rating 7 to 9, the bridge is Good. Bridges rated below 7 but above 4 are classified Fair; however, there is no related Federal Highway Administration (FHWA) performance measure associated with that rating. Considering the differences in criteria, initial 2- and 4-year targets were established.

System Performance. The travel time reliability metric is calculated for each segment of the National Highway System (NHS), weighted by volume and occupancy. Data is collected in 15-minute segments during four total time periods and is reported as the "percent of reliable person-miles traveled." The segment is considered reliable if the reliability ratio is below 1.50 during all time periods. Freight movement is assessed by calculating truck travel time reliability ratio using data from five total time periods. The higher the ratio value, the less reliable the segment.

Lake~Sumter MPO 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 2-3**.

Table 2-3: 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

Statewide system conditions for each safety performance measure are included in **Appendix A**, along with system conditions in the Lake~Sumter MPO 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.

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 2-4**).

Table 2-4: Lake~Sumter MPO Bridge and Pavement Performance Targets (PM2)

Performance Measures	Florida 2-year Targets 1/1/2018 to 12/31/2019	Florida 4-year Targets 1/1/2018 to 12/31/2021
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 2-5** 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 2-5: 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.

Table 2-6: Transit Asset Performance Measures

Asset Category	Performance Measure
Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
Infrastructure	Percentage of track segments with performance restrictions
Facilities	Percentage of facilities within an asset class rated below condition 3.0 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 2-7**.

Table 2-7: FTA TAM Targets for LakeXpress

Asset Class	2018 Performance	2019 Target	2020 Target	2021 Target	2022 Target
Rolling Stock					
Buses	31%	19%	31%	31%	0%
Cutaways	23%	6%	61%	61%	48%
Minivans	0%	0%	0%	100%	0%
Vans	60%	0%	0%	0%	40%
Equipment					
Non Revenue/Service Automobile	43%	0%	0%	0%	0%
Facilities					
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 2-8.**

Table 2-8: Group Transit Asset Management Targets for Tier II Providers

Asset Category Performance Measure	Asset Class	FY 2019 Asset Condition	FY 2020 Target
Revenue Vehicles			
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%
Equipment			
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%
Facilities			
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%

Transit Safety Performance Measures

The Federal Transit Administration (FTA) established transit safety performance management requirements in the Public Transportation Agency Safety Plan (PTASP) final rule, which was published on July 19, 2018. This rule requires providers 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.

The PTASP must include performance targets for the performance measures established by FTA in the National Public Transportation Safety Plan, which was published on January 28, 2017. The transit safety performance measures are:

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

The PTASP rule took effect on July 19, 2019. 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 December 31, 2020. MPOs then have 180 days to establish transit safety targets for the MPO planning area. Once the public transportation provider establishes targets, it must make the targets available to MPOs to aid in the planning process. The Lake~Sumter MPO must reflect those targets in any LRTP and TIP updated on or after July 20, 2021.

Lake~Sumter MPO will coordinate with public transportation providers in the planning area on the development and establishment of transit safety targets. Future TIPs will include a discussion of the anticipated effect towards achieving the transit safety targets.

Other Performance-Based Planning Considerations

FDOT Transportation Asset Management Plan (TAMP)

FDOT published the most recent TAMP on June 28, 2019. This plan summarizes the current state of the asset management planning process, goals and objectives, performance measures, and FDOT performance targets. The MPO supports the FDOT asset management process and adopts by reference the 2019 TAMP into the 2045 Long Range Transportation Plan. The MP will continue to monitor the development of the update of the TAMP and will work with the FDOT to set performance targets for the following asset management performance measures only:

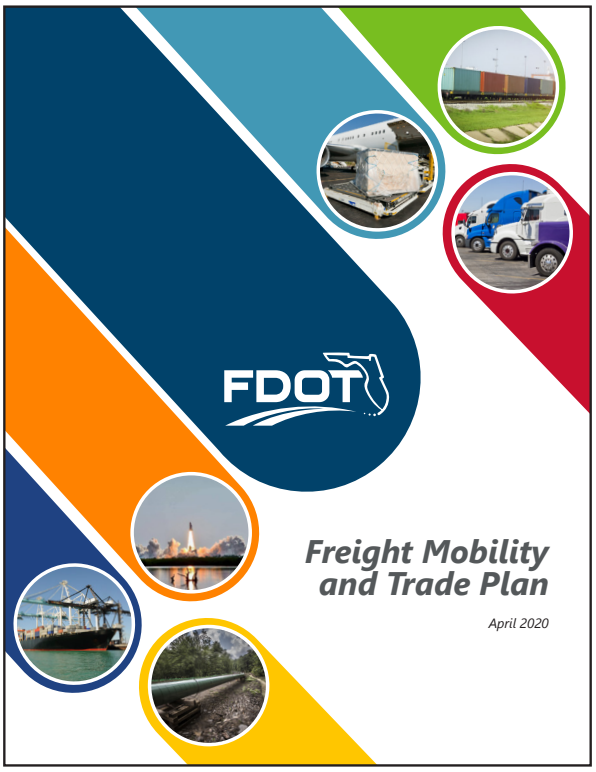
- % of Interstate pavements in Good condition
- % of Interstate pavements in Poor condition
- % of non-Interstate NHS pavements in Good condition
- % of non-Interstate NHS pavements in Poor condition
- % of NHS bridges classified as in Good condition by deck area
- % of NHS bridges classified as in Poor condition by deck area

The MPO will not be responsible for setting performance targets for other asset management performance measures contained within the TAMP.

Florida Freight Mobility and Trade Plan

There is growing recognition of the importance of freight movement at the national, state and regional level. Most notably, the need to place an increased focus on the nation's freight system is evident in the inclusion of freight provisions and requirements in the last two federal transportation bills. In 2012, MAP-21 established a policy to improve the condition and performance of the national freight network. This included the designation of a national freight network and the development of a national freight strategic plan.

These goals and objectives were further reinforced with the implementation of the FAST Act, implemented in 2015. A key provision contained in the FAST Act is the requirement that State Departments of Transportation such as FDOT develop a state freight plan to comprehensively address the State's short- and long-term freight issues and needs. Development of a state freight plan is a requirement to be eligible to receive funding under the National Highway Freight Program (23 U.S.C. 167).



In 2013 and 2014, FDOT developed the first Florida Freight Mobility and Trade Plan (FMTP) designed to set the stage for freight planning in Florida, raise awareness, and galvanize the freight community. FDOT released an updated FMTP in April 2020. This new document built upon the foundation set by the previous FMTP by using tactical and strategic approaches to implement immediate opportunities while also positioning Florida for future possibilities. One key recommendation from both FMTP efforts was that freight issues and needs shall be given emphasis in all appropriate transportation plans including MPO LRTPs.

The MPO supports the state freight planning process and will work with FDOT to set appropriate performance targets for the measurement of Truck Travel Time Reliability (Truck travel time reliability ratio (TTTR) on the Interstate system).

Table 2-9 illustrates the relationship between Connect 2045 goals and the new FMTP objectives which were developed in context of the FTP goal areas (also shown for reference).

Table 2-9: LSMPO 2045 LRTP Goals and Florida Freight Mobility and Trade Plan Objectives

FTP Goal	FMTP Objective	LSMPO 2045 LRTP Goals				
		Economic Success and Community Values	Safety and Security	Transportation Operations	Mobility	System Preservation
Safety and Security	Leverage multisource data and technology to improve freight system safety and security	●	●	●	●	
Resilient Infrastructure	Create a more resilient multimodal freight system	●		●		●
	Ensure the Florida freight system is in a State of Good Repair	●				●
Mobility	Drive innovation to reduce congestion, bottlenecks and improve travel time reliability	●		●	●	
Transportation Choices	Remove institutional, policy and funding bottlenecks to improve operational efficiencies and reduce costs in supply chains	●		●		
	Improve last-mile connectivity for all freight modes	●		●	●	
Economy	Continue to forge partnerships between the public and private sectors to improve trade and logistics	●		●		
	Capitalize on emerging freight trends to promote economic development	●		●		
Quality Places	Increase freight-related regional and local transportation planning and land use coordination	●		●	●	
Environment	Promote and support the shift to alternatively fueled freight vehicles	●				

3 Planning Assumptions

Chapter 3 - Planning Assumptions

The development of the 2045 LRTP required the identification of future transportation needs and the balance of those needs against available funding in order to establish a Cost Feasible Plan. An initial step in this process is to develop a forecast of the geographic distribution of the planning area's population and employment over the next 20 years. The forecasted population and employment data is used to develop a forecast of the travel demand for the year 2045. A travel demand model is utilized to convert population and employment data into trips which are subsequently assigned to a roadway and/or transit network. Documentation related to the model development is included in **Technical Appendix A** and **Technical Appendix B**.

As also discussed elsewhere in this plan, it should be noted that the 2045 LRTP was developed during the COVID-19 pandemic which has resulted in economic disruptions that impact travel behavior, levels of employment, and varying commuting patterns. Although the impacts of the pandemic were unprecedented in modern times, the 2045 forecast assumes that periods of economic growth and contraction will balance out. As the forecast used for long range planning is updated every five years, the MPO will closely monitor the ongoing effects and potential long-term influence of the pandemic on projected travel demand.

As stated in Chapter 2, this plan has been developed in a manner consistent with the Comprehensive Plans developed and adopted by local governments within the planning area. The Future Land Use Element of the Comprehensive Plan provides the policy direction for land use within each respective jurisdiction, guides where growth will occur, and sets standards for the allowable densities and intensities of development. A part of the LRTP process is to consider future land use policy and the related development standards of Lake and Sumter counties, as well as the municipalities in the planning area.

Population and Employment Growth

Significant growth is expected in Lake and Sumter counties through 2045. This is based on the analysis of national and local trends, population data, and employment data. Future transportation needs are largely based on the type and amount of growth that is anticipated.

Table 3-1 and **Table 3-2** summarize the forecasted permanent population (not inclusive of group quarter population data) and employment growth by county included in the Central Florida Regional Planning Model (CFRPM) v7 2045 Socioeconomic (SE) data. The assignment of these growth figures was completed using Future Land Use maps, current development activity and input from local government planning staff. Population and employment projections were based on those developed by the University of Florida Bureau of Economic and Business Research (BEBR) from January 2018 and the Woods & Poole 2018 Economics State Profile.

For Lake and Sumter counties, annual population growth rates were based on the BEBR medium projections. More information on the development of the population and employment projections included in CFRPM v7 can be found in **Technical Appendix B**.

Figure 3-1 and **Figure 3-2** illustrate where these areas of growth are expected. These maps show where the permanent population and employment growth are occurring by Transportation Analysis Zone (TAZ), which are commonly used geographic units utilized for transportation planning processes. This "socioeconomic" data documents anticipated population and employment concentrations at the TAZ level and is used to forecast future travel patterns.

An increased demand on the area's transportation network and the need for additional mobility options is the result of projected increases in population and employment. The MPO is committed to identifying these needs and providing a sustainable transportation system for residents, visitors, and supporting economic growth in Lake and Sumter counties.

Table 3-1: Permanent Population Forecast Summary

County	2015 Permanent Population	2045 Permanent Population	Population Growth	Percent Growth
Lake	318,365	511,433	193,068	60.64%
Sumter	115,657	223,979	108,322	93.66%

Source: CFRPM v7; University of Florida Bureau of Economic and Business Research (BEBR) Bulletin 180, January 2018

Table 3-2: Employment Forecast Summary

County	2015 Employment	2045 Employment	Employment Growth	Percent Growth
Lake	129,709	252,743	123,034	94.85%
Sumter	30,073	71,336	41,263	137.21%

Source: Woods & Poole Economics 2018 State Profile

Figure 3-1: Population Growth in Lake and Sumter Counties

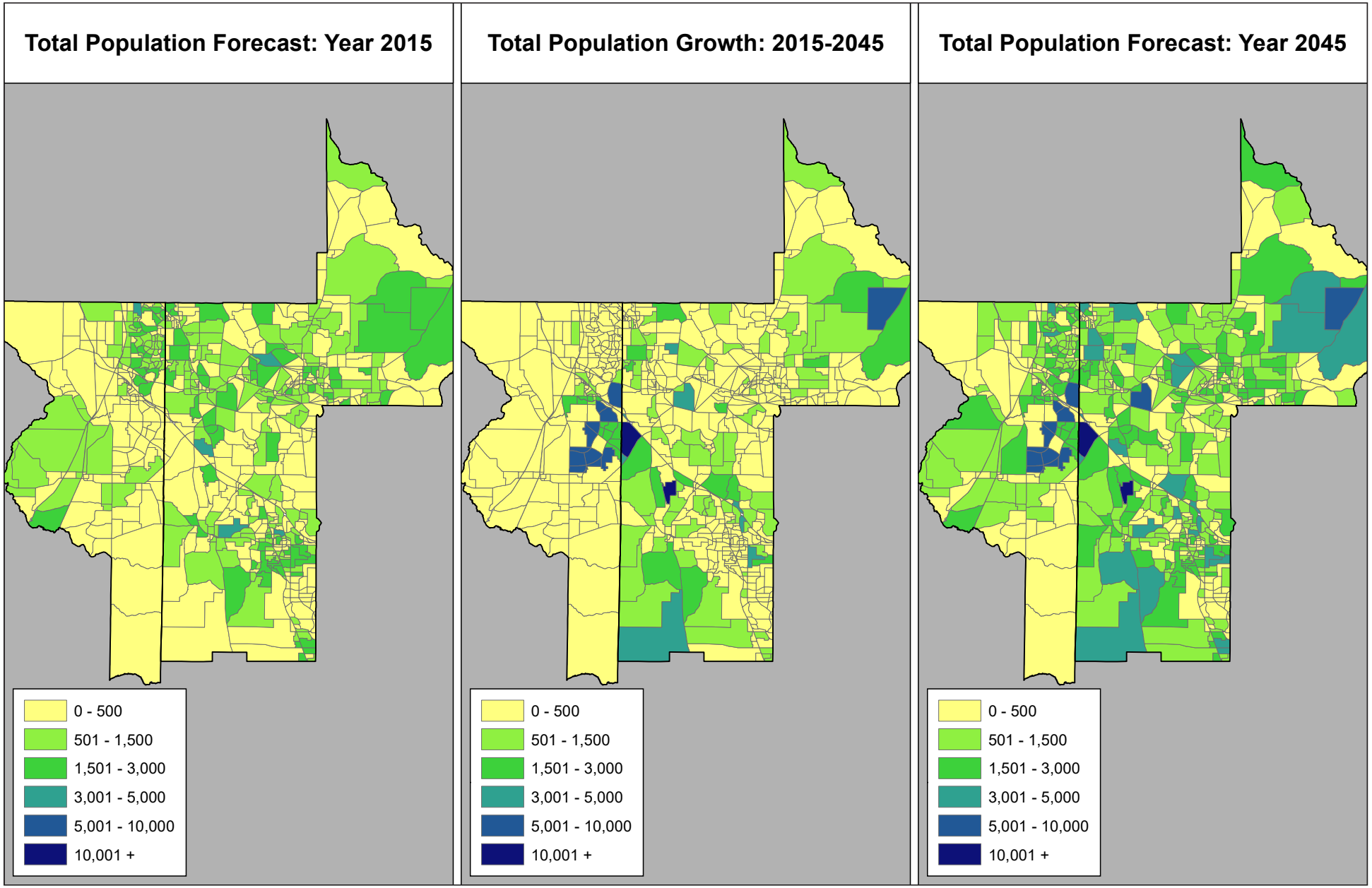
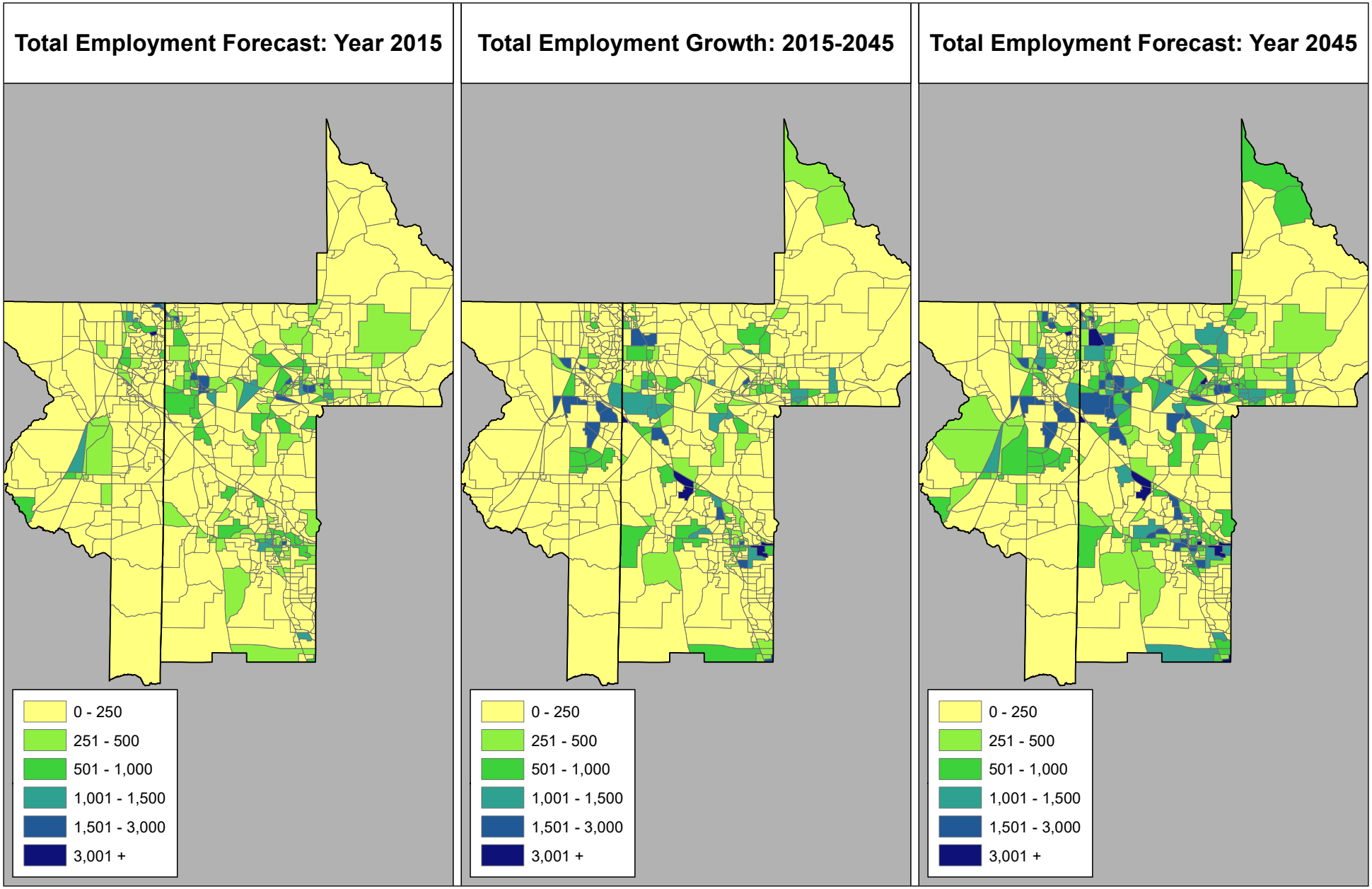


Figure 3-2: Employment Growth in Lake and Sumter Counties



4 Transportation Plan

Chapter 4 - Transportation Plan

This chapter provides an overview of the 2045 LRTP multimodal transportation plan, including the Cost Feasible list of projects. The plan is guided by projected financial resources available to plan for the future transportation network. Guided by a revenue forecast, the Cost Feasible Plan (CFP) includes a fiscally-constrained list of high-priority projects through the planning horizon of 2045.

2045 LRTP 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 section 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).

The following 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. Potential new revenues were discussed during the development of the plan, however during the process it was decided to not include any alternative revenues.

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 (**Technical Appendix E**). 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 4-3**.

Financial Projections

Revenue Estimates for Roadway Capacity Projects

Table 4-1 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. Estimates for the State and Federal revenues plus affiliated inflation factors were guided by both FDOT's 2045 Revenue Forecast for the Lake~Sumter MPO, dated November 2018 (**Technical Appendix E**), and the 2019 FDOT Revenue Forecasting Guidebook (**Technical Appendix F**). 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 4-1: Total Revenue for Roadway Capital Projects (2025-2045) (Year of Expenditure)

	Category	Total Projected Revenues 2025-2045
State and Federal	Strategic Intermodal System	$608,228,000
	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
Lake County	Impact Fees	$252,490,000
	Infrastructure Sales Tax (1%)	$80,570,000
Sumter County	Impact Fees	$258,570,000
	Subtotal (Non-SIS)	*$1,584,486,000*
	Total	**$2,192,714,000**

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 4-2** provides a summary of the estimated revenues for O&M on the SHS and local roadways.

Table 4-2 Total Revenue for Roadway Operations and Maintenance (2020-2045) (Year of Expenditure)

	Category	Total Projected Revenues	Total Cost
State and Federal	Districtwide SHS	$14,981,000,000	$14,981,000,000
Lake County	County Gas Tax	$51,477,000	$51,477,000
	Constitutional Gas Tax	$115,475,000	$115,475,000
	First Local Option Gas Tax	$182,106,000	$182,106,000
	9th Cent Gas Tax	$49,256,000	$49,256,000
Sumter County	County Gas Tax	$27,113,000	$27,113,000
	Constitutional Gas Tax	$61,017,000	$61,017,000
	First Local Option Gas Tax	$157,965,000	$157,965,000
	9th Cent Gas Tax	$32,655,000	$32,655,000
	Local Subtotal	**$677,064,000**	**$677,064,000**

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 4-3**.

Table 4-3: State/Federal and Local Funding Sources for Transit

Lake County	Sumter County
State/Federal Sources	
› FTA 5307 › FTA 5310 › FTA 5311 › FTA 5339 › Service Development Grant › State Block Grant › CTD funds	› FTA 5307 › FTA 5310 › FTA 5311 › Service Development Grant › Medical Non-Emergency Transportation funds › Community Care for Elderly/Title III funds › CTD funds
Local Sources	
› General Fund › Fare revenue › County Motor Fuel Tax Reimbursement › Miscellaneous revenue sources	› Miscellaneous revenue sources

Table 4-4 and **Table 4-5** present the revenues forecasted to be available for Lake County and Sumter County transit services through 2045, respectively.

Table 4-4: Forecasted Revenue and Costs for Lake County Transit (2021-2045) (YOE)

	Category	Projected Revenues 2021-2025	Projected Revenues 2026-2028	Projected Revenues 2029-2030	Projected Revenues 2031-2045	Total
State and Federal	Capital	$3,887,000	$4,562,000	$2,602,000	$27,953,000	$39,004,000
	Operations	$30,565,000	$21,847,000	$15,510,000	$141,120,000	$209,042,000
Local	Capital	$1,553,000	$1,084,000	$794,000	$7,715,000	$19,649,000
	Operations	$8,996,000	$6,071,000	$4,310,000	$39,220,000	$50,094,000
Subtotal (Capital)		$5,440,000	$5,646,000	$3,396,000	$35,668,000	$58,653,000
Subtotal (Operations)		$39,561,000	$27,918,000	$19,820,000	$180,340,000	$259,136,000
Total Revenues		**$45,001,000**	**$33,564,000**	**$23,216,000**	**$216,008,000**	**$317,789,000**
Costs		**$45,001,000**	**$33,564,000**	**$23,216,000**	**$216,008,000**	**$317,789,000**
Time Frame Balance		**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 0**

Table 4-5: Total Revenue for Sumter County Transit (2021-2045) (YOE)

	Category	Projected Revenues 2021-2025	Projected Revenues 2026-2030	Projected Revenues 2031-2045	Total
Federal	Operations	$3,444,631	$3,491,000	$10,472,000	$17,407,631
State	Operations	$3,396,203	$3,436,000	$10,309,000	$17,141,203
Local	Operations	$3,148,802	$3,186,000	$9,558,000	$15,892,802
	Total	**$9,989,636**	**$10,113,000**	**$30,339,000**	**$50,441,636**

Revenue Summary

The Lake-Sumter 2045 LRTP revenue forecast is summarized in **Table 4-6**. 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 4-6: Summary of Total MPO Transportation Revenues (2025-2045) (Year of Expenditure)

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

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 4-1** and listed in **Table 4-7**.

Table 4-7: 2045 Final Roadway Needs Projects

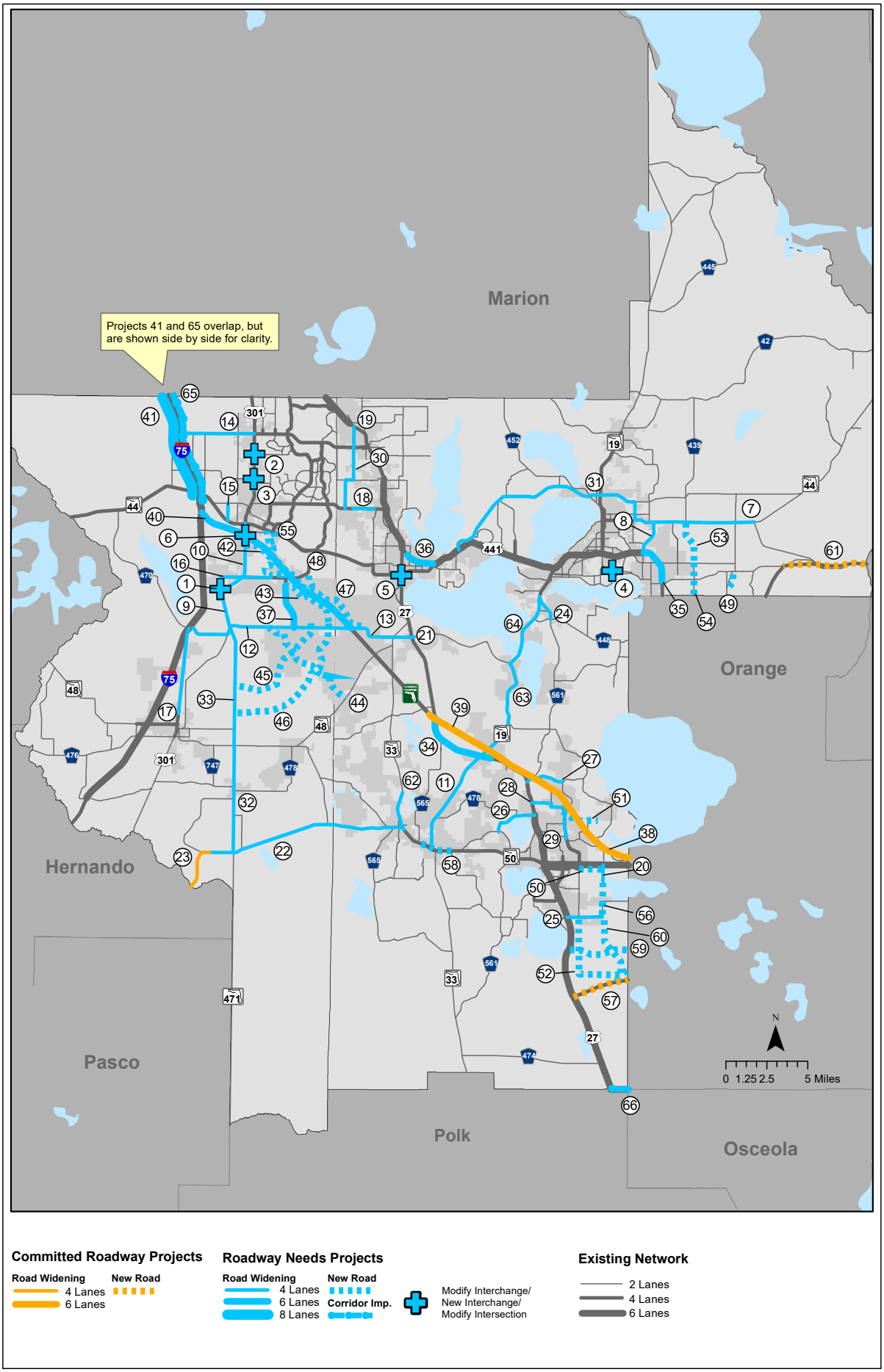
Map ID	Facility	From	To	Improvement
New Interchange/Modify Intersection				
1	US-301	@ CR-525E		Modify Intersection
2	US-301	@ C-472		Modify Intersection
3	US-301	@ E CR-462		Modify Intersection
4	Old 441 / CR-19A	@ Eudora Rd		Modify Intersection
5	SR-44	@ US-27		Modify Intersection
6	Florida's Turnpike	@ US-301		Modify Interchange
Widen to 4 Lane (or equivalent capacity)*				
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
Widen to 6 or 8 Lane (or equivalent capacity)*				
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
New Roadway				
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
Other				
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 4-1: 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 C includes the projects with the Year-of-Expenditure (YOE) costs, while Appendix D includes the projects in terms of Present Day Cost (PDC). **Table 4-10** includes Cost Feasible projects. The maps in **Figure 4-2** and **Figure 4-3** illustrate the projects shown in Table 4-10. The Map ID listed for each project in Table 4-10 are used to label the corresponding projects in Figure 4-2 and Figure 4-3. Unfunded projects are depicted in **Figure 4-4** 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 multi-jurisdictional 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. General revenue sources for TIP projects are listed in **Table 4-8** and **Appendix E. Table 4-9** 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. **Appendix B** includes further details including associated costs and timeframes.

Table 4-8: TIP FY 2020/21 -2024/25 Revenues by Source for Capacity Projects

Revenue Type	Revenue	Cost
Federal	$110,430,390	$110,430,390
State	$591,941,554	$591,941,554
Local	$16,807,223	$16,807,223
Toll/Turnpike	$25,080	$25,080
Total	**$719,204,247**	**$719,204,247**

Table 4-9: Summary of TIP Roadway (Capacity) Projects for FY 2020/21 - 2024/25

FM#	Project	From	To	Improvement
Non-SIS				
4293561	SR 500 (US 441)	SR 44	North of SR 46	Add Lanes and Rehabilitate Pavement
SIS				
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

Table 4-10: 2045 Cost Feasible Plan Projects

2045 Capacity Projects: Fully Funded						
Map ID	**Location**	**On Street**	**From**	**To**	**Improvement Type**	**Implementation Timeframe**
Strategic Intermodal System (SIS) Projects - Figure 4-2						
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
State Projects - Figure 4-3						
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
--	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

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				2036-2040
Local Projects - Figure 4-3						
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 4-3						
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 4-3						
24	Lake	CR-33	SR-50	Simon Brown Rd	Strategic Improvement*	2026-2030

**Operational capacity improvements to be determined*

Figure 4-2: Strategic Intermodal System (SIS) Cost Feasible Projects

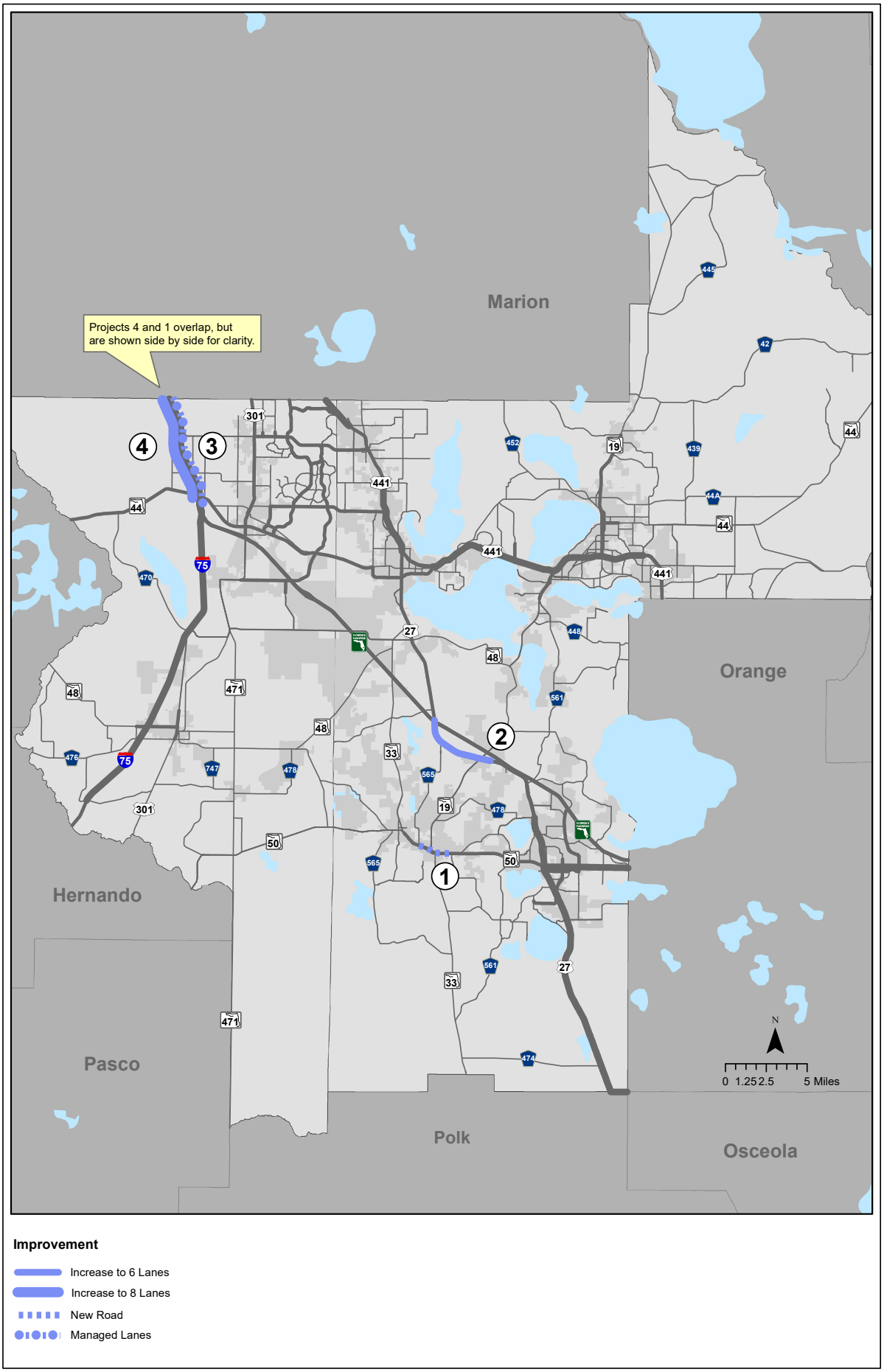


Figure 4-3: State and Local Cost Feasible Projects

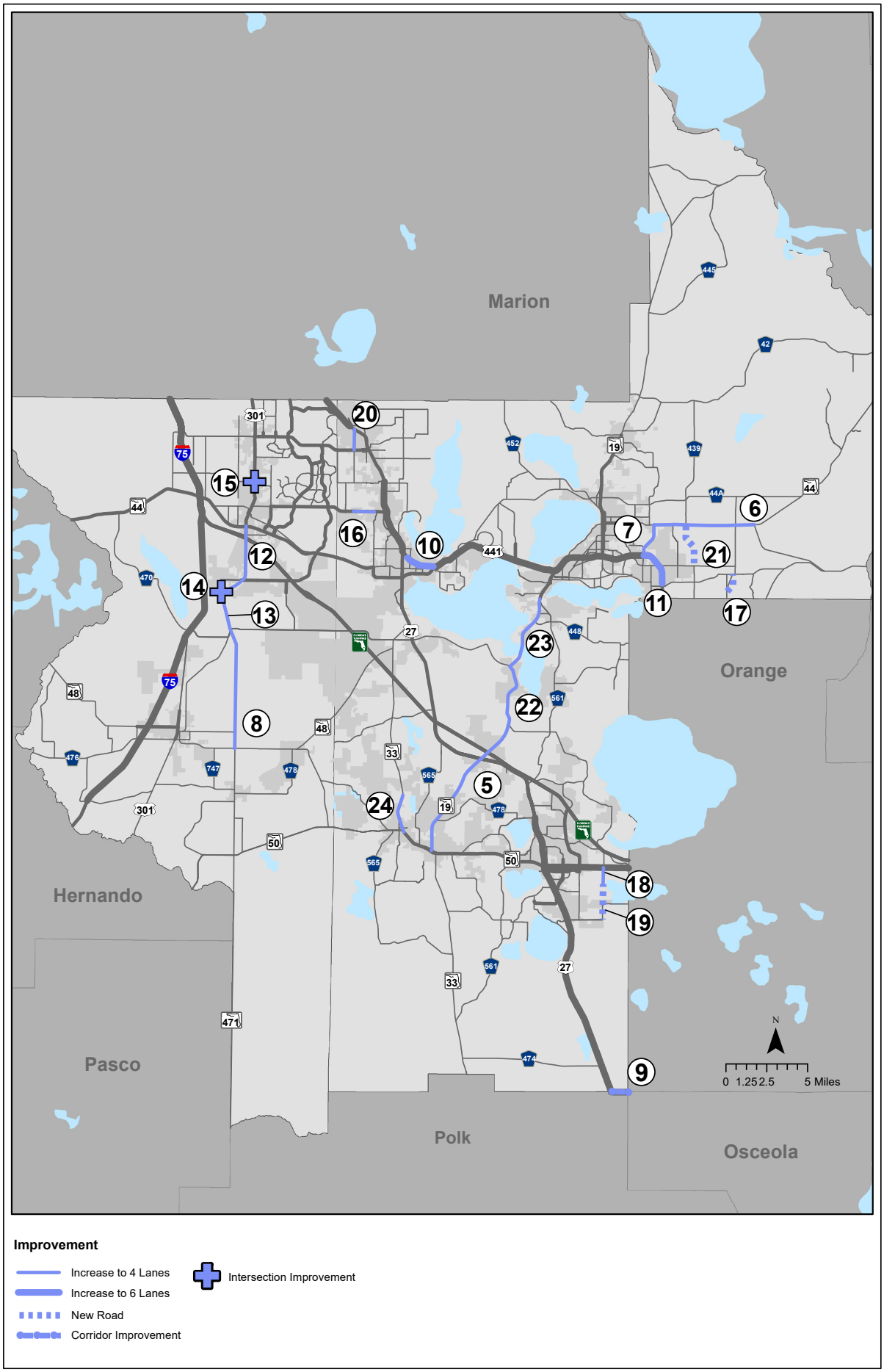
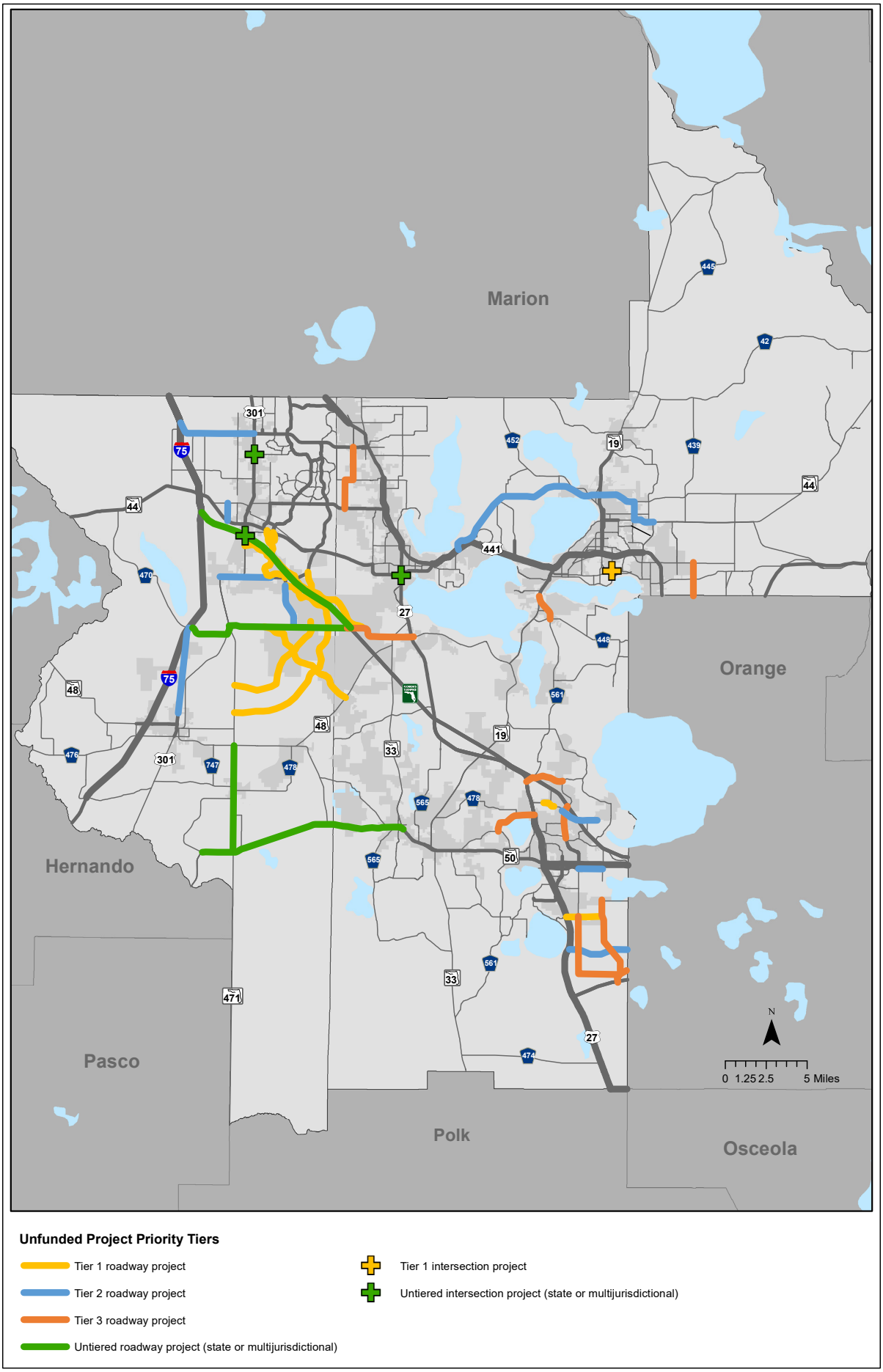


Figure 4-4: Unfunded Needs Projects



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 was 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

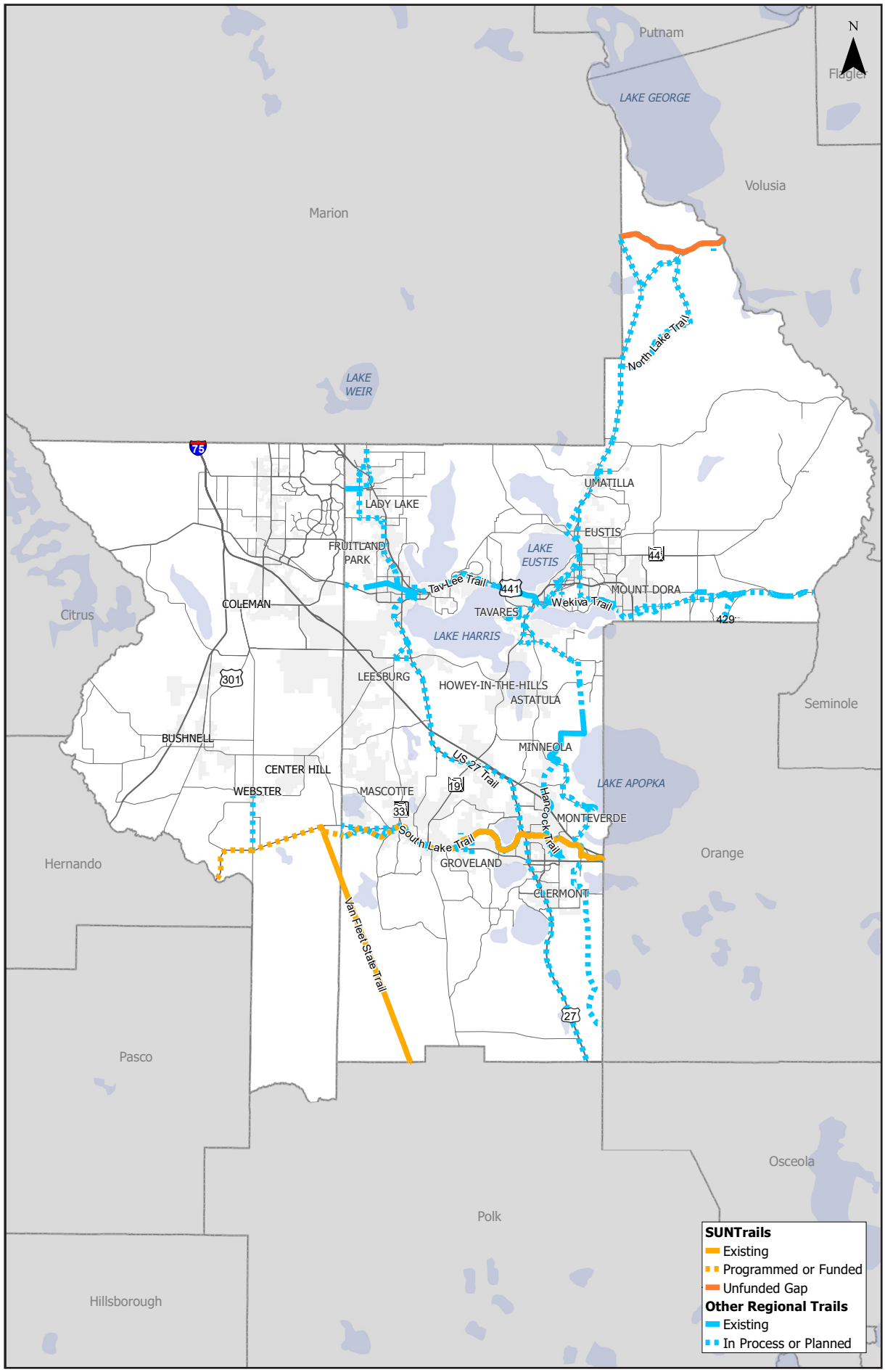
The MPO continues to be a strong advocate of a robust regional trail system. There is an expanding trail network throughout the state and the MPO continues to plan for a series of paved multi-use trails that connect to other regional trails in Florida, including the Coast-to-Coast Trail, the Heart of 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 4-5 depicts existing, planned, programmed, and conceptual trail locations within the planning area, as well as unfunded gaps in the SUN Trail network. **Appendix F** includes planning level cost estimates for paved multi-use trails in the planning area.

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 4-5: 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 4-6 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.

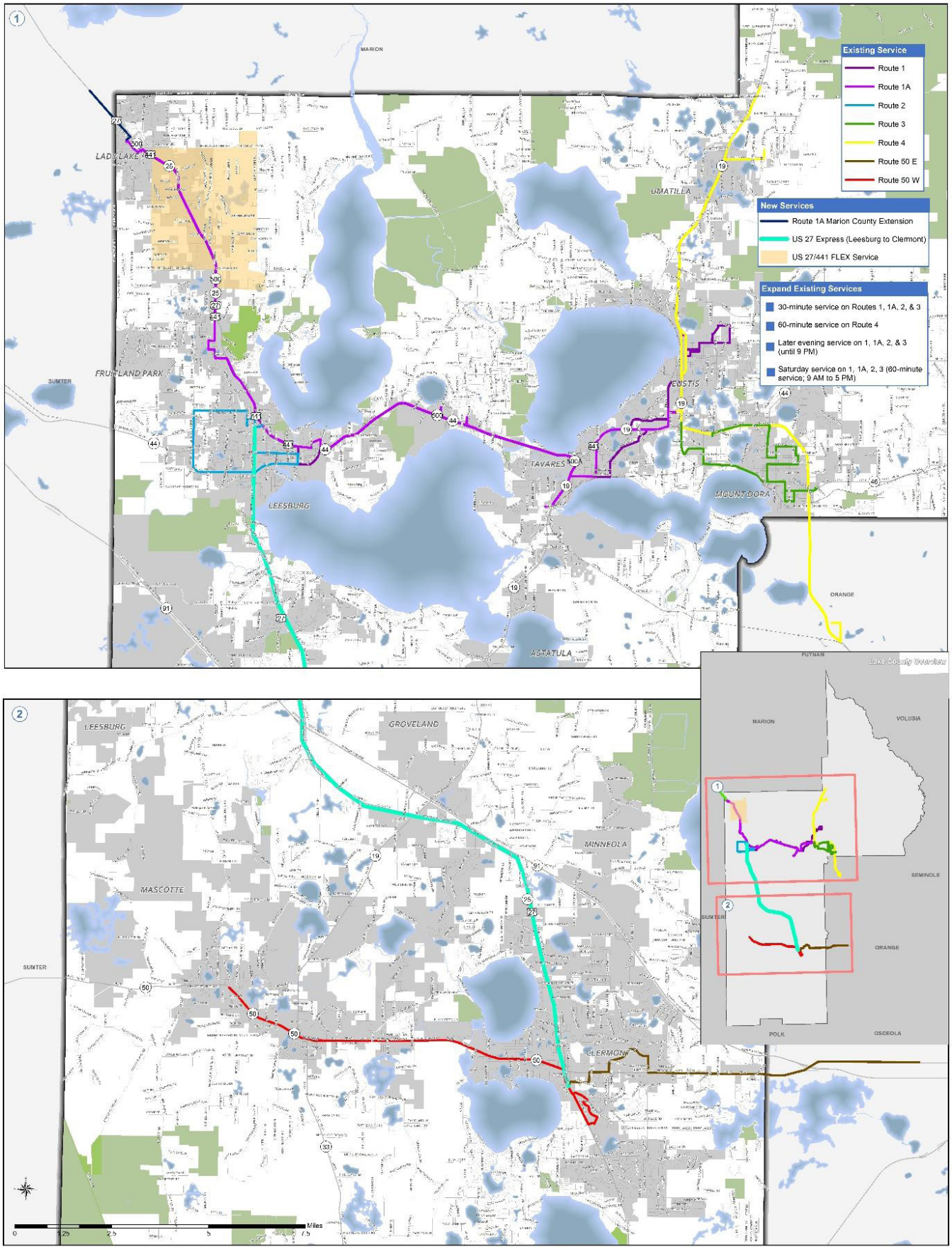
Regional Transit Opportunities

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 4-6: 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:

Connected Vehicles (New Initiative)	› Coordinate with vehicle technology to quickly identify roadway hazards and alert drivers › 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
Management/ Deployments	› 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 › Deploy advanced traveler information systems and 511 › Develop and update the ITS standards and specifications › Provide technical support and assistance to FDOT's District Offices and other partners › Promote and coordinate the statewide use of robust, non-proprietary ITS standards.
ITS Communications	› Guide deployment of a communications backbone to serve ITS deployments on major corridors › Manage and update the Statewide ITS Communications Network to support ITS deployments › Manage the maintenance program for the Statewide ITS Communications Network to support ITS deployments and various ITS research and development initiatives › Manage the Federal Communications Commission statewide radio license database › 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
Statewide Arterial Management Program	› A Technical Memorandum on Adaptive Signal Control Technologies › Traffic Signal Maintenance and Compensation Agreement

ITS Software and Architecture	› Manage the SunGuide® Software System for freeway and incident management, transportation management center interoperability, and data archiving. › Manage the Statewide ITS Architecture to promote integrated ITS regions, corridors, and projects. › Coordinate ITS training to enhance the quality and quantity of the State's ITS workforce. › Unified traffic information and management system for the State of Florida ITS traffic data.
Managed Lanes	› Statewide Policy, Procedures, Manuals, and Guidance for Managed Lanes Which Includes Express Lanes › Statewide Toll and Express Lane Team › Regional Concept of Transportation Operations › Express Lane Concept of Operations › Change Management Process for Statewide Express Lane Software › Statewide Methodology for Determining Ingress/Egress To/From Express Lanes

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 the list below. ITS projects will be consistent with regional ITS architecture.

- **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 on board 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. FDOT developed guidance for ACES planning in September 2018, which will be utilized by the MPO in planning for congestion management and the evolution of transportation throughout the community and region.

Congestion Management

Lake~Sumter MPO has developed a Congestion Management Process (CMP) (**Technical Appendix H**), 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 (**Technical Appendix I**) 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.

Table 4-11 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 4-11: Extremely Congested Corridors

County	Segment	Miles
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 4-12 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 4-12: Congested Corridors

County	Segment	Miles
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

Transportation Safety

The proposed multimodal improvements included in this plan are expected to enhance safety for all roadway users. Increased capacity and alternate routes will also help to reduce congestion. Furthermore, these projects will upgrade facilities to meet the latest design standards. The incorporation of sidewalks and bicycle lanes into future roadway projects is another notable safety enhancement. Additionally, the MPO's CMP will continue to identify intersections and roadway segments with safety concerns and program improvements.

Strategic Highway Safety Plan Emphasis Areas

In the development of this plan, the MPO considered federal and state safety documents, including the FDOT State Strategic Highway Safety Plan (SHSP). To ensure consistency with the SHSP, the Lake~Sumter MPO will support the Key Safety Emphasis Areas listed below:

- Lane Departures
- Impaired Driving
- Pedestrians and Bicyclists
- Intersections
- Occupant Protection
- Motorcyclists
- Aging Road Users
- Commercial Motor Vehicles
- Speeding and Aggressive Driving
- Teen Drivers
- Distracted Driving
- Work Zones
- Traffic Records and Information Systems

Vision Zero

Vision Zero is a multi-dimensional effort to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. It takes a traditional approach to safety and reconsiders some of the most basic assumptions made over the past decades to reduce the number of deaths on American roadways. The FDOT initially established a Vision Zero policy in 2012, and the 2016 update of the SHSP supports the policy. As discussed in Chapter 2, the MPO acknowledges and supports FDOT's statewide safety targets, which set the target at "0" for each performance measure to reflect the Department's goal of zero deaths.

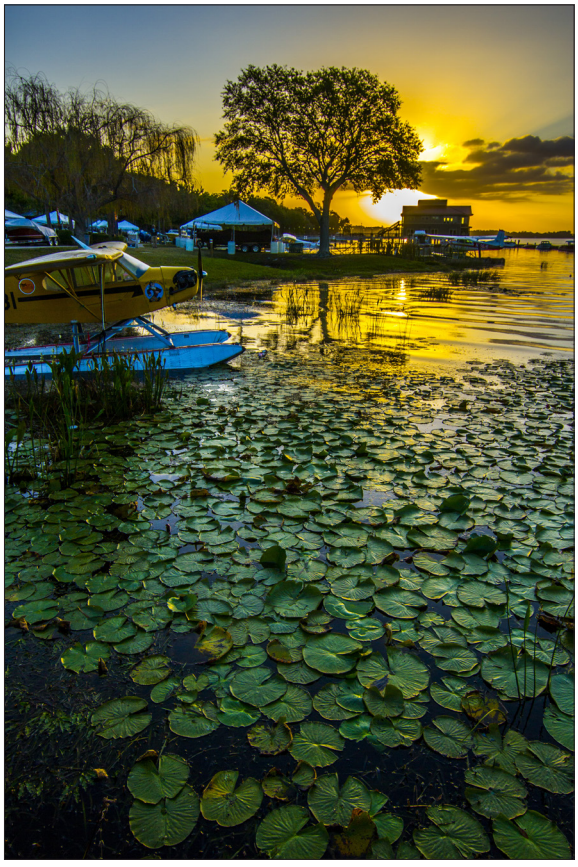
Transportation Security and System Resiliency

Better planning in transportation security can help reduce the negative impacts to local and regional transportation systems from major natural or manmade events, such as hurricanes, tornadoes, flooding, or terror attacks. Federal requirements for metropolitan planning also include the consideration of security as a factor in the development of LRTPs. The planning process should provide for consideration and implementation of projects, strategies, and services that will increase the security of the transportation system for motorized and non-motorized users.

The MPO can play a key role in planning both before and after a disaster. Pre-disaster planning involves efforts to guard against, prepare for, and mitigate a disaster's effects; while post-disaster planning focuses on restoring essential functions, speeding recovery, and rebuilding in the wake of a disaster. Based on its vulnerability to hurricanes and tropical storms, Florida has become a leader in emergency management and disaster mitigation planning. Local governments prepare several types of plans that MPOs should be aware of and, as appropriate, participate in developing:

- Comprehensive Emergency Management Plans: Operational procedures used to prepare for, respond to, recover from, and mitigate emergencies.
- Local Mitigation Strategies: Identify and prioritize hazard mitigation needs and strategies to reduce the vulnerability to natural hazards.
- Post-Disaster Redevelopment Plans: Outlining recovery and reconstruction procedures and policies.

Working with FDOT and other partners, the MPO can assist in strengthening the transportation system and increasing its resiliency to man-made and natural disasters. This often begins by identifying critical assets and key transportation infrastructure; the loss of which would have a severe impact on the public's welfare and local economy. Pre-disaster planning may also involve identifying and assessing a community's vulnerability to specific hazards or threats.



Travel and Tourism

Tourism in Lake and Sumter Counties is focused on the environment's natural resources and the hospitality and history/culture of the local communities. The counties also attract sports tourism, frequently in the form of running and bicycling events. Agritourism and ecotourism are also expanding.

The 2045 Long Range Transportation Plan includes extensive investment in roadways improving the access to tourism activities including US 441, US 301, SR 19, and other important corridors.

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.

The 2045 LRTP 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.

Regional Coordination

Ongoing regional transportation planning will be critical as Lake and Sumter counties anticipate continued growth through 2045. The MPO maintains strong partnerships in the region and throughout the state through organizations including the East Central Florida Regional Planning Council (ECFRPC), the Central Florida MPO Alliance (CFMPOA), and the Florida Metropolitan Planning Organization Advisory Council (MPOAC). The CFMPOA is a partnership of metropolitan planning organizations in the Central Florida area encompassing Orange, Osceola, Seminole, Brevard, Lake, Sumter, Polk, Volusia, Ocala, and Marion counties that meet to collaborate on the transportation needs of the region. The CFMPOA continues to develop a regional list of priority projects for the mutual benefit of the region and to improve the communication of regional priorities to the FDOT. The MPO will ensure that the appropriate regional projects contained in this plan are reflected in future regional transportation plans.

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.

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.

LRTP 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).

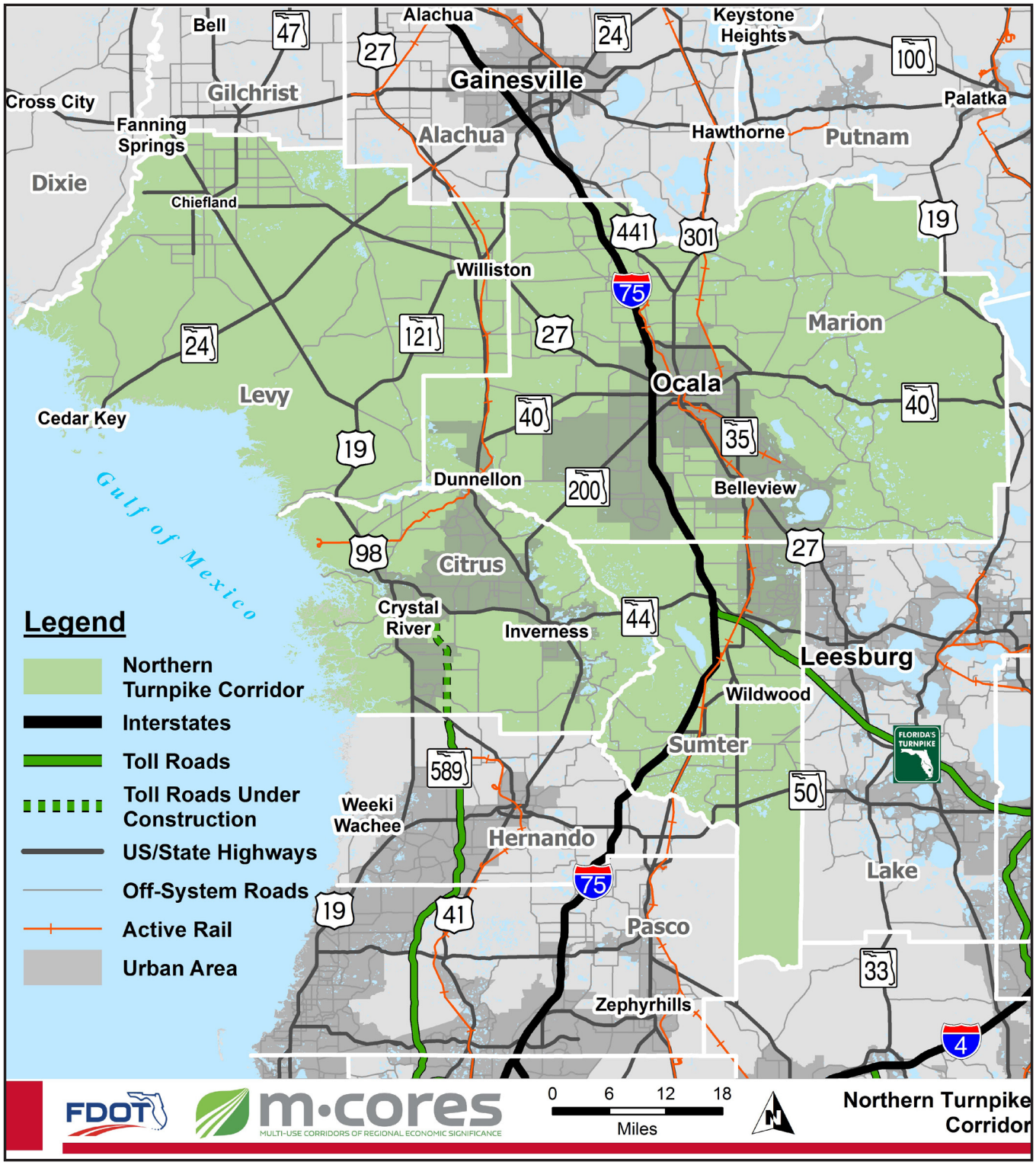
MPOs and TPOs are responsible for actively involving all affected parties in an open, cooperative, and collaborative process when developing LRTPs and TIPs. Regional coordination is required since M-CORES projects affect more than one MPO. Public participation required for the development of LRTP and 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 4-7: M-CORES Northern Turnpike Corridor



Four Corners

Four Corners is a fifty square-mile Census-Designated Place that includes parts of Lake, Polk, Osceola, and Orange Counties. This area has experienced significant growth in recent years and are anticipating similar levels of growth in the future. Perhaps the most distinct characteristic about the area is that while it is geographically cohesive, it is within the jurisdictions of three MPO/TPOs, two FDOT districts, four school districts, and three water management districts. This has created unique challenges due to the varying approaches to governance, planning, growth, and general development.

In 2005, a collaborative public-private partnership called the Four Corners Area Council (FCAC) was established to address these challenges as the area was beginning its current exponential growth trajectory. In recent years, the Council sought to develop a strategic plan for the area that focuses on near-term planning as well as planning for the future.

FOUR CORNERS AREA COUNCIL AND FOUR CORNERS ONE VISION

The FCAC is comprised of governmental and private entity representatives from each of the four counties involved—Lake, Polk, Osceola, and Orange. The Council has been developing a strategic plan entitled Four Corners, One Vision, of which the first phase was completed in late 2018, and the second phase is anticipated to be complete in 2020.

As part of the Technical Subcommittee, the Lake-Sumter MPO coordinated with Polk TPO and Metroplan Orlando to evaluate and coordinate the unique transportation needs for the future of Four Corners. This includes roadway projects in different phases and locations such as I-4 Beyond the Ultimate, Lake/Orange County Connector, Poinciana Parkway Extension, and the US 192 Mobility Study. It also includes multimodal projects like those from local transit providers and bicycle and pedestrian needs. This needs assessment is largely based on the needs of each MPO/TPO as demonstrated in their current Long Range Transportation Plans. Projects that meet the following criteria are considered higher priority:

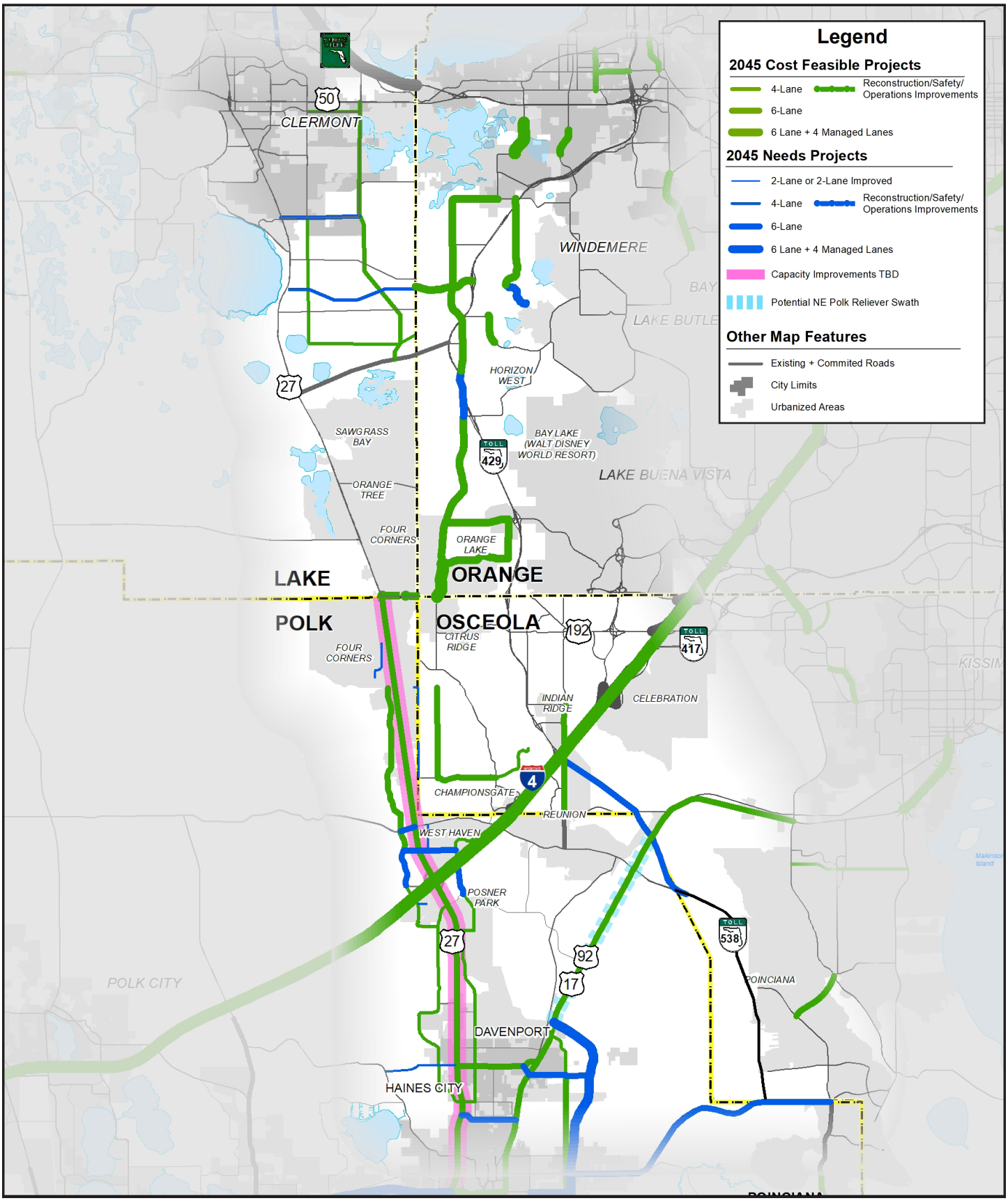
- Projects of regional significance that have a particular impact on the Four Corners.
- Roads that cross county lines in the Four Corners region
- Roads or projects within a single county, but that have (or have the potential to have) a major impact on the road network in the Four Corners area.
- Projects involving data and ITS/TSM&O

FOUR CORNERS ROADWAY NETWORK

The high demand on I-4, US 27, US 192, and SR 429 consequently puts a strain on the local roads, some of which already experience congestion and delays due to factors aside from simply the number of users, such as seasonal populations, driver demographics (often tourists unfamiliar with the area), number of business access driveways, additional commercial vehicles, among others.

Figure 4-8 display the roadway project shown as Cost Feasible and Unfunded Needs. Additional information on transportation plans for the Four Corners Area can be found in **Appendix G**.

Figure 4-8: Four Corners 2045 Roadway Cost Feasible Projects and Needs Assessment



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 of 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 4-13**.

Table 4-13: Potential Environmental Mitigation Opportunities

Resource/Impacts	Potential Mitigation Strategy
Wetlands and Water Resources	› Restore degraded wetlands › Create new wetland habitats › Enhance or preserve existing wetlands › Improve storm water management › Purchase credits from a mitigation bank
Forested and other natural areas	› Use selective cutting and clearing › Replace or restore forested areas › Preserve existing vegetation
Habitats	› Construct underpasses, such as culverts › Other design measures to minimize potential habitat fragmentation
Streams	› Stream restoration › Vegetative buffer zones › Strict erosion and sedimentation control measures
Threatened or Endangered Species	› Preservation › Enhancement or restoration of degraded habitat › Creation of new habitats › Establish buff areas around existing habitat

5 Public Involvement

Chapter 5 - Public Involvement

The Lake~Sumter MPO actively seeks and considers public input on transportation policies, plans, and ultimately the prioritization of transportation investments. A major function of the MPO is to ensure that the public (comprised of a diverse constituency of interested and affected parties) maintains a strong voice in the transportation planning process. The 2045 LRTP was developed in a manner consistent with the MPO's Public Participation Plan (PPP) (**Technical Appendix C**) 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.

COVID-19 and Public Involvement

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.

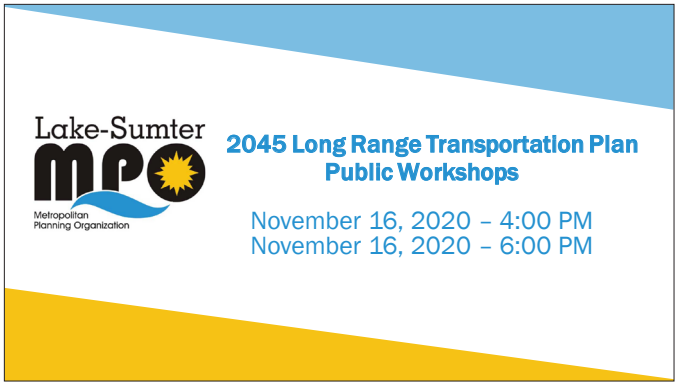
Public Involvement Activities

A number of public involvement tools were utilized to obtain public input to during the development of the Needs Assessment and the Cost Feasible Plan (CFP). Throughout the planning, interim findings and documentation were presented to the MPO's Governing Board, Technical Advisory Committee (TAC), and Citizens Advisory Committee (CAC). Technical memoranda were provided in advance of the MPO meetings and the typical format of the meetings included a presentation followed by an opportunity to provide feedback and ask questions. The MPO meetings were publicly advertised, thus providing opportunities for the public to provide input. The following is a summary of public involvement activities related to the 2045 LRTP.

Workshops

Two virtual public workshops related to the LRTP were held to present the draft Cost Feasible Plan and solicit input and comments from the public and community stakeholders.

The input received from these workshops was used to refine the Cost Feasible Plan. Please see **Technical Appendix D** for copies of the presentations and for a summary of public input obtained from these workshops.

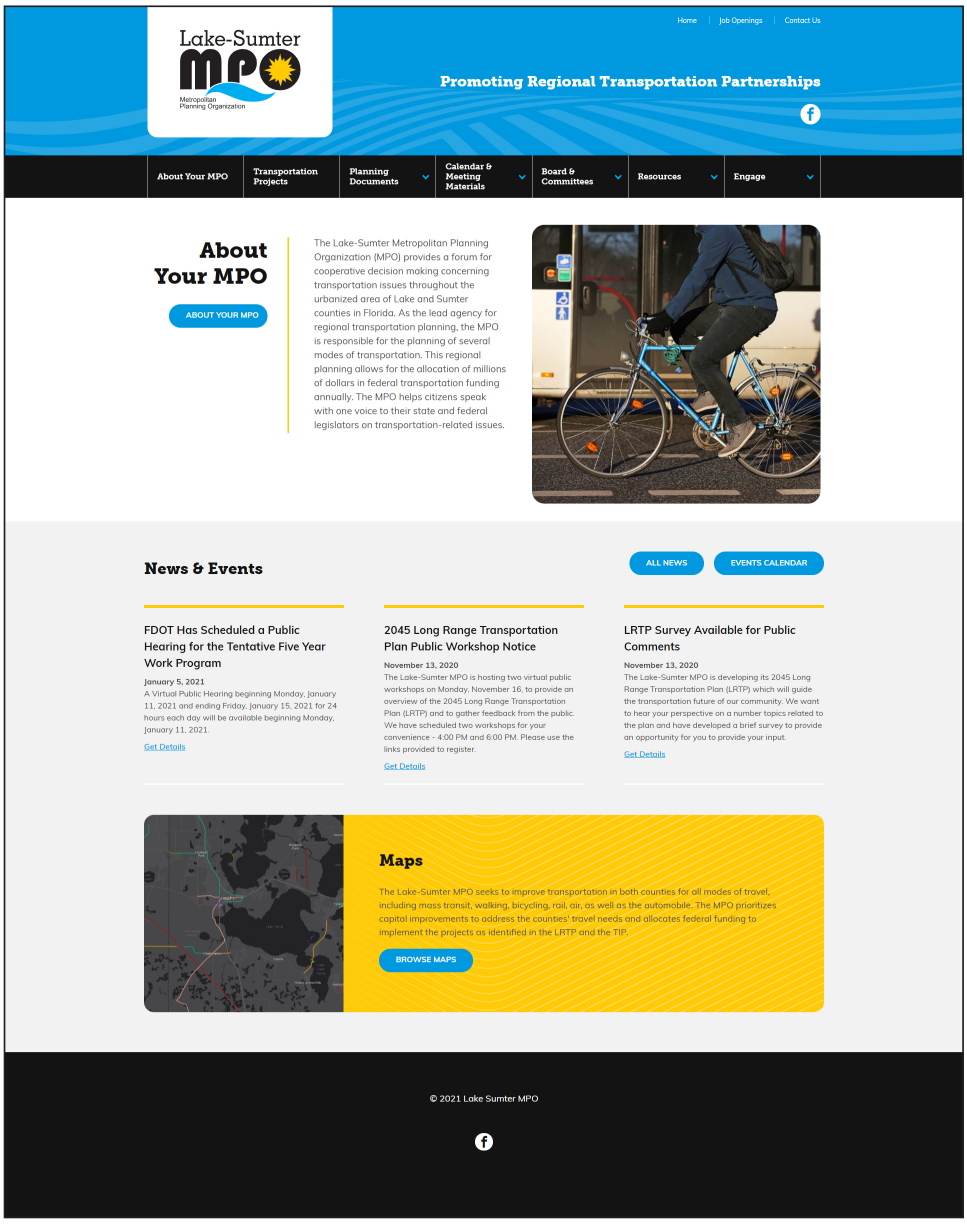


Survey

An online survey was also developed by the MPO to provide additional opportunities for the public and stakeholders to provide input on the plan. Please see **Technical Appendix D** for complete results of the survey, which were utilized to also inform development of the LRTP.

MPO Website

The MPO's website (www.lakesumtermpo.com) also served as the major information portal for the development of the plan. All of the plan information including workshop presentations and technical documents were made available to the public via the website. Advertisements for public meetings and workshops were posted online and placed in local newspapers. The MPO also utilized its social media accounts to share timely and relevant content and to complement other public involvement efforts by alerting participants to opportunities for providing input.



Agency Outreach and Coordination

The development of the LRTP included coordination with local agencies, adjacent MPO/TPOs, and FDOT. Also, in order to understand the environmental mitigation opportunities and issues within the planning area, the MPO also conducted direct outreach to appropriate federal, state and local land management, resource, environmental, and historic preservation agencies. While consultation with Tribal governments is also prescribed, there are no designated Tribal lands within the boundaries of the MPO planning area. Direct agency outreach included the following:

- Lake County
- Sumter County
- US Fish and Wildlife Service
- Florida Department of Environmental Protection
- St. Johns River Water Management District (SJRWMD)
- Florida Fish and Wildlife Conservation Commission
- Florida Forest Service
- USDA Forest Service (Ocala National Forest)
- Florida Department of Historical Resources

MPO Governing Board and Committee Coordination

The LRTP process included significant review as part of the regular meetings of the MPO Governing Board and standing committees. These groups include citizen representatives, elected officials, local government staff and special interest advocates representing the diversity of the planning area. Advance public notice was provided for each board/committee meeting in accordance with Florida Statutes and the adopted bylaws of the MPO.

In addition to the MPO Board, input and guidance on the development of the LRTP was provided by the Technical Advisory Committee (TAC), Citizens Advisory Committee (CAC), and Transportation Disadvantaged Coordinating Boards (TDCB). It is important to note that advisory input and the perspectives of non-transportation professionals was also provided throughout the process by citizen representatives on the CAC.

Freight Coordination

As discussed in Chapter 4, part of the planning process involved coordinating freight transportation needs. The MPO engaged the freight community including, the FDOT District Five Freight Coordinator as the key agency planning for regional and statewide freight transportation. Additional outreach also included economic development and chamber organizations that represent private freight industry interests.

Environmental Justice

Environmental Justice (EJ) is the fair treatment of all groups within the community. Per Presidential Executive Order 12898, efforts must be made throughout the development of plans and projects to avoid disproportionate adverse effects on minority and low-income populations. This attention to protecting all communities is critical, and this plan included efforts to evaluate sociocultural effects and EJ.

The two driving characteristics of EJ areas in the MPO planning area are percentage of households at or below poverty level and percentage of minority population. Percentages of population meeting the criteria were compared to the statewide average. Those Census Tracts that were estimated to have levels of EJ populations that were equal to or exceeded the statewide average were highlighted and considered to be potential areas for Environmental Justice considerations throughout the planning process. The analysis utilized data provided by the U.S. Census Bureau, 2013-2017 American Community Survey (ACS) 5-Year Estimates, which were the most recent data available at the time of the analysis. **Table 5-1** shows the ACS data used for the plan's EJ analysis. **Figure 5-1** and **Figure 5-2** show where the higher levels of EJ populations are located by U.S. Census tract within Lake and Sumter counties.

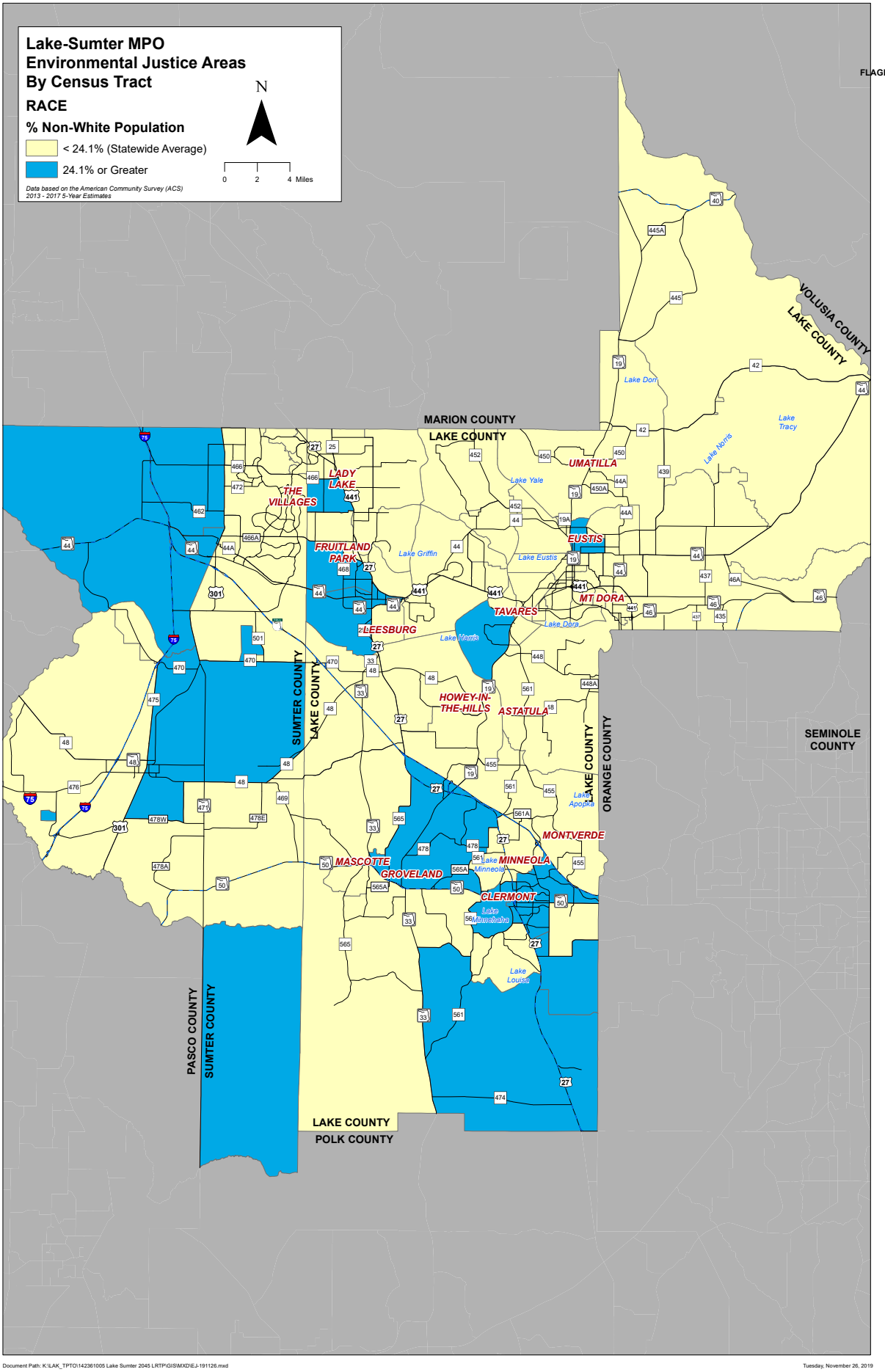
Table 5-1: Environmental Justice Populations Summary

	Lake County	Sumter County	Statewide
Estimate; Population for whom poverty status is determined	*322,123*	*107,432*	*19,858,469*
Population Below Poverty Level	41,353	9,895	3,070,972
Percent Below Poverty Level	12.8%	9.2%	15.5%
Estimate; Population for whom race is determined	*326,215*	*116,754*	*20,278,447*
Minority Population	55,806	13,204	4,934,450
Percent Minority Population	17.1%	11.3%	24.3%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

An Environmental Justice Workshop was conducted virtually with both the Lake County and Sumter County Transportation Disadvantaged Coordinating Boards. The workshop shared information about the establishment and importance of environmental justice and provided opportunity for the discussion of potential impacts of transportation improvements on elderly, minority, disabled, and low-income populations throughout the planning area. This type of input was important to help guide and prioritize needs and future projects in the LRTP, with the goal of minimizing negative impacts to those areas identified as having a higher proportion of populations included in environmental justice considerations.

Figure 5-1: Minority Population



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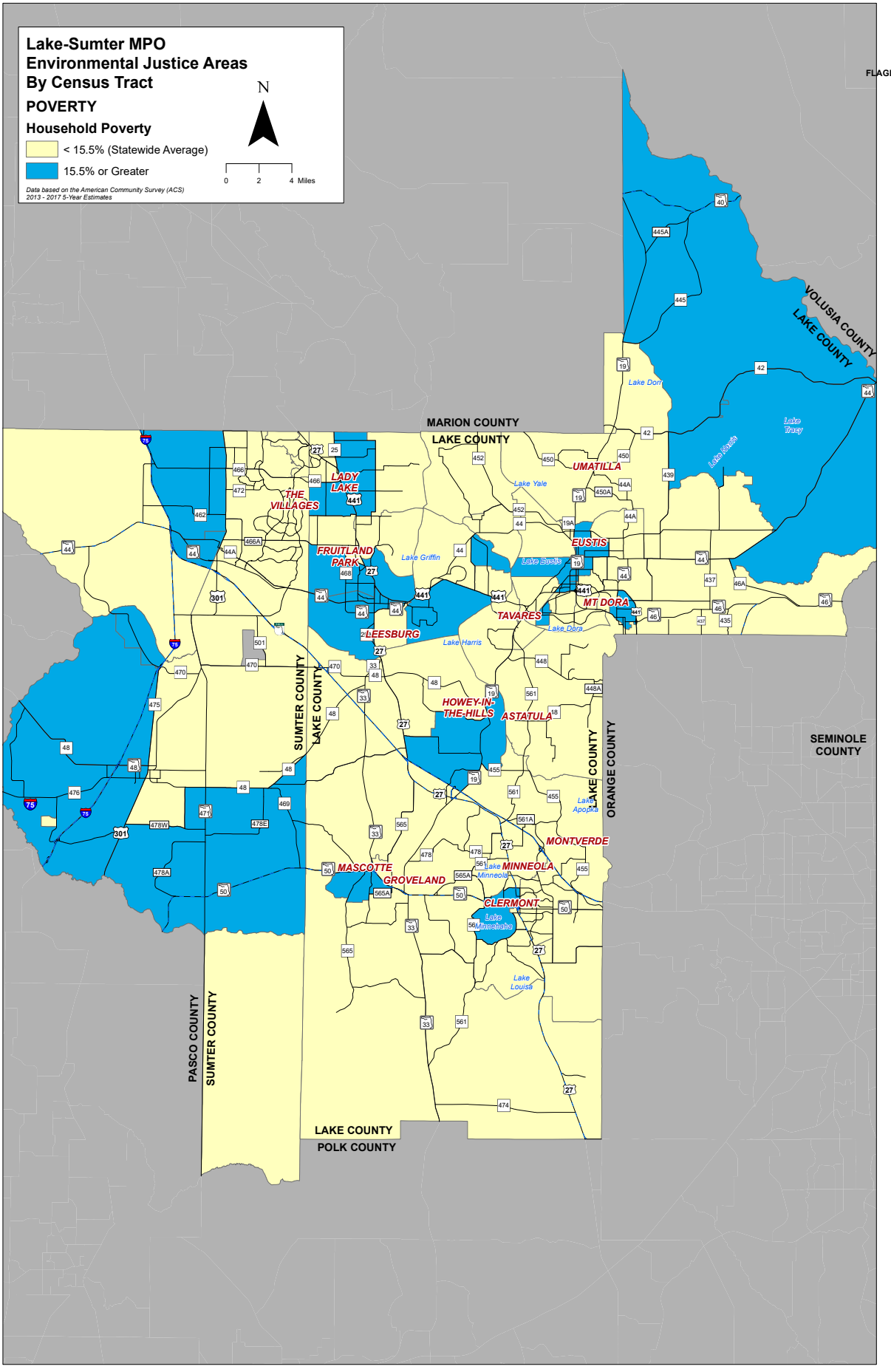
Tuesday, November 26, 2019

Figure 5-2: Households in Poverty Status



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Tuesday, November 26, 2019

6 Performance Evaluation

Chapter 6 - Performance Evaluation

Incorporating performance targets early in the planning process helps to determine success in meeting future goals. Chapter 2 and the federally-required System Performance Report (**Appendix A**) provide an in-depth description of ongoing performance measurement. System performance measures provide objective indications of how well the transportation network meets demand, guide the planning efforts of the MPO, and inform decision making processes as it relates to the funding and prioritization of projects and programs. Chapter 2 includes the performance-based planning foundation of the 2045 LRTP. The intent of this chapter is to provide what could be considered as a "report card" on the performance of this LRTP. The tables on the following pages include an evaluation and forecast of the performance of the plan.

Performance Measures

Performance Measures established through the Federal Highway Administration (FHWA) address each of the national planning goal areas. MPOs are required to conduct performance-based planning by setting data-driven performance targets for the performance measures and programmed transportation investments that are expected to contribute to achieving those targets. **Tables 6-1** through **Table 6-3** present the adopted targets and thresholds as identified in Chapter 2 and includes a forecast for 2045 relative to each Performance Measure.

Performance Indicators

Performance Indicators have been established by the Lake~Sumter MPO in order to evaluate the effectiveness of the LRTP in relation to its Goals and Objectives. It should be noted that the Performance Indicators are not intended to be reviewed annually and that the evaluation in these tables represent an analysis performed at the conclusion of the long-range transportation plan.

Table 6-1: FAST Act Performance Measures
Performance Measure 1 (PM1) - Safety

LSMPO 2045 LRTP Goal	Performance Measure	Target	2045 Forecast	Comments
Goal 2 - Promote Safety and Security	Number of fatalities	0	Improved	N/A
	Rate of Fatalities	0	Improved	N/A
	Number of Serious Injuries	0	Improved	N/A
	Rate of Serious Injuries	0	Improved	N/A
	Number of nonmotorized fatalities and non-motorized serious injuries	0	Improved	N/A

Table 6-2: FAST Act Performance Measures -
Performance Measure 2 (PM2) - Pavement and Bridge

LSMPO 2045 LRTP Goal	Performance Measure	Target	2045 Forecast	Comments
Goal 5 - System Preservation	Percent of Interstate pavements in good condition	≥ 60%	Maintained or Improved	FDOT and local governments have made this a priority. FDOT develops district-wide estimates of funding for Resurfacing, Bridge and Operations & Maintenance programs and provide to MPOs, per agreement between FDOT and FHWA Division Office related to reporting Operations and Maintenance estimates for the State Highway System in MPO LRTPs.
	Percent of Interstate pavements in poor condition	≤ 5%	Maintained or Improved	
	Percent of non-Interstate NHS pavements in good condition	≥ 40%	Maintained or Improved	
	Percent of non-Interstate NHS pavements in poor condition	≤ 5%	Maintained or Improved	
	Percent of NHS bridges by deck area in good condition	≥ 50%	Maintained or Improved	
	Percent of NHS bridges by deck area in poor condition	≤ 10%	Maintained or Improved	

Table 6-3: FAST Act Performance Measures -
Performance Measure 3 (PM3) - System Performance and Freight

LSMPO 2045 LRTP Goals	Performance Measure	Target	2045 Forecast	Comments
Goal 1 - Support Economic Success and Community Values Goal 3 - Improve Transportation Operations	Percent of person-miles on the Interstate system that are reliable — Level of Travel Time Reliability (Interstate LOTTR)	≥ 70%	Maintained or Improved	N/A
	Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR)	≥ 50%	Maintained or Improved	
	Freight travel time reliability	2	Maintained or Improved	

Table 6-4: LSMPO 2045 LRTP Performance Indicators - Goal 1

Goal 1: Support Economic Success and Community Values			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 1.1 – Reduce congestion and improve travel reliability for the traveling public and freight users on highways and major arterials.	% Lane Miles with V/C > 1 (State Highway System)	48.28% on State Highway System only	Increased Congestion on State Highway System
Objective 1.2 – Enhance access to major employment centers.	Number of Lane Miles Added (State Highway System)	218 Lane Miles Added on State Highway System by 2045	24% Additional Lane Miles on State Highway System in 2045
Objective 1.3 – Coordinate regional transportation planning efforts and local comprehensive planning efforts.	Did the Lake~Sumter MPO actively participate in the activities of the Central Florida MPO Alliance?	Yes	Please see the Regional Coordination section in Chapter 4.
Objective 1.4 – Minimize negative environmental impacts associated with transportation investments.	Did the LRTP consider the potential environmental impacts of transportation investments and include appropriate mitigation strategies?	Yes	Environmental mitigation was considered throughout the development of this plan. Please see Chapter 5.
Objective 1.5 – Address Environmental Justice in all appropriate aspects of MPO planning.	Did the MPO address Environmental Justice during the LRTP planning process and other MPO planning efforts?	Yes	Please see the Environmental Justice section in Chapter 5.

Table 6-5: LSMPO 2045 LRTP Performance Indicators - Goal 2

Goal 2: Promote Safety and Security			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 2.1 – Prioritize investments to reduce crash related Fatalities for all modes of transportation.	Did the LRTP include funding for safety projects?	Yes	Planning focused on high crash locations identified through congestion management process and other bicycle/pedestrian safety efforts.
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.	Did the LRTP prioritize investment on evacuation routes?	Yes	The LRTP funds improvements to evacuation routes including US-441 and US-301.
Objective 2.5 – Invest in Transit security.	Did the LRTP address Transit Security?	Yes	The MPO supports the security of transit systems in the planning area. Please see page 2-16 and the System Performance Report in Appendix A.

Table 6-6: LSMPO 2045 LRTP Performance Indicators - Goal 3

Goal 3: Improve Transportation Operations			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 3.1 – Invest in Intelligent Transportation Systems (ITS).	Did the LRTP program funds for ITS/ACES?	Yes	The LRTP specifically allocates funding for ITS/ACES over the course of the plan.
Objective 3.2 – Invest in Vehicle to Infrastructure Communication.	Did the LRTP program funds for ITS/ACES?		
Objective 3.3 – Invest in cost effective Congestion Management strategies.	Did the LRTP program funds for Operational Improvements?	Yes	Operational improvements to SR 19 and Lake County CR 33 are funded in the LRTP.

Table 6-7: LSMPO 2045 LRTP Performance Indicators - Goal 4

Goal 4: Improve Mobility			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 4.1 – Improve transportation options available.	Did the LRTP expand transportation options?	Yes	
Objective 4.2 – Invest in Bicycle and Pedestrian infrastructure.	Did the LRTP invest in bicycle and pedestrian infrastructure?	Yes	It is anticipated that cost feasible roadway projects will include context-appropriate bicycle and pedestrian facilities. The MPO prioritizes bicycle, pedestrian, and, trails projects which may be eligible for funding on an annual basis.

Goal 4: Improve Mobility			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 4.3 – Maintain or enhance Transit service.	Did the LRTP maintain or enhance Transit service?	Yes	No change in transit service coverage area as funding only sufficient to support continuation of existing service.
Objective 4.4 – Balance regional capacity needs with human scale accessibility needs (Complete Streets).	Did the LRTP identify Complete Streets corridors for funding when available?	Yes	Potential Complete Streets corridors include SR 19 in Eustis and Main Street in Leesburg. Please see Chapter 4 for additional discussion on the MPO's support for Complete Streets.
Objective 4.5 – Invest in Context Sensitive/Complete Street investments in multimodal corridors.			

Table 6-8: LSMPO 2045 LRTP Performance Indicators - Goal 5

Goal 5: System Preservation			
Objective	**Performance Indicator**	**2045 Forecast**	**Comments**
Objective 5.1 – Maintain Transportation infrastructure.	Did the LRTP maintain transportation infrastructure?	Yes	
Objective 5.2 – Maintain Transit assets.	Did the LRTP maintain transit assets?	Yes	

Network Performance

Travel Demand Model Results

As previously discussed, the CFRPM was utilized to identify the current and projected transportation demand of persons and goods in the planning area. The model was also used to evaluate the performance of the 2045 LRTP against identified performance targets and indicators, as well as the performance of the roadway network. The travel demand model provides an indication of how effective the Cost Feasible Plan network is in managing congestion and travel delay. An overall analysis of volume/capacity (V/C) ratios for the roadway network was conducted to demonstrate the level of congestion expected in 2045. Maps depicting the 2045 roadway network are included on the following pages, including the number of directional lanes (**Figure 6-1**), V/C ratios (**Figure 6-2**), and annual average daily traffic (**Figure 6-3**).

Figure 6-1: Number of Directional Lanes (2045 Network)

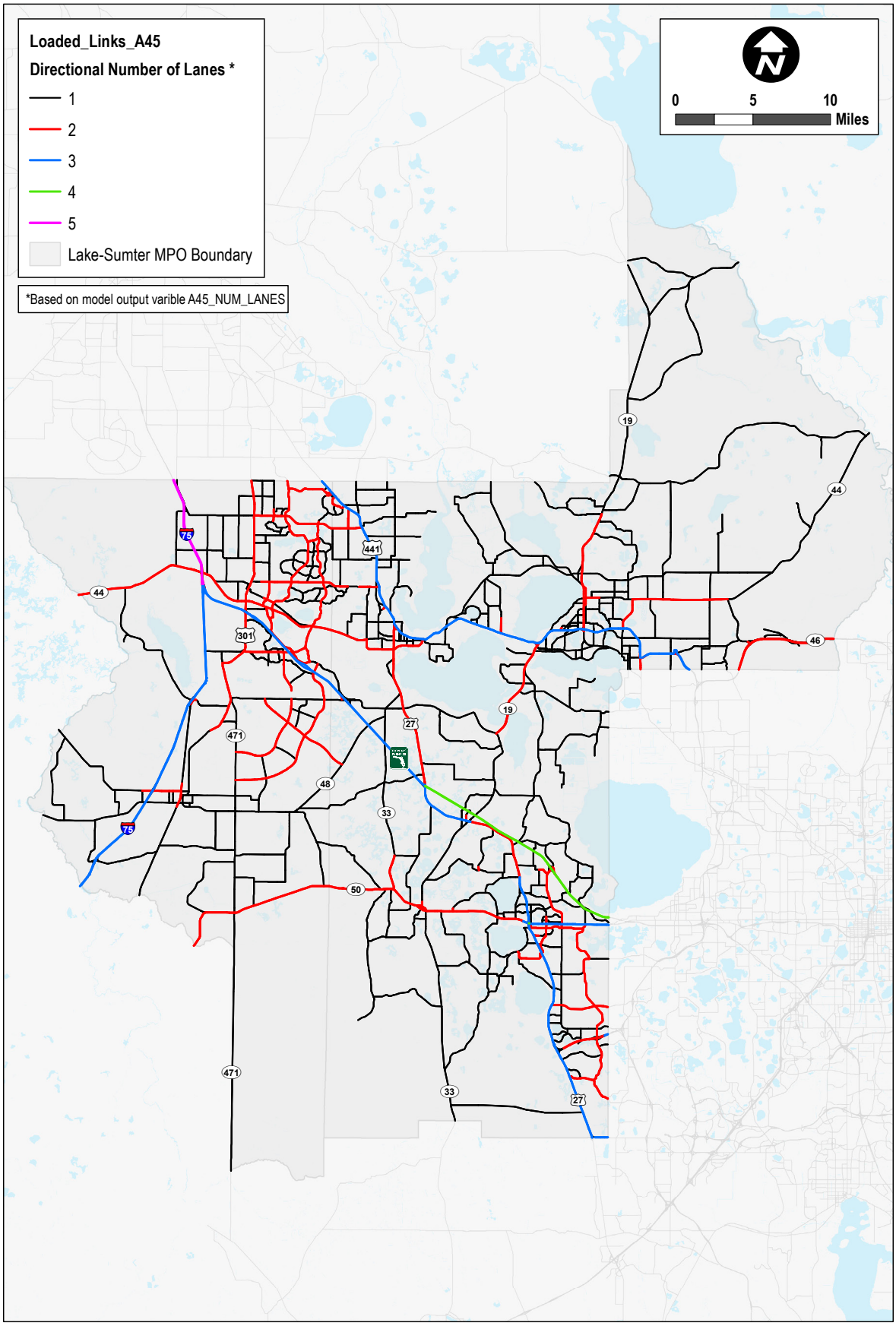
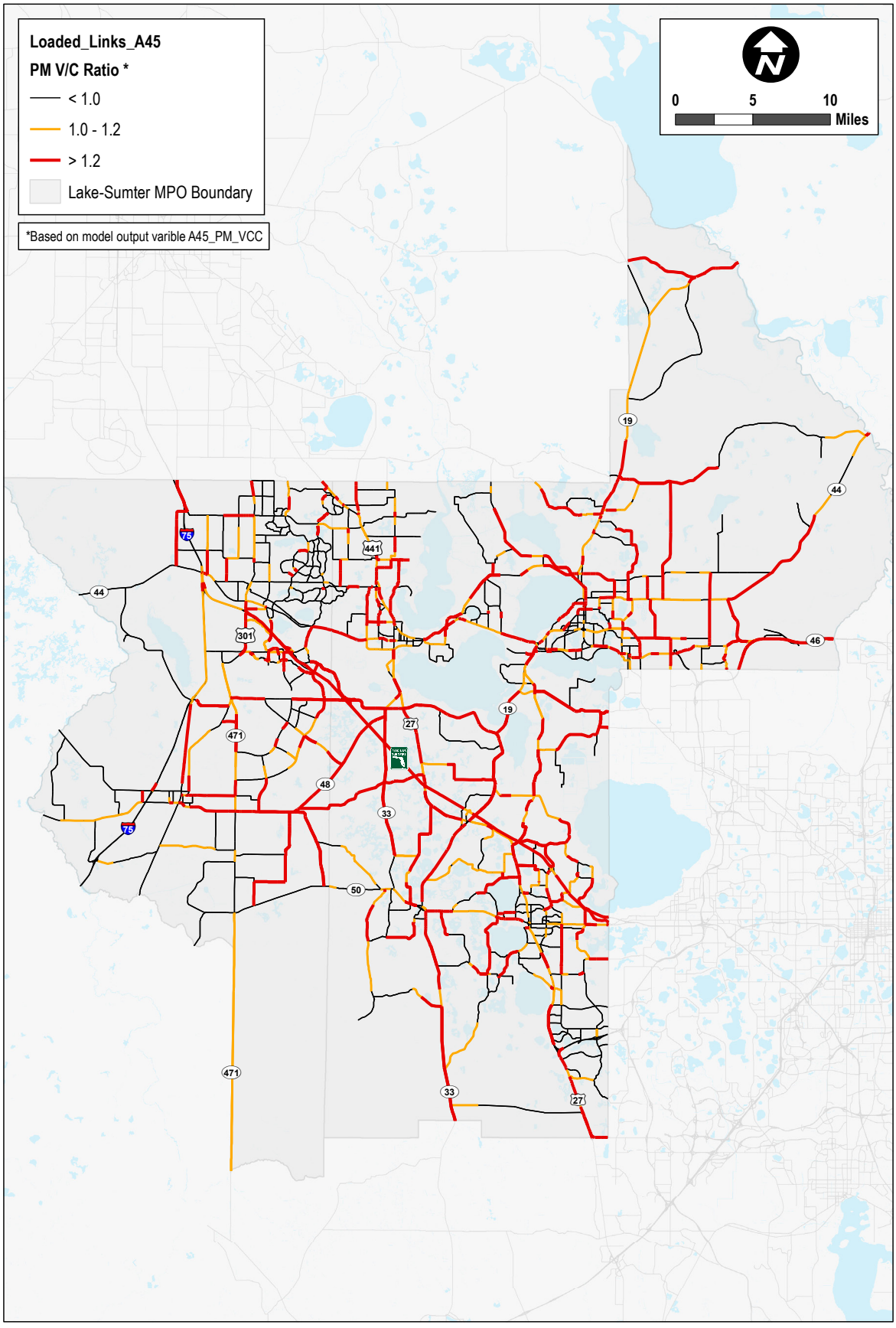


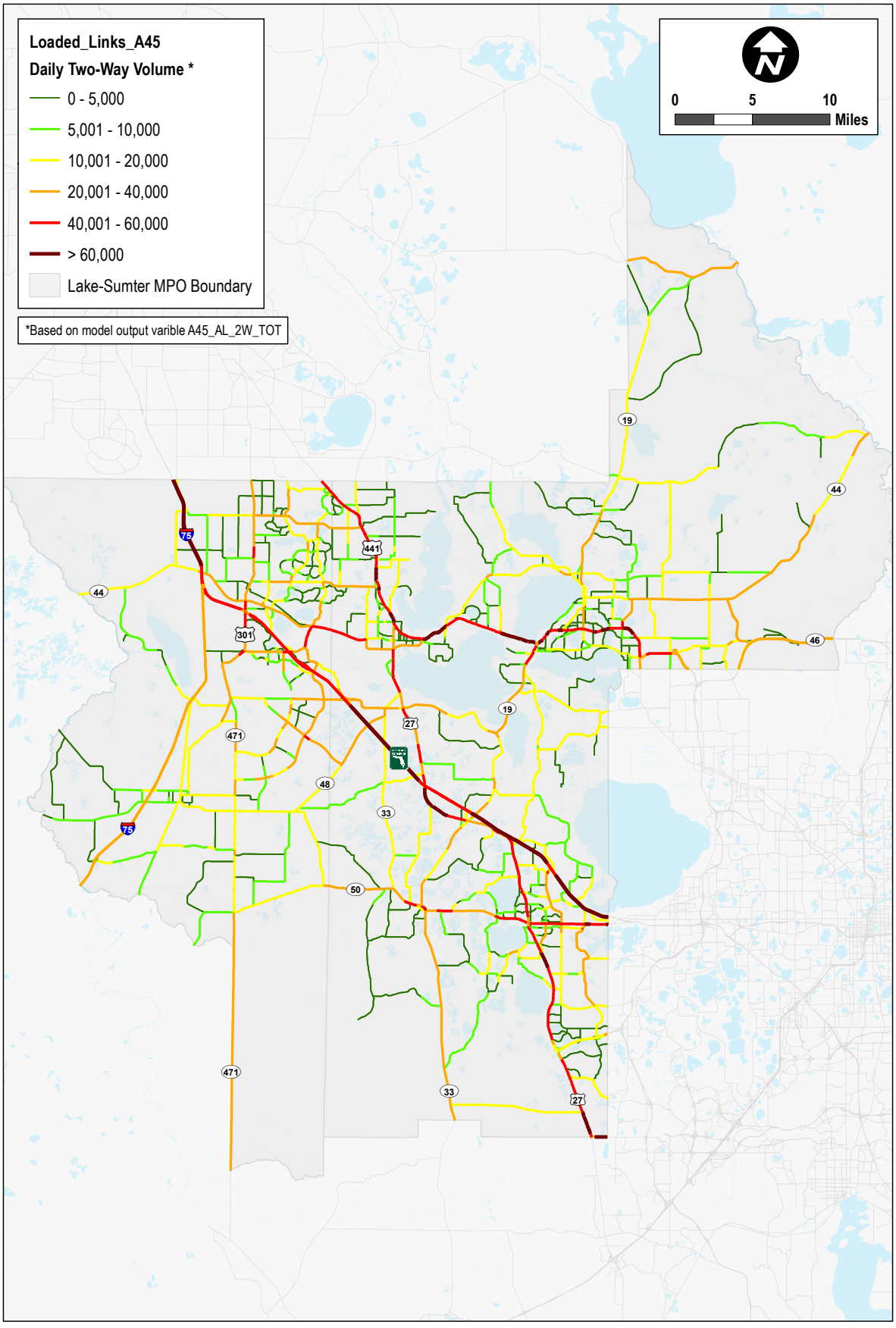
Figure 6-2: Volume-to-Capacity (2045 Network)



CFRPM v7 | Loaded 2045 Network (11/03/2020 Model File)

PM Period Volume-to-Capacity (V/C) Ratio

Figure 6-3: Annual Average Daily Traffic (2045 Network)



CFRPM v7 | Loaded 2045 Network (11/03/2020 Model File)

Total Daily Two-Way Traffic Volume

7 Plan Implementation

Chapter 7 - Plan Implementation

The 2045 LRTP will provide guidance for the Lake~Sumter MPO over the next five years by providing a roadmap for the implementation of improvements to the tranportation network. The MPO will rely upon the support and cooperation of a number of partners to successfully implement this plan, including Lake County, Sumter County, local municipalities, FDOT District Five, transit service providers, neighboring jurisdicitons and TPO/MPOs, and the community. In order to secure funding fo the projects necessary to meet the area's future needs, the MPO will continue to collaborate with each of these partners.

This LRTP is a key component in the planning framework of the MPO and integral to the process for programming projects. The 2045 LRTP Cost Feasible Plan provides the list of projects that will support the development of the annual List of Priority Projects (LOPP). The LOPP subsequently determines the projects will advance into the Transportation Improvement Program (TIP) and FDOT's Five-Year Work Program.

Plan Adoption

The 2045 LRTP was formally adopted by the Lake~Sumter MPO Governing Board on December 9, 2020 after formal review by the MPO's advisory committees and the formal 21-day public comment period prescribed in the MPO Publice Participation Plan.

Compliance with the FAST Act

Transportation governed by the Fixing America's Surface Transportation Act (FAST Act), which was signed into law on December 4, 2015. The FAST Act enacted changes to the MAP-21 planning processes for the development of long range transportation plans, including the incorporation of Transportation Performance Management and the addition of new planning factors. The MPO has been proactive in addressing FAST Act requirements and incorporating them into the development of this LRTP and other core planning activities.

LRTP Amendment Process

This LRTP is not a static document and changes can occur due to a number of reasons, including shifts in funding or updated project priorities. The MPO may need to revise the LRTP outside of the standard 5-year update cycle and FDOT provides guidance to MPOs to implement LRTP amendments. The Code of Federal Regulations defines two types of revisions—administrative modifications and amendments. The MPO's Public Participation Plan refers to these revisions as 'Non-Substantial' and 'Substantial' Amendments.

'Non-Substantial' Amendments to the LRTP

Amendments are considered as "not substantial" if they only include minor changes to project phase costs, minor changes to funding sources of previously included projects or changes to project phase initiation dates. These types of revisions do not require public review and comment and re-demonstration of fiscal constraint.

Amendments to the LRTP deemed 'not substantial' are reviewed by LSMPO's advisory committees for input and recommendations prior to Board adoption. In addition to the public comment periods provided at each Committee meeting, opportunities for public input are also a standard part of every Board meeting, prior to Board action.

The standard Board agenda includes a public comment period prior to action items on the agenda. During the review process and following Board adoption, the proposed amendment is electronically published on the MPO's webiste.

'Substantial' Amendments to the LRTP

Substantial Amendments are revisions that may involve the addition or deletion of a major project or a major change in project cost or a major change in design concept or design scope (changing termini or the number of through traffic lanes, for example). Substantial amendments require public review and comment and redemonstration of fiscal constraint.

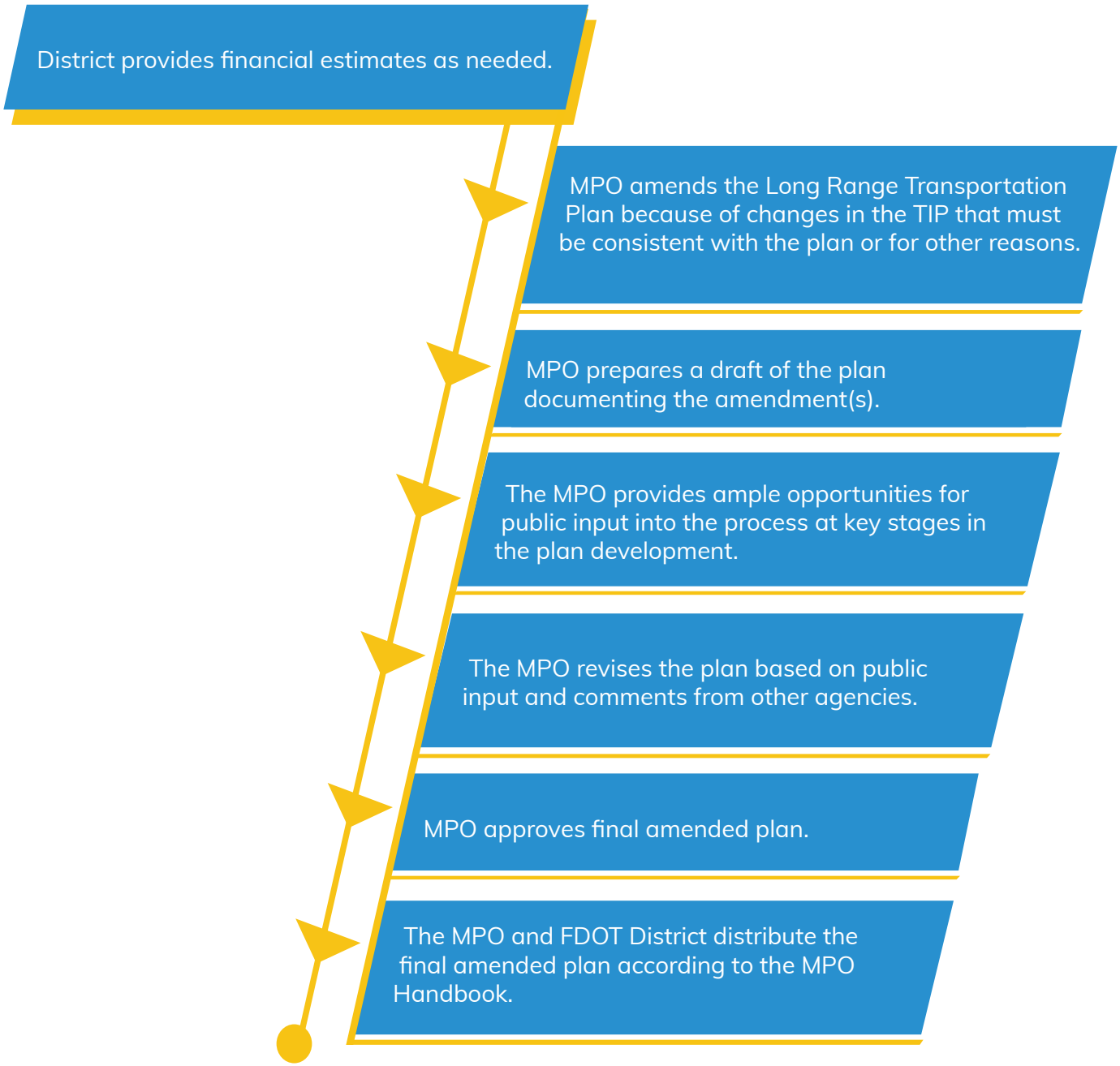
The following actions are potential amendments:

- Adding or deleting a federally-funded or regionally significant project, including earmarks;
- Increasing or decreasing the cost of project phases in excess of the thresholds for administrative modifications established by the FDOT; and
- Making a major change to the scope of work to an existing project. A major change would be any change that alters the original intent (e.g. a change in the number of lanes, a change in the project length more than 20%, or a change in location)

For amendments to the LRTP deemed 'substantial,' Lake~Sumter MPO follows a similar public involvement process to the original adoption of the plan, including a formal twenty-one (21) day public comment period after any required technical analysis and review by the organization's advisory committees for both input and recommendations prior to Board adoption. Public notification of the public comment period for the amendment follows the approved advertisement process. During the review process and following Board adoption, the proposed amendment is electronically published on the MPO's website

The LRTP can be revised at any time. It is important to note that the MPO does not have to extend the planning horizon of the LRTP for administrative modifications or for amendments. Florida Statute requires that the MPO Board adopt amendments to the LRTP by a recorded roll call vote or handcounted vote of the majority of the membership present. The amended LRTP is to be distributed in accordance with the FDOT MPO Handbook requirements. **Figure 7-1**, summarizes the LRTP amendment process.

Figure 7-1: LRTP Amendment Process



Lake-Sumter MPO

Metropolitan
Planning Organization

Appendix A:
System Performance Report

Lake~Sumter Metropolitan Planning Organization

Long-Range Transportation Plan
System Performance Report Template

October 2020

TABLE OF CONTENTS

1 – PURPOSE AND BACKGROUND

Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21) Act enacted in 2012 and the Fixing America's Surface Transportation Act (FAST Act) enacted in 2015, state departments of transportation (DOT) and 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).[1] This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the 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).

[1] 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[2] 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

	Florida Statewide Baseline Performance (Five-Year Rolling Average)			Calendar Year 2020 Florida Performance Targets
Performance Measures	**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

[2] 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

Performance Measures	Florida Baseline Performance	Lake~Sumter MPO Baseline Performance
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.

LRTP 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)

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

Performance Measures	Statewide (2017 Baseline)	Statewide 2019 Actual	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)	Lake~Sumter MPO (2017 Baseline)	Lake~Sumter MPO 2019 Actual
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)

System Performance/Freight/CMAQ Performance Measures and Targets Overview

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

National Highway Performance Program (NHPP)

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

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

4. Annual hours of peak hour excessive delay per capita (PHED);
5. Percent of non-single occupant vehicle travel (Non-SOV); and
6. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NOx, VOC, CO, PM10, and PM2.5) for CMAQ funded projects.

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

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

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

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

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

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

- Two-year and four-year statewide targets for percent of person-miles on the Interstate system that are reliable;
- Four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable[3]; 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.

[3] 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 2-year Target (2019)	Statewide 4-year Target (2021)	Lake~Sumter MPO (2017 Baseline)	Lake~Sumter MPO 2019 Actual
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

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

[1] no longer in service

[2] 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

Asset Category Performance Measure	Asset Class	FY 2018 Asset Condition	FY 2019 Target	FY 2020 Target	FY 2021 Target	FY 2022 Target
Rolling Stock						
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%
Equipment						
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%
Facilities						
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

Asset Category - Performance Measure	Asset Class	FY 2019 Asset Conditions	FY 2020 Performance Target
Revenue Vehicles			
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%
Equipment			
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%
Facilities			
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

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

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

Transit Safety Performance Measures

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

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

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

Once the public transportation provider establishes targets, it must make the targets available to MPOs to aid in the planning process. MPOs have 180 days after receipt of the PTASP targets to establish transit safety targets for the MPO planning area. In addition, the 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**
Non-SIS																				
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
SIS																				
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
Strategic Intermodal System (SIS) Projects																				
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
State Projects																				
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 2031-2035 2036-2045	$ 7,055,000 $ 52,929,000 $ 1,021,000	OA OA OA	2036-2045	$ 96,840,000	OA	$ 5,636,000	Fully Funded
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
Local Projects																				
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
State Projects																				
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
Local Projects																				
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

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

*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.

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
Strategic Intermodal System (SIS) Projects																				
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
State Projects																				
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 2031-2035 2036-2045	$ 5,345,000 $ 34,148,000 $ 498,000	OA OA OA	2036-2045	$ 47,239,000	OA	$ 2,749,000	Fully Funded
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
Local Projects																				
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
State Projects																				
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
Local Projects																				
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

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

*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.

Appendix E:
Cost Feasible Plan Financial Summary/ Demonstration of Fiscal Constraint

2045 LRTP Cost Feasible Plan - Financial Summary

Lake-Sumter MPO

TIP FY 2020/21 -2024/25 Revenues by Source for Capacity Projects

Revenue Type	Revenue	Cost
Federal	$110,430,390	$110,430,390
State	$591,941,554	$591,941,554
Local	$16,807,223	$16,807,223
Toll/Turnpike	$25,080	$25,080
Total	**$719,204,247**	**$719,204,247**

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

Note: Product Support is provided at the FDOT District level and MPOs are directed to not exceed a given amount based on a percentage of Construction and ROW funding. Product Support includes non-capacity programs that are prioritized and programmed annually for inclusion in the FDOT Work Program.

Appendix F:
Multi-Use Trails

Multi-Use Trail Priorities

Lake-Sumter MPO 2045 Long Range Transportation Plan

Trail Name	Regional Name	Surface	Length	SUN Trail (Y/N)	Present Day Cost Planning Level Estimate (in millions)	Year of Expenditure Planning Level Estimate (2036-2045) (in millions)
Black Bear Scenic Trail	Black Bear Scenic Trail	Paved	7.69	Y	$13.80	$25.14
Eustis Trail	River to Hills Trail	Paved	0.41	N	$2.05	$4.22
Gardenia Trail	Lake Ridge Trail	Paved	12.51	N	$40.97	$72.07
Hartle Road / CR 455 Trail	River to Hills Trail	Paved	3.32	N	$11.13	$19.54
North Lake Trail	River to Hills Trail	Paved	34.26	N	$64.14	$116.25
Tav-Dora Trail	Wekiva Trail	Paved	2.02	N	$10.10	$20.74
Tav-Lee Trail	Wekiva Trail	Paved	1.68	N	$8.41	$17.27
Umatilla Park Trail	River to Hills Trail	Paved	0.41	N	$1.36	$2.39
Venetian Gardens Trail		Paved	0.39	N	$1.30	$2.29
Wekiva Trail	Wekiva Trail	Paved	13.79	N	$46.24	$81.18

Appendix G:
Four Corners Plan

Four Corners Transportation Plan

Background

Four Corners is a fifty square-mile Census-Designated Place that includes parts of Lake, Polk, Osceola, and Orange Counties. This area has experienced significant growth in recent years and are anticipating similar levels of growth in the future. Perhaps the most distinct characteristic about the area is that while it is geographically cohesive, it is within the jurisdictions of three MPO/TPOs, two FDOT districts, four school districts, and three water management districts. This has created unique challenges due to the varying approaches to governance, planning, growth, and general development.

In 2005, a collaborative public-private partnership called the Four Corners Area Council (FCAC) was established to address these challenges as the area was beginning its current exponential growth trajectory. In recent years, the Council sought to develop a strategic plan for the area that focuses on near-term planning as well as planning for the future.

Four Corners Area Council and Four Corners One Vision

The FCAC is comprised of governmental and private entity representatives from each of the four counties involved—Lake, Polk, Osceola, and Orange. The Council has been developing a strategic plan entitled Four Corners, One Vision, of which the first phase was completed in late 2018, and the second phase is anticipated to be complete in 2020.

As part of the Technical Subcommittee, the Lake-Sumter MPO coordinated with Polk TPO and Metroplan Orlando to evaluate and coordinate the unique transportation needs for the future of Four Corners. This includes roadway projects in different phases and locations such as I-4 Beyond the Ultimate, Lake/Orange County Connector, Poinciana Parkway Extension, and the US 192 Mobility Study. It also includes multimodal projects like those from local transit providers and bicycle and pedestrian needs. This needs assessment is largely based on the needs of each MPO/TPO as demonstrated in their current Long Range Transportation Plans. Projects that meet the following criteria are considered higher priority:

- Projects of regional significance that have a particular impact on the Four Corners.
- Roads that cross county lines in the Four Corners region
- Roads or projects within a single county, but that have (or have the potential to have) a major impact on the road network in the Four Corners area.
- Projects involving data and Intelligent Transportation System (ITS)/Transportation Systems Management and Operations (TSM&O) Public Involvement Activities

Travel Characteristics

The main driver of the Four Corners' growth is its location, which is nearby many of Central Florida's tourist attractions. Four Corners is located adjacent to Bay Lake, the municipality in which the Disney Parks are located. Along with I-4, the major corridors that are located within the Four Corners boundary include US 27, US 192, and SR 429. These corridors are vital regional connections.

I-4 provides access to the Lakeland, Tampa, and I-75 to the west and access to Orlando, Daytona, and I-95 to the east. US-27 is the primary north-south corridor, connecting Haines City and Lake Wales to Clermont and The Villages.

Four Corners Transportation Plan

US-192 connects US-27 eastward to Florida's Turnpike through Celebration and Kissimmee. SR 429 serves as the western portion of Central Florida's Beltway system, connecting I-4 to the Turnpike and SR 50.

These limited number of higher-speed facilities are constrained by development and/or the natural environment. The number of users on these roadways frequently results in congestion throughout the Four Corners area, with regular heavy delays on I-4 from west of US 27 through Four Corners and beyond, especially nearby interchanges with similar congestion experienced on the cross facilities. As such, it should be noted that I-4 is programmed to be widened throughout this area, and each US 27 and US 192 are currently being studied for potential improvements or alternatives. Further, SR 429 is a tolled facility and currently does not experience regular congestion.

One Vision Report

The Four Corners Area Council *One Vision Report* identifies several transportation issues that the recommendations seek to address.

1. ***CONGESTION**. In common with much of Central Florida, rapid growth in the Four Corners has led to increasing congestion in the area, particularly along US 192.*
2. ***AN EVOLVING ROAD NETWORK**. Multiple public and private projects on area roads will transform the area's road network in the foreseeable future, altering and expanding the Four Corners.*
3. ***TRANSIT**. A large proportion of the workforce in the Four Corners, and in much of the attractions area, is highly dependent on transit for access to jobs. In addition, many are dependent on bicycle and pedestrian networks for access to transit. This makes the challenges associated with effectively providing transit in Central Florida especially acute and relevant in the Four Corners.*
4. ***COORDINATION**. Multiple entities are involved in transportation planning affecting the Four Corners: two districts of the Florida Department of Transportation, three Metropolitan Planning Organizations (MPOs), four counties, the Central Florida Expressway Authority, the Turnpike Enterprise, and several large-scale private developments.*

These issues are generally reflected equally in all four counties, as the population growth in the area is dispersed throughout the area. Several recommendations are established by the report. The first of which is *Recommendation 3 – Include a Focus on the Four Corners in the Long Range Transportation Plans of the Lake, Orange and Osceola, and Polk MPOs*. This recommendation was in-part met by this document as part of the development of the Lake~Sumter MPO 2045 Long Range Transportation Plan.

In coordinating with other MPOs/TPOs to identify the needs listed in the following sections, the next recommendation is partially addressed: *Recommendation 4 – Ensure That Transportation Projects in the Four Corners Include All Four Counties, as Appropriate*. As each needs project moves forward into implementation, there will be efforts to coordinate with the adjacent jurisdictions to encourage the implementation of corresponding projects, so that jurisdictional boundaries do not diminish the benefits of the improvements. To continue coordination between the jurisdictions, the report also recommends *Recommendation 5 – Establish a Four Corners Transportation (including Transit) Working Group*.

Four Corners Transportation Plan

Roadway Network

The high demand on I-4, US 27, US 192, and SR 429 consequently puts a strain on the local roads, some of which already experience congestion and delays due to factors aside from simply the number of users, such as seasonal populations, driver demographics (often tourists unfamiliar with the area), number of business access driveways, additional commercial vehicles, among others.

Roadway and highway projects were identified in the LRTPs of each MPO/TPO, adopted December 2020. In each plan, the projects are grouped into different tiers. These tiers identify the relative level of priority and funding status as indicated in **Figure 1** below.

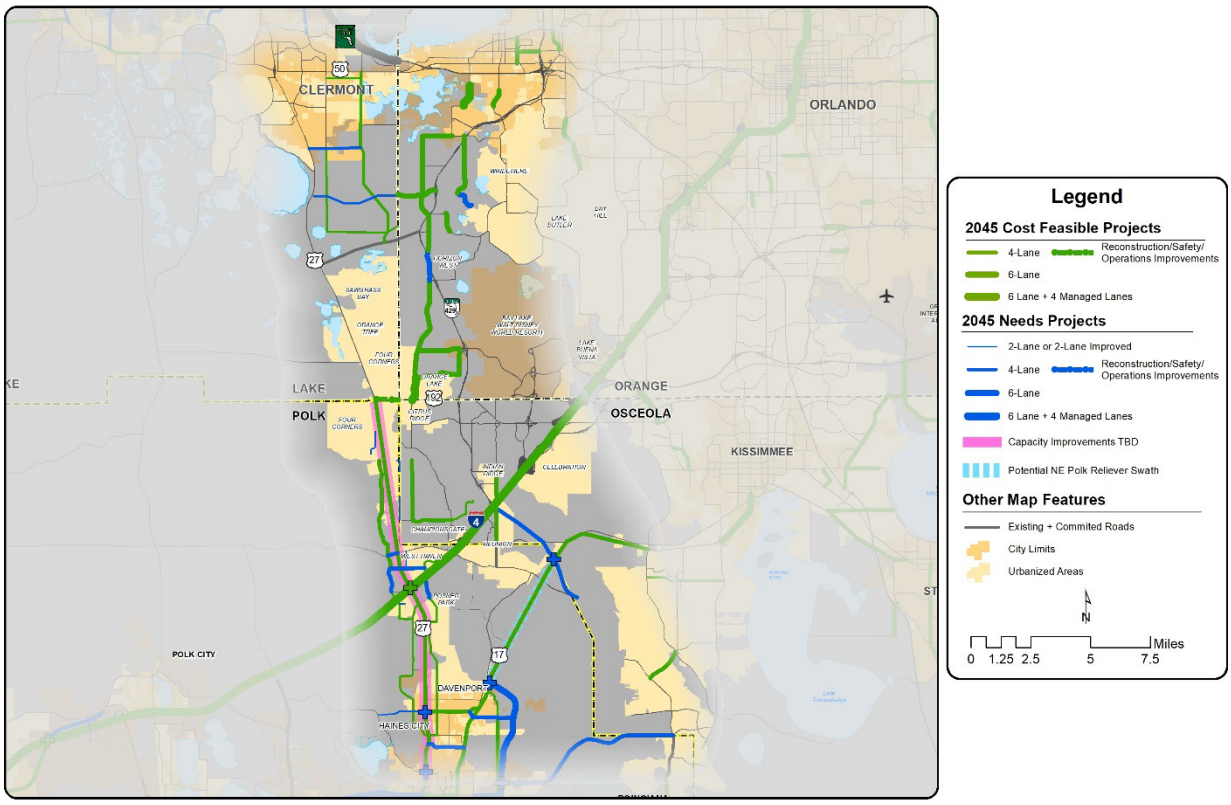
- Tier 1 projects are committed improvements to be built in the next 5 years. (2020 – 2025)
- Tier 2 & 3 projects are part of the Cost Feasible Plan. (2025 – 2045)
- Tier 4 represents high priority projects not currently cost feasible but could be added to the plan should funding become available in the future. These "Illustrative Projects" include the Central Polk Parkway and completing the 4 lanes on the Polk Parkway. Both of these projects would likely be funded by future Florida's Turnpike Enterprise revenues or some other source provided by the state.
- Tier 5 projects represent unfunded needs.
- Tier 6 projects represent other unfunded roadway improvements that are important to establish local connectivity or to serve existing and planned development.

Figure 1: Project Phasing Prioritization

	TIER 1	TIER 2	TIER 3	TIER 4	TIER 5	TIER 6
	Existing and Committed Roadway Improvements	Cost Feasible Plan (2025-2035)	Cost Feasible Plan (2036-2045)	Illustrative Projects / Other Priority Projects	Other Unfunded Needs	Vision Roadway Improvements
Needs Assessment?	Yes	Yes	Yes	Yes	Yes	
High Priority?	Yes	Yes	Yes	Yes		
Cost Feasible?	Yes	Yes	Yes	Should funds become available		

The following maps in **Figure 2** display the roadway projects, shown as Cost Feasible (Tiers 2 & 3) and Unfunded Needs (Tiers 4-6). For the purposes of this memo, Tier 1 projects are identified as "Existing."

Figure 2: Roadway Cost Feasible Projects and Needs Assessment



Tables 1-4 list the projects by tier, corresponding to Figure 2.

Table 1: Tier 1 - Existing and Committed Projects

Tier	County	Road	From	To	Improvement	Year
1	Polk	Lake Wilson Rd	CR 54	CR 532	Widen to 4 Lanes	2021
1	Polk	Marigold Ave	Palmetto St	CR 580	Widen to 4 Lanes	2021
1	Polk	CR 580 (Cypress Parkway)	W Solivita Blvd	Solivita Blvd	Widen to 4 Lanes	2021
1	Lake, Orange	Lake-Orange Expressway	US 27	SR 429	New 4 Lane Expressway	2025
1	Lake	Florida's Turnpike	Minneola	Orange County Line	Widen to 8 Lanes	2021
1	Osceola	I-4	at CR 532		Interchange Improvements	2021
1	Osceola	SR 429	at I-4		Interchange Improvements	2022

Four Corners Transportation Plan

Table 2: Tiers 2 and 3 -Cost Feasible Projects

Tier	County	Road	From	To	Improvement	Year
2	Lake	CR 455/Hartle Rd	Lost Lake Rd	Good Hearth Blvd	Widen to 4 Lanes	2026 - 2030
2	Lake	CR 455 /Hartle Rd	Hartwood Marsh	Lost Lake Rd	New 4 Lanes	2026 - 2030
2	Lake	US 192	US 27	Orange County Line	Corridor Improvements	2026 - 2030
2	Osceola	US 17/92	Polk County Line	Poinciana Blvd	Widen to 4 Lanes	2031 - 2035
2	Orange	Avalon Rd	New Independence Pkwy	Tilden Rd	Widen to 4 Lanes	2031 - 2035
2	Orange	Winter Garden-Vineland Rd	Fowler Grove Blvd	Roper Rd	Widen to 4 Lanes	2031 - 2035
2	Osceola	Old Lake Wilson Rd	Polk County Line	Sinclair Rd	Widen to 4 Lanes	2031 - 2035
2	Polk	Holly Hill Rd	Patterson Rd	CR 547 (Bay St)	New 2 Lane	2031 - 2035
2	Polk	Holly Hill Rd	CR 547 (Bay St)	Ridgewood Lakes Blvd	New 2 Lane	2031 - 2035
2	Polk	Powerline Rd Extension	South Blvd	US 17/92	New 4 Lane	2031 - 2035
2	Polk	North Ridge Trail	Four Corners Blvd	Sand Mine Rd	New 4 Lane	2026 - 2030
2	Polk	FDC Grove Rd	Massee Rd	Ernie Caldwell Blvd	New 2 Lane	2031 - 2035
2	Polk	North Ridge Trail	Deen Still Rd	Four Corners Blvd	New 2 Lanes	2026 - 2030
2	Polk	Grandview Parkway Extension	Grandview Parkway Dead End	Dunson Rd	New 4 Lane	2031 - 2035
3	Orange	Summerlake Park Blvd	Porter Rd	Summerlake Groves St	Widen to 4 Lanes	2036 - 2045
3	Orange	New Independence Pkwy	Lake County Line	Valencia Pkwy	Widen to 4 Lanes	2036 - 2045
3	Orange	New Independence Pkwy	Valencia Pkwy	Avalon Rd	Widen to 4 Lanes	2036 - 2045
3	Orange	New Independence Pkwy	Avalon Rd	SR 429	Widen to 4 Lanes	2036 - 2045
3	Orange	Avalon Rd	Hartzog Rd	Seidel Rd	Widen to 4 Lanes	2036 - 2045
3	Orange	Avalon Rd	Porter Rd	New Independence Pkwy	Widen to 4 Lanes	2036 - 2045
3	Orange	Avalon Rd	Tour Pointe Blvd	Sunridge Blvd	Widen to 6 Lanes	2036 - 2045

Tier	County	Road	From	To	Improvement	Year
3	Orange	Tiny Rd	Bridgewater Crossing	Tilden Rd	Widen to 4 Lanes	2036 - 2045
3	Orange	Hartzog Rd / Flamingo Crossings Blvd	Avalon Rd	Western Way	Widen to 4 Lanes	2036 - 2045
3	Orange	Avalon Rd	US 192	Hartzog Rd	Widen to 6 Lanes	2036 - 2045
3	Orange	Avalon Rd	Old YMCA Rd	Schofield Rd	Widen to 4 Lanes	2036 - 2045
3	Orange	Avalon Rd	Schofield Rd	Porter Rd	Widen to 4 Lanes	2036 - 2045
3	Orange	Tiny Rd / Schoolhouse Pond Rd	New Independence Pkwy	Bridgewater Crossing	Widen to 4 Lanes	2036 - 2045
3	Orange	Western Way Extension	Avalon Rd	Flamingo Crossings Blvd	Widen to 4 Lanes	2036 - 2045
3	Osceola	Sinclair Rd	Goodman Rd	Tradition Blvd	New 2 Lane	2036 - 2045
3	Osceola	Laurel Ave / Reaves Rd	Poinciana Blvd	Marigold Ave	New 4 Lanes	2036 - 2045
3	Osceola	Westside Blvd	Monaco Blvd	Tri County Rd	New 4 Lanes	2036 - 2045
3	Polk	US 17/92	Central Polk Pkwy	Osceola County Line	Widen to 4 Lane	2036 - 2045
3	Polk	US 17/92	US 27	Osceola County Line	Widen to 4 Lane	2036 - 2045
3	Polk	Powerline Rd	CR 580-Johnson Ave	South Blvd	Widen to 4 Lane	2036 - 2045
3	Polk	FDC Grove Rd	US 27	Massee Rd	New 2 Lane	2036 - 2045
3	Polk	US 17/92	US 17/92 (Hinson Ave)	Central Polk Parkway	Widen to 4 Lane	2036 - 2045
3	Polk	Holly Hill Rd	Ridgewood Lakes Blvd	Ernie Caldwell Blvd	New 2 Lanes	2036 - 2045
3	Polk	I-4 Crossover Connector	Waverly Barn Rd	Deen Still Rd	New 4 Lane	2036 - 2045
3	Polk	I-4 Crossover Rd	FDC Grove Rd	NW Access Rd	Widen to 4 Lane	2036 - 2045

Table 3: Tiers 4 - Partially Funded and Illustrative Projects

Tier	County	Road	From	To	Improvement
4	Osceola	Bella Citta Blvd	Westside Blvd	S Goodman Rd	Widen to 4 Lanes
4	Polk	US 27 Reliever Road	CR 580	US 17/92	New 6 Lane Freeway
5	Polk	Poinciana Parkway Extension	Poinciana Pkwy	CR 532	New 4 Lane
5	Polk	Poinciana Parkway Extension	CR 532	I-4	New 4 Lane

Four Corners Transportation Plan

Table 4: Tiers 5 and 6 - Unfunded Needs and Visionary Projects

Tier	County	Road	From	To	Improvement
5	Lake	Schofield Rd	US 27	SR 429	New 2 Lane
5	Lake	Hooks St Extension	Hancock Rd	CR 455/Hartle Rd	New 2 Lane
5	Lake	Wellness Way	US 27	SR 429	New 4 Lane
5	Lake	CR 455 Extension	CFX Connector	Hartwood/Marsh Rd	New 4 Lane
5	Lake	Hartwood Marsh Rd	US 27	CR 455	New 4 Lane
5	Orange	New Independence Pkwy	Tiny Rd/Schoolhouse Pond Rd	Ave of the Groves	Widen to 4 Lanes
5	Orange	Avalon Rd	Seidel Rd	Old YMCA Rd	Widen to 4 Lanes
5	Polk	CR 547 Extension	Old Polk City Rd	US 27	New 2 Lanes
5	Polk	Bates Rd	US 27	US 17/92	Widen to 4 Lane
5	Polk	Deen Still Rd	North Ridge Trail	US 27	Widen to 4 Lane
5	Polk	CR 547 Extension	CR 547	US 17/92	Widen to 4 Lane
5	Polk	Pink Apartment Rd Ext	Bates Rd Extension	Snell Creek Rd	New 2 Lane
5	Polk	Marshall Rd	30th St Extension	Bates Rd Extension	Widen to 4 Lane
5	Polk	Snell Creek Rd	Pink Apartment Rd	Warner Rd	Improved
5	Polk	Bates Rd Ext	Marshall Rd	Pink Apartment Extension	New 2 Lane
5	Polk	North Collector	Poitras Rd	Polo Park Blvd	New 2 Lane
5	Polk	Dunson Rd	US 27	Buckingham Drive	Widen to 4 Lane
5	Polk	Waverly Barn Rd	North Ridge Trail	US 27	Widen to 4 Lane
5	Polk	Loma Del Sol Extension	Dunson Rd	CR 54	New 2 Lane
5	Polk	I-4 Crossover Connector	Home Run Blvd	I-4 Crossover	New 2 Lane
5	Polk	CR 580 (Cypress Parkway)	Central Polk Pkwy	CR 580 (Cypress Parkway)	Widen to 4 Lane
5	Polk	South Blvd	Powerline Rd	US 17/92	Widen to 4 Lane
5	Polk	CR 547 Extension	Powerline Rd Extension	Central Polk Parkway	Widen to 4 Lane
5	Polk	CR 547 Extension	Old Polk City Rd	US 27	New 2 Lane
6	Polk	Unnamed Road	Sand Mine Rd Dead End	Polk Line/Westside Blvd	New 2 Lane
6	Polk	Tank Rd	Student Dr	Sand Mine Rd	New 2 Lane
6	Polk	Tank Rd	Bella Citta Blvd	Barry Rd	New 2 Lane
6	Polk	30th St Extension	Baker Ave	Marshall Rd N	New 4 Lane

Four Corners Transportation Plan

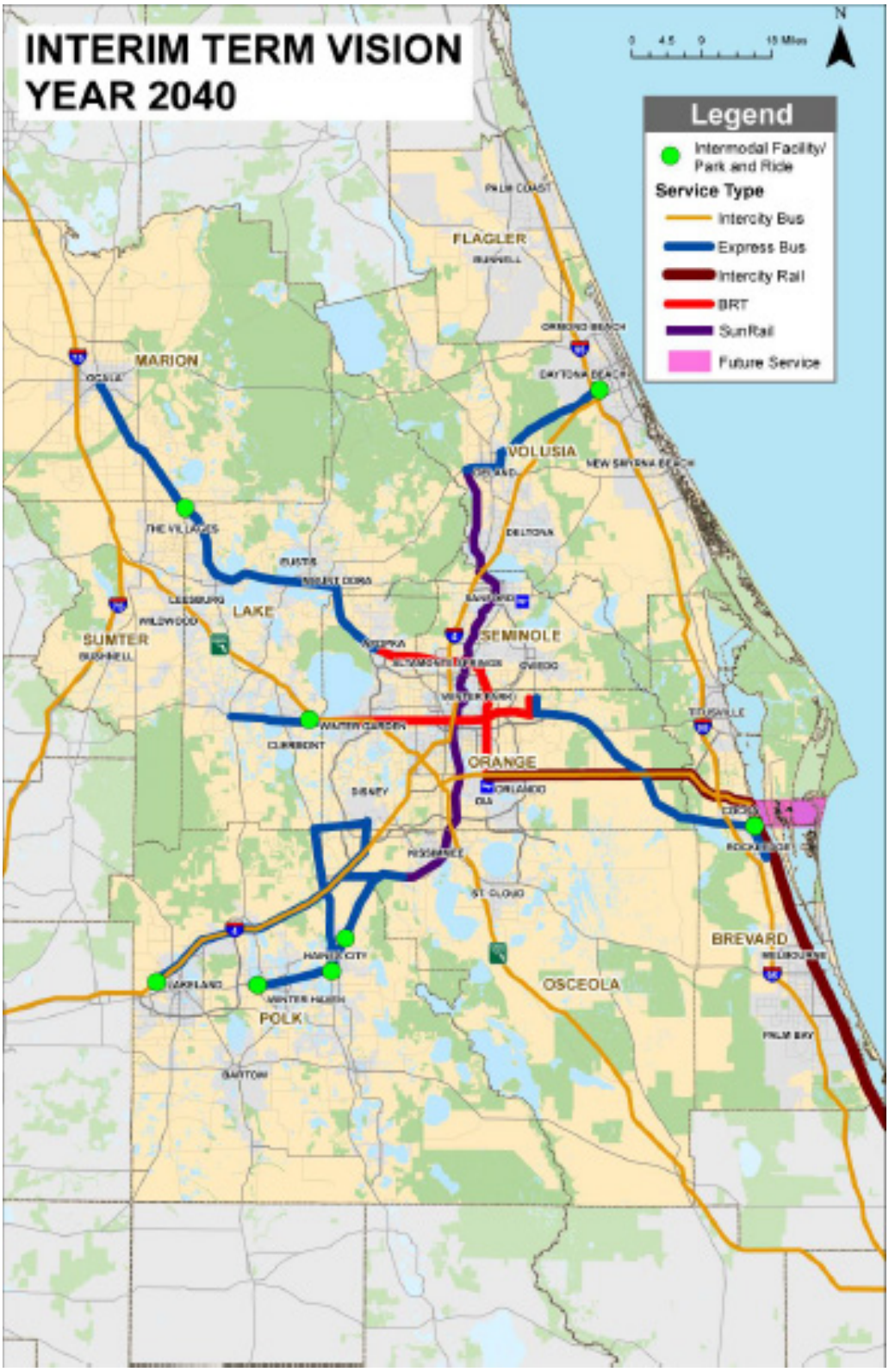
Transit

Three different transit providers offer service in the Four Corners area—Citrus Connection, which is based in Polk County, Lynx, which is based in Orange County, and LakeXpress. Each of these providers operates at least one route that crosses county lines into an adjacent county. Lynx, which primarily operates routes in Osceola, Orange, and Seminole Counties, provides connection service in Lake and Polk Counties within the Four Corners Boundary, including a Lynx Superstop transit hub. It is at this location that transit riders can take a bus to the Poinciana SunRail station, which is a commuter rail that travels from Poinciana in Osceola County through Orlando to DeBary in Volusia County.

Much of the bus service is centered around the attractions and supporting services (accommodations and other commercial areas) to serve a high number of area employees and tourists. As the population and tourism continues to expand throughout the Four Corners area, the demand for transit will increase as well. Additional routes that cross county lines may be needed to serve the residents, employees, and visitors alike.

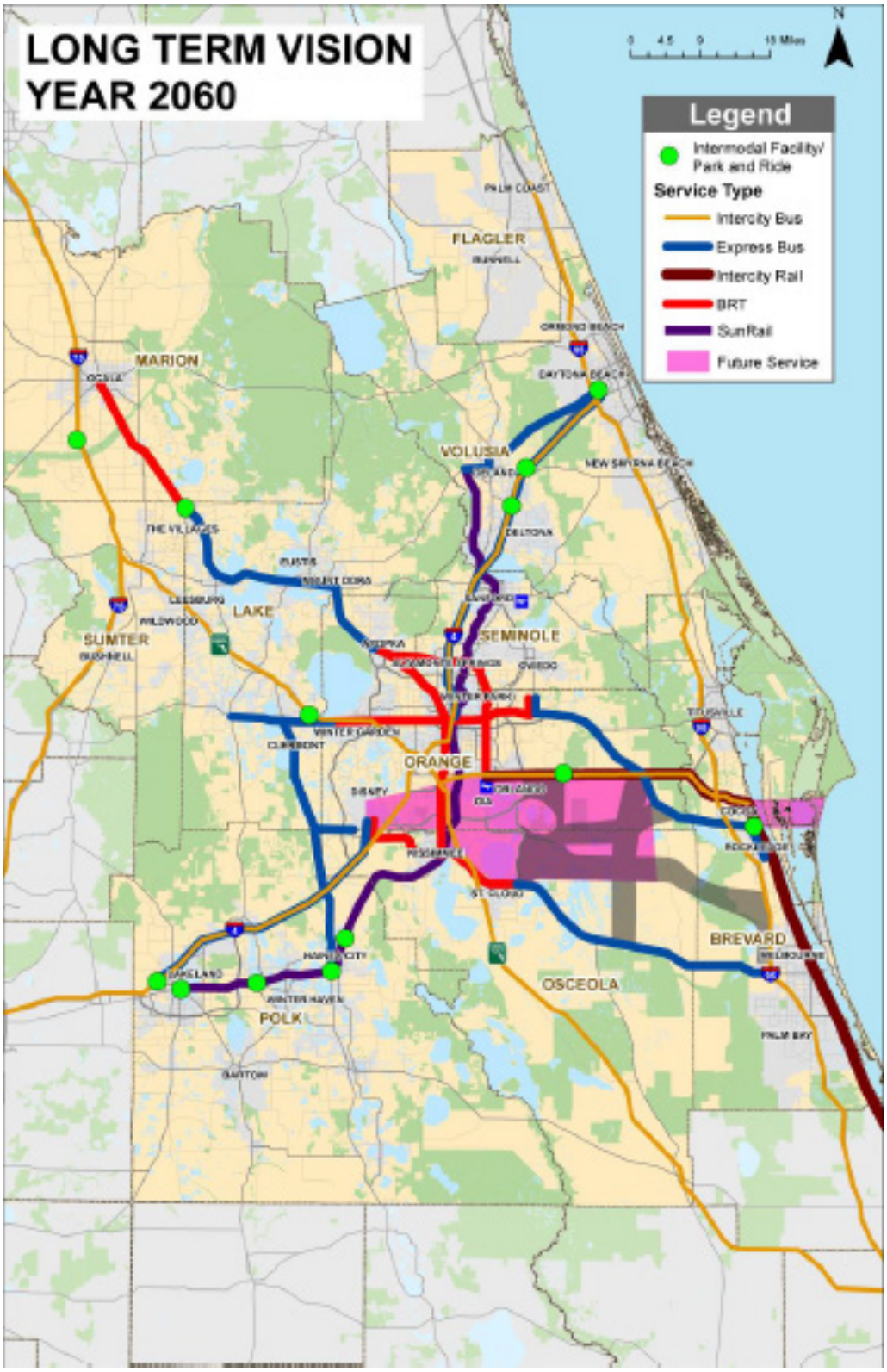
In 2018, the Central Florida MPO Alliance published the *Central Florida Regional Transit Study*, which identified the transit needs from a regional perspective of the Four Corners counties and beyond. The report identifies a 2040 Interim Vision (**Figure 3**), which generally consisted of the 2040 LRTP needs, and a Long Term Vision for the year 2060 (**Figure 4**).

Figure 3: Four Corners Area Transit Interim Vision Needs



Four Corners Transportation Plan

Figure 4: Four Corners Area Transit Long Term Vision Needs



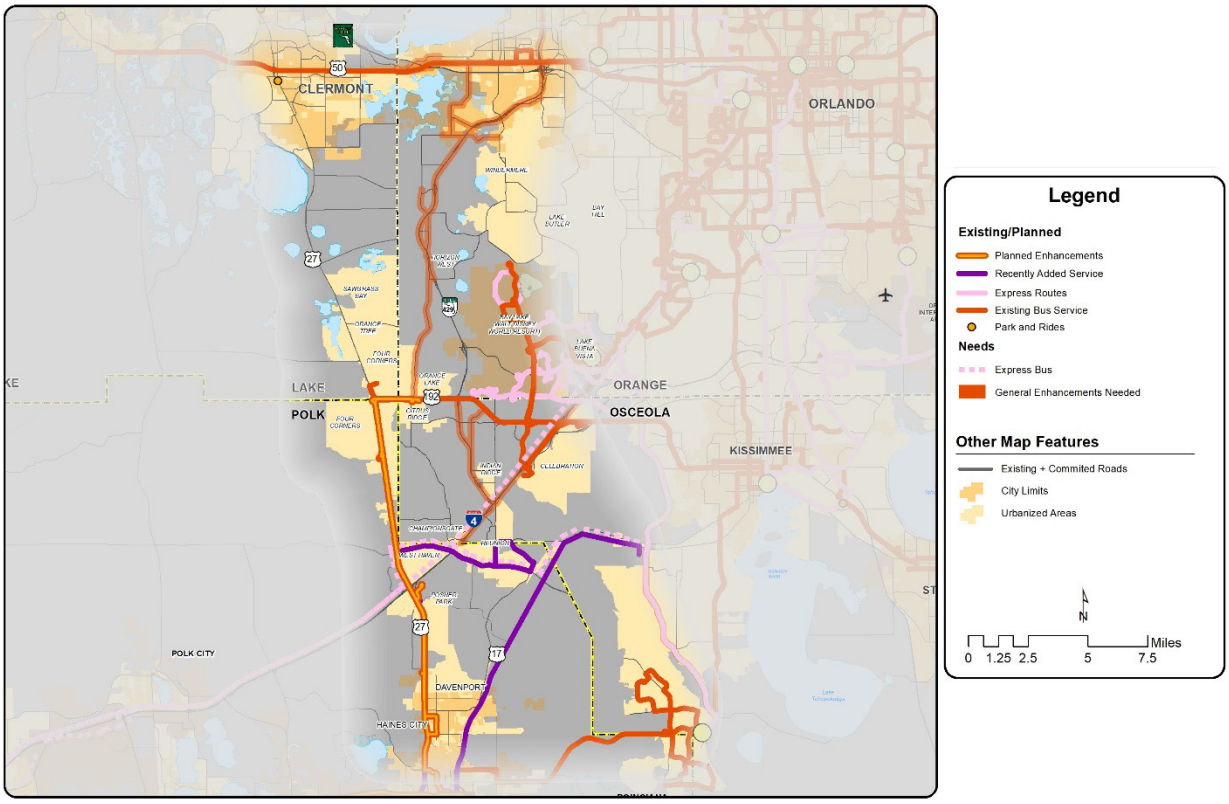
Four Corners Transportation Plan

Transit projects identified in the 2045 LRTPs of each MPO/TPO largely include those in the 2040 plans as referenced above and are included in **Table 5**. The following map in **Figure 5** display the transit projects, shown as Cost Feasible and Unfunded Needs.

Table 5: Four Corners Area Transit Needs

Status	County	Project	Type	Notes
Unfunded Need	Polk	SunRail South to Polk County	Commuter Rail / Premium Transit	
Unfunded Need	Polk, Osceola, Orange	I-4 Express Bus	Express Bus	
Partially Programmed	Polk, Osceola, Orange	High Speed Rail	High Speed Rail	Orlando Brightline operations anticipated to begin in 2022.
Unfunded Need	Polk, Osceola	Lakeland-SunRail Express	Express Bus	Additional express connection to SunRail
Unfunded Need	Lake, Orange, Osceola, Polk	Enhanced Fixed-Route Bus Service	Enhanced Service	
Unfunded Need	Osceola	Enhanced Service Area West of Kissimmee	Enhanced Service	
Unfunded Need	Osceola	Enhanced Service Area – Osceola Four Corners	Enhanced Service	
Unfunded Need	Orange (Disney)	Enhanced Service Area – Disney	Enhanced Service	
Unfunded Need	Lake, Orange, Osceola, Polk	US 192 Premium Transit Service	Premium Service	
Unfunded Need`	Orange	Enhanced Service Area – South Horizon West	Enhanced Service	

Figure 5: Four Corners Existing and Needed Transit



Bicycle, Pedestrian, and Trails

Bicycle and pedestrian safety is a major concern in the Four Corners, with many of the primary facilities not accommodating to the average cyclist or pedestrian, and land uses along the corridors provide few destinations that may be reasonably accessed by cycling or on foot. However, some of the residential and vacation communities in and nearby Four Corners, such as Cagan Crossings, Celebration, and Margaritaville provide and maintain facilities that are ideal for biking and walking.

Citing the anticipated continued growth, the importance of providing areas and facilities that are safe for all user becomes even more pronounced. The demand for additional bicycle and pedestrian facilities for standard trips is expected to increase as well as recreational trails.

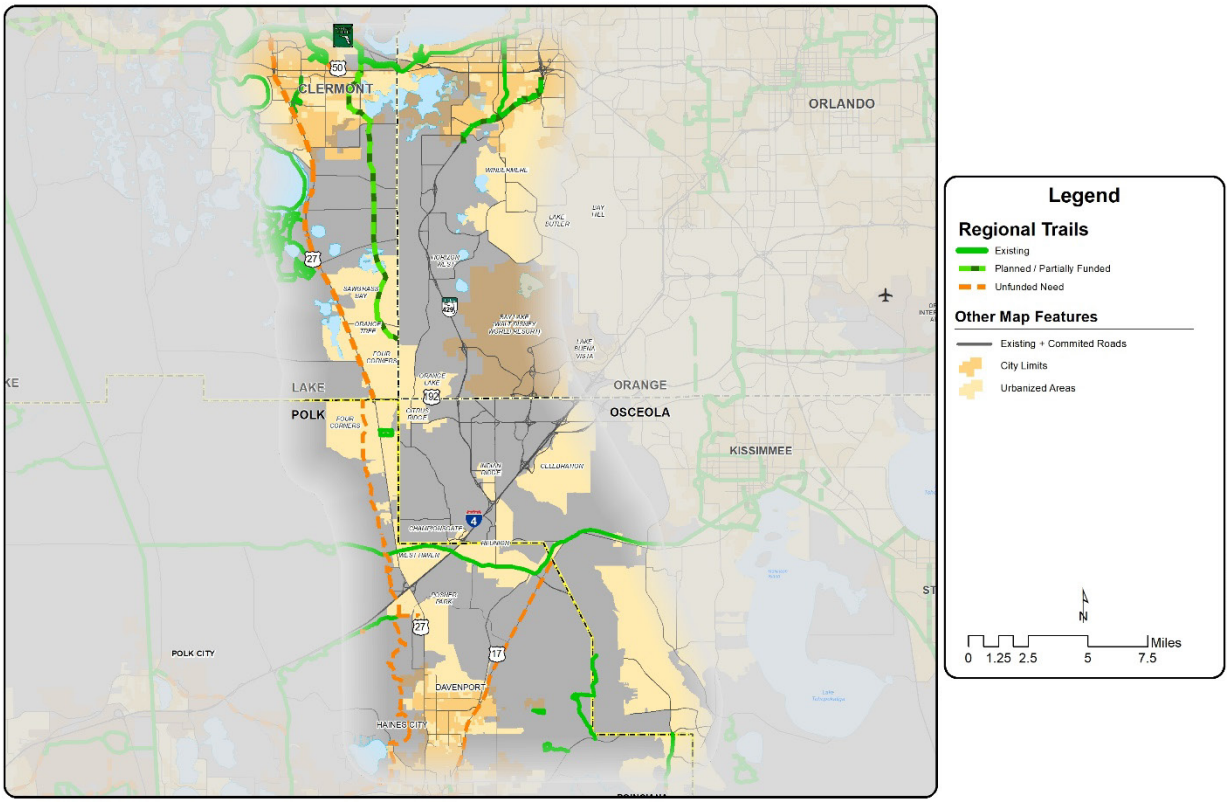
Bicycle, Pedestrian, and Trail projects were identified in the LRTPs of each MPO/TPO. Based on this available data, the following map in **Figure 6** displays the identified trails and **Table 6** lists the trails along with status and additional details.

Four Corners Transportation Plan

Table 6: Four Corners Area Trail Needs

Status	County	Facility	From	To	SUN Trail	Type	Notes
Existing	Osceola	Bill Johnston Memorial Pathway to Ronald Reagan Parkway Connector / Old Tampa Highway Trail / FNST Connector	Polk County Line	East of Four Corners Boundary	No	Unpaved	
Existing	Polk	Deen Still Road / Ronald Reagan Parkway	Van Fleet Recreational Trail	Osceola County Line	No	Unpaved	
Proposed	Polk	Florida Power Ridge Trail	Hilochee Trail	US 27	No	Paved	
Proposed	Polk	Green Swamp Trail	Lake Bonnett Marsh	Lake County Line	No	Unpaved	Connects with Lake Ridge Trail (Lake Co)
Planned; Unfunded	Lake	Hartle Road / CR 455 Trail (River to Hills Trail)	Orange County Line	North of Four Corners Boundary	No	Paved Multiuse	In planning and design; Unfunded
Existing	Polk	Hilochee Trail	CR 557	Florida Power Ridge Trail	No	Unpaved	
Unfunded Need	Orange	Horizon West	Tiny Rd	West Orange HS	No	Paved Multiuse	Part of Horizon West Trails Study
Various	Orange	Horizon West Trails	Various	Various	No		
Existing	Lake	Lake Louisa State Park Trail	Lake Louisa State Park		No	Unpaved Multiuse	
Existing	Polk	Northeast Regional Park Trails	Poitras Road		No	Paved	
Proposed	Polk	US 17/92 Trail	Downtown Davenport	Osceola County Line	No	Paved	
Conceptual	Lake	US 27 Trail (Lake Ridge Trail)	Polk County Line	North of Four Corners Boundary	No	Paved Trail	Connects to Green Swamp Trail (Polk Co)
Existing	Polk	Lake Marion Creek Management Area Trail	Lake Marion Creek Management Area		No	Unpaved	

Figure 6: Four Corners 2045 Trails Needs



Appendix H:
Federal and State Requirements Checklist

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
23 C.F.R. Part 450 – Planning Assistance and Standards		
A-1	Does the plan cover a 20-year horizon from the date of adoption? Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(a)	Yes. Chapter 1 – Introduction Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan Chapter 6 – Performance Measurement
A-2	Does the plan address the planning factors described in 23 C.F.R. 450.306(b)? Please see the "Fiscal Constraint" section of the 2018 FHWA LRTP Expectations Letter for guidance. Please see the "New Requirements" section of the 2018 FHWA LRTP Expectations Letter for guidance. Risk and Resiliency Does the plan improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation? Travel and Tourism Does that plan enhance travel and tourism? Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(a)	Yes. Chapter 1 – Introduction (pp. 1-2 – 1-3) [new planning factors] Chapter 2 – Goals, Objectives, and Performance Measures (pp. 2-4 – 2-5) Fiscal Constraint Chapter 4 – Transportation Plan Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC) Appendix E – Financial Summary / Demonstration of Fiscal Constraint Risk and Resiliency Chapter 2 – Goals, Objectives, and Performance Measures (Goal 1, Goal 5) Chapter 4 – Transportation Plan (p. 4-30) Travel and Tourism Chapter 4 – Transportation Plan (p. 4-30)
A-3	Does the plan include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(b)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan Appendix A – System Performance Report

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-4	Was the requirement to update the plan at least every five years met? Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(c)	Yes. The Lake~Sumter MPO 2040 LRTP was adopted on December 9, 2015. The 2045 LRTP was adopted on December 9, 2020 (Resolution 2020-13).
A-5	Did the MPO coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP)? 23 C.F.R. 450.324(d)	N/A -The Lake~Sumter MPO Planning Area is not within a non-attainment area.
A-6	Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity? Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(e)	Yes. Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan
A-7	Does the plan include the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(1)	Yes. Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan Chapter 5 – Public Involvement Chapter 6 – Performance Evaluation

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-8	Does the plan include existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan? 23 C.F.R. 450.324(f)(2)	Yes. Chapter 4 – Transportation Plan
A-9	Does the plan include a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with §450.306(d)? Please see the "New Requirements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(3)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (PM1, PM2, PM3, and Transit) Chapter 6 – Performance Evaluation Appendix A – System Performance Report
A-10	Does the plan include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in §450.306(d), including progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data? Please see the "New Requirements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(4)(i)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (PM1, PM2, PM3, and Transit) Chapter 6 – Performance Evaluation Appendix A – System Performance Report

Federal and State Requirements Checklist

A-11	Did the MPO integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program including: (i) The State asset management plan for the NHS, as defined in 23 U.S.C. 119(e) and the Transit Asset Management Plan, as discussed in 49 U.S.C. 5326; (ii) Applicable portions of the HSIP, including the SHSP, as specified in 23 U.S.C. 148; (iii) The Public Transportation Agency Safety Plan in 49 U.S.C. 5329(d); (iv) Other safety and security planning and review processes, plans, and programs, as appropriate; (v) The Congestion Mitigation and Air Quality Improvement Program performance plan in 23 U.S.C. 149(l), as applicable; (vi) Appropriate (metropolitan) portions of the State Freight Plan (MAP-21 section 1118); (vii) The congestion management process, as defined in 23 CFR 450.322, if applicable; and (viii) Other State transportation plans and transportation processes required as part of a performance-based program. Please see the "New Requirements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.306 (d)(4)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (i) Chapter 2 – Goals, Objectives, and Performance Measures (System Performance Report – PM1, PM2, PM3, and Transit) Chapter 6 – Performance Evaluation Appendix A – System Performance Report (ii) Chapter 2 – Goals, Objectives, and Performance Measures (PM 1) Chapter 4 – Transportation Plan (pg. 4-29) Appendix A – System Performance Report (iii) Chapter 2 – Goals, Objectives, and Performance Measures (pg. 2-16) Appendix A – System Performance Report (iv) Chapter 2 – Goals, Objectives, and Performance Measures (PM 1) Chapter 4 – Transportation Plan (pg. 4-29 – 4-30) Chapter 6 – Performance Evaluation Appendix A – System Performance Report (v) -N/A - Measures pertaining to the CMAQ Program currently do not apply in Florida. (vi) Chapter 2 – Goals, Objectives, and Performance Measures (pp. 2-17 – 2-18) Appendix A – System Performance Report (vii) Chapter 2 – Goals, Objectives, and Performance Measures Chapter 4 – Transportation Plan (pp. 4-26 – 4-28) Chapter 6 – Performance Evaluation (viii) Chapter 2 – Goals, Objectives, and Performance Measures

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-12	Does the plan include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(5)	Yes. Chapter 4 – Transportation Plan (pp. 4-24 – 4-28)
A-13	Does the plan include consideration of the results of the congestion management process in TMAs, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(6)	N/A -The Lake~Sumter MPO Planning Area is not within a non-attainment area.
A-14	Does the plan include assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters? 23 C.F.R. 450.324(f)(7)	Yes. Chapter 4 – Transportation Plan

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-15	Does the plan include transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a)? 23 C.F.R. 450.324(f)(8)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures Chapter 4 – Transportation Plan (pp. 4-22 – 4-23)
A-16	Does the plan describe all proposed improvements in sufficient detail to develop cost estimates? Please see the "Fiscal Constraint" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(9)	Yes. Chapter 4 – Transportation Plan Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC)
A-17	Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(10)	Yes. Chapter 4 – Transportation Plan (pp. 4-30 – 4-31) Technical Appendix D – Public Involvement/Agency Coordination Summary
A-18	Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented? Please see the "Fiscal Constraint" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(11)	Yes. Chapter 4 – Transportation Plan Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC)

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-19	Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation? 23 C.F.R. 450.324(f)(11)(i)	Yes. Chapter 4 – Transportation Plan Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC) Technical Appendix E – 2045 Lake~Sumter MPO Revenue Forecast Technical Appendix F - 2019 FDOT Revenue Forecasting Guidebook
A-20	Did the MPO, public transportation operator(s), and State cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a)? Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(f)(11)(ii)	Yes. Chapter 4 – Transportation Plan (pp. 4-2 – 4-8) Technical Appendix E – 2045 Lake~Sumter MPO Revenue Forecast Technical Appendix F - 2019 FDOT Revenue Forecasting Guidebook
A-21	Does the financial plan include recommendations on additional financing strategies to fund projects and programs included in the plan, and, in the case of new funding sources, identify strategies for ensuring their availability? 23 C.F.R. 450.324(f)(11)(iii)	Yes. Chapter 4 – Transportation Plan (pp. 4-2)
A-22	Does the plan's revenue and cost estimates use inflation rates that reflect year of expenditure dollars, based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s)? 23 C.F.R. 450.324(f)(11)(iv)	Yes. Chapter 4 – Transportation Plan (4-2 – 4-8) Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC) Technical Appendix E – 2045 Lake~Sumter MPO Revenue Forecast Technical Appendix F - 2019 FDOT Revenue Forecasting Guidebook
A-23	Does the financial plan address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP? 23 C.F.R. 450.324(f)(11)(vi)	N/A -The Lake~Sumter MPO Planning Area is not within a non-attainment area.

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-24	Does the plan include pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g)? 23 C.F.R. 450.324(f)(12)	Yes. Chapter 4 – Transportation Plan (4-20 – 4-21) Appendix F – Multi-Use Trails
A-25	Does the plan integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP, the Public Transportation Agency Safety Plan, or an Interim Agency Safety Plan? Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(h)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (PM 1 - pp. 2-9 – 2-10) Chapter 4 – Transportation Plan (pp. 4-29 – 4-30) Chapter 6 – Performance Evaluation Appendix A – System Performance Report
A-26	Does the plan identify the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? 23 C.F.R. 450.324(g)(1)	Yes. Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan Chapter 6 – Performance Evaluation
A-27	Did the MPO provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a)? 23 C.F.R. 450.324(j)	Yes. Chapter 4 – Transportation Plan (p. 4-20 – 4-23) Chapter 5 – Public Involvement (p. 5-4 – 5-7) Technical Appendix C – Lake~Sumter MPO Public Participation Plan Technical Appendix D – Public Involvement/Agency Coordination Summary

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-28	Did the MPO publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.324(k), 23 C.F.R. 450.316(a)(1)(iv)	Yes. Chapter 5 – Public Involvement (p. 5-4 – 5-7) Technical Appendix C – Lake~Sumter MPO Public Participation Plan Technical Appendix D – Public Involvement/Agency Coordination Summary
A-29	Did the MPO provide adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R 450.316(a)(1)(i)	Yes. Chapter 5 – Public Involvement Chapter 7 – Plan Implementation (pg. 7-2) Technical Appendix C – Lake~Sumter MPO Public Participation Plan Technical Appendix D – Public Involvement/Agency Coordination Summary
A-30	In developing the plan, did the MPO seek out and consider the needs of those traditionally underserved by existing transportation systems such as low-income and minority households? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R 450.316(a)(1)(vii)	Yes. Chapter 5 – Public Involvement (p. 5-5 – 5-7) Technical Appendix C – Lake~Sumter MPO Public Participation Plan Technical Appendix D – Public Involvement/Agency Coordination Summary

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-31	Has the MPO demonstrated explicit consideration of and response to public input received during development of the plan? If significant written and oral comments were received on the draft plan, is a summary, analysis, and report on the disposition of the comments part of the final plan? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.316(a)(1)(vi) & 23 C.F.R. 450.316(a)(2)	Yes. Chapter 5 – Public Involvement Technical Appendix C – Lake~Sumter MPO Public Participation Plan Technical Appendix D – Public Involvement/Agency Coordination Summary
A-32	Did the MPO provide an additional opportunity for public comment if the final plan differs significantly from the version that was made available for public comment and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R 450.316(a)(1)(viii)	N/A – The final plan did not differ significantly from the version that was made available for public comment and did not raise new material issues.
A-33	Did the MPO consult with agencies and officials responsible for other planning activities within the MPO planning area that are affected by transportation, or coordinate its planning process (to the maximum extent practicable) with such planning activities? Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R. 450.316(b)	Yes. Chapter 2 – Goals, Objectives, and Performance Measures Chapter 4 – Transportation Plan Chapter 5 – Public Involvement (pg. 5-3) Technical Appendix D – Public Involvement/Agency Coordination Summary
A-34	If the MPO planning area includes Indian Tribal lands, did the MPO appropriately involve the Indian Tribal government(s) in the development of the plan? 23 C.F.R 450.316(c)	N/A – There are no designated tribal lands located within the boundaries of the MPO Planning Area.

Federal and State Requirements Checklist

Section A Federal Requirements		Where and How Addressed
A-35	If the MPO planning area includes Federal public lands, did the MPO appropriately involve Federal land management agencies in the development of the plan? 23 C.F.R 450.316(d)	Yes. Chapter 5 – Public Involvement (pg. 5-3) Technical Appendix D – Public Involvement/Agency Coordination Summary
A-36	In urbanized areas that are served by more than one MPO, is there written agreement among the MPOs, the State, and public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent plans across the planning area boundaries, particularly in cases in which a proposed transportation investment extends across those boundaries? 23 C.F.R. 450.314(e)	N/A – Urbanized area not served by multiple MPOs

Section B State Requirements		Where and How Addressed
Florida Statutes: Title XXVI – Public Transportation, Chapter 339, Section 175		
B-1	Are the prevailing principles in s. 334.046(1), F.S. – preserving the existing transportation infrastructure, enhancing Florida's economic competitiveness, and improving travel choices to ensure mobility – reflected in the plan? ss.339.175(1), (5) and (7), F.S.	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (pp. 2-2 – 2-7) Chapter 4 – Transportation Plan (pp. 4-20 – 4-23, 4-30 – 4-33)
B-2	Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities? ss.339.175(1) and (7)(a), F.S.	Yes. Chapter 4 – Transportation Plan Appendix C - Cost Feasible Capacity Projects Year of Expenditure (YOE) Appendix D - Cost Feasible Capacity Projects Present Day Cost (PDC)
B-3	Is the plan consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies of the approved comprehensive plans for local governments in the MPO's metropolitan planning area? ss.339.175(5) and (7), F.S.	Yes. Chapter 2 - Goals, Objectives, a Performance Measures (pp. 2-6) Chapter 3 – Planning Assumptions

Federal and State Requirements Checklist

Section B State Requirements		Where and How Addressed
B-4	Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions? ss.339.175(1) and (7) F.S.	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (Goal 1, Goal 4) Chapter 6 – Performance Evaluation
B-5	Were the goals and objectives identified in the Florida Transportation Plan considered? s.339.175(7)(a), F.S.	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (pp. 2-6 – 2-7)
B-6	Does the plan assess capital investment and other measures necessary to 1) ensure the preservation of the existing metropolitan transportation system, including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities; and 2) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods? s.339.175(7)(c), F.S.	Yes. Chapter 2 – Goals, Objectives, and Performance Measures - (Goal 1, Goal 3, Goal 5); (pp. 2-12) Chapter 4 – Transportation Plan Chapter 6 – Performance Evaluation Appendix A – System Performance Report
B-7	Does the plan indicate, as appropriate, proposed transportation enhancement activities, including, but not limited to, pedestrian and bicycle facilities, scenic easements, landscaping, historic preservation, mitigation of water pollution due to highway runoff, and control of outdoor advertising? s.339.175(7)(d), F.S.	Yes. Chapter 2 – Goals, Objectives, a Performance Measures (Goal 1, Goal 4) Chapter 4 – Transportation Plan (pp. 4-20 – 4-21, 4-36 – 4-37) Chapter 5 – Public Involvement Chapter 6 – Performance Evaluation
B-8	Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present? s.339.175(13) F.S.	Yes. Resolution 2020-13

Federal and State Requirements Checklist

Section C Proactive Recommendations		Where and How Addressed
C-1	Does the plan attempt to improve the resilience and reliability of the transportation system or mitigate the impacts of stormwater on surface transportation? 23 C.F.R 450.306(b)(9)	Yes. Chapter 2 – Goals, Objectives, a Performance Measures (Goal 3) Chapter 6 – Performance Evaluation
C-2	Does the plan proactively identify climate adaptation strategies including—but not limited to—assessing specific areas of vulnerability, identifying strategies to reduce emissions by promoting alternative modes of transportation, or devising specific climate adaptation policies to reduce vulnerability?	Yes. Chapter 2 – Goals, Objectives, a Performance Measures (Goal 3) Chapter 4 – Transportation Plan (p. 4-8, 4-29)
C-3	Do the plan consider the transportation system's accessibility, mobility, and availability to better serve an aging population?	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (Goal 2) Chapter 5 – Public Involvement (p. 5-4) Chapter 6 – Performance Evaluation
C-4	Does the plan consider strategies to promote inter-regional connectivity to accommodate both current and future mobility needs?	Yes. Chapter 2 – Goals, Objectives, and Performance Measures (Goal 1, Goal 3, Goal 4) Chapter 3 – Planning Assumptions Chapter 4 – Transportation Plan (pp. 4-20 - 4-23. 4-31 – 4-35) Chapter 6 – Performance Evaluation
C-5	Is the MPO considering the short- and long-term effects of population growth and or shifts on the transportation network?	Yes. Chapter 3 – Planning Assumptions

Appendix I:
List of Acronyms

List of Acronyms

Acronym	Definition
AADT	Annual Average Daily Traffic
ACES	Automated, Connected, Electric, and Shared Use Vehicles
ACS	American Community Survey
BEBR	University of Florida Bureau of Economic and Business Research
CFR	Code of Federal Regulations
CAC	Citizens Advisory Committee
CFMPOA	Central Florida Metropolitan Planning Organization Alliance
CFP	Cost Feasible Plan
CFRPM	Central Florida Regional Planning Model
CMP	Congestion Management Process
CR	County Road
CST	Construction
DOT	Department of Transportation
E+C	Existing Plus Committed
ECFRPC	East Central Florida Regional Planning Council
EJ	Environmental Justice
FS	Florida Statute
FAST Act	Fixing America's Surface Transportation Act
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FLU	Future Land Use
FMTP	Freight Mobility and Trade Plan
FTA	Federal Transit Administration
FTP	Florida Transportation Plan
FY	Fiscal Year
HSIP	Highway Safety Improvement Program
IRI	International Roughness Index
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation System
LOPP	List of Priority Projects
LOTTR	Level of Travel Time Reliability
LRTP	Long-Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
M-CORES	Multi-use Corridors of Regional Economic Significance
MPO	Metropolitan Planning Organization
MPOAC	Metropolitan Planning Organization Advisory Council
NAAQS	National Ambient Air Quality Standards
NBI	National Bridge Inventory
NHS	National Highway System
NTD	National Transit Database

List of Acronyms

Acronym	Definition
O&M	Operations and Maintenance
OA	Other Arterials
PDC	Present Day Cost
PDE or PD&E	Project Development and Environment
PE	Preliminary Engineering
PM	Performance Measure
PPP	Public Participation Plan
PTASP	Public Transportation Agency Safety Plan
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHS	State Highway System
SHSP	Florida Strategic Highway Safety Plan
SIS	Strategic Intermodal System
SJRWMD	St. Johns River Water Management District
SR	State Road
STIP	State Transportation Improvement Program
SUN	Shared-Use Nonmotorized
TAC	Technical Advisory Committee
TAM	Transit Asset Management
TAMP	Transportation Asset Management Plan
TAZ	Transportation Analysis Zone
TDCB	Transportation Disadvantaged Coordinating Board
TDP	Transit Development Plan
TIP	Transportation Improvement Program
TPO	Transportation Planning Organization
TRIP	Transportation Regional Incentive Program
TSM&O	Transportation Systems Management and Operations
TTTR	Truck Travel Time Reliability index
USC	United States Code
ULB	Useful Life Benchmark
UPWP	Unified Planning Work Program
V/C	Volume-to-Capacity
VMT	Vehicle Miles Traveled
YOE	Year of Expenditure