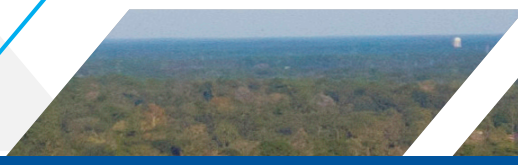
OCALA MARION 2045
RACING TOWARD A CONNECTED FUTURE

TPO OCALA MARION TRANSPORTATION PLANNING ORGANIZATION



OCALA MARION 2045 LONG RANGE TRANSPORTATION PLAN

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

NOVEMBER 2020

Letter from the TPO Chair

On behalf of the Ocala/Marion County Transportation Planning Organization (TPO), I am pleased to present the 2045 Long Range Transportation Plan (LRTP) – Racing Toward a Connected Future. The 2045 LRTP, like the previous plan adopted in 2015, is based on a strategic vision for a safe, convenient and accessible multimodal transportation system that supports a vibrant economy, preserves existing assets and protects the natural environment. That vision, developed with significant input from the public and our partners, is reflected in priorities and projects outlined in this plan.

The 2045 LRTP provides an update on key issues that are critical to transportation and describes new actions taken to further the goals. Among the major changes include the integration of new federal legislation requiring performance based planning to monitor the progress of specific targets toward achieving results. Also included in the plan is the weighting of goals to more effectively prioritize transportation projects and the application of specific evaluation criteria. The end result is a more accountable, outcome driven plan.

Transportation is a vital component of our economy, providing a network of options that each of us rely upon every day, whether we drive, walk, bike or ride whenever we work, shop, or play. As Marion County's economy continues to grow, it brings new transportation challenges, such as increasing congestion, greater truck traffic, or safety concerns. It also brings exciting opportunities to modernize and further expand our multimodal transportation network.

Many of the actions and projects outlined in this plan demonstrate the TPO's commitment to our future success, whether it is increasing efficiency to make the best use of public funds, implementing safety strategies to especially protect the vulnerable, building new facilities to support economic development, or taking steps to preserve infrastructure and the environment around it. The TPO works consistently to address the needs of our citizens, always keeping safety and vitality in mind. This plan is evidence of the TPO's continuing efforts to support the needs of all users of transportation as we race toward a more connected and prosperous future.

Sincerely,

Commissioner Jeff Gold

Ocala Marion TPO Board Chair

The Ocala Marion Transportation Planning Organization (TPO) complies with nondiscrimination laws and regulations, including Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act (ADA). Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons wishing to express their concerns relative to the Ocala Marion TPO compliance with Title VI may do so by contacting the TPO at (352)438-2630 or 2710 East Silver Springs Blvd, Ocala, FL 34470.

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Resolution
No. 20-15

A RESOLUTION OF THE OCALA/MARION COUNTY TRANSPORTATION PLANNING ORGANIZATION ADOPTING THE 2045 LONG-RANGE TRANSPORTATION PLAN AS THE OFFICIAL TRANSPORTATION PLAN OF THE OCALA/MARION COUNTY METROPOLITAN PLANNING AREA

WHEREAS, the Ocala/Marion County Transportation Planning Organization (TPO) is responsible for the continuing, comprehensive and cooperative transportation planning process for Marion County, and

WHEREAS, the TPO is required to maintain an up-to-date Long Range Transportation Plan that guides the development of a transportation system that will adequately serve both the existing and future population of the Ocala/Marion County area; and

WHEREAS, 23 CFR part 450.324 stipulates that a Long-Range Transportation Plan shall address at least a twenty year planning horizon and be updated every five years to confirm its validity and consistency with current and forecasted transportation and land use trends; and

WHEREAS, the 2045 Long-Range Transportation Plan will guide federal, state, and local funding of major transportation improvements within the Ocala/Marion County area over the next twenty-five years; and

WHEREAS, the 2045 Long-Range Transportation Plan was developed consistent with the Fixing America's Surface Transportation (FAST) Act, the Florida Transportation Plan and local government comprehensive plans; and

WHEREAS, the 2045 Long-Range Transportation Plan includes a Needs Assessment of transportation projects based on projected population and employment and local comprehensive plans and vision plans as well as the anticipated revenue for transportation projects, and

WHEREAS, the total cost of the projects identified in the Needs Assessment exceed the anticipated revenue, a Cost Feasible Plan was developed based on local priorities, and

WHEREAS, the 2045 Long-Range Transportation Plan was made available for a public review and comment period beginning October 6, 2020; and

WHEREAS, the 2045 Long-Range Transportation Plan was reviewed by the TPO at a duly noticed public hearing on October 27, 2020; and

WHEREAS, the proposed Plan was reviewed and approved for transmittal to the TPO by the Citizen's and Technical Advisory Committee at their regularly scheduled meetings on November 10, 2020.

NOW THEREFORE BE IT RESOLVED by the Ocala/Marion County Transportation Planning Organization that:

The Ocala/Marion County Transportation Planning Organization hereby adopts the 2045 Long-Range Transportation Plan as the official plan for the TPO's metropolitan planning area.

Certificate

The undersigned duly qualified Chairman of the Ocala/Marion County Transportation Planning Organization hereby certifies the foregoing is a true and correct copy of the resolution adopted at a legally convened public meeting of the Ocala/Marion County Transportation Planning Organization held this 24th day of November 2020.

By: _____
Jeff Gold, Chairman

Attest: _____
Robert Balmes, TPO Director

Ocala Marion TPO Governing Board

Commissioner Jeff Gold, Chair
Marion County, District 3

Councilman Brent Malever, Vice-Chair
City of Ocala, District 1

Councilman Ire Bethea
City of Ocala, District 2

Commissioner Kathy Bryant
Marion County, District 2

Councilman Justin Grabelle
City of Ocala, District 5

Mayor Kent Guinn
City of Ocala

Councilwoman Valerie Hanchar
City of Dunnellon, Seat 4

Commissioner Ronald Livsey
City of Belleview, Seat 3

Commissioner David Moore
Marion County, District 1

Councilman Jay Musleh
City of Ocala, District 3

Commissioner Michelle Stone
Marion County, District 5

Commissioner Carl Zalak
Marion County, District 4

Jared Perdue, Non-Voting Member
FDOT District 5 Secretary

Ocala Marion TPO Technical Advisory Committee (TAC)

Elton Holland, Chair
Marion County Engineering

Nancy Smith, Vice-Chair
City of Ocala Planning Dept

David Herlihy
Marion County School Board

Steven Neal
City of Ocala – SunTran

Kenneth Odom
Marion County Planning Dept.

Bruce Phillips
City of Belleview

Loretta Shaffer
Marion County Tourism

Eric Smith
City of Ocala, Engineering

Lonnie Smith
City of Dunnellon

Mickey Thomason
Florida Greenways and Trails

Vickie Wyche, Non-Voting Member
FDOT District 5 Liaison

Ocala Marion TPO Citizens Advisory Committee (CAC)

Steve Rudnianyn, Chair

Richard McGinley, Vice-Chair

Davis Dinkins

Joe London

Travis Magamoll

Paul Marraffino

Suzanne Mangram

Michelle Shearer

Clark Yandle

Andrea Lemieux

Richard Howard

Ocala Marion TPO LRTP Steering Committee

Robert Balmes
Ocala Marion TPO

Derrick Harris
Ocala Marion TPO

Elton Holland
Marion County Engineering

Kenneth Odom
Marion County Planning Dept.

Chris Rison
Marion County

Steven Neal
City of Ocala - SunTran

Nancy Smith
City of Ocala Planning Dept

Noel Cooper
City of Ocala

Lonnie Smith
City of Dunnellon

Bruce Phillips
City of Belleview

Loretta Shaffer
Marion County Tourism

Vickie Wyche
FDOT District 5 Liaison

Carl Bauer
US Forest Service

Mickey Thomason
Florida Greenways and Trails

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Ocalamariontpo.org/plans-and-programs/long-range-transportation-plan-lrtp

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APPENDIX B – GLOSSARY OF ACRONYMS

APPENDIX C – LRTP PUBIC INVOLVEMENT PLAN

APPENDIX D – METROQUEST SURVEY SUMMARY

APPENDIX E – GOALS AND OBJECTIVES TECH MEMORANDUM

APPENDIX F – SYSTEM PERFORMANCE REPORT

APPENDIX G – PLAN SYNTHESIS TECH MEMORANDUM

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CHAPTER 1. INTRODUCTION

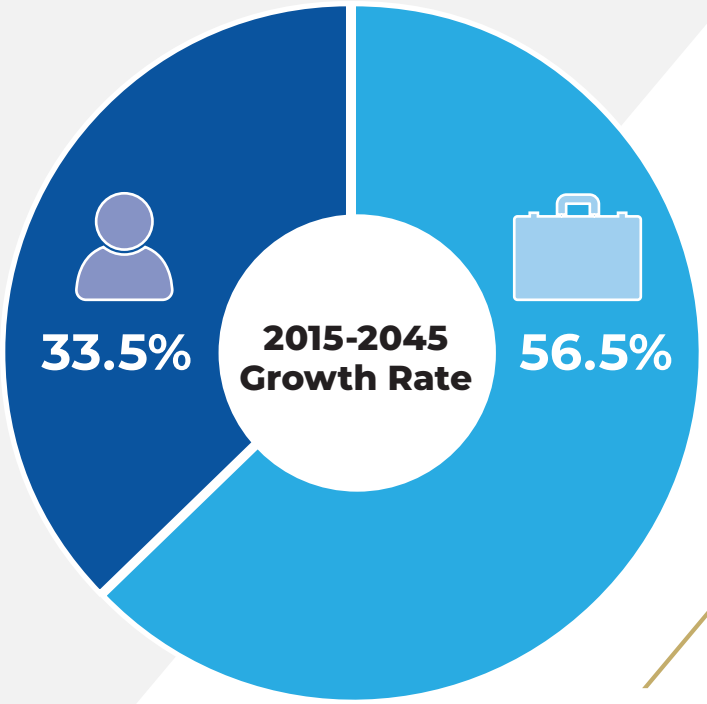
Ocala/Marion County

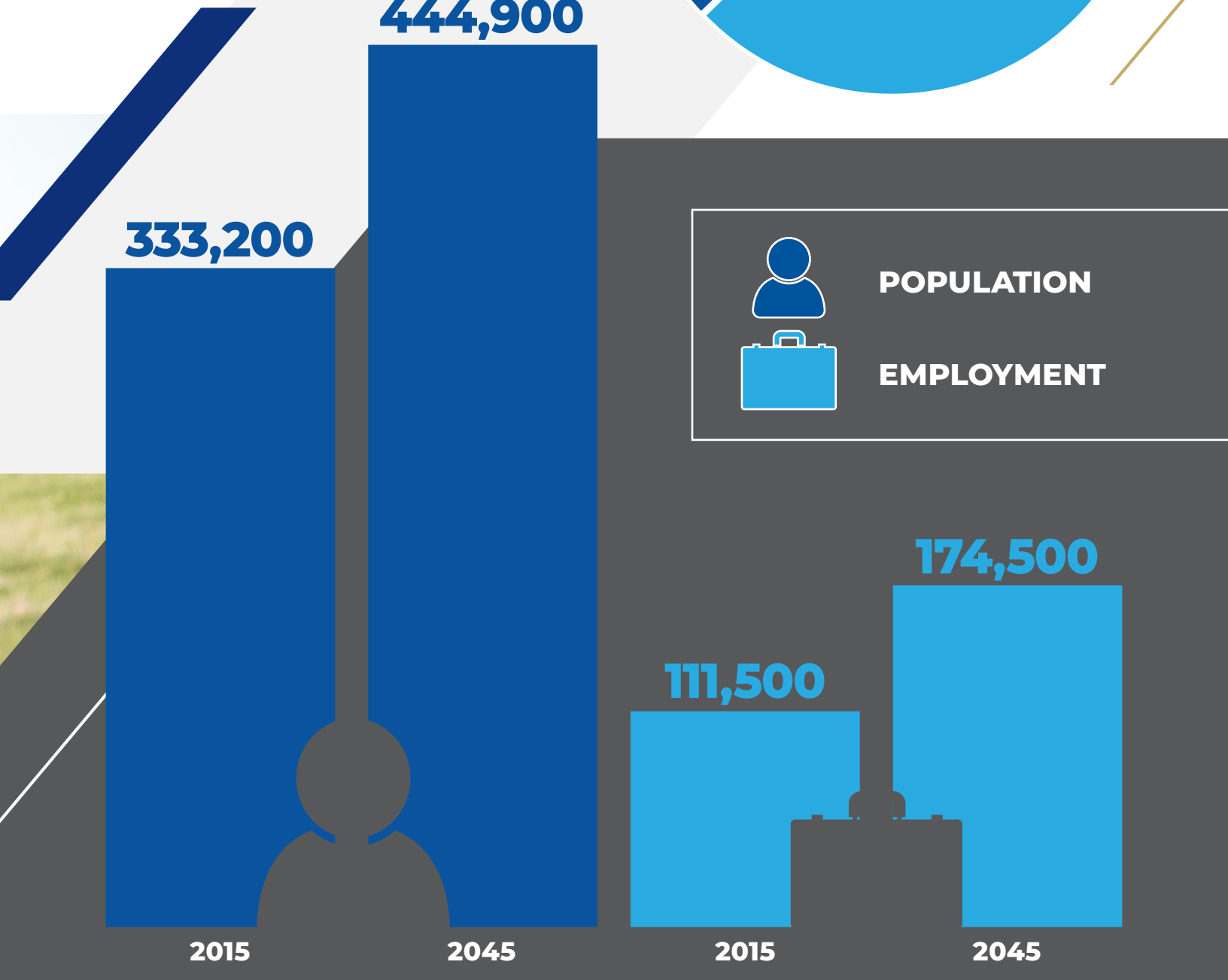
In 1844, Marion County was created by the Florida Legislature, separating it from Alachua, Orange, and Hillsborough counties. The County has grown from a town of 3,000 in 1844 to a metropolitan region with more than 365,000 residents, 110,000 jobs, and thriving equestrian and tourism industries, and a budding freight logistics industry. The expansive growth that has occurred in this County has created transportation and growth management challenges, but through it all, the County has managed to preserve its unique natural resources and assets. With almost 200 hundred miles of hiking and biking trails, over 400,000 acres of the Ocala National Forest, more than 500 square miles of state and local parks, and over 70,000 acres of thoroughbred horse farms, Marion County continues to thrive as a natural gem in north central Florida.

Known as the horse capital of the world, Marion County has produced many world class racehorses, including a triple crown winner. In 1978, a three-year-old Ocala raised horse won the three most prominent horse races in the United States, collectively known as the triple crown. Affirmed was raised on Harbor View Farm in the community of Fellowship near US 27 and CR 464. Just five miles to the south of Fellowship, the World Equestrian Center (WEC) is under development. The WEC will consist of 200 acres for an equestrian complex and 400 acres of residential development. The equestrian center is expected to add up to 500 jobs to the Marion County economy. The long-term outlook for the County calls for 33% growth in population and 56% job growth, to 444,900 and 174,500, respectively, in 2045.

There are many challenges associated with accommodating and supporting the growth that is expected to occur over the next 25 years. Among them are preservation of the Ocala National Forest, state parks, and freshwater springs while simultaneously supporting the important tourism economy that these resources support. An additional challenge is the cost of operating, maintaining, and expanding the transportation infrastructure needed to support the economic, recreational, and educational needs of its residents and visitors.

FIGURE 1.1: POPULATION AND EMPLOYMENT





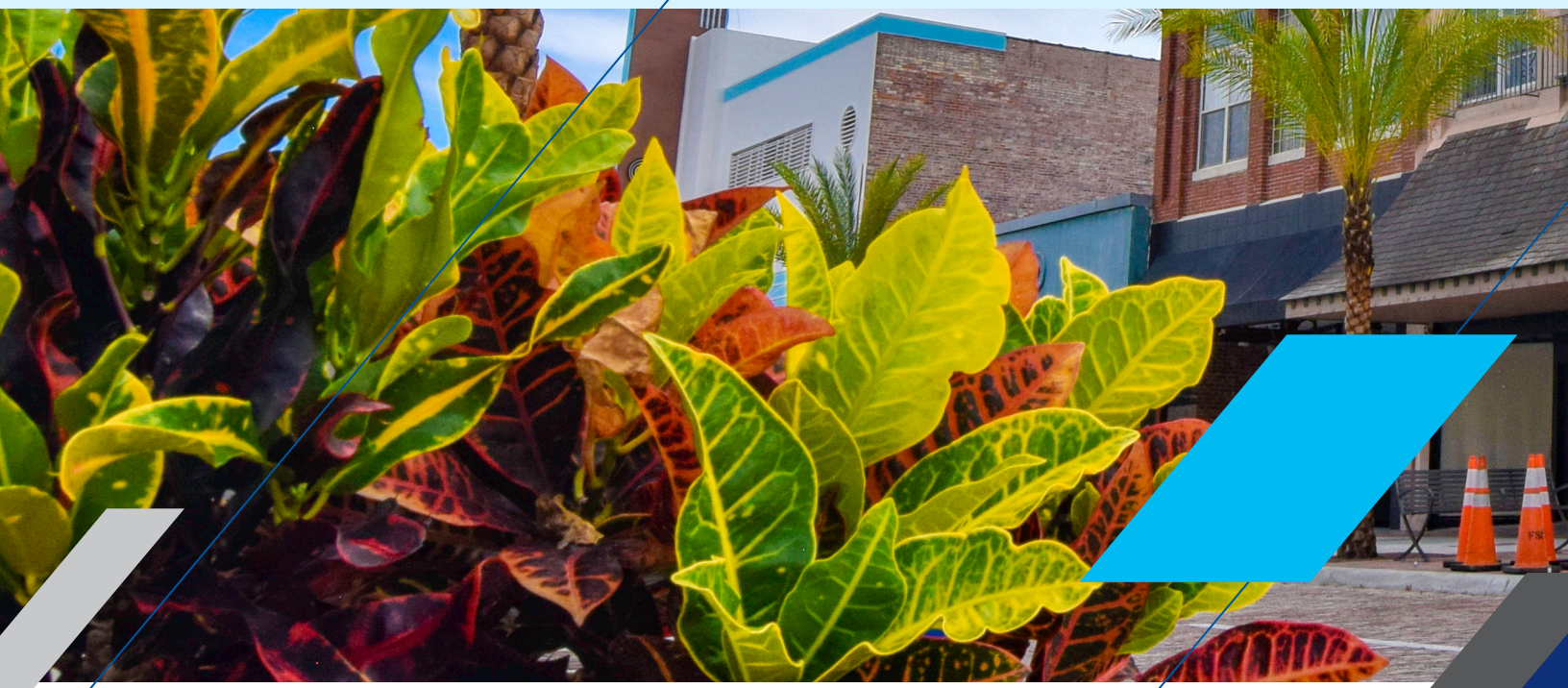
The Ocala Marion TPO

Established in 1981, the **Ocala Marion Transportation Planning Organization (TPO)** is a federally-mandated agency responsible for allocating state and federal funds to roadway, freight, transit, bicycle and pedestrian projects within Marion County. The TPO serves the cities of Belleview, Dunnellon, Ocala and Marion County, and works to ensure improvements to the transportation system reflect the needs of both stakeholders and the public. Improvements to the transportation system are determined through a long-term visioning process. This process combined with short-term action steps necessary to implement the vision are developed in the TPO's core plans and programs.

The TPO is comprised of five staff and is governed by a 12-member Board of locally elected officials. The expertise of TPO staff and leadership of the TPO Board are supplemented by the Technical Advisory Committee (TAC), Citizens Advisory Committee (CAC) and Transportation Disadvantaged Local Coordinating Board (TDLCB). Collectively, these boards and committees provide guidance and policy-making decisions for the organization. The work of the TPO is guided by state and federal legislation, including Florida Statute 339 and U.S. Code Title 23 and 49.

Throughout the United States, there are over 400 MPO/TPOs and are represented in all 50 states. Florida is home to 27, the most of any state. MPO/TPOs are required by federal and state laws in areas with a population greater than 50,000.

The core requirements of the TPO are the regular update and adoption of a Long Range Transportation Plan; short term Transportation Improvement Program; a Public Involvement Plan; and a 2-year budget known as the Unified Planning Work Program.



What is the Long Range Transportation Plan?

The TPO Long Range Transportation Plan (LRTP) is the cornerstone of the transportation planning process for the Ocala Marion County planning area, which includes the municipalities of Belleview, Dunnellon, Ocala and the entirety of Marion County. The LRTP serves as a twenty-five (25) year blueprint for transportation improvements for the entire county. The LRTP considers all modes of transportation, including roadways, transit, bicycles, pedestrians, trails, freight and aviation. The development of the LRTP is based on an extensive participatory process with input from partners, stakeholders and the general public.

The LRTP document describes the current status of transportation in Marion County, and projects future population/employment, and analyzes impacts on the anticipated transportation system. In addition, the LRTP includes a vision, set of goals and objectives, and financial projections, as well as estimates of future traffic. To ensure the recommendations are financially feasible, all projects included in the LRTP are linked to specific federal, state and local funding sources. Based on Federal regulations, the LRTP must be updated every five (5) years.

The two core elements of the LRTP include the Needs Plan and Cost Feasible Plan. A project that is included in the Needs Plan must go through a careful vetting process to ensure it is supported by the community, is reflected in local plans and programs, and meets the approval of elected leaders. A Needs Plan project is further prioritized based on available funding and whether it effectively supports the vision and goals of the TPO. If a project meets these thresholds, it is identified in the Cost-Feasible Plan and will be eligible to be funded and completed within the next 25 years.

The ultimate goal of the LRTP is to identify the highest priority improvements that are cost restrained to the available revenues, and for the TPO to submit these projects to the Florida Department of Transportation (FDOT) on an annual basis with the intent of receiving funding towards implementation. For more information on how projects each year are submitted to FDOT, please review the TPO's Fact Sheet on the List of Priority Projects (LOPP). The following sections and chapters outline the entire planning process undertaken to update the Ocala Marion County LRTP. The appendices to the plan also include more in depth information regarding the various milestones and steps in the process.

The Planning Process

As the comprehensive transportation planning document coordinating the needs, desires, and efforts of Marion County stakeholders, the LRTP Needs Plan is a composition of a variety of other plans, including modal plans, land use plans, and comprehensive plans. A synthesis of more than fifteen plans was prepared to inform the vision, goals, and needs assessment processes in the development of the LRTP and is included in **Appendix G**. The purpose of the synthesis is to identify common themes across the reviewed plans and inform the LRTP. The plans incorporated into the synthesis include the following:

- Marion County 2035 Comprehensive Plan
- Ocala/Marion County MPO 2040 LRTP
- City of Ocala 2035 Comprehensive Plan
- City of Ocala 2035 Vision
- City of Belleview Comprehensive Plan
- City of Dunnellon Comprehensive Plan
- Ocala Downtown Master Plan
- Silver Springs Community Redevelopment Plan
- Dunnellon Bicycle, Pedestrian, & Blueway Facilities Master Plan
- Ocala/Marion TPO 2035 Bicycle & Pedestrian Master Plan
- SunTran Ocala/Marion County Florida Transit Development Plan (created in 2017)
- Ocala International Airport Master Plan (created in 2014)
- Ocala Marion 2018 ITS Strategic Plan
- FDOT Freight Mobility and Trade Plan
- SIS Cost Feasible Plan
- Regional Trails Facilities Plan
- Marion County 2045 population and employment forecasts
- Ocala/Marion TPO Congestion Management Process

The primary themes derived from the plan synthesis involve a range of planning considerations, including the management of population and employment growth in the County; accommodation of that growth with multimodal infrastructure; management of traffic congestion using a variety of capital and operational strategies; support of the freight infrastructure to accommodate freight related economic development; crash reduction; and emergency preparedness. There are two ways in which the synthesized themes are reflected in the LRTP. The first is their inclusion in the vision, goals and objectives used to guide the LRTP update. The second way in which the synthesized themes are used is encapsulated in the way the Goals and Objectives were used to inform project identification and prioritization. The technical performance-based planning process required by the Federal Highway Administration (FHWA) is reflected in how the transportation system was assessed to determine needed improvements and how those improvements were subsequently evaluated and prioritized for inclusion in the Cost Feasible Plan.

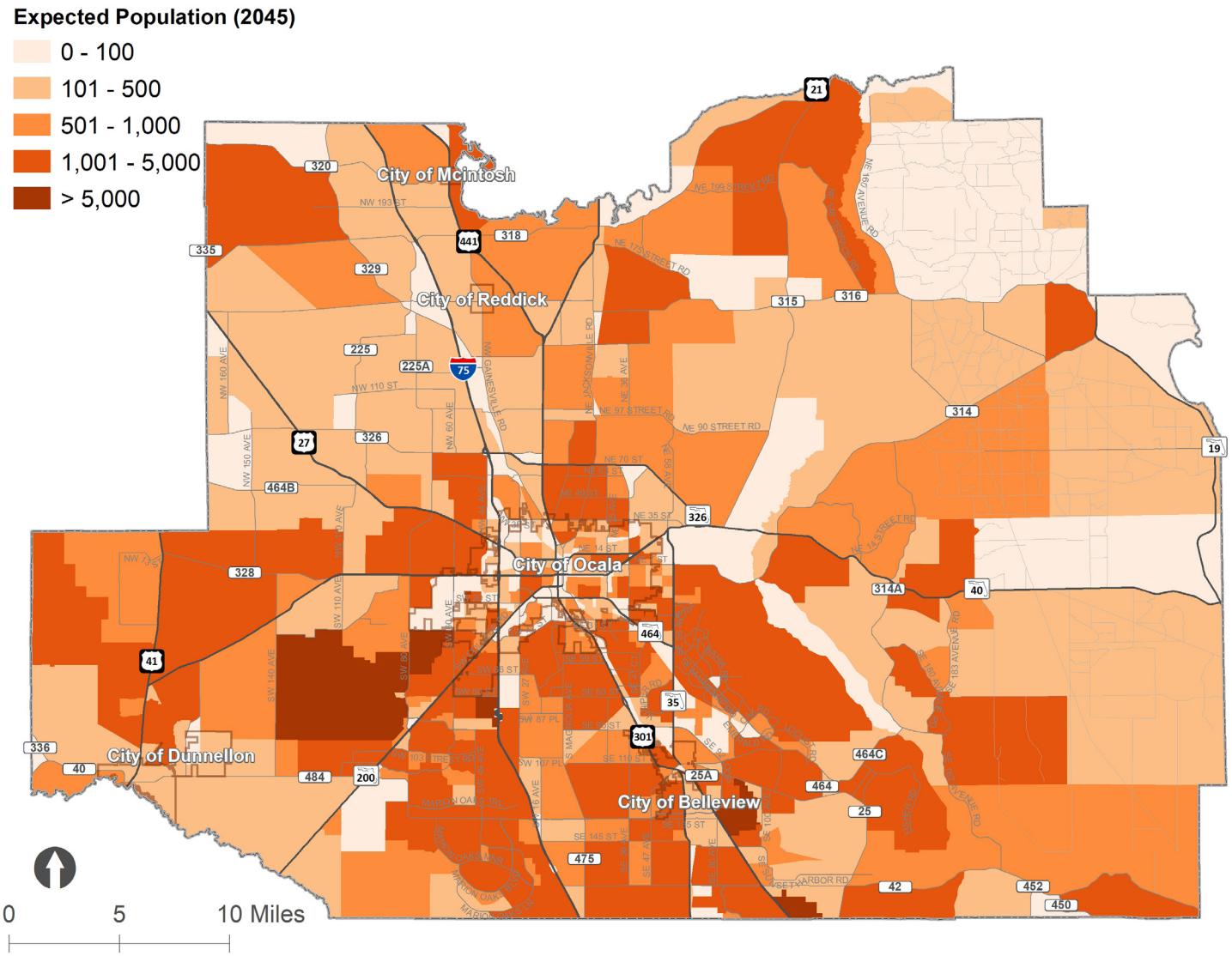
The correlation between the synthesized themes and national Planning Factors developed by FHWA is another important element of this plan. **TABLE 1.1** includes a summary of the synthesis themes and related National Planning Factors that must, by federal law, be incorporated into the LRTP planning process. The relationship of the two indicates consistency in the fundamental purpose and needs identified in local, regional and state plans with the national Planning Factors.

TABLE 1.1: PLAN SYNTHESIS THEMES AND NATIONAL PLANNING FACTORS

LOCAL, REGIONAL, STATE PLAN SYNTHESIS THEMES	NATIONAL PLANNING FACTORS
Promote walkable, livable communities and multimodal accessibility of employment centers from nearby population centers	Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
Support creation of jobs and stabilization of existing businesses in downtowns, major activity centers and redevelopment areas of Marion County	
Improve network connectivity and safety to encourage use of non-motorized modes of transportation	Increase the **safety** of the transportation system for motorized and nonmotorized users
Focus on efficient multimodal movement of people and goods; safety and security; and providing a predictable transportation experience through ITS infrastructure improvements	Increase the **security** of the transportation system for motorized and nonmotorized users
	Improve the **resiliency** and **reliability** of the transportation system, and reduce or mitigate storm water impacts of surface transportation
Encourage higher density/intensity development through infill and redevelopment strategies	Increase the **accessibility** and **mobility** for people and freight
Protect unique natural, cultural, and physical resources in Marion County and discourage urban sprawl	Protect and enhance the **environment**, promote energy conservation, improve the **quality of life**, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
Reduce greenhouse gas emissions by supporting non-motorized transportation options and discouraging urban sprawl	
Manage growth as the County's population continues to grow	
Integrate transit service into a multimodal network and provide resources to transportation disadvantaged people	
Support regional facilities that provide connections to recreation areas, the Heart of Florida loop trail system, and the Withlacoochee Trail and Lake County	Enhance travel and **tourism** Enhance the **integration** and **connectivity** of the transportation system, across and between modes, people and freight
Enhance freight infrastructure, including aviation, highways, and rail, ensuring that industry and manufacturing land uses have access to the freight network	
Focus on efficient multimodal movement of people and goods; safety and security; and providing a predictable transportation experience through, congestion management strategies and ITS infrastructure improvements	Promote **efficient system management** and operation Emphasize the **preservation** of the existing system

Another key component of the LRTP update process is the consideration of future infrastructure needs, as well as current needs. The primary underlying factors defining these needs include the population and employment growth that is expected to occur during the plan period. As described in the previous section, the forecast population of Marion County, in accordance with Florida Bureau of Economic and Business Research estimates (BEBR), adds more than 111,000 people in the coming 25 years and 63,000 more jobs, relative to current levels. This significant growth presents a real challenge and an important consideration in terms of the identification and prioritization of needed infrastructure improvements. The maps in **FIGURE 1.2** and **FIGURE 1.3** depict the forecasted 2045 population and employment in Marion County by Transportation Analysis Zone (TAZ). The datasets represented on these maps were developed by FDOT in consultation with the TPO and local planning partners and are consistent with known growth areas and plans as well as local land use plans.

FIGURE 1.2: 2045 POPULATION



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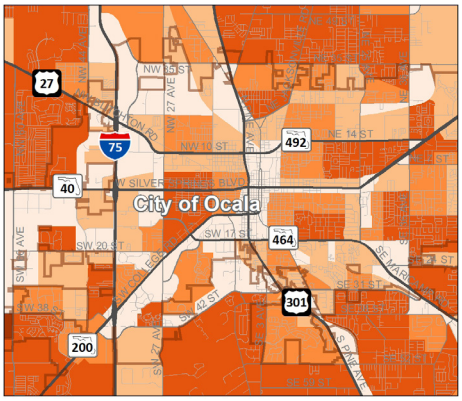
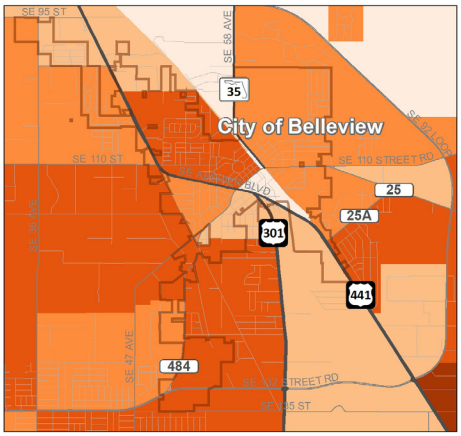


BELLEVIEW



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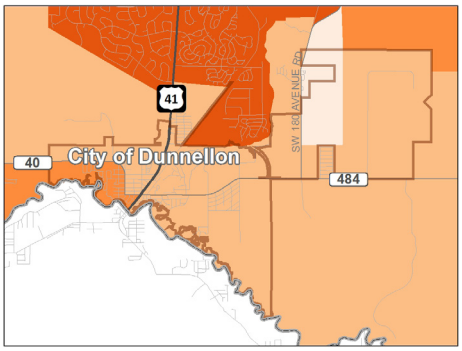
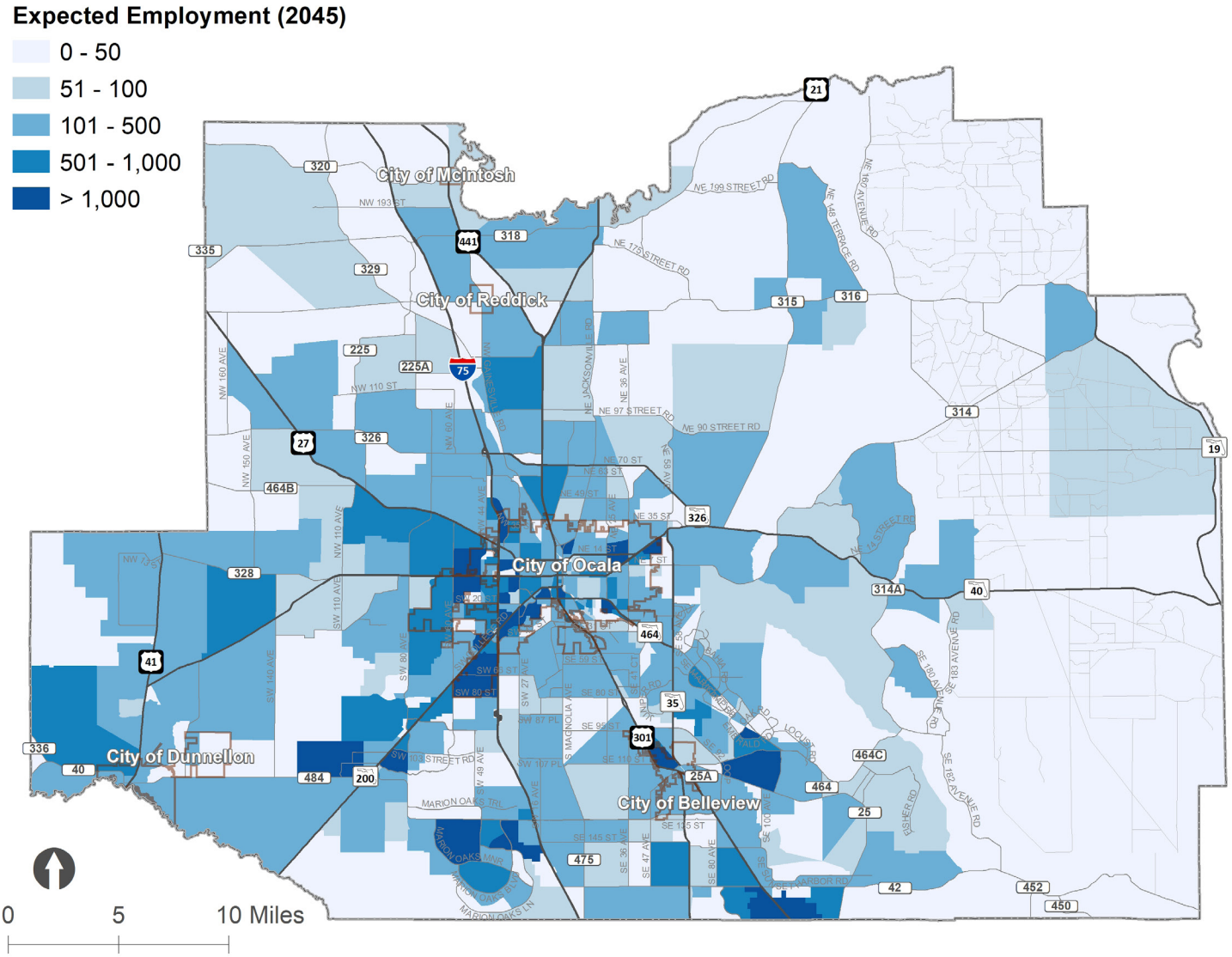


FIGURE 1.3: 2045 EMPLOYMENT



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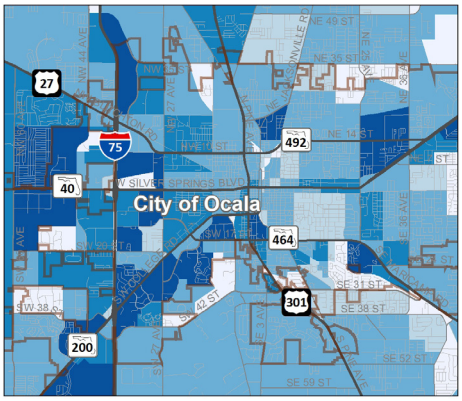

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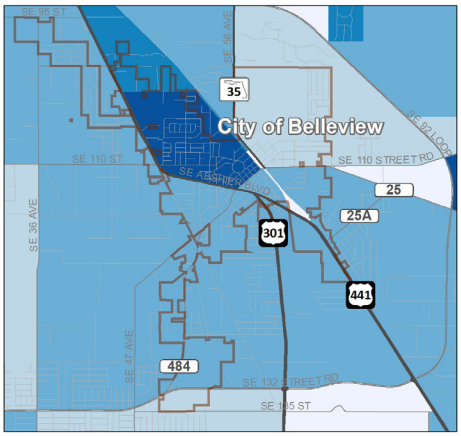

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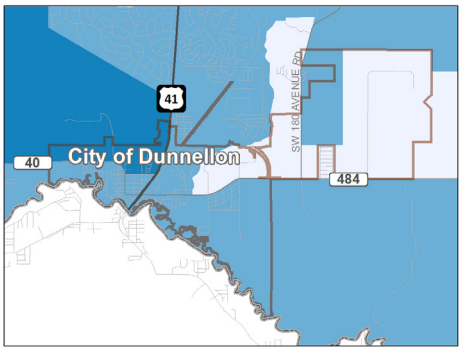
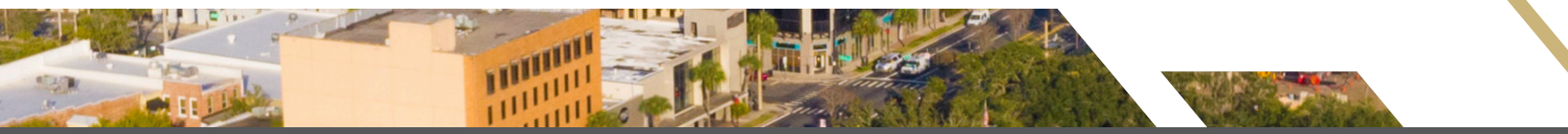


CHAPTER 2. VISION, GOALS AND OBJECTIVES

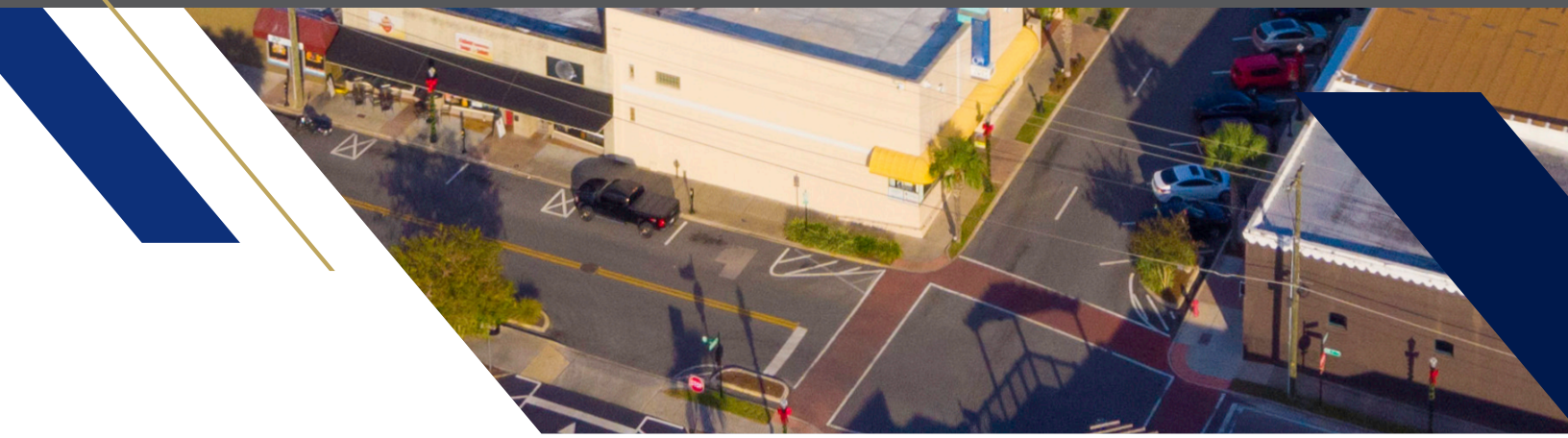
The 2045 Vision was formulated to set the context for and steer the LRTP toward a future in Marion County that is consistent with the aspirations, desires, and needs of its residents, businesses, and visitors. Further, the Vision encapsulates the LRTP goals and objectives, highlighting key elements of the latter in broad terms. The elements of Safety, Accessibility, Multimodality, Economy, System Preservation, and the Environment are crucial aspects of a successful transportation system and a successful metropolitan area. Marion County's dependence on its natural and recreational resources to support its economy; need for safe, multimodal infrastructure to support its transportation disadvantaged and aging populations; and committed focus on the preservation of existing infrastructure are important elements, all of which are intently pursued and reflected in this plan.

These guiding principals are operationalized in the way that the plan was assembled, including the data-based prioritization of the most important infrastructure improvements designed to support them. The framework by which the Vision informs Goals and Objectives, which are used to inform measures of effectiveness is encapsulated in **FIGURE 2.1**.



2045 VISION

Develop a Safe, Convenient and Accessible Multimodal Transportation System that Supports a Vibrant Economy, Preserves Existing Assets, and Protects the Natural Environment.



LRTP Goals and Objectives

In February 2020, the TPO Governing Board adopted the six goals and accompanying objectives crafted to guide the 2045 plan update process. Formulation of the goals was influenced by a number of factors and sources, including the 2040 LRTP; State and Federal guidance; Steering Committee input; and TAC/CAC/Governing Board guidance. One of the key provisions of the Fixing America's Surface Transportation Act (FAST Act), signed into law by President Obama in 2015, is the requirement that states and TPOs improve project decision making through a performance-based planning process. The FHWA's rule implementing the FAST Act includes seven goals to guide that process; requires the establishment of targets; and measurement of progress toward those targets in 23 U.S.C. 150(b). FHWA also included a set of ten planning factors in the final rule implementing the FAST Act, including two new planning factors since passage of the law. A comparison of the National Planning Factors to the Ocala Marion 2045 Goals and Objectives is included in **Appendix A**.

The Goals, Objectives, and Evaluation Criteria are listed in **TABLE 2.1**.

FIGURE 2.1: FRAMEWORK

TABLE 2.1: GOALS, OBJECTIVES, AND EVALUATION CRITERIA

GOALS	OBJECTIVES	EVALUATION CRITERIA
Goal 1: Promote Travel Choices that are Multimodal and Accessible	Objective 1.1: Increase transit ridership by providing more frequent and convenient service	• Transit orientation index assessing the levels of transit dependent populations and population densities applied to adjacent or intersecting facilities • Sidewalk and bike lane gaps in existing network • Level of minority and poverty population measured as proportion of population applied to adjacent or intersecting facilities
	Objective 1.2: Increase bicycle and pedestrian travel by providing sidewalks, bike lanes, and multi-use trails throughout the county	
	Objective 1.3: Provide safe and reasonable access to transportation services and facilities for use by the transportation disadvantaged (TD) population	
	Objective 1.4: Provide desirable and user-friendly transportation options for all user groups regardless of socioeconomic status or physical ability	
Goal 2: Provide Efficient Transportation that Promotes Economic Development	Objective 2.1: Improve access to and from areas identified for employment development and growth	• Level of employment growth applied to adjacent or intersecting facilities • Level of access to freight activity centers identified via heavy truck traffic and land use designation • Levels of congestion on existing network simulated against future population and employment
	Objective 2.2: Foster greater economic competitiveness through enhanced, efficient movement of freight	
	Objective 2.3: Address mobility needs and reduce the roadway congestion impacts of economic growth	
Goal 3: Focus on Improving Safety and Security of the Transportation System	Objective 3.1: Provide safe access to and from schools	• Presence of schools within a half mile of facilities • Levels of congestion on existing evacuation routes simulated against future population and employment • Historical crash rates stratified by seriousness of injuries, fatalities, and property damage
	Objective 3.2: Increase the accessibility and mobility of people and freight within the region and to other areas	
	Objective 3.3: Improve security by enhancing the evacuation route network for natural events and protecting access to military asset	
	Objective 3.4: Reduce the number of fatal and severe injury crashes for all users	

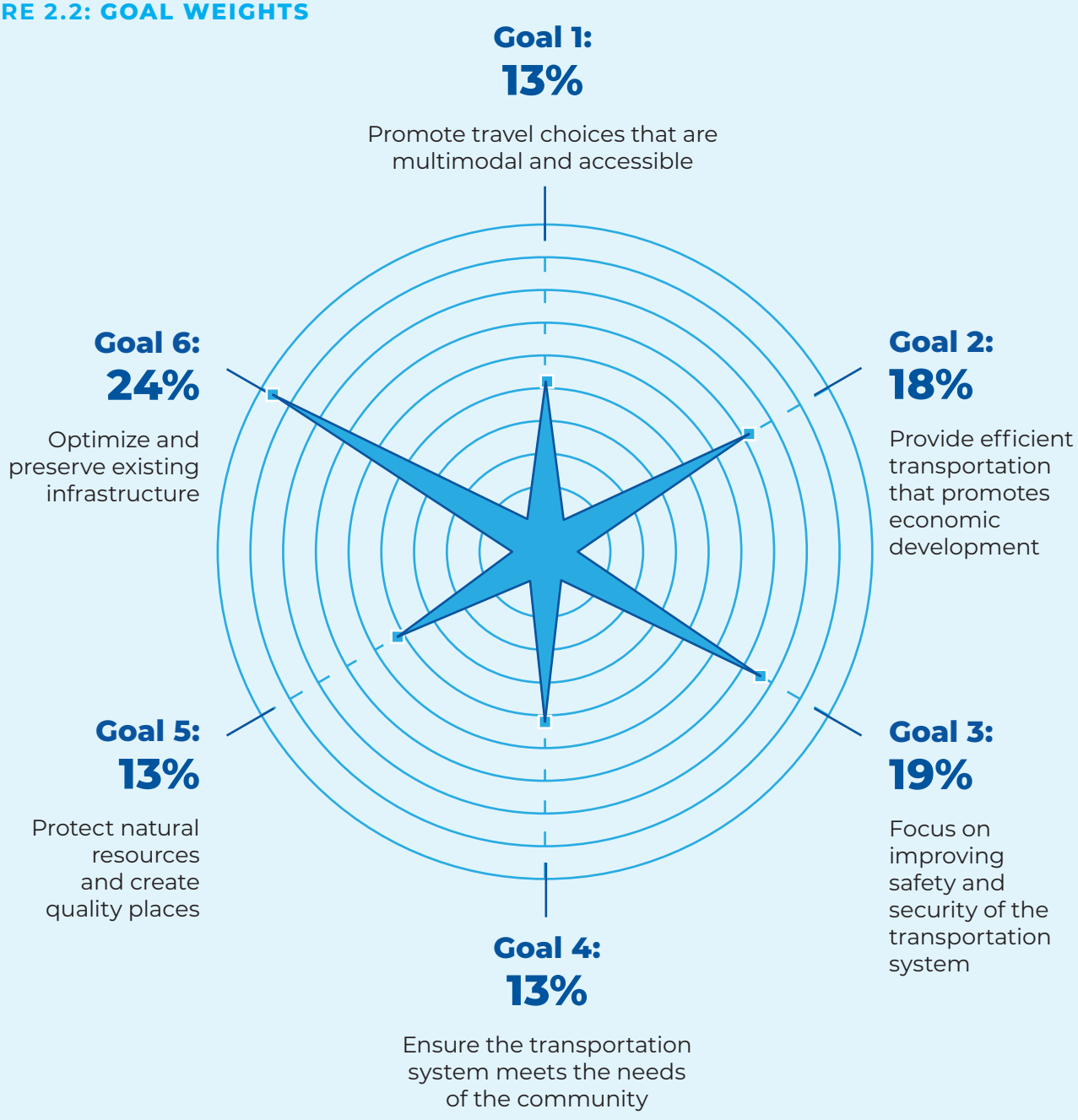
GOALS	OBJECTIVES	EVALUATION CRITERIA
Goal 4: Ensure the Transportation System Meets the Needs of the Community	Objective 4.1 – Provide opportunities to engage citizens, particularly traditionally underserved populations, and other public and private groups and organizations	• NA – Goal 4 objectives measured by public and stakeholder involvement process
	Objective 4.2 – Support community education and involvement in transportation planning	
	Objective 4.3 – Coordinate with local government to consider local land use plans when identifying future transportation projects	
	Objective 4.4 – Collaborate with various agencies including FDOT, Marion County School District, Marion County and its municipalities, SunTran, and providers of freight and rail travel to create strategies for developing a multimodal transportation system	
Goal 5: Protect Natural Resources and Create Quality Places	Objective 5.1 – Limit impacts to existing natural resources, such as parks, preserves, and protected lands	• Environmentally sensitive areas, including wetlands, impaired waters, vulnerable aquifer areas, spring protection zones, and parks/ recreational areas applied to adjacent or intersecting facilities • 100-year flood zone area applied to adjacent or intersecting facilities • Tourist destinations, including RV parks, campgrounds, sport complexes, museums, boat ramps, equestrian centers, and recreational areas
	Objective 5.2 – Avoid or minimize negative impacts of projects and disruption to residential neighborhoods	
	Objective 5.3 – Improve the resiliency of the transportation system through mitigation and adaptation strategies to deal with catastrophic events	
	Objective 5.4 – Enhance access to tourist destinations, such as trails, parks and downtowns	
Goal 6: Optimize and PreserveExisting Infrastructure	Objective 6.1 – Improve the performance of the transportation system through intersection modifications, access management strategies, Intelligent Transportation Systems (ITS) applications, and other emerging technologies	• Operational improvement need, including traffic signal, turn lanes, technological
	Objective 6.2 – Emphasize the preservation of the existing transportation system and establish priorities to ensure optimal use	
	Objective 6.3 – Maintain the transportation network by identifying and prioritizing infrastructure preservation and rehabilitation projects such as asset management and signal system upgrades	
	Objective 6.4 – Plan for the future of Automated, Connected, Electric and Shared (ACES) vehicles and other emerging technologies into the transportation network	
	Objective 6.5 – Improve the reliability of the transportation system through operational and incident management strategies	

Goal Weighting

An important feature of how the goals were operationalized in the needs assessment process for the LRTP is the use of goal weights assigned to the Goals by the TPO Board. The weights add a nuance to the technical planning approach and support the performance-based process defining this LRTP. The weights are used to distinguish the goals by level of importance to the future of Marion County.

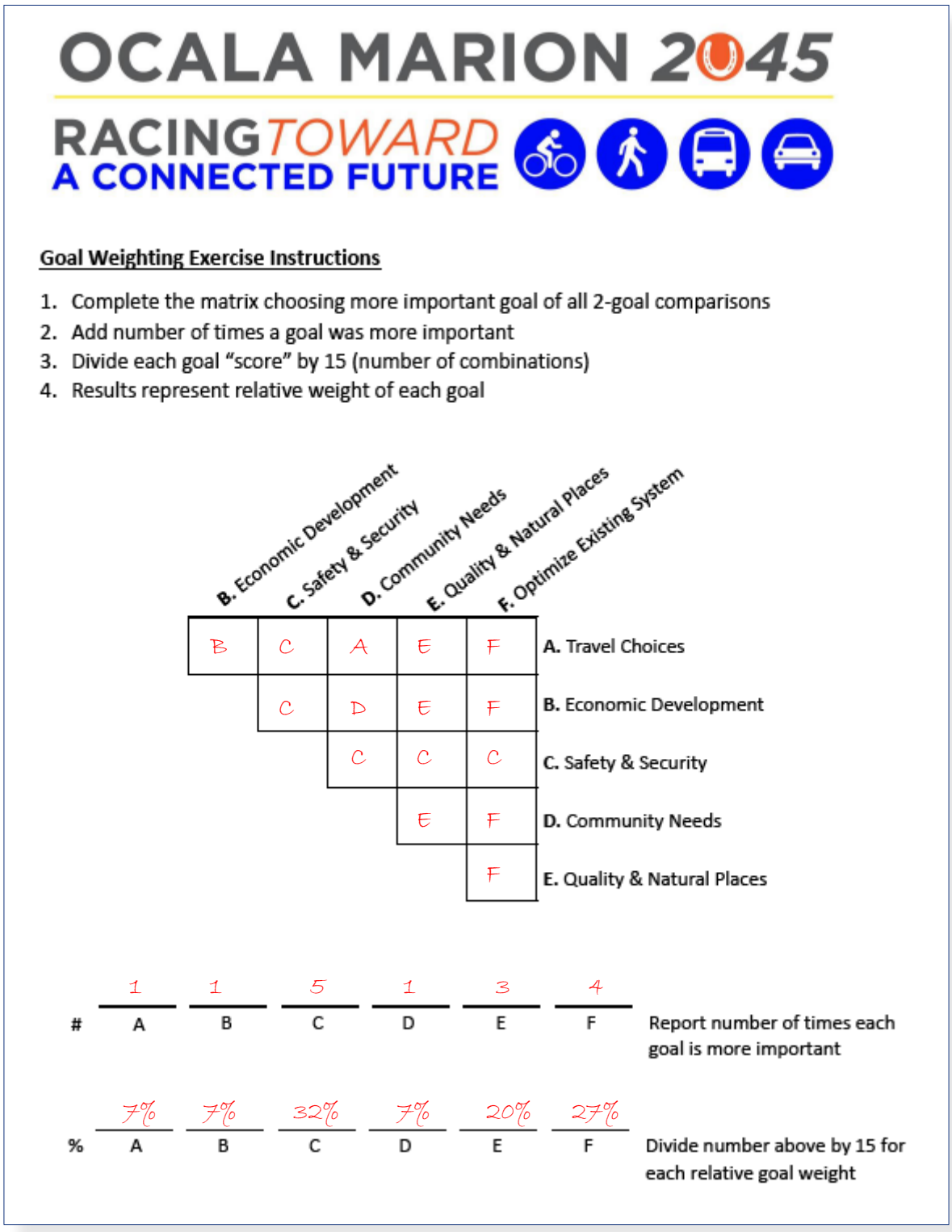
The weighting process was informed by a survey completed by more than 200 residents of Marion County; input from the TPO technical and citizen advisory committees; the LRTP Steering Committee, and TPO staff. A straightforward pairwise comparison process was used to obtain input from these groups on goal weights. The worksheet used to complete the pairwise comparison process is depicted in **FIGURE 2.2**. The values in the sample worksheet in Figure 5 are not reflective of the goal weights used in the plan, but are included to illustrate the weighting exercise. Ultimately, the input collected from the public, committees, and TPO staff were presented to the TPO Governing Board for their consideration in assigning weights to the goals.

FIGURE 2.2: GOAL WEIGHTS



The goal weights, as adopted by the TPO Board, highlight the importance of *optimizing and preserving existing infrastructure, as the most heavily weighted goal*, which recognizes the need to improve existing infrastructure first, before expanding roadway and other facilities. The second and third most heavily weighted goals are the *economic development* and *safety and security goals*. The rest of the goals were evenly weighted.

FIGURE 2.3: WORKSHEET



OCALA MARION 2045

RACING TOWARD A CONNECTED FUTURE

Goal Weighting Exercise Instructions

1. Complete the matrix choosing more important goal of all 2-goal comparisons
2. Add number of times a goal was more important
3. Divide each goal "score" by 15 (number of combinations)
4. Results represent relative weight of each goal

	B. Economic Development	C. Safety & Security	D. Community Needs	E. Quality & Natural Places	F. Optimize Existing System	
	B	C	A	E	F	**A.** Travel Choices
		C	D	E	F	**B.** Economic Development
			C	C	C	**C.** Safety & Security
				E	F	**D.** Community Needs
					F	**E.** Quality & Natural Places

	A	B	C	D	E	F	
#	1	1	5	1	3	4	Report number of times each goal is more important
%	7%	7%	32%	7%	20%	27%	Divide number above by 15 for each relative goal weight

Values in this figure are not representative of the weights assigned to goals. They are included only to illustrate the goal weighting exercise.

Performance Reporting

The federally required performance-based planning process involves the setting of performance targets and a monitoring process to track progress toward those targets. A performance monitoring report is included in **Appendix F**. In addition to performance monitoring, the process involves the use of quantitative metrics to assess the transportation system for needed improvements and prioritize projects for inclusion in the Cost Feasible Plan. This ensures a connection between planning and performance. To this end, thirteen metrics were established to assess network performance relative to the plan goals and objectives and applied to perform the systemwide assessment and project prioritization. The details and results of this process are described fully in **Chapter 5** of this plan.

State Goals

Chapter 339.155 in Florida Statutes requires that FDOT develop a Statewide Transportation Plan that addresses the same federal legislation that must be addressed in local LRTP's. The Florida Transportation Plan (FTP) is developed by FDOT to fulfill this legislation and the goals of the FTP, as outlined in the Policy Element, address the elements of both State and Federal legislation guiding transportation planning. The FTP goals were reviewed and considered for inclusion in the LRTP, as depicted in **TABLE 2.2** comparing the LRTP and FTP goals.

In addition to the FTP, other Statewide plans reviewed for consistency with the LRTP Goals include the Florida Highway Safety Plan (HSP), Florida Strategic Highway Safety Plan (SHSP), the Strategic Intermodal System (SIS) Policy Plan, FDOT Transportation Asset Management Plan, and the Freight Mobility and Trade Plan. As described in more detail in **Appendix E**, the LRTP Goals and Objectives align with each of the reviewed Statewide plans.

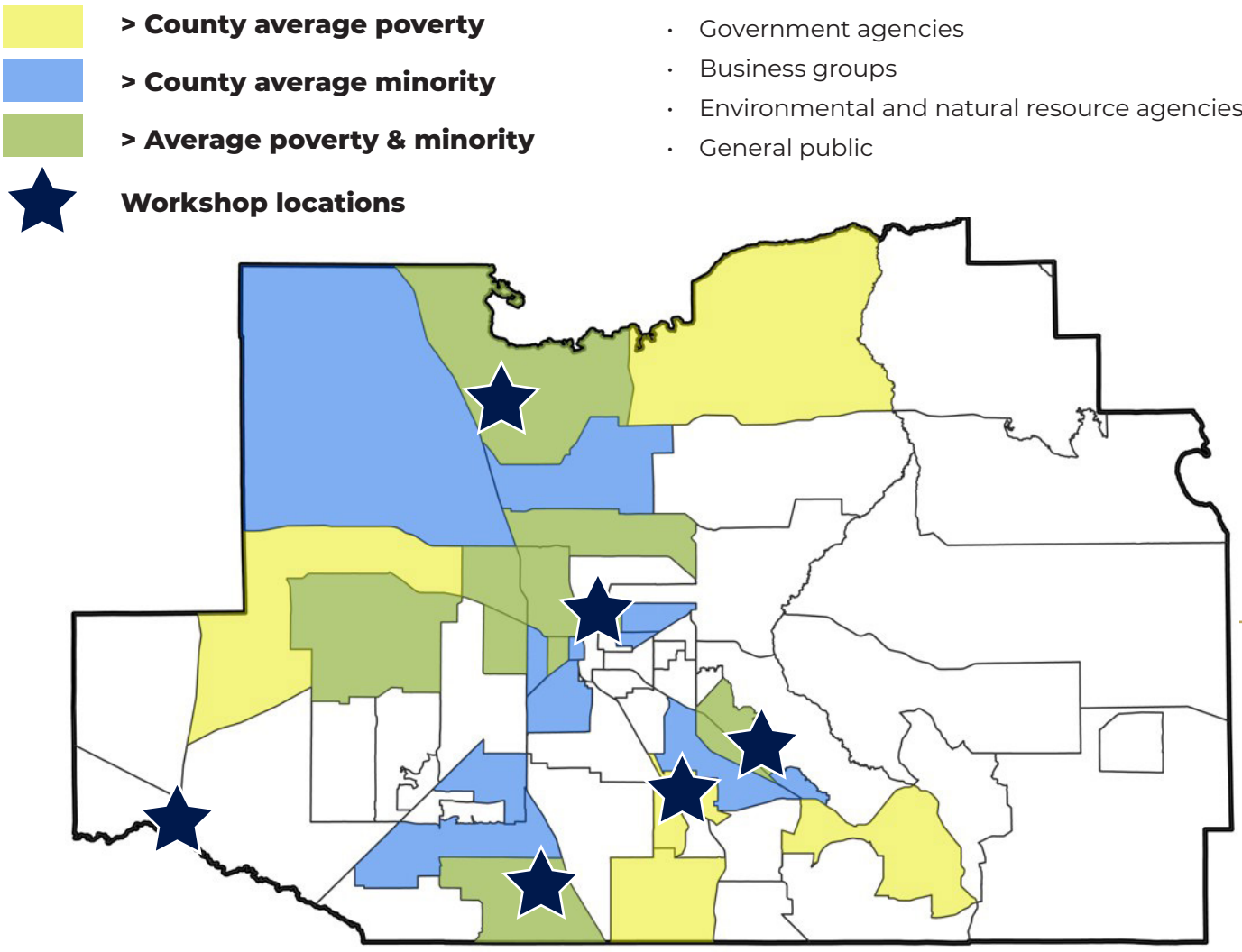
TABLE 2.2: LRTP AND FTP GOALS

LRTP GOALS	FTP GOALS
Goal 1: Promote Travel Choices that are Multimodal and Accessible	More Transportation Choices for People and Freight
Goal 2: Provide Efficient Transportation that Promotes Economic Development	Transportation Solutions that Support Florida's Global Economic Competitiveness
Goal 3: Focus on Improving Safety and Security of the Transportation System	Safety and Security for Residents, Visitors, and Businesses
Goal 4: Ensure the Transportation System Meets the Needs of the Community	Transportation Solutions that Support Quality Places to Live, Learn, Work, and Play
Goal 5: Protect Natural Resources and Create Quality Places	Transportation Solutions that Support Florida's Environment and Conserve Energy
Goal 6: Optimize and Preserve Existing Infrastructure	Agile, Resilient, and Quality Infrastructure
	Efficient and Reliable Mobility for People and Freight

CHAPTER 3. PUBLIC AND STAKEHOLDER INVOLVEMENT

One of the first steps in the LRTP update process is to develop a Public Involvement Plan (PIP) to guide the critical public participation process that has shaped the LRTP. The PIP identifies the activities and media used to collect public input; a schedule of public involvement activities; and the variety of media used to do public outreach, including a website, social media, and in-person workshops. Due to the emergence of the COVID-19 virus, the PIP was amended to reflect a virtual workshop format, and a virtual workshop was deployed during the Needs Plan phase of the LRTP update in June/July 2020. The PIP also includes a map of Environmental Justice areas, defined as those areas with a significant minority and/or low income population and a strategy to conduct workshops in those areas to maximize accessibility to the planning process for those populations.

FIGURE 3.1: ENVIRONMENTAL JUSTICE AREAS



A new addition to the PIP, relative to past LRTP updates, is the establishment of public outreach evaluation criteria and targets, measured through a questionnaire administered at public outreach workshops and other metrics outlined in the PIP. The metrics were designed to provide feedback and facilitate continuous improvements throughout the plan update process, applying performance-based planning principles to the coordination process, in addition to the technical analysis. Targets were also set for each of the metrics.

Stakeholder Groups

A crucial component of the planning process is the coordination of public and stakeholder input, ensuring that the plan is influenced by residents, business interests, and public agencies that are responsible for implementation of the plan. More than 40 separate meetings were conducted to coordinate the plan update with these stakeholders in a variety of formats. The stakeholder groups that were engaged at key milestones in the planning process can be summarized in terms of four general categories, including:

- Government agencies
- Business groups
- Environmental and natural resource agencies
- General public

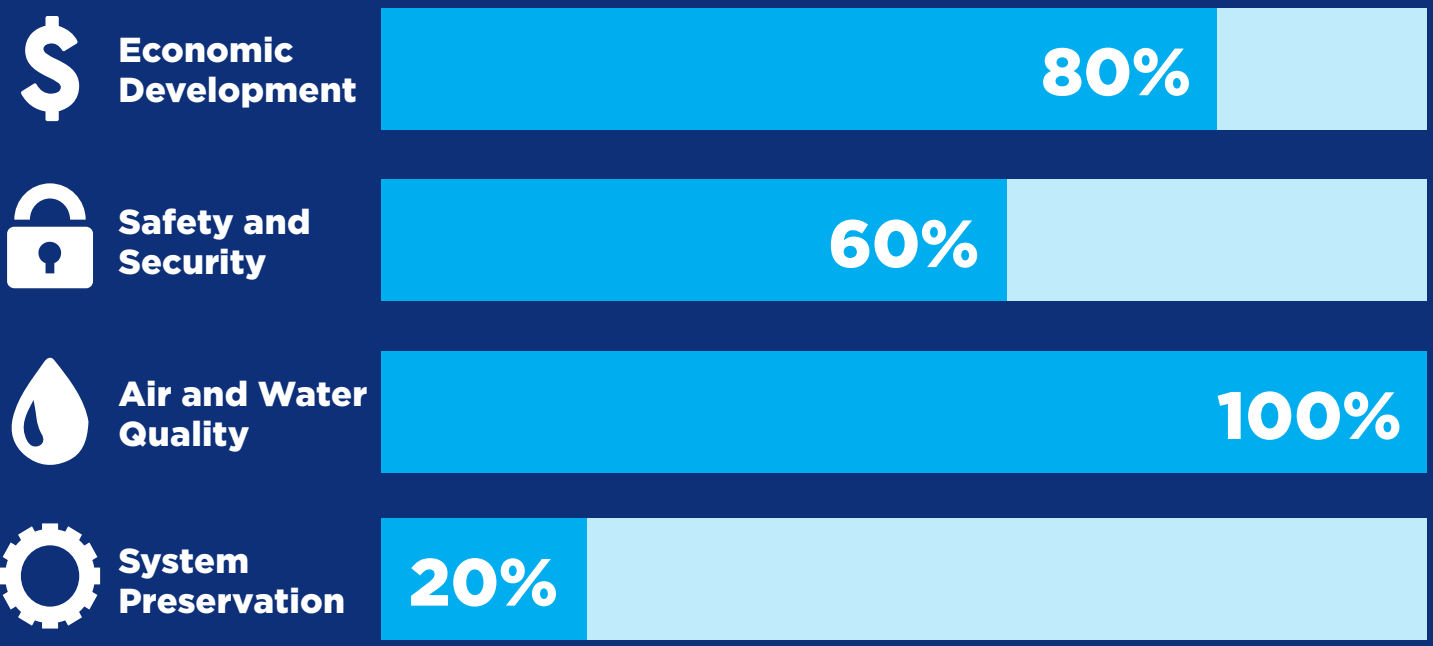
Government Agencies and Business Stakeholders

There are four TPO committees that provided guidance in the LRTP update, including the Citizens Advisory Committee, Technical Advisory Committee, the LRTP Steering Committee, and the TPO Governing Board. Other institutional stakeholders that were engaged regularly throughout the plan development process include the Ocala Marion Transportation Disadvantaged Local Coordinating Board, city councils of the cities of Belleview, Ocala, and Dunnellon and the Florida Engineering Society. Input from these stakeholders was incorporated into the Goals and Objectives weighting and Needs Plan development processes. More than 30 meetings were held with these groups at those key milestones. The second category includes meetings held with key stakeholders not specifically represented on the committees. The stakeholders are divided into two groups. The first includes institutional, business, land development interests, and environmental justice interests. The following is a list of the stakeholders in this category that were engaged early in the plan update process to gain input on the Vision, Goals and Objectives, and general transportation concerns:

- Ocala/Marion County Chamber & Economic Partnership
- Ocala Realtors Association
- Marion County Road Builders Association
- Ocala Builders Association
- Ocala Business Leaders
- Marion County School System
- Governor's West Council
- Florida Engineering Society
- Ocala Marion Transportation Disadvantaged Local Coordinating Board

FIGURE 3.2: INDUSTRY STAKEHOLDER CONCERNS

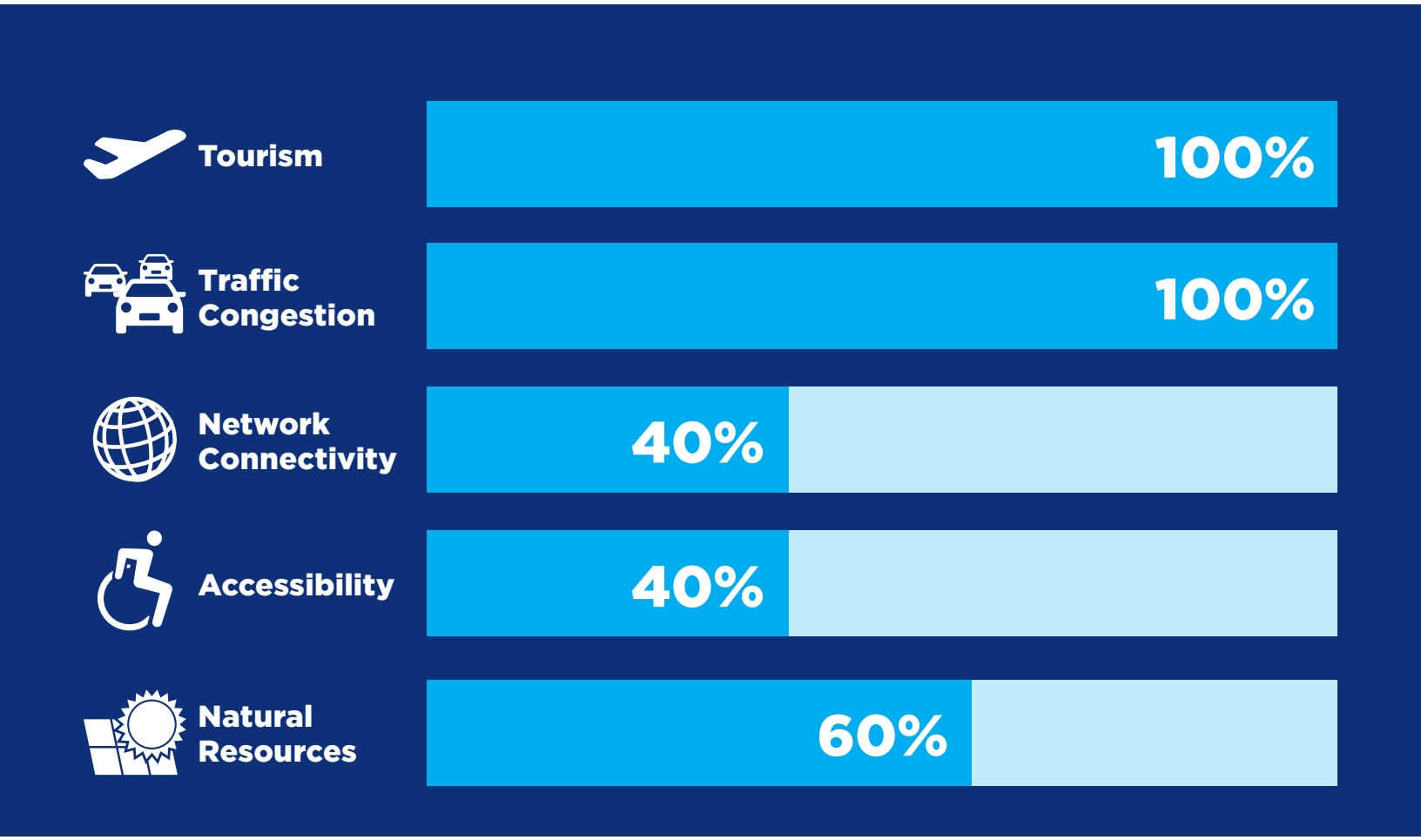
(measured as proportion of stakeholders sharing concern for specific issues)



Some of the primary themes that arose in the stakeholder discussions involved the delicate balance of the County's growing freight and development industries with the bucolic nature of the County. The most prevalent concern on the part of the stakeholders is the preservation of the County's horse farms and natural resources. Another concern that emerged in these discussions is the balance between tourism and natural resource preservation. The County's economic dependence on the tourism industry, to an extent, has encouraged the commercialization of the natural resources that draw many tourists, which has had some negative consequences on the resources themselves. Despite these concerns, there is a general sentiment among these stakeholders that growth and development will continue and that the transportation system must also grow to accommodate the added demand on the County's infrastructure. Issues that were most prevalent in the stakeholder discussions were air and water quality, tourism, and traffic congestion, followed closely by economic development. Safety, natural resources and network connectivity and accessibility also were salient concerns voiced by stakeholders.

The TPO team also coordinated with the neighboring counties to the south through the Lake Sumter MPO, which shares a portion of the urbanized area in the region. The teams coordinated during the Needs Plan phase of the plan update process, which is the point at which needed infrastructure improvements are identified and evaluated for potential inclusion in the Cost Feasible Plan. The reason for coordination at this point was to ensure that improvement needs on regional facilities traversing both the Marion County and Lake/Sumter County areas are closely coordinated for consistency. It was determined that there were no inconsistencies and that FDOT's plans for I-75, which is the primary regional facility shared by the three counties, are captured consistently in the SIS Cost Feasible Plan.

FIGURE 3.2: INDUSTRY STAKEHOLDER CONCERNS CONT'D
(measured as proportion of stakeholders sharing concern for specific issues)



Environmental and Natural Resource Agencies

The third category of stakeholders that were engaged includes environmental and natural resource agency representatives. At an interactive stakeholder meeting with representatives of local, state, and federal natural resource agencies, the TPO planning team presented a series of maps depicting environmentally sensitive areas in a number of categories, including conserved lands; the County's Environmentally Sensitive Overlay Zones; FDEP's Springs Protection Zones; results of an aquifer vulnerability model (DRASTIC model); FDEP's Impaired and Outstanding Florida Waters; FEMA's Flood Hazard and Flood Prone areas; and USGS drainage maps.

- Florida Fish and Wildlife Conservation Commission
- Federal Highway Administration, Eastern Federal Lands Highway Division
- St Johns River Water Management District
- Florida Department of Environmental Protection
- US Forest Service

The team also presented the group with maps of transportation improvement needs, which were assessed relative to the environmental data to determine levels of impact on the sensitive areas. A third data series that was presented to the group and discussed extensively included a series of environmental mitigation programs designed to mitigate the negative impacts of infrastructure and development improvements. Important feedback was received by these stakeholders in terms of all three data series that were presented. In addition to validating the team's approach to environmental impacts, the stakeholders made several important suggestions resulting in additional datasets to be included in the environmentally sensitive areas. A comprehensive discussion of the datasets and how they were used in the technical needs assessment phase of the LRTP update is included in **Chapter 4** of this document.

Public Workshops

Engagement of the general public has included public meetings and workshops geared to inform and engage participants and obtain feedback and input on the plan from the public perspective. A total of seven public meetings were held throughout the process, including a virtual workshop during the COVID-19 pandemic. The TPO Board adopted a formal resolution (Resolution #20-07) on April 28, 2020 outlining alternative public participation procedures during emergency situations, like the COVID-19 pandemic. A series of in-person public workshops were held in August 2019 to kick off the plan update process. Five of the six workshops were held in predominantly low income, predominantly minority, and/or both. The venues for the workshops in these areas include the Marion Oaks Community Center, Belleview City Hall, Silver Springs Shores Community Center, Lillian Bryant Community Center, and Reddick-Collier Elementary School. The venues were selected based on these variables as well as geographic consideration to ensure that the meetings were distributed across the County, maximizing accessibility to residents. The 2019 workshops focused on an overview of the plan update process; the LRTP goals and objectives; collection of specific area or facility comments; and promotion of an on-line survey that could be completed on tablets at the workshops.

More than 65 people attended the workshops and provided their input through a variety of means, including marking up maps, completing an online survey, and discussing their needs and concerns regarding transportation in Marion County. The input received at the workshops informed the Goals and Objectives established to guide the plan and the Goal weights that were recommended to the TPO Governing Board. Specific facility- and mode-related input was also provided, which was used in the later technical needs assessment.

CHAPTER 3

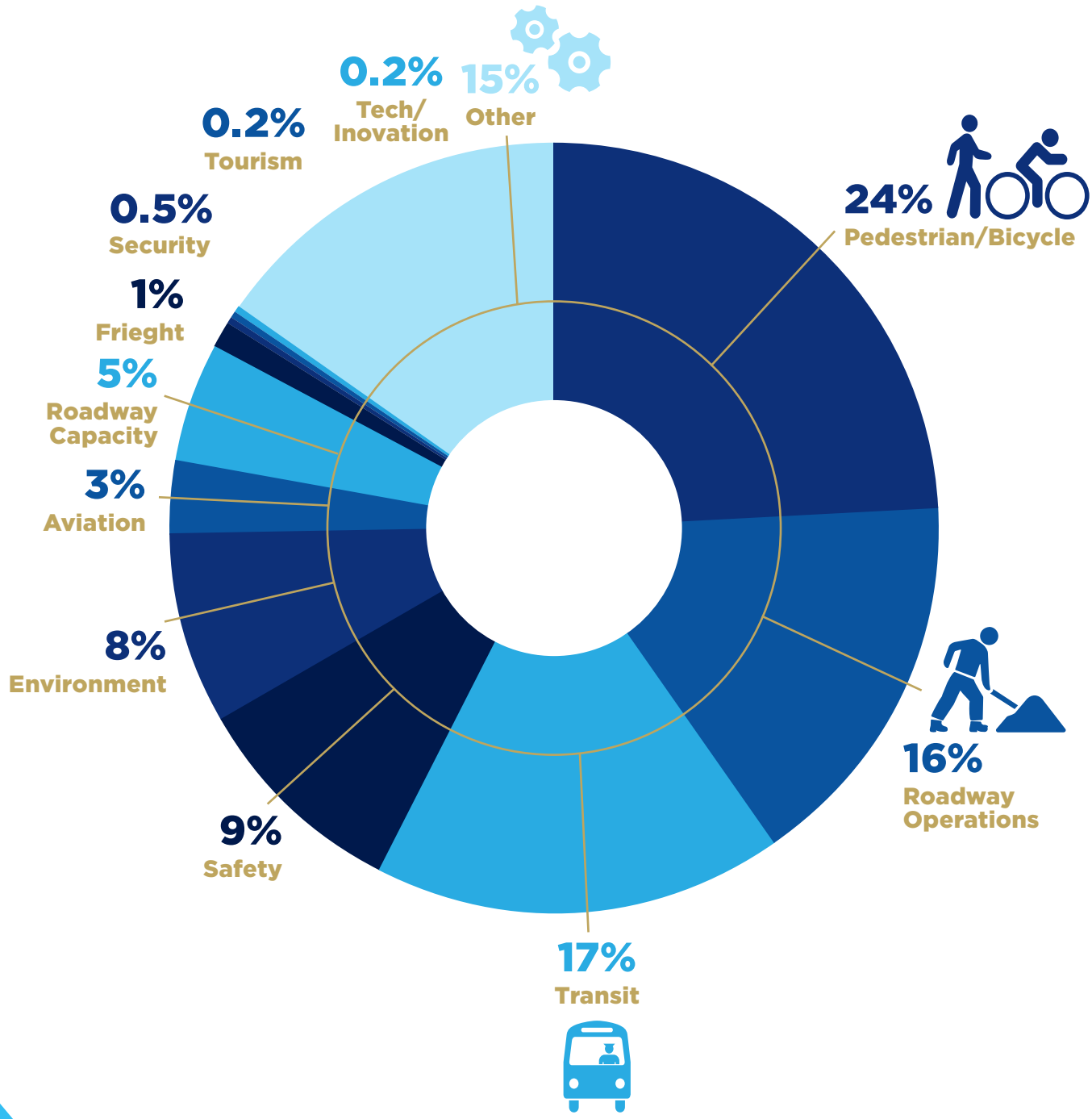
OCALA MARION 2045
WELCOME

OCALA MARION 2045
RACING TOWARD A CONNECTED FUTURE
KITTELSON & ASSOCIATES

Get Involved
Take Our Survey
Ocala Marion TPO
OCALA MARION 2045
RACING TOWARD A CONNECTED FUTURE
Long Range Transportation Plan (LRTP)
WELCOME
We need your input!
The Ocala/Marion County Transportation Planning Organization (TPO) is currently developing the 2045 Long Range Transportation Plan (The Plan). The goal of this Plan is to create a transportation system to serve the needs of Marion County's residents and visitors.
As part of our public outreach efforts, the Ocala/Marion TPO is seeking input through this survey to help guide Marion County's long term transportation needs.

More than 75 comments were logged during the 2019 workshops, with almost 25% of those comments related to bicycle and pedestrian issues, as summarized in **FIGURE 3.3**. Another sixteen percent of the comments were related to operational roadway issues, which includes traffic signal timing, the need for turn lanes, and other non-capital improvement related concerns. Approximately seventeen percent of the comments were related to public transit, mostly representing the opinion that the limited transit services offered in Marion County do not address commenters' travel needs. Close to ten percent of the comments received relate to the need for safety improvements and almost the same number of comments were related to environmental concerns. Interestingly, only five percent of the total comments received at the workshops were related to the need for more roadway capacity. The need for safety, bicycle/pedestrian, transit and operational roadway improvements represented the vast majority of all comments.

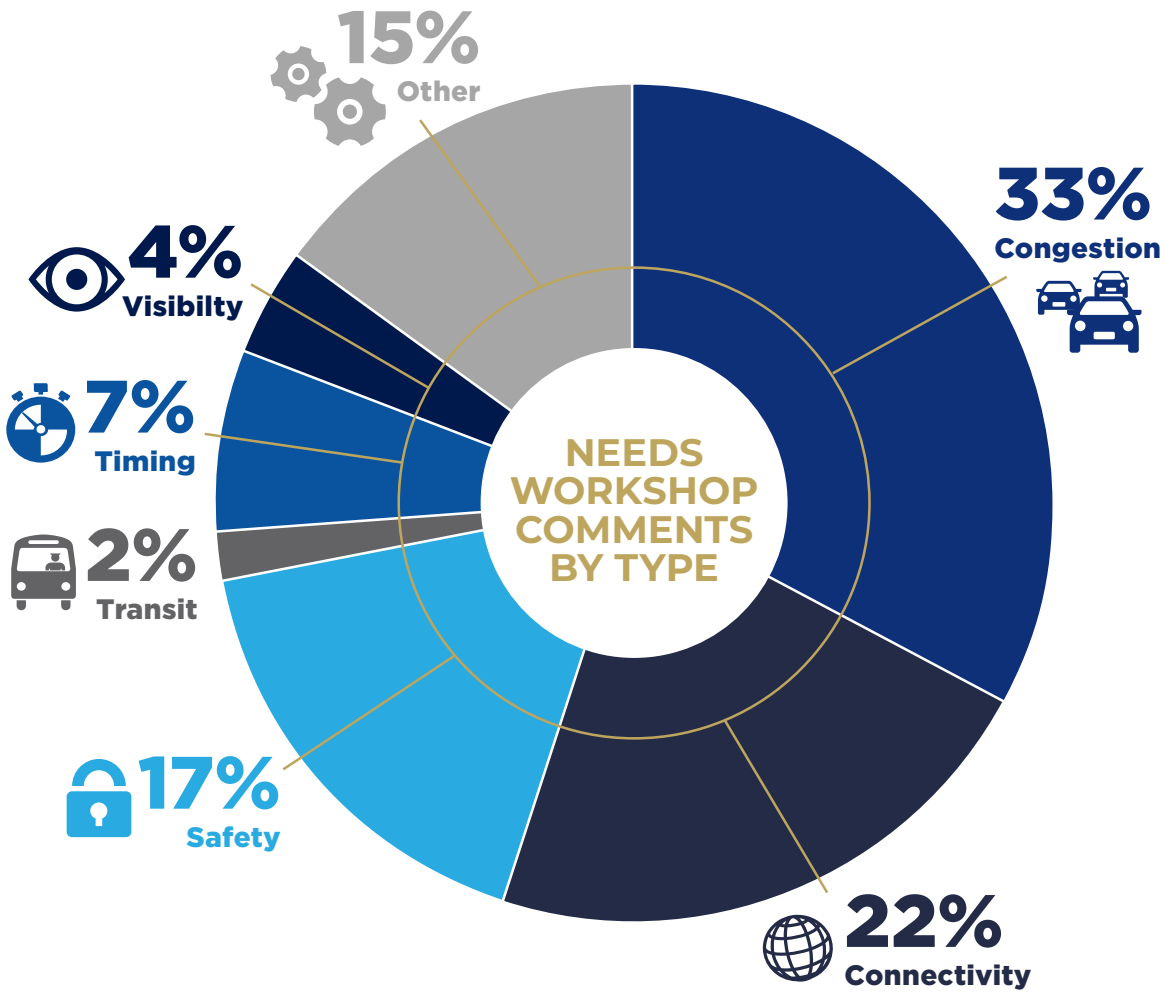
FIGURE 3.3: KICKOFF PUBLIC WORKSHOP COMMENTS



A Needs Plan workshop, which coincided with the emergence of the COVID-19 pandemic, was held virtually, with the option on the first day of the workshop for people to attend in person at the County Commission Chambers in Ocala. The workshop was available on-line for people to attend at any time for a period of six weeks from June 18 to July 31, 2020. The focus of the workshop was to present the LRTP Needs Plan, including identified sidewalk, bicycle lane, trail, transit, and roadway improvements for consideration in the LRTP Cost Feasible Plan. Participants could comment on existing projects or suggest new ones and a summary of comments by type were available in real time for people to review and/or react to. More than 30 people attended the live workshop on June 18, 2020. The primary objective of the workshop was to engage participants in the assessment of needed improvements in the County's transportation system, both in terms of already identified improvements making up the draft Needs Plan at the time, and potentially new improvement needs.

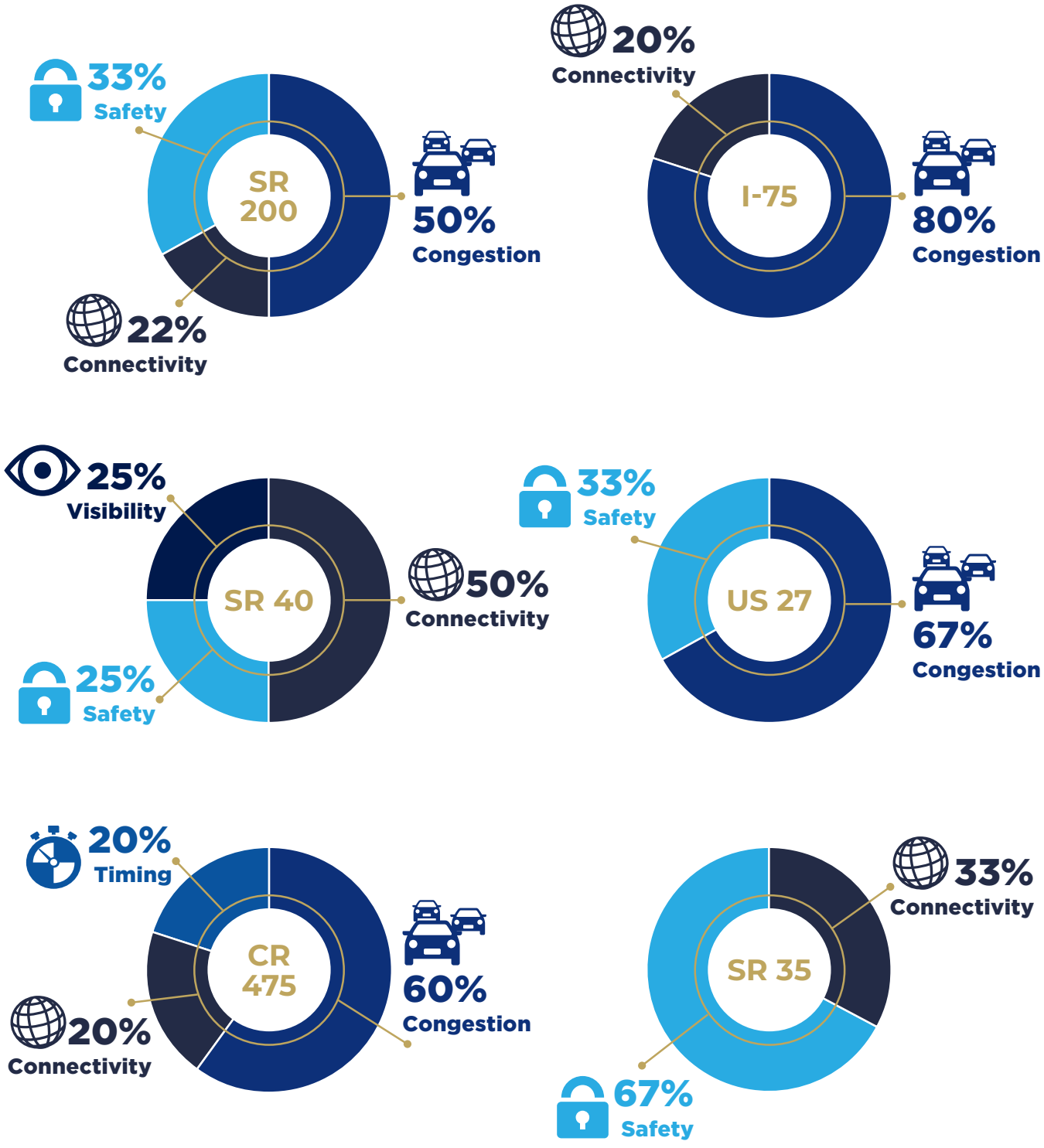
Participants in the Needs Plan workshop were encouraged to comment on specific improvement needs, but they were also engaged more generally by categorizing their comments in terms of generalized transportation needs or concerns, like traffic congestion, safety, network connectivity, and others. The results of the workshop, summarized in **FIGURE 3.4**, indicated the largest share of concerns were related to traffic congestion, making up 33 percent of the total comments received. Network connectivity also represented an area of concern, with 22 percent of the comments, and safety comments comprised almost 20 percent as well. While the traffic congestion comments are all related to the auto mode of travel, the connectivity and safety comments were divided between modes. Half of the connectivity comments were related to trails and 30 percent related to roadways. The remaining 20 percent were sidewalk and transit related. With regard to safety, the breakdown was reversed, with 60 percent of the safety comments related to auto travel and 40 percent related to the bicycle and pedestrian modes of travel.

FIGURE 3.4: NEEDS PUBLIC WORKSHOP COMMENTS



Specific roadway or transportation facility comments provided during the Needs Plan workshop included more than 20 facilities, with six of them representing 54 percent of the comments, as summarized in **FIGURE 3.5**. Interstate 75, SR 200, SR 40, and US 27 were the most commonly mentioned roadways in the comments. The remainder of facility-specific comments include a mix of state highways and local roadways. A breakdown of the comments by facility for the top six most cited roadways highlights the congestion, connectivity and safety concerns on the part of workshop participants.

FIGURE 3.5: NEEDS WORKSHOP FACILITY COMMENTS



On-line Survey

An on-line survey administered between June and September 2019 collected input on existing conditions of pedestrian, bicycle, transit, and roadway infrastructure; goal ranking; and desired investments by mode and improvement type. The survey was advertised extensively on social media, with spikes in the numbers of completed surveys clearly correlated with social media boosting efforts at various points in the three-month survey period. While the survey administration did not include a statistically significant sampling methodology, demographic questions were asked to assess representation of the County population in the sample. The results of the demographic analysis, as summarized in **FIGURE 3.6**, indicate a general resemblance of the County's demographics in the survey sample, with the exception of under-representation of the County's 18 or younger population. All the other age groups and general ethnicity was well represented, the latter in terms of caucasian and non-caucasian.

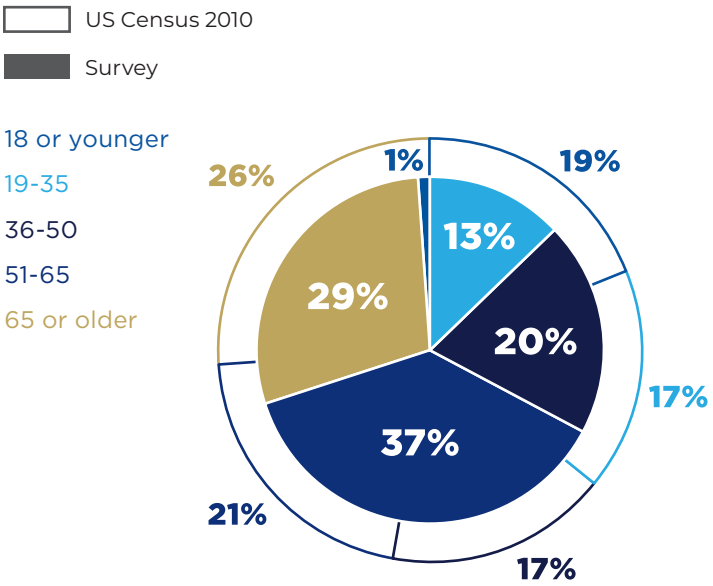
607
SITE VISITS

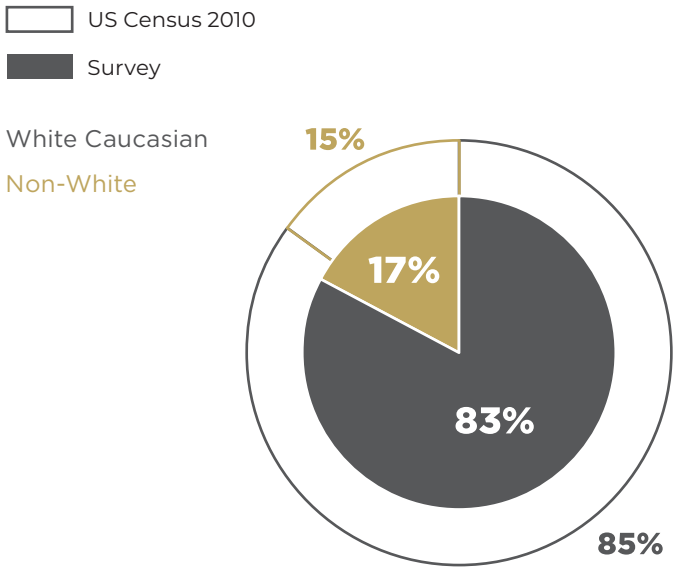
257
PARTICIPANTS

313
COMMENTS

5,439
DATA POINTS

FIGURE 3.6: WORKSHOP DEMOGRAPHICS



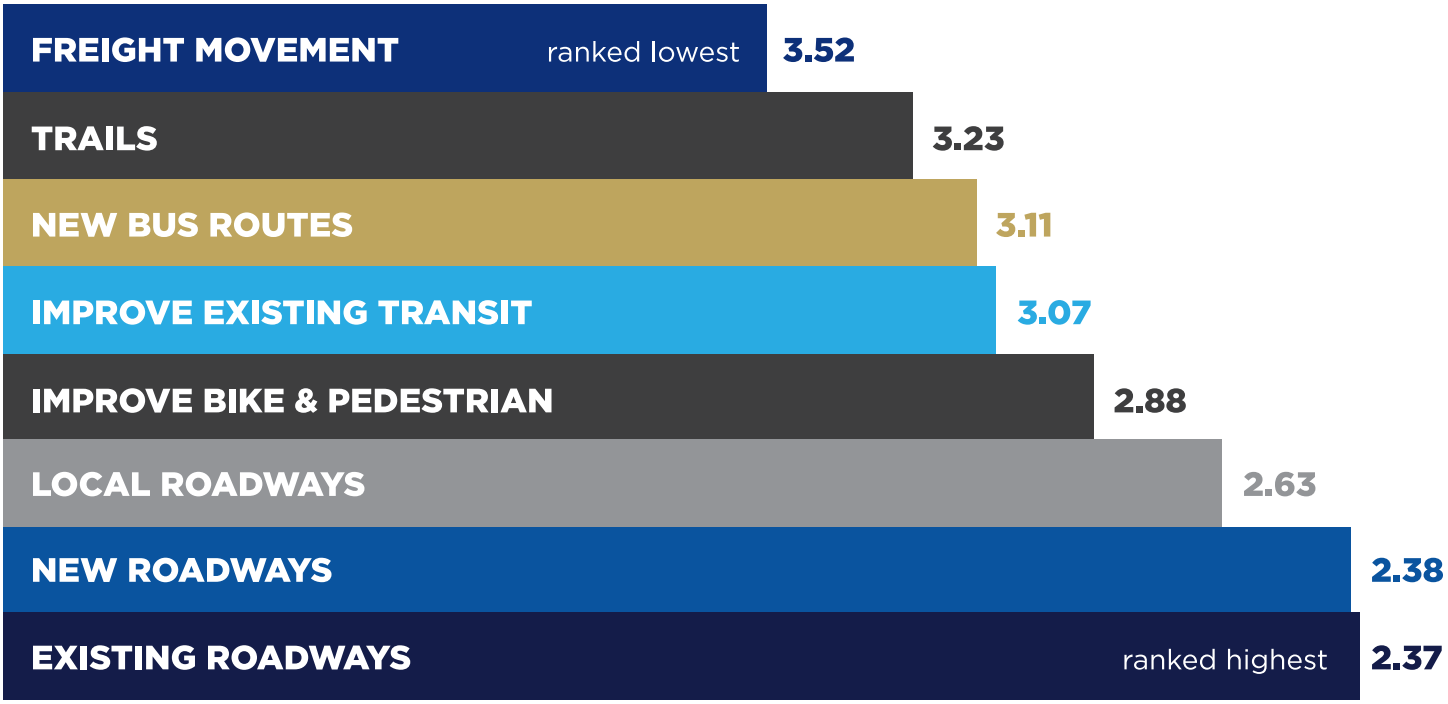


The goal ranking question in the survey was included to provide input to the TPO committees and Governing Board in the goal weighting process. The survey results indicated the County's natural resource protection goal as the most important goal, followed by system preservation.

FIGURE 3.7: GOAL RANKING IN SURVEY RESULTS

The question asking survey respondents to rank the types of transportation improvements they feel are most important found that roadways were the most important facilities for needed improvements, with improvement of existing roadways the highest ranked category. The second highest category was the construction of new roadways, followed by the need to improve multimodal and transit facilities. Freight improvements were the lowest ranked category of needed improvements in the survey.

FIGURE 3.8: STRATEGY RANKING IN SURVEY RESULTS



Social Media

Social media is an important medium of communication with the public and perhaps one of the best ways to reach the maximum possible number of people. One of the specific reasons for incorporating social media into the 2045 plan update process is to attempt to engage a younger demographic than has historically been reached in long range planning public involvement programs. The initial establishment of a social media presence for the LRTP was the launch of a Facebook account in June 2019.

Facebook

Since launching in June 2019, the **Ocala Marion 2045 Transportation Plan** Facebook page has garnered 469 followers and generated more than 160 comments since the launch, with an average of 109 unique users engaging on a weekly basis. An advertising campaign was also launched early in the plan update process to increase participation, particularly in the weeks leading up to public workshops. Facebook engagements tracked since the social media launch in 2019 indicate the value and success of the marketing investments, as depicted in **FIGURE 3.9.**

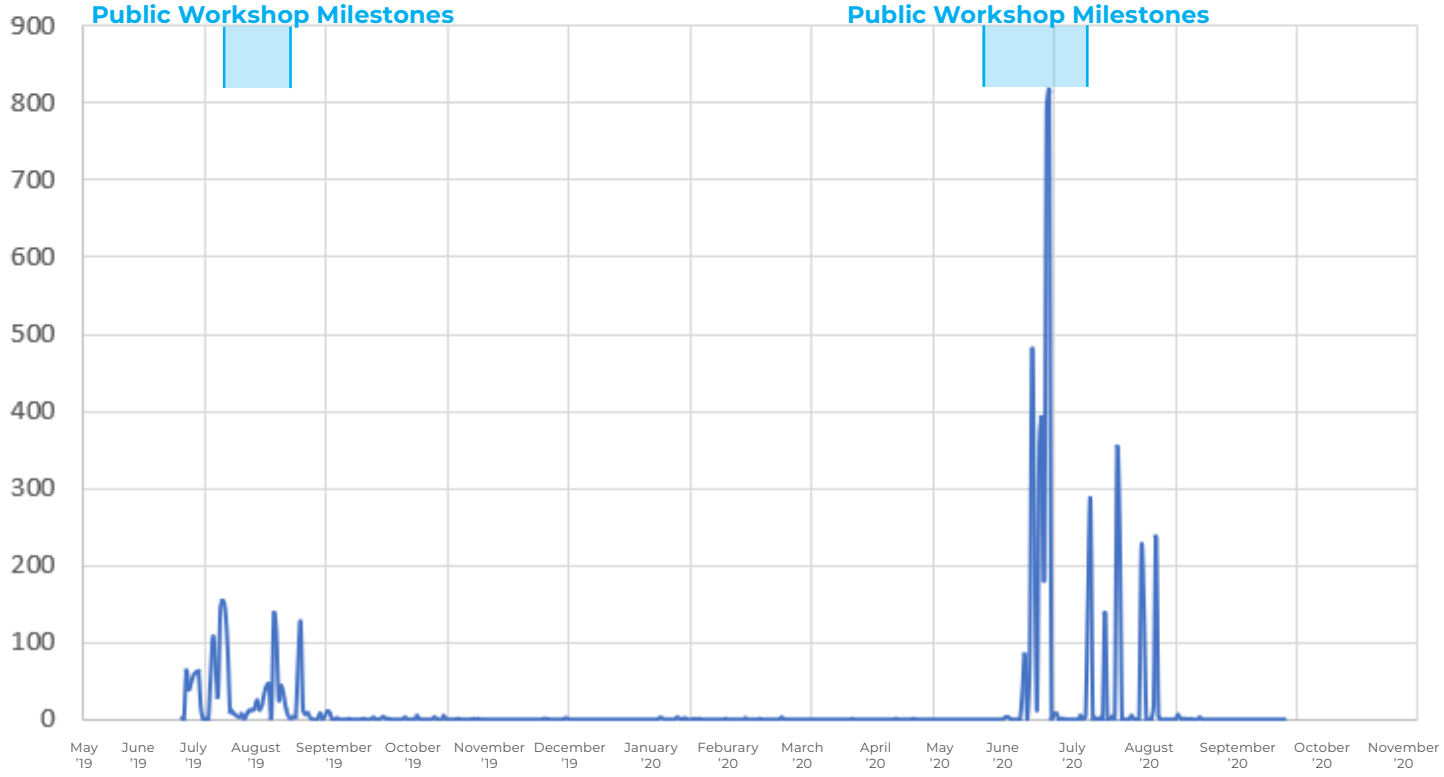
469 FOLLOWERS

109 UNIQUE USERS

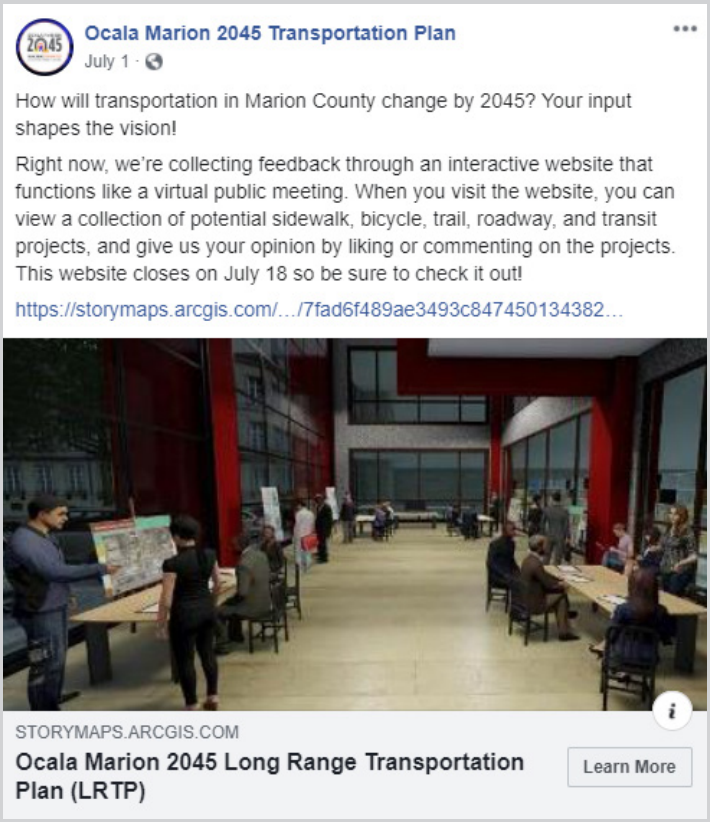
160 COMMENTS

10,873 PEOPLE REACHED WITH TOP POST

FIGURE 3.9: FACEBOOK DAILY PAGE ENGAGEMENTS



Every Facebook post for the page was set up with a goal in mind—either to build trust with followers, gather comments, or ask for an action related to the LRTP, such as attending an event. The most popular post reached 10,873 people. 400 people clicked to open the post, 327 people clicked to the project website, and 71 people reacted, commented, or shared.



10,873 VIEWS

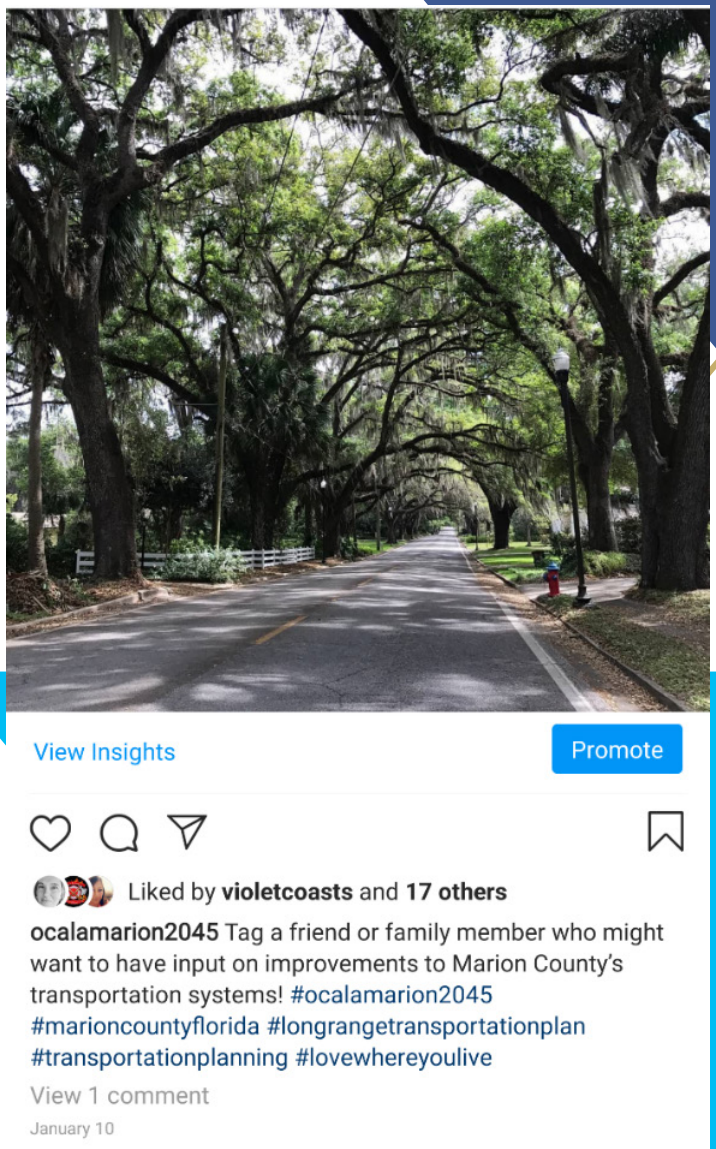
400 CLICKS

327 WEBSITE

71 INTERACTIONS

Instagram

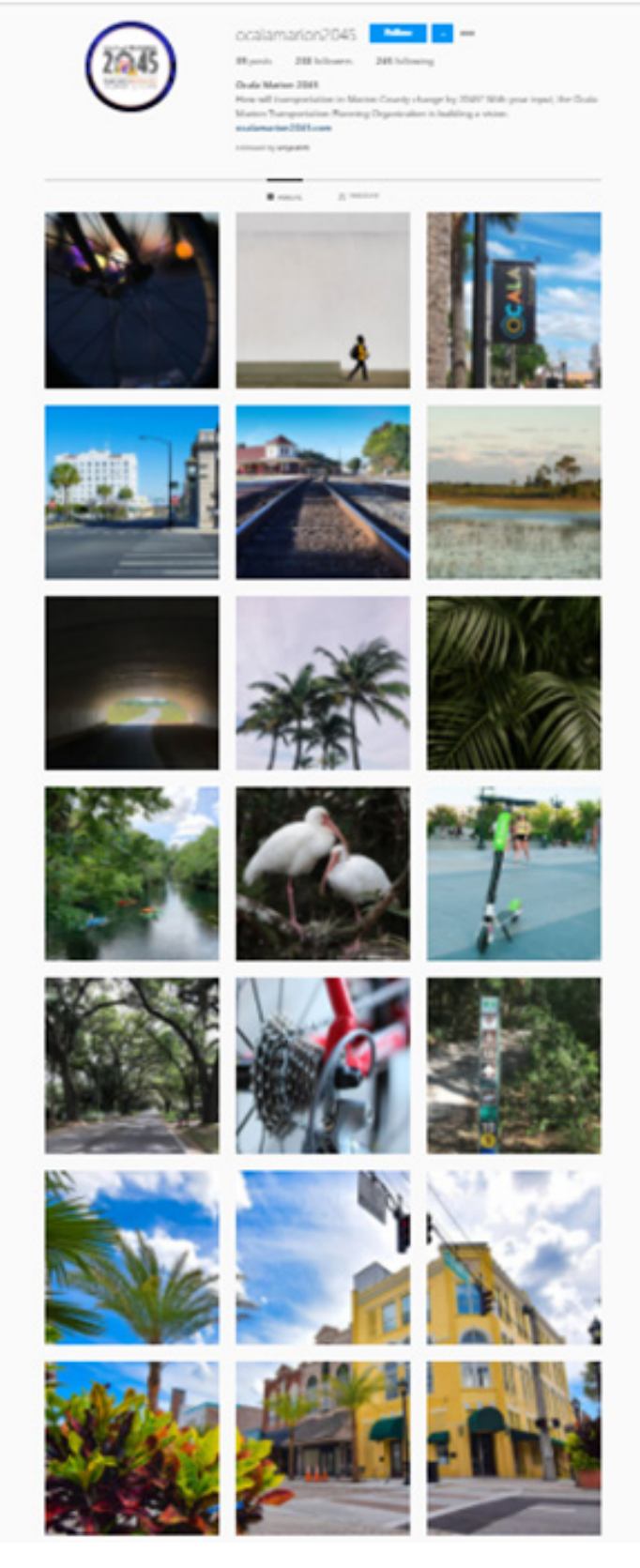
LRTP Demographic data collected through the Metroquest survey described in the previous section indicated a relatively low participation in the 18 or younger age group, so subsequent to the survey deployment, the team established an Instagram account, recognizing the higher level of participation by younger demographics in Instagram, relative to Facebook. The ocalamarion2045 Instagram page was launched in October 2019. Posts on Instagram have emphasized the uniqueness and beauty of Marion County while informing followers of engagement opportunities and encouraging them to weigh in on the LRTP. The page has accumulated 283 followers and received 9 comments. The most popular Instagram post reached over 100 users and received 18 likes.



238 FOLLOWERS

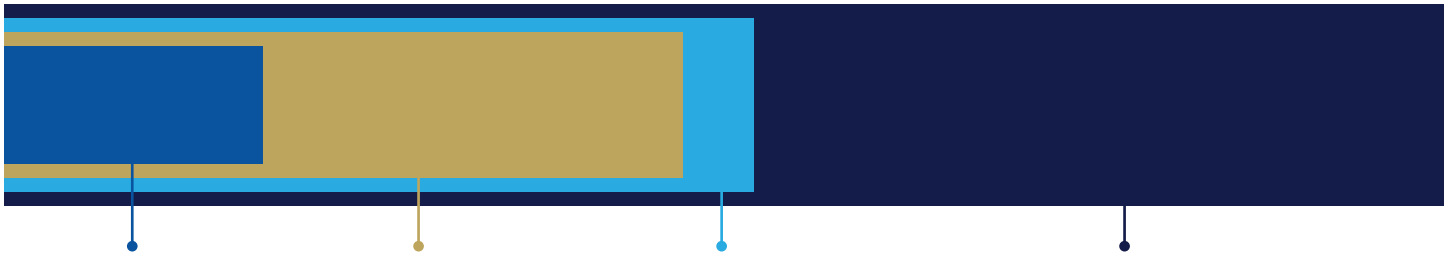
1,872 IMPRESSIONS

TOP 5 POSTS AVERAGED 94 PEOPLE



Performance Indicators

Public outreach performance indicators include a range of metrics, including attendance at workshops, survey response rates, social media followers, and others, as described in the PIP. Unfortunately, due in large part to the COVID-19 pandemic, in-person workshops throughout the planning process were limited to seven total workshops. In spite of that, the performance targets were largely met, and in some cases exceeded. One of the metrics informed by the 2019 on-line survey was a demographic breakdown of surveyed individuals, which indicated that respondents largely represented the demographics of Marion County residents at large, with the exception of the population younger than 18 years of age. This was addressed at that time by increasing the project's social media footprint with the addition of a project Instagram account.



87
MEETING ATTENDEES

228
INSTAGRAM

252
METROQUEST

484
FACEBOOK

Average workshop attendance

14
(TARGET: 30)

Social media followers

712
(TARGET: 500)

Responses to on-line survey

257
(TARGET: 300)

Public involvement effectiveness scores

MEETING ACCESSIBILITY

4.6
(TARGET: 4.5)

MEETING CONTENT CLARITY/ USEFULNESS

4.1
(TARGET: 4.5)

CHAPTER 4. ENVIRONMENTAL ANALYSIS

Considering Environmental Resources

Marion County boasts a diverse and valued natural landscape. Thousands of acres of national forest, natural springs, miles of regional recreational trails, horse farms, and countryside greet visitors and welcome residents home. The Needs Assessment process, as outlined in **Chapter 5**, considered the proximity of infrastructure improvements to environmental resources as part of the evaluation of projects. The proximity measure was used to score projects based on their potential environmental impacts. The environmental resources used for this analysis, described in detail the following section, include:

- Wetland areas
- Aquifer vulnerability areas
- Parks and recreation areas
- Marion County designated Environmentally Sensitive Overlay Zone areas
- Marion County designated Springs Protection Overlay Zone areas
- FDEP designated Impaired Waters
- FDEP species concentration areas

Early in the Needs Plan development phase of the LRTP update, the TPO also coordinated a data sharing workshop with environmental resource agencies and stakeholders to review Needs Plan projects and identify environmental needs and strategies for the avoidance or mitigation of environmental effects. The stakeholder group included the following state and federal natural resource agencies.

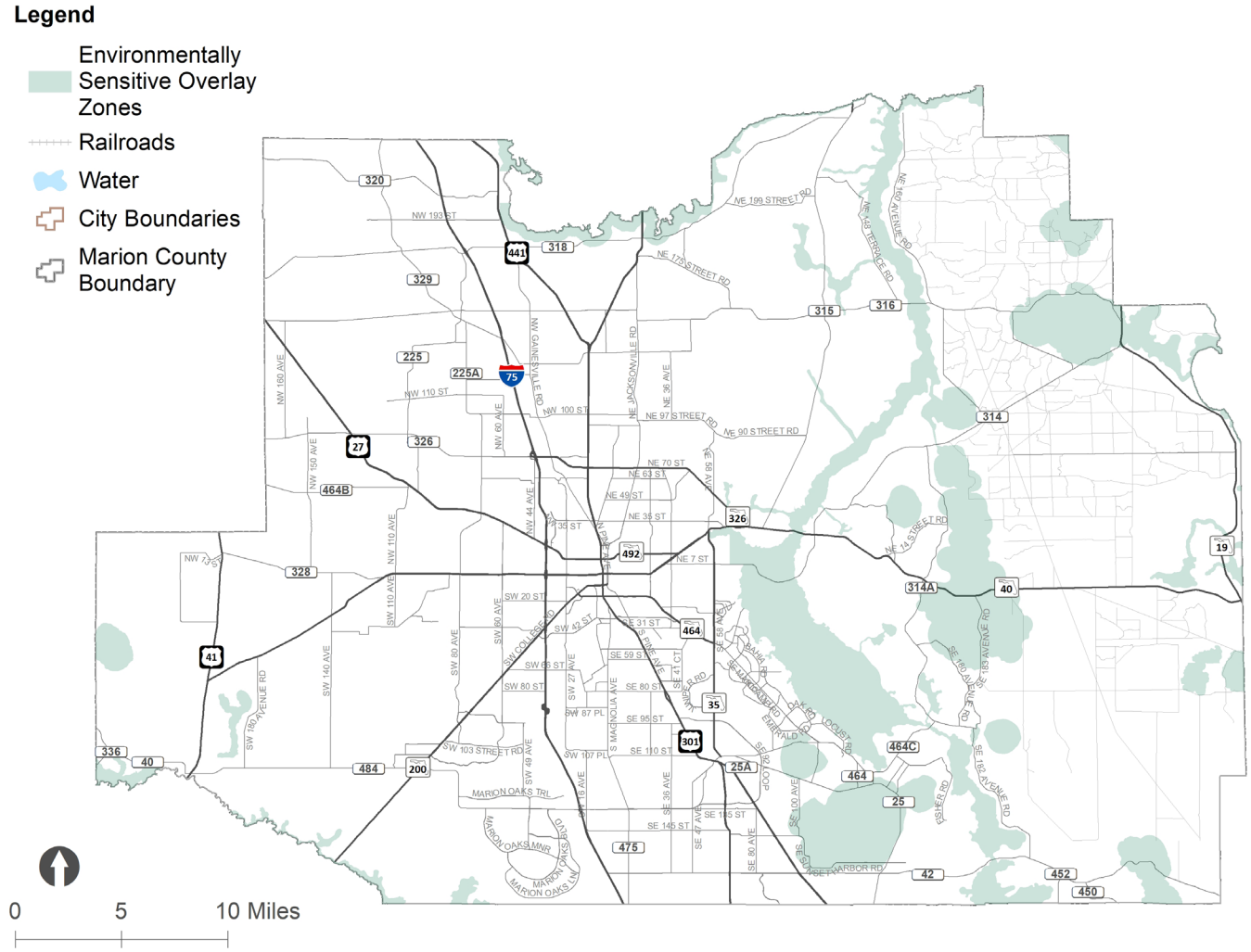
- Florida Fish and Wildlife Conservation Commission
- Federal Highway Administration, Eastern Federal Lands Highway Division
- St Johns River Water Management District
- Florida Department of Environmental Protection
- US Forest Service

Designated Environmentally Sensitive Areas

There are multiple layers of environmental policy and analysis requirements at the local, State, and Federal levels associated with the construction of infrastructure improvements. At the local level, the Marion County Comprehensive Plan established an Environmentally Sensitive Overlay Zone (ESOZ) to protect surface waters, including wetlands, wildlife habitats and vegetation in and near certain rivers, creeks, and lakes in Marion County. The ESOZ designated area provides conservation and protection criteria for land development, including development density and intensity limitations, sewage disposal standards, and increased setback standards.

Areas included in the ESOZ include springs, lakes at least 200 acres large, spring runs, 500 feet landward of perennial wetlands and primary tributaries, and Silver River State Park. Additional restrictions, actions, and considerations may need to be undertaken for infrastructure changes in or near the ESOZ area. **FIGURE 4.1** depicts the ESOZ boundaries, as defined in the County's Comprehensive Plan.

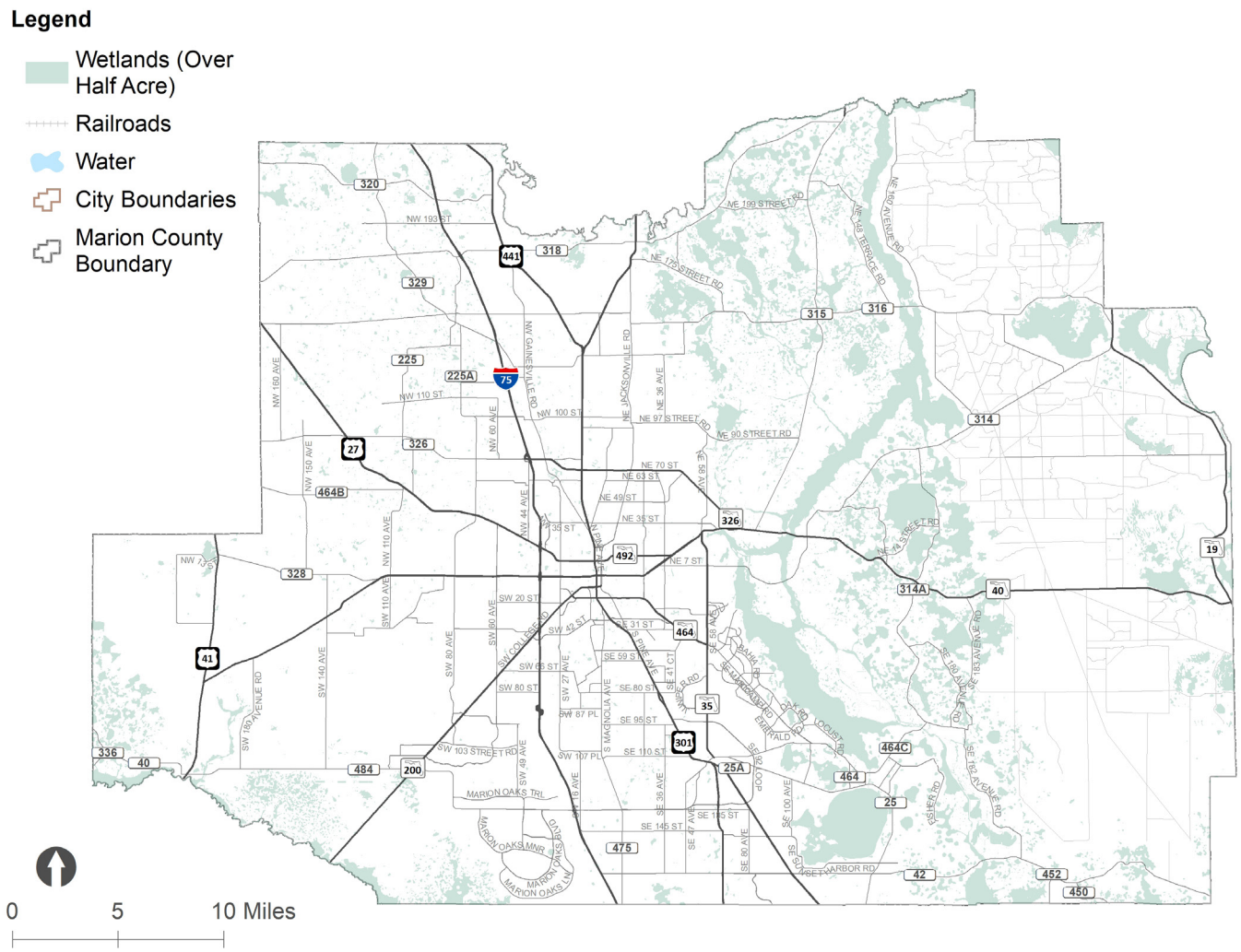
FIGURE 4.1: ENVIRONMENTALLY SENSITIVE OVERLAY ZONE



Wetland Areas

Wetlands provide a wealth of benefits, including habitat for plants and animals, opportunities for recreation, flood control, aquifer recharge, and cultural activities. The National Wetland Inventory (NWI) was developed by the US Fish and Wildlife Service (USFWS) to promote the understanding, conservation, and restoration of wetlands. Wetland areas are subject to additional development criteria and regulations, as set forth by policies such as the Marion County ESOZ. **FIGURE 4.2** depicts the wetlands in Marion County, as defined through the NWI.

FIGURE 4.2: WETLAND AREAS

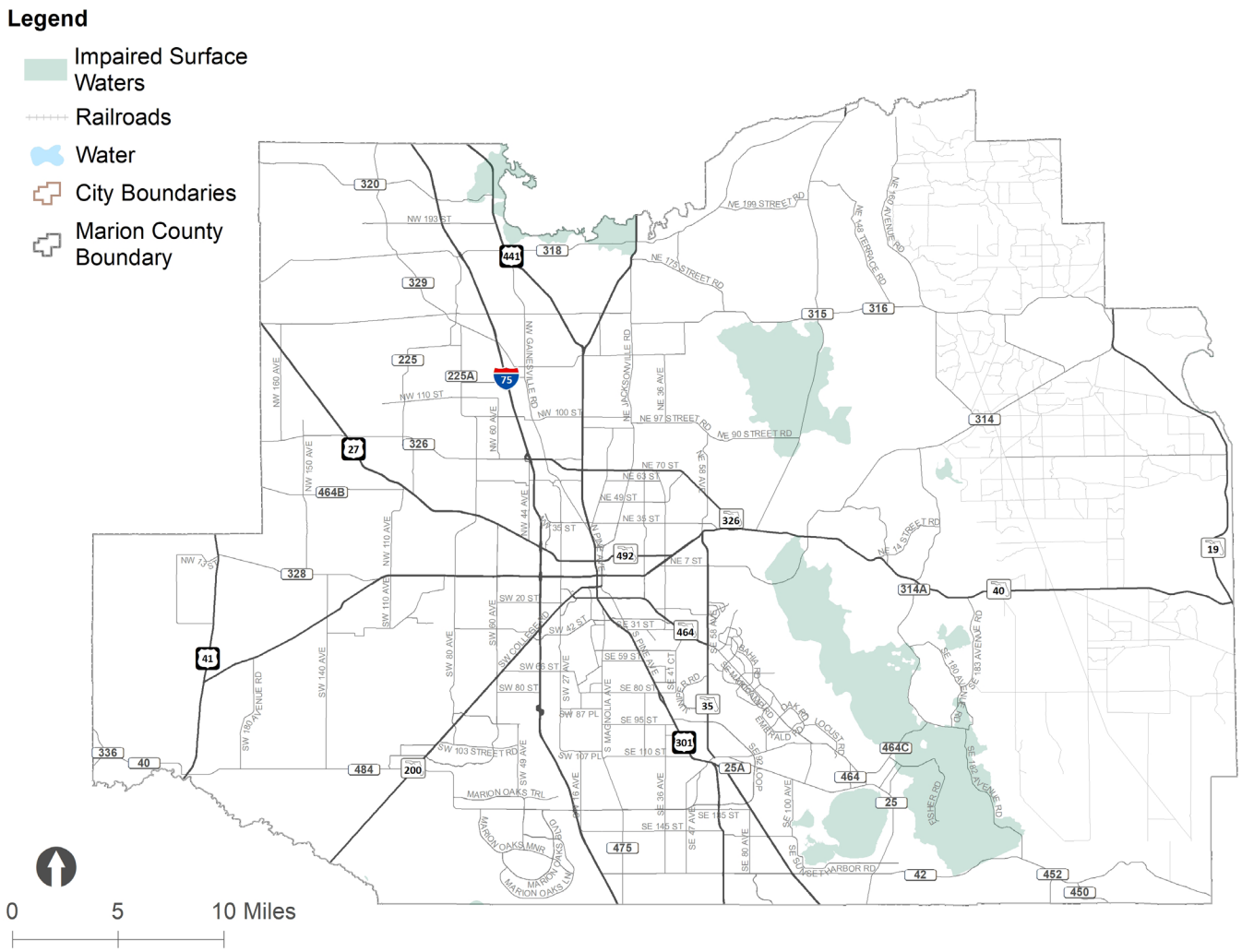


Impaired Surface Waters

The FDEP identifies impaired surface waters using water quality and biological data. For waterbodies identified as impaired FDEP establishes Total Maximum Daily Loads (TMDL) as targets to determine levels at which the waterbody will no longer be considered impaired. The FDEP Water Quality Restoration Program uses the data as a performance based program to restore impaired waterbodies. After establishing these targets, Basin Management Action Plans (BMAPs) are developed through coordination with local stakeholders to identify and implement actions to meet the established targets. BMAPs include a wide variety of strategies including the permitting of wastewater facilities, agricultural best management practices, conservation programs, and financial assistance with the goal of reducing pollutants to the TMDL. After the BMAP is set, measurements against the TMDL are taken every five years to assess progress.

Restoration plans for impaired waters should be considered when identifying mitigation needs and strategies. Additional stormwater or mitigation requirements may be needed if impaired waters are expected to be affected by development. **FIGURE 4.3** depicts the impaired waters.

FIGURE 4.3: IMPAIRED SURFACE WATERS



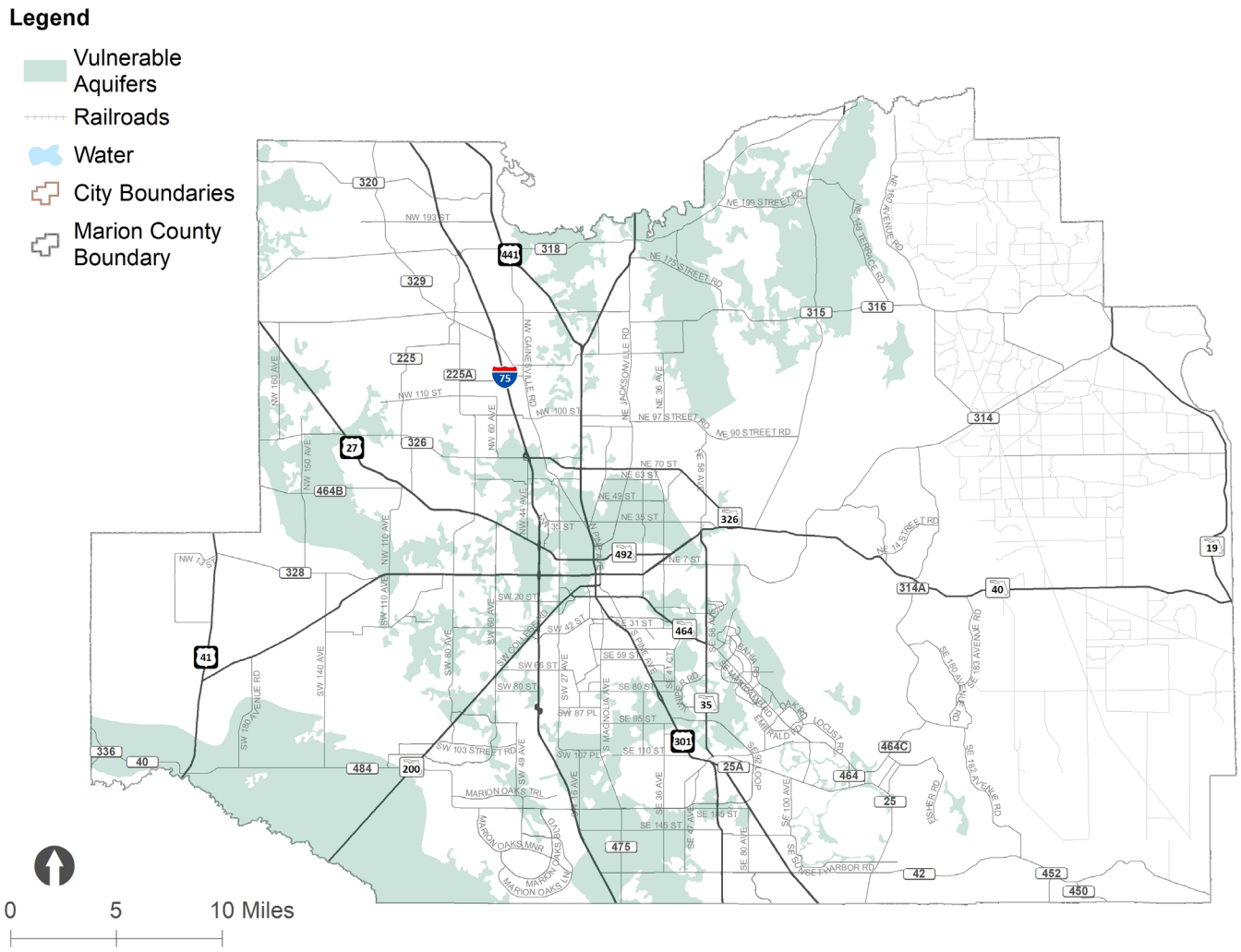
Vulnerable Aquifers

Most of the freshwater supply in Florida comes from aquifers. The many springs in Marion County are reminders of the natural and economic importance and value of the aquifer. Depending on the area and aquifer characteristics, the aquifer is more susceptible to contamination in different parts of Marion County. The DRASTIC model created by USEPA and National Water Well Association assesses aquifer vulnerability by generating a numerical ranking for different characteristics that influence the flow of groundwater. These characteristics are: Depth to water, net Recharge, Aquifer media, Soil media, Topography, Impact of vadose zone, and hydraulic Conductivity of aquifer. Each characteristic is assigned a score between one and ten and a weighting factor between one and five is applied to each characteristic. The DRASTIC index is calculated as the sum of each characteristic multiplied by the relevant weighting factor. To estimate vulnerability, the DRASTIC model assumes that contaminants are introduced at the ground surface.

The FDEP has data for the DRASTIC model for each aquifer. The Intermediate Aquifer is not vulnerable in Marion County. The Surficial Aquifer is vulnerable in the eastern portion of Marion County, however compared to the vulnerability of the Floridan Aquifer, the Surficial Aquifer is relatively protected from pollutants.

FIGURE 4.4 depicts the areas that scored more than 200 points, which includes the top 20% most vulnerable areas in Marion County, using the DRASTIC analysis of the Floridan Aquifer. Analysis of projects in these areas should be especially aware of existing BMAPs and the effect of pollutants on the aquifer.

FIGURE 4.4: VULNERABLE AQUIFERS

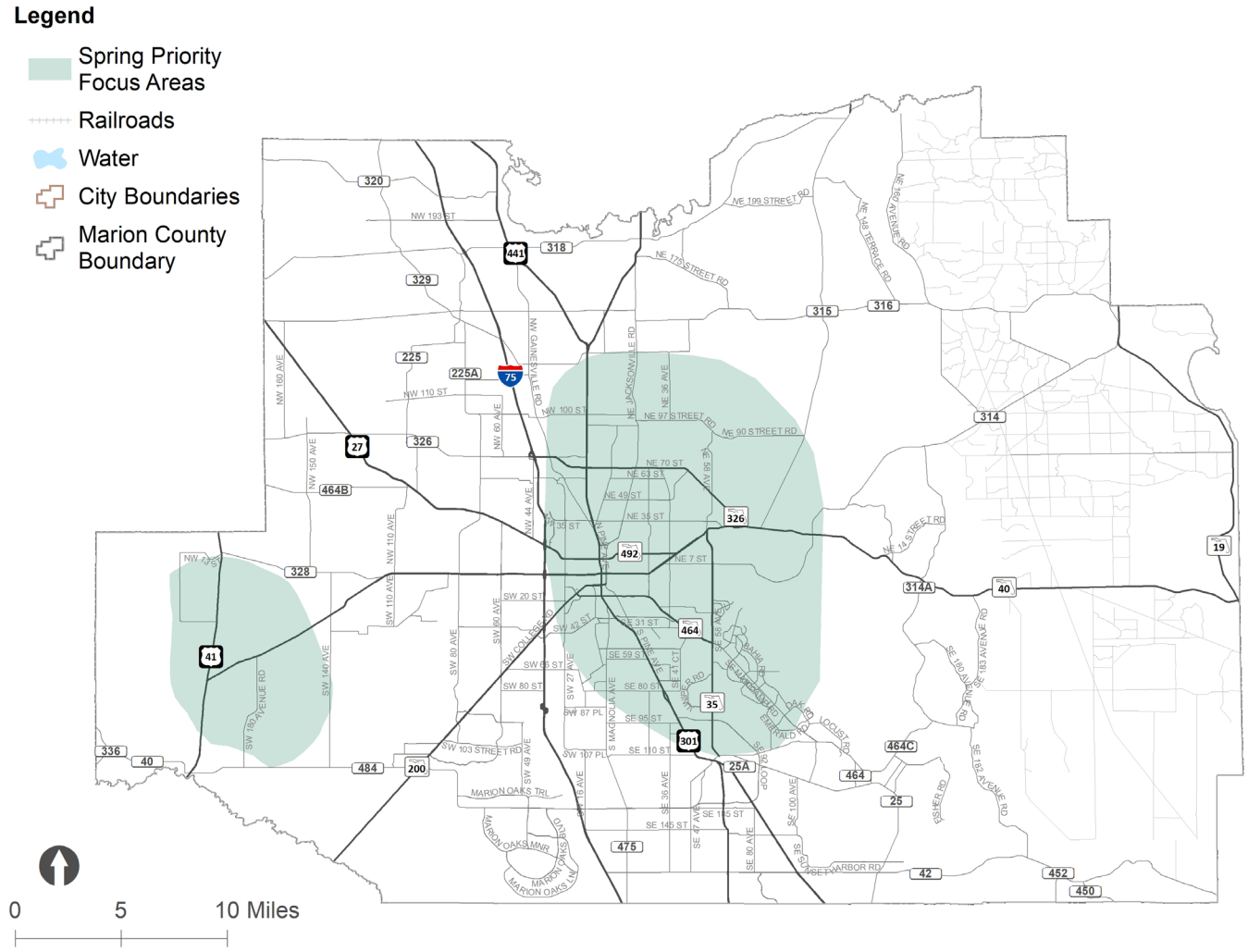


Spring Protection Overlay Zone

Marion County is home to 76 springs, three of which are designated by the Florida Legislature as Outstanding Florida Springs (Rainbow Springs Group, Silver Glen Springs, and Silver Springs) through the Florida Springs and Aquifer Protection Act. The Outstanding Florida Springs are given a special status and protection. Each of the Outstanding Florida Springs were assessed and determined to be impaired. A Basin Management Action Plan (BMAP) was developed for each spring, documenting priority focus areas for their protection.

The Marion County Comprehensive Plan defines the Spring Protection Overlay Zone (SPOZ) and the secondary SPOZ. The Primary SPOZ, as depicted in **FIGURE 4.5** was defined based on the zero to ten year water recharge travel time. The Secondary SPOZ was defined as the rest of Marion County until a further study of the remaining springs in Marion County can be completed. The purpose of the SPOZ is to provide an additional level of water quality protection for springs and groundwater by reducing and managing potential groundwater contamination for water supplies. Development in these areas is required to follow the ESOZ requirements and assess impacts on recharge volume and groundwater quality. The SPOZ have additional requirements pertaining to buffer area, stormwater management, centralized utilities, and on-site treatment disposal systems associated with land development, as defined in the Marion County Comprehensive Plan.

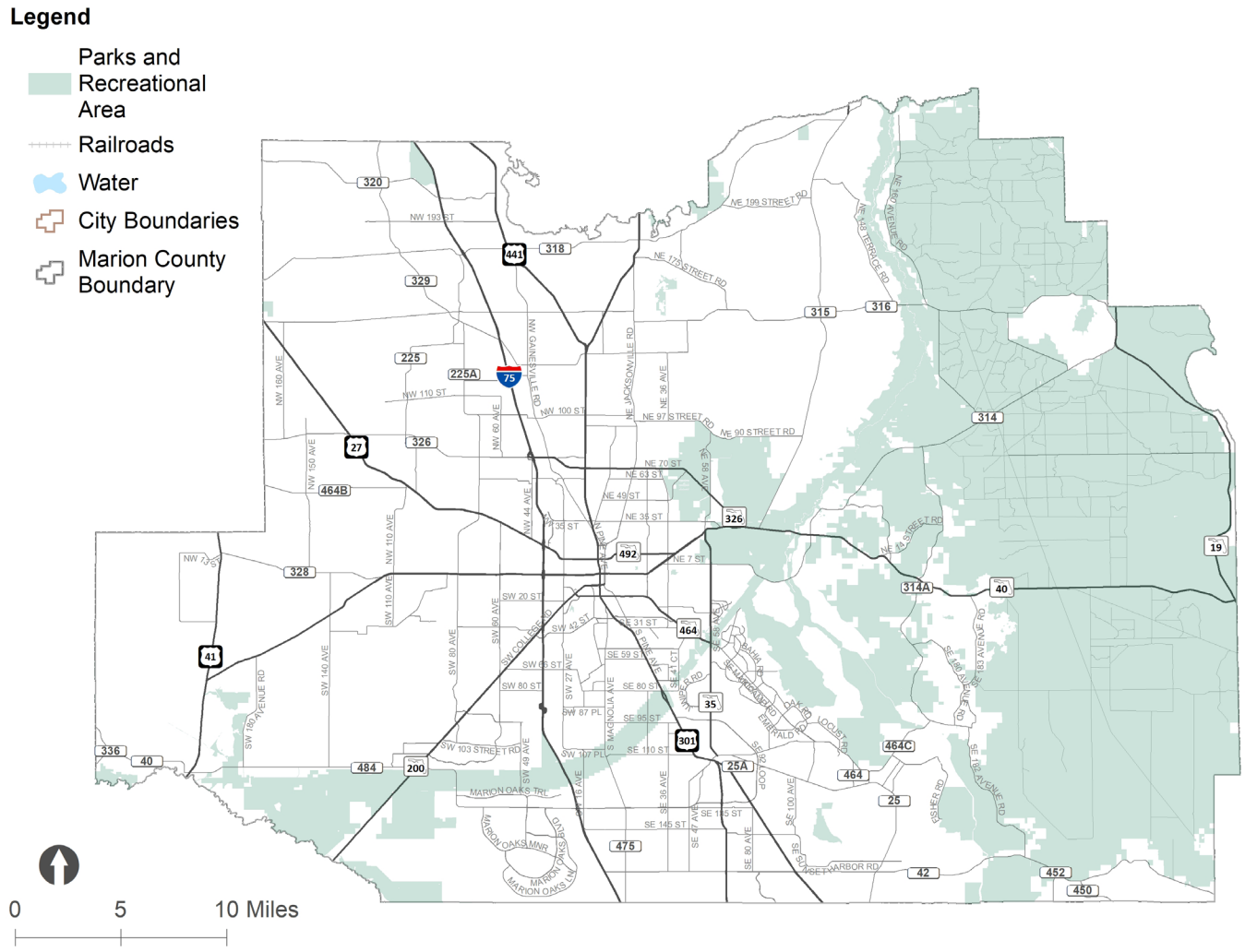
FIGURE 4.5: SPRING PROTECTION OVERLAY ZONES



Parks and Recreational Areas

With more than 500 square miles of parks and recreational areas, Marion County is a destination for hiking, biking, boating, mountain biking, and fishing. The County is home to large swaths of contiguous conserved lands, including the Ocala National Forest and the Marjorie Harris Car Cross Florida Greenway. State parks and conserved areas also represent a significant land mass in the County. These include Silver Springs State Park, Rainbow Springs State Park, Indian Lake State Forest, Ross Prairie State Forest, Silver Springs Forest Conservation Areas, and Water Management District Lands. In addition to these resources, Marion County Parks and Recreation manages more than 40 park sites. The Ocala National Forest, Florida State Parks, and the Cross Florida Greenway are depicted in **FIGURE 4.6**.

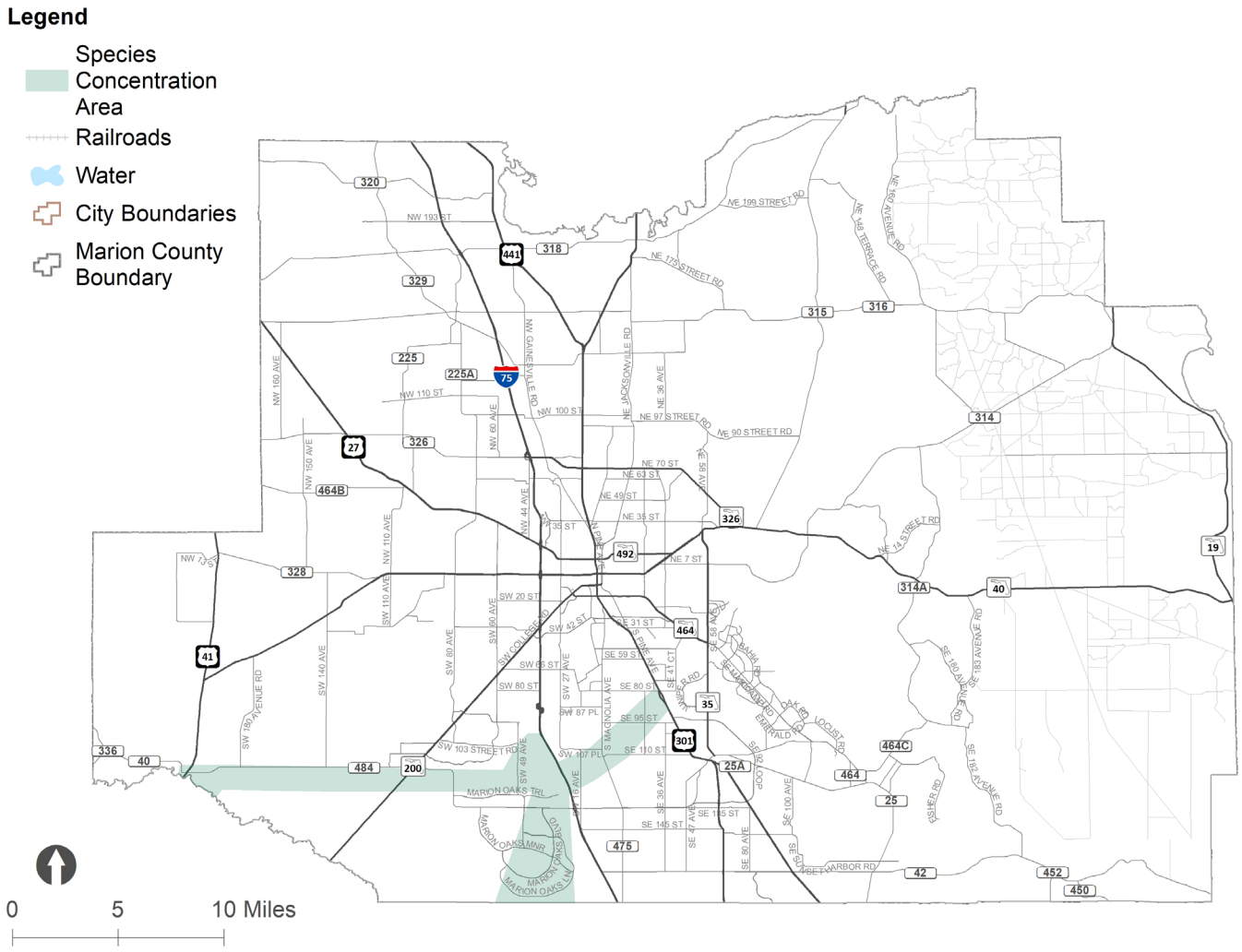
FIGURE 4.6: PARKS AND RECREATIONAL AREAS



Species Concentration Areas

The FDEP has also identified habitat areas with a concentration of listed and Federally endangered plant and wildlife species in Marion County, including a generalized area along the Cross Florida Greenway between Dunnellon and Santos. FDEP identified 13 protected wildlife species, 18 protected plant species, and at least 2 federally endangered species in this area, including the Florida scrub jay and longspurred mint plan, in this area. **FIGURE 4.7** depicts the species concentration areas.

FIGURE 4.7: SPECIES CONCENTRATION AREAS



Avoidance and Mitigation of Environmental Impacts

The LRTP strives to minimize negative impacts of infrastructure improvements on the County's natural resources to protect their intrinsic ecological value as well as their extrinsic value to the County's tourism economy and quality of life. The inventory of environmentally sensitive areas was used to identify opportunities to avoid or mitigate environmental impacts on projects included in the LRTP at a high level. The TPO collaborates with FDOT, FDEP, SWFWMD, and other environmental stakeholders to most effectively address the potential environmental impacts from transportation projects.

A mitigation hierarchy, established through the International Finance Corporation's Performance Standard 6, provides guidance to reduce the environmental impact of land development projects. The hierarchy represents a generalized approach to avoid, minimize, and/or mitigate impacts as follows.

1. **Avoidance**: Especially critical during long range planning, avoidance seeks to minimize the need for mitigation by considering site location or limiting the area of impact for a project.
2. **Minimization**: Minimization seeks to use technology or methods to reduce the intensity of impact.
3. **Restoration**: Restoration should be undertaken if environmental impacts are unavoidable. Restoration can return the site environment to pre-project state or facilitate natural processes to return habitats to their natural state.
4. **Offsets**: As a last resort, project impacts may be offset by actions to restore similar lands in other locations or at the site. Offsets should be considered at the outset of the project to maximize efficacy.

The LRTP project evaluation and prioritization process generally follows the first two steps in the hierarchy through a scoring process that reduces the scores of projects estimated to impact environmentally sensitive areas. Some projects in the LRTP represent, by their very nature, mitigation strategies designed to minimize harmful environmental impacts. Examples include the reconstruction of the land bridge where the Cross Florida Greenway trail intersects I-75 and the construction of a tunnel at the trail's intersection with CR 484. These projects will minimize disruption to wildlife species that depend on the Cross Florida Greenway for safe crossings of roadway facilities.

Efficient Transportation Decision Making (ETDM) Process

In addition to the identification of potential environmental needs or impacts during the LRTP process, major projects and capacity-adding projects follow the Efficient Transportation Decision Making (ETDM) process. This process supports the environmental policy of the FDOT to "protect and preserve the quality of life, and the natural, physical, social and cultural resources of the State, while expeditiously developing safe, cost effective, and efficient transportation systems" (Environmental Policy No.: 000-625-001-m). The ETDM process provides agencies and other stakeholders the opportunity for early input and consideration of the environment in transportation planning.

During the ETDM screening process, resource agencies at both the federal and state levels are requested to review specific projects. Agencies provide information regarding their resource specific conservation plans and future key conservation efforts for each project.

To provide a visual representation of projects and their impacts to the environment, ETDM utilizes a GIS-based Environmental Screening Tool (EST) that enables project reviewers to interactively assess proposed transportation improvements. This tool provides a wealth of environmental and sociocultural data that allows a comprehensive review of the projects and their potential impacts.

FDOT Mitigation Program

In cases where project impacts cannot be avoided or minimized, there are a variety of mitigation programs and strategies available to implement restoration or offsets. The FDOT Mitigation Program, established by Florida Statute, is managed by State Water Management Districts (WMDs) and coordinated with State and Federal resource and regulatory agencies to mitigate the impacts of infrastructure development. The Program requires the development of a Mitigation Plan that includes an inventory of construction projects with a minimum three year horizon, recognizing that consideration of potential environmental impacts early in the project development process allows time to develop appropriate mitigation projects.

The FDOT Mitigation Plan is updated annually to account for changes to projects throughout their lifecycle. Mitigation projects in the program are required to address water resource needs, with a focus on the needs defined by Florida Department of Environmental Protection (FDEP) and the WMDs. Projects may include Surface Water Improvement and Management (SWIM) projects, lands identified for acquisition, restoration or enhancement, and control of invasive and exotic plants. **TABLE 4.1** includes a range of mitigation strategies included in the FDOT Mitigation Plan.

TABLE 4.1: FDOT MITIGATION PLAN

PROJECT TYPE	PROJECT TYPE DESCRIPTION
SWIM (Surface Water Improvement and Management)	The SWIM Program focuses on projects to improve water quality or restore natural systems along highly threatened surface water bodies. Projects may focus on reducing the pollution in stormwater, restore degraded or destroyed natural systems, enhance existing habitats, or promote the preservation of natural habitats.
Lands for acquisition	Acquisition involves procurement of lands and further mitigation actions carried out on the procured lands.
Lands for restoration	Restoration manipulates the site characteristics to return or repair natural or historic functions to a historic or degraded resource. The EPA policy is to generally consider restoration before enhancement or preservation, as the likelihood of success is greater, impacts to other resources is lower, and potential benefits are higher[1]. Examples of restoration actions include the construction of stormwater ponds to filter pollutants and restoration of estuarine habitats.
Lands for enhancement	Enhancement manipulates the characteristics of a resource to improve the function of the resource. Examples of enhancement actions include prescribed burns and exotic species control.
Species control	Excessive populations of invasive plants impact navigation, recreation, flood control, reduced dissolved oxygen levels, and damage fish and wildlife habitat. Removal of invasive vegetation and installation of native plants are example of species control mitigation actions.

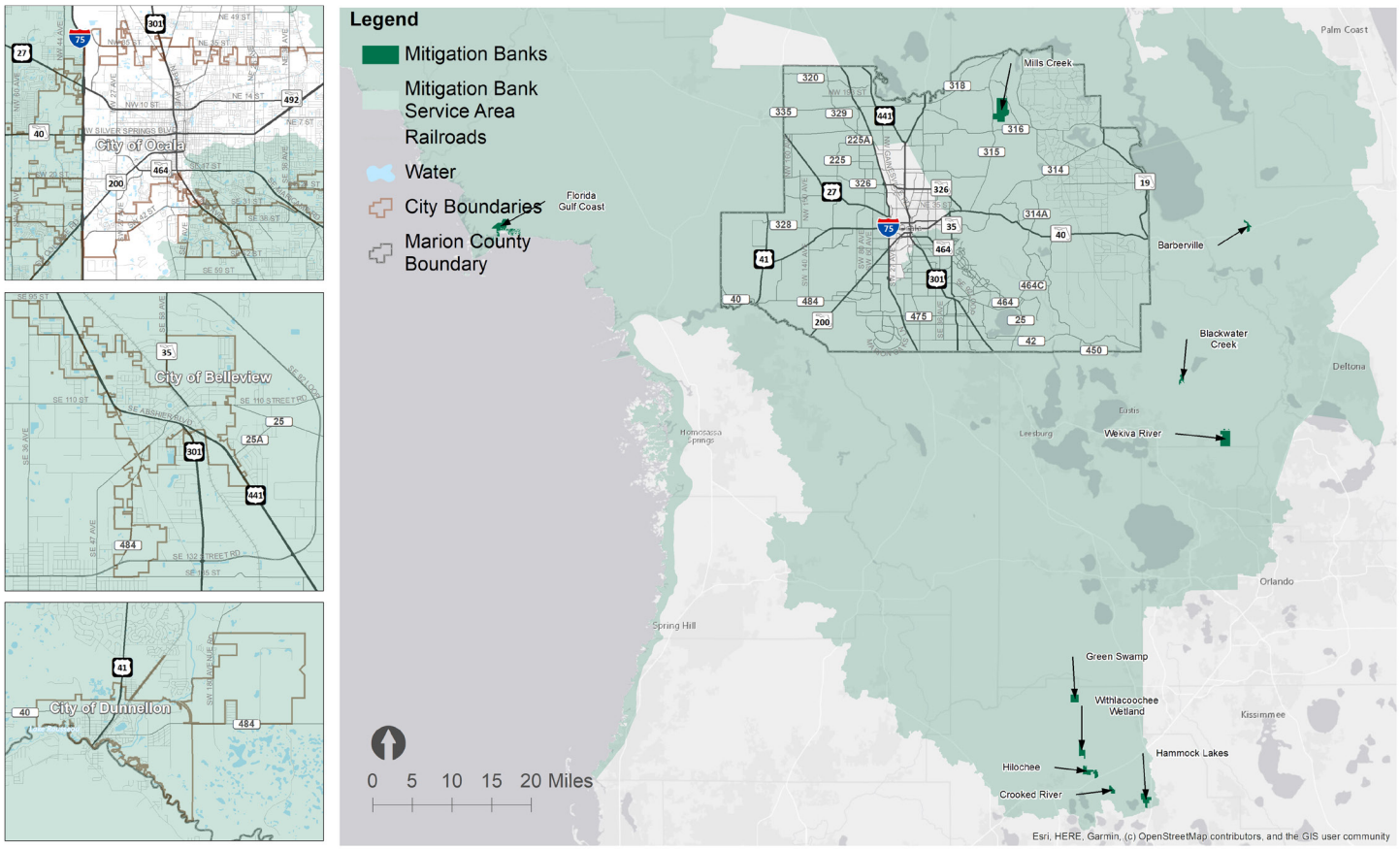
1 Wetland and Stream Mitigation: A Handbook for Land Trusts, EPA: https://www.epa.gov/sites/production/files/2015-08/documents/wetlands_and_stream_mitigation_-_a_handbook_for_land_trusts_0.pdf

Mitigation Banks

Wetland mitigation banks represent a common example of mitigation. Wetland mitigation standards require mitigation projects to be carried out in the same watershed as the projected impacts. Similarly, if a habitat is impacted a habitat with a similar value and function must be created, enhanced, restored, or preserved.

There are ten mitigation banks with service areas overlapping Marion County, as shown in **FIGURE 4.8**, with only a small portion of Marion County not within the service area of any mitigation banks. The purchase of mitigation bank credits must be considered when the purchase will offset the impact of the project, provide equal benefit as other mitigation options, and provide the most cost-effective mitigation option.

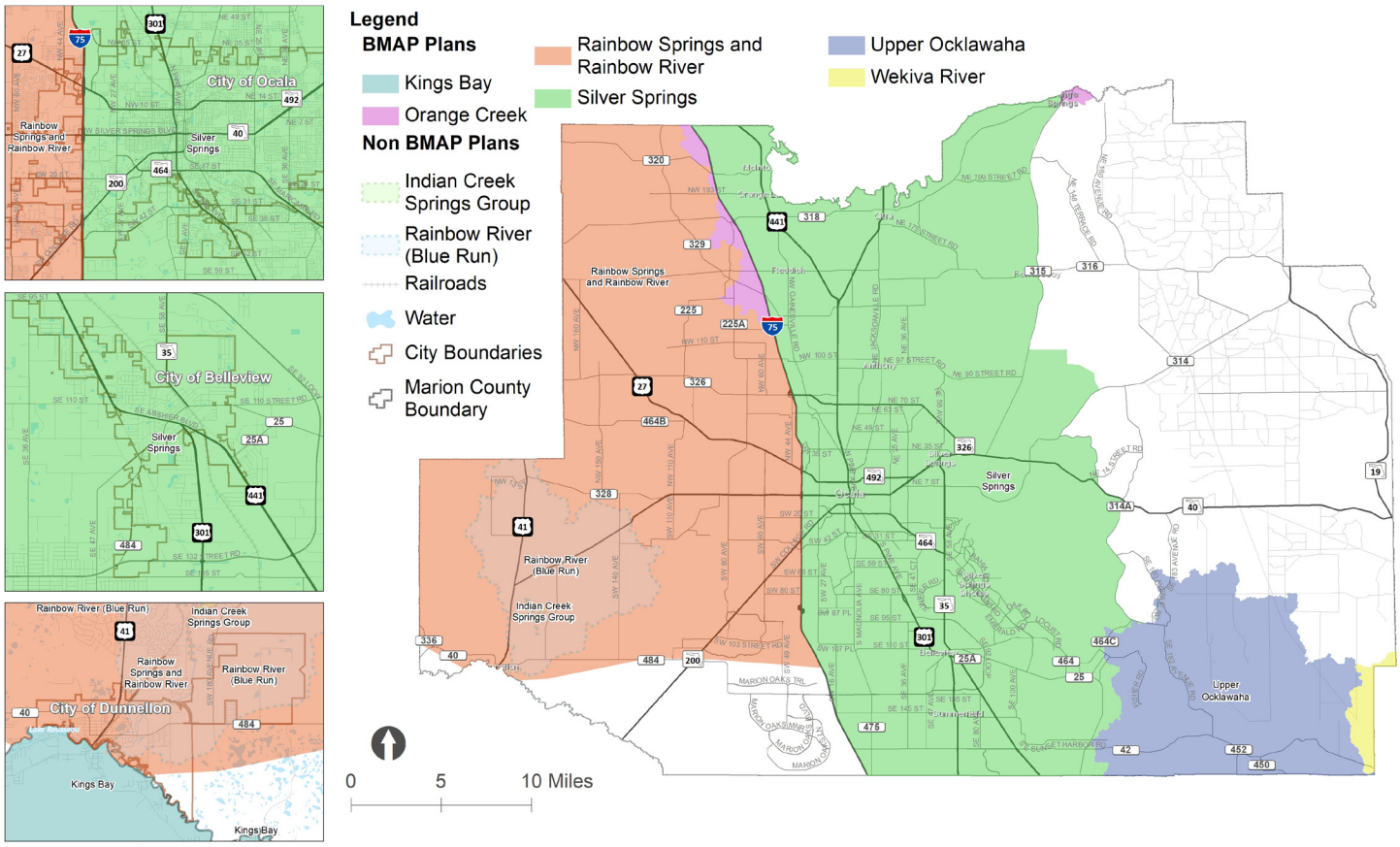
FIGURE 4.8: MITIGATION BANKS



Basin Management Action Plans (BMAPs)

Basin Management Action Plans (BMAPs) represent another multi-disciplinary approach and coordination framework to set goals and actions to reduce pollutant loading on impaired waterbodies. FDEP has completed six BMAPs that overlap Marion County as summarized in the following section. The BMAPs that have been completed in Marion County are depicted in **FIGURE 4.9**.

FIGURE 4.9: BMAP AND NON BMAP RESTORATION PLANS



Silver Springs: The Silver Springs Basin Management Area covers the center of Marion County, overlapping with the cities of Belleview, Ocala, and McIntosh. The Silver Springs and Rainbow Springs BMAPs were developed in conjunction due to overlapping watersheds from changing climatic conditions from year to year. The BMAP was developed due to the impairment of Silver Springs and the Upper Silver River. Silver Springs and the Upper Silver River were considered to be impaired due to an imbalance of flora and fauna, demonstrated by excessive algal growth, which was correlated to elevated levels of nitrates in the ground water. The adopted TMDL requires a 79% reduction in nitrate concentration in the impaired waterbodies.

The BMAP is a commitment from stakeholders to restore water quality to Silver Springs and the Upper Silver River. Ground-water driven systems typically experience a lag time to see a response from management actions. Approximately 80% of the nitrogen released into the Upper Floridan aquifer (source of Silver Springs) is from onsite sewage treatment and disposal systems and agricultural commodities. More than 140 specific projects are identified in the BMAP, which are divided into the following categories:

- Stormwater Structural Best Management Practices (BMPs),
- Drainage Well Abatement,
- Agricultural BMPs,
- Regulations, Ordinances, and Guidelines,
- Special Studies and Planning Efforts,
- Education and Outreach Efforts,
- Basic Stormwater Management Program Implementation,
- Conservation Land Acquisition,
- On-site sewage treatment and disposal systems conversion,
- Wastewater System Upgrade and Improved Management and Infrastructure Management, Maintenance, and Repair.

Projects identified in the Silver Springs BMAP are expected to reduce surface loading of Nitrogen by about 6%, most of the reduction is from a reduction in nitrogen loading from wastewater treatment and agricultural commodities.

Rainbow Springs: The Rainbow Springs Basin Management Area covers most of the western portion of Marion County, overlapping with the cities of Dunnellon and Ocala. The Silver Springs and Rainbow Springs BMAPs were developed in conjunction due to overlapping watersheds from changing climatic conditions from year to year. The BMAP was developed due to the impairment of Rainbow Springs Group and Rainbow River. Rainbow Springs Group and Rainbow River were considered to be impaired due to an imbalance of flora and fauna, demonstrated by excessive algal growth which was correlated to elevated levels of nitrates in the ground water. The adopted TMDL requires an 82% reduction in nitrate concentration in the impaired waterbodies.

The BMAP is a commitment from stakeholders to restore water quality to Silver Springs and the Upper Silver River. More than 97 specific projects are identified in the BMAP, which are divided into the following categories:

- Stormwater Structural Best Management Practices (BMPs),
- Agricultural BMPs,
- Regulations, Ordinances, and Guidelines,
- Special Studies and Planning Efforts,
- Education and Outreach Efforts,
- Basic Stormwater Management Program Implementation,
- Conservation Land Acquisition,
- On-site sewage treatment and disposal systems conversion,
- Wastewater System Upgrade and Improved Management and Infrastructure Management, Maintenance, and Repair.

The identified projects are expected to reduce surface loading of Nitrogen by about 8%, most of the reduction is from a reduction in nitrogen loading from agricultural commodities.

Upper Ocklawaha: The Upper Ocklawaha River Basin covers the southeastern corner of Marion County, overlapping with the cities of Dunnellon and Ocala. The BMAP was developed due to the impairment of the Upper Ocklawaha River Basin. The Upper Ocklawaha River Basin was considered to be impaired primarily due to total phosphorus discharges to surface waters, some waterbodies in the Upper Ocklawaha River Basin are also impaired considering total nitrogen and biological oxygen demand (BOD).

The BMAP presents a phased plan for reducing nutrient loadings in the basin. As working group members focus on reducing larger pollution sources, they will also evaluate other pollution sources that may require additional study. The specific projects identified in the BMAP are divided into the following categories:

- Structural Best Management Practices (BMPs),
- Agricultural BMPs,
- Restoration and Water Quality Improvement Projects,
- Regulations, Ordinances, and Guidelines,
- Special Studies and Planning Efforts,
- Education and Outreach Efforts,
- Basic Stormwater Management Program Implementation,

The identified projects are expected to reduce loading of total phosphorus by about 70%. Considering the conservative estimates in the BMAP, additional efforts will be needed to reach the targeted TMDL.

Orange Creek: The Orange Creek Basin Management Area includes a small portion in the northwest corner of Marion County, overlapping with the cities of Reddick and McIntosh. The BMAP was developed due to the impairment of several streams and lakes in the Orange Creek Basin Management Area. These waterbodies were considered to be impaired due to high levels of fecal coliform bacteria, excessive nitrogen, and excessive phosphorus, with different waterbodies experiencing different impairments.

The BMAP is a commitment from stakeholders to address water quality issues and implement a stormwater management program. More than 100 specific projects are identified in the BMAP, which are divided into the following categories:

- Stormwater Structural Best Management Practices (BMPs),
- Agricultural BMPs,
- Restoration and Water Quality Improvement Projects
- Regulations, Ordinances, and Guidelines,
- Special Studies and Planning Efforts,
- Education and Outreach Efforts,
- Basic Stormwater Management Program Implementation,
- Conservation Land Acquisition / BMP Land Acquisition,
- Wastewater System Upgrade and Improved Management and Infrastructure Management, Maintenance, and Repair.

Kings Bay: The Kings Bay Basin is located directly southwest of Marion County in Citrus County. The FDEP determined that 24 of the 30 Outstanding Florida Springs (OFS) in the Basin were impaired for nitrate. TMDL targets for nitrate, orthophosphate, total nitrogen, and total phosphorus were set for waterbodies in the basin. On-site sewage treatment and disposal systems account for 42% of the estimated nitrogen loading to the groundwater. Various strategies are identified in the BMAP to achieve these targets. Strategies are primarily oriented on reducing loading due to OSTDS.

Wekiva River: The Wekiwa Spring and Rock Springs Basin Management Area is located directly southeast of Marion County in Seminole County. These waterbodies were identified as impaired due to a biological imbalance caused by excessive concentrations of nitrate in the water. TMDL targets for nitrate and phosphorus were set for waterbodies in the basin. On-site sewage treatment and disposal systems account for 29% of the estimated nitrogen loading to the groundwater and urban turfgrass fertilizer accounts for 26% of the nitrogen loading to the groundwater. Various strategies are identified in the BMAP to achieve these targets include reducing loading due to on site sewage and wastewater treatment facilities.

One of the most important aspects of environmental mitigation activities is the coordination and communication across the various stakeholders and regulatory agencies. This is particularly important as it relates to local designations and overlay zones and state programs and plans that are intended to regulate land development activities. Coordination across agencies at the different geographical levels is needed to ensure that these important resources and regulations are considered early during the initial project development phases of infrastructure improvements.

CHAPTER 5. TRANSPORTATION NEEDS ASSESSMENT

Identifying Transportation Needs

The development of the 2045 Needs Plan reflects a continuation of the strategies identified in the 2040 LRTP and other modal plans developed by the TPO, FDOT, and local planning partners in recent years. However, the improvements in those plans were re-evaluated using more recent data and in light of new federal and state planning requirements, including the use of a performance-based planning evaluation framework described in this chapter. Indeed, the entire federal-aid eligible network was evaluated using the framework, which highlighted a number of corridors for which other plans had not identified needed improvements. Those corridors were added to the Needs Plan as corridor studies.

The plan synthesis process described in **Appendix G** includes the review of over 15 local, regional, and state plans for Marion County. In addition to the broad land use strategies and growth scenarios envisioned by these plans, more than 300 transportation improvements were identified in the plans. These include sidewalk, bicycle lane, trail, transit service, roadway operational, and roadway capacity improvements, all of which were considered for inclusion in the Cost Feasible Plan. A technical evaluation methodology was developed to assess projects and the network as a whole using transportation and land use variables as described in this chapter.

Transportation and Land Use Evaluation

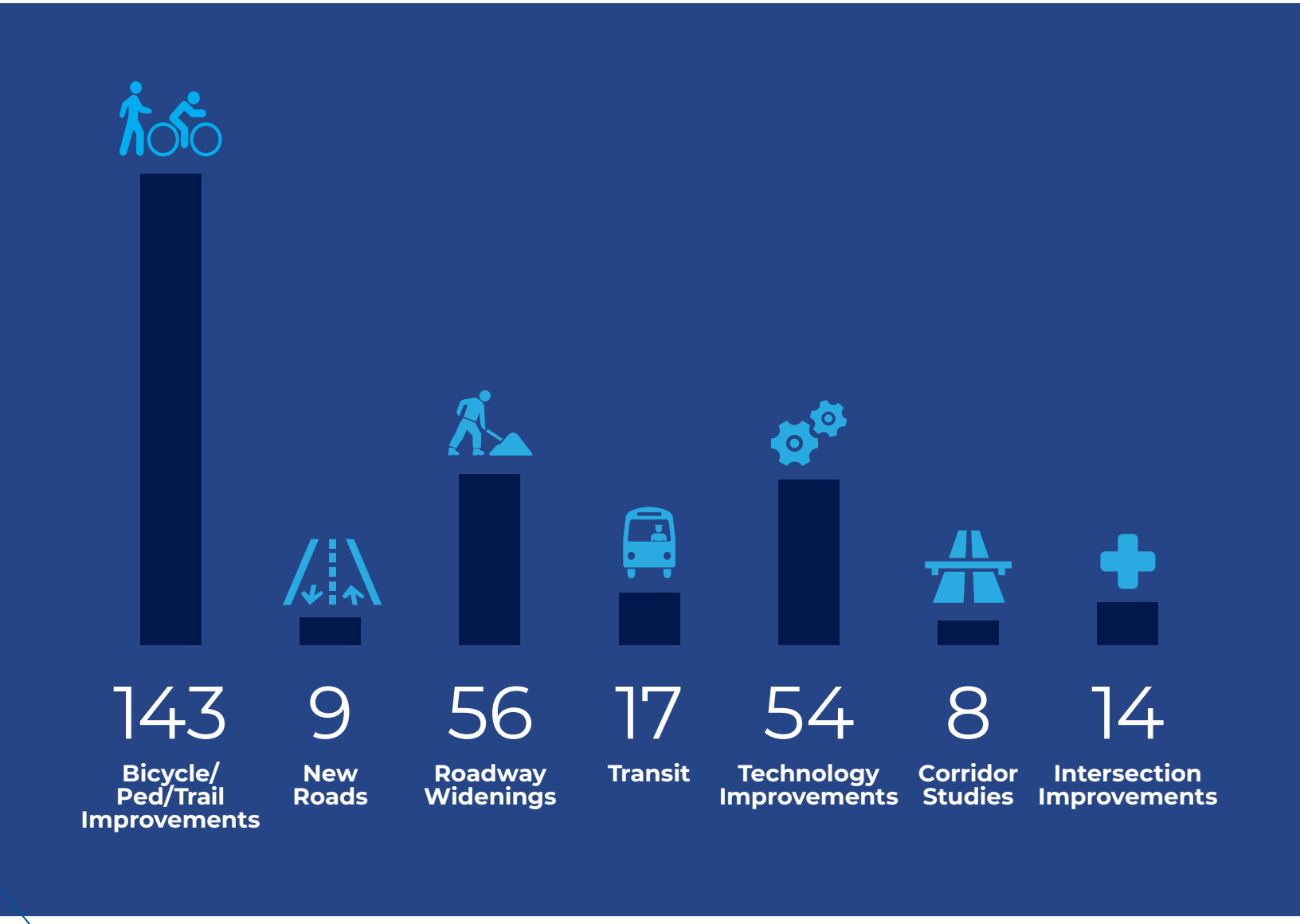
The assessment of the transportation network and its performance is a technical process that has historically relied on travel demand forecasting models. While the Central Florida Regional Planning Model (CFRPM) was utilized to forecast demand on the transportation network, it was not the only tool in the needs assessment methodology conducted for this plan update. Consistent with the federal requirement to practice performance-based planning, the 2045 LRTP needs assessment relies on a land use and network performance data analysis methodology to assess the transportation network and evaluate identified improvements against the plan goals and objectives for consideration in the Cost Feasible Plan. An important link was made, using this methodology, between the systemwide performance analysis of the Marion County transportation infrastructure and the evaluation and prioritization of needed improvements to the infrastructure.

The assessment framework was created to provide comprehensive analysis, rather than depend solely on traffic congestion metrics based on the travel demand model. While not all the plan goals represent infrastructure performance and are thus not measurable in this way, the Travel Choices, Safety, Security, Economic Development, System Preservation, and Natural Resources goals were all used to perform the system and project assessments.

All major roadways in Marion County were analyzed using the needs assessment methodology. The network was segmented based on major intersections. The segment analysis completed for the network was also used to evaluate identified improvement needs summarized in **FIGURE 5.1**. Network segments identified through the needs assessment evaluation but not addressed by projects included in other plans, were added to the Needs Plan as corridor study projects. A total of 301 projects are included in the Needs Plan.

Each segment of the roadway network was scored using a GIS-based process and the resulting scores were scaled and normalized to enable consistent scoring across all goals. The scaled aggregate goal level scores were then weighted by the respective goal weights and added together for aggregate segment scores. Each topic area and the associated metrics are described and results presented in the following sections of this chapter and the detailed tabulation of results by roadway segment is provided in **Appendix K**.

FIGURE 5.1: NEEDS PLAN PROJECTS



Goal Specific Scoring and Data Sources

A total of 13 metrics were established relative to the plan goals and objectives. Some are quantitative in nature, while others are qualitative, but applied in a way that quantifies the results on a numeric scale. The evaluation framework used a variety of data sources and processes outlined in **TABLE 5.1**. The description of the metrics and countywide assessment is summarized in the following section in terms of the prevailing themes encapsulated in the LRTP vision and goals and objectives. A matrix in **Appendix K** illustrates the network segment scores derived from the performance-based analysis, providing an array of metric scores for each project in the Needs Plan and for all roadway segments in the federal aid eligible network in Marion County. This evaluation framework represents a comprehensive data driven needs assessment framework that considers the full range of elements encapsulated in the LRTP Goals and Objectives.

TABLE 5.1: NEEDS ASSESSMENT EVALUATION FRAMEWORK

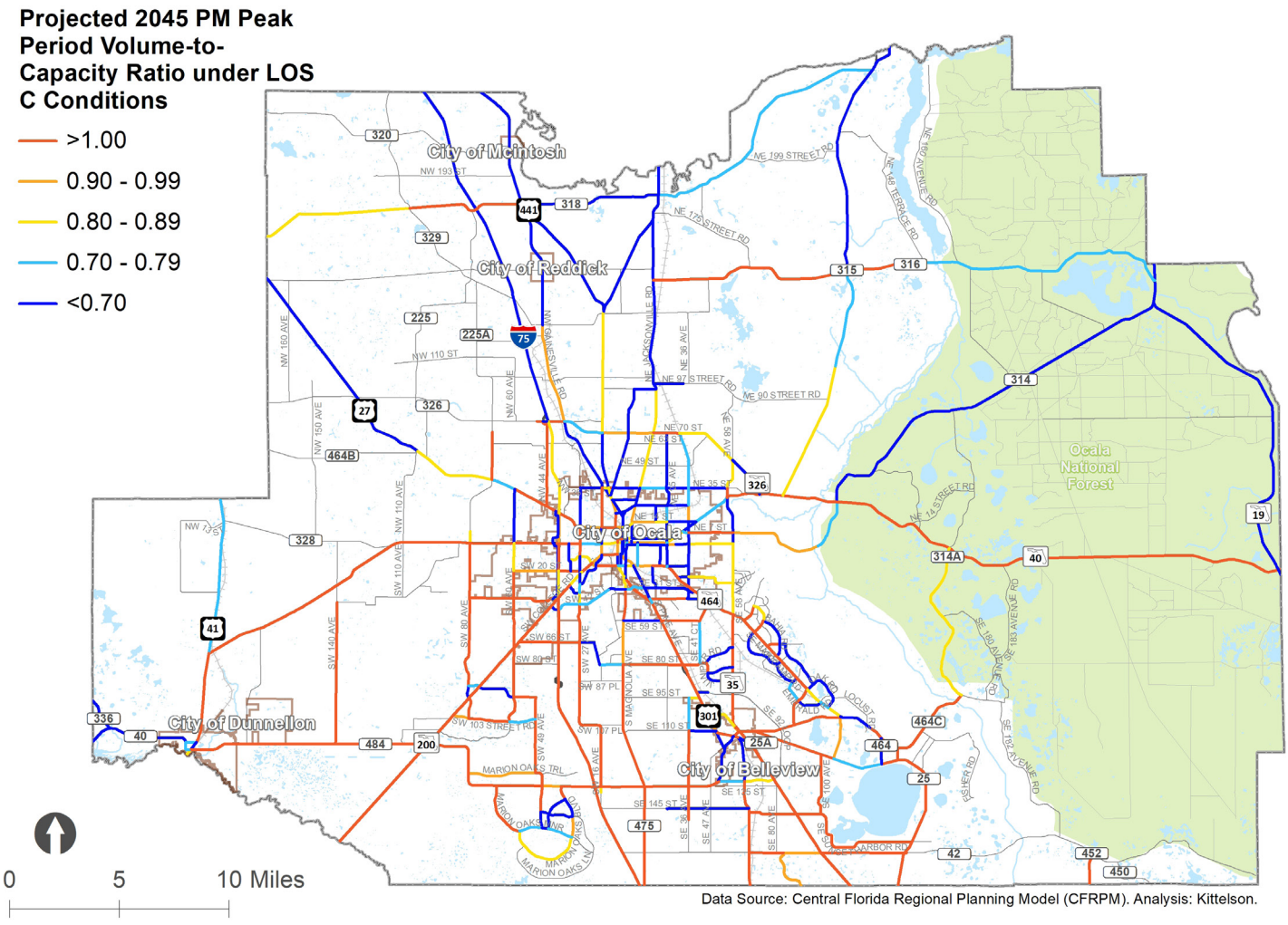
NEED CATEGORY	DATA ELEMENTS	DATA SOURCES
Traffic Congestion	2045 traffic projections and roadway capacity	FDOT Central Florida Regional Planning Model
	2045 population and employment forecasts	FDOT socioeconomic data projections
NEED CATEGORY	**DATA ELEMENTS**	**DATA SOURCES**
Economic Development and Freight	High employment growth areas based on 2045 employment projections	FDOT socioeconomic data projections
	Freight activity centers	FDOT Freight Mobility and Trade Plan
	2019 heavy truck traffic counts	Marion County Future Land Use plans
	2045 traffic congestion forecasts	FDOT 2019 truck traffic counts
Safety	High crash segments, weighted by crash severity	Signal 4 Analytics
	Marion County school locations	Marion County data resources
Security	Evacuation Routes	Marion County Comprehensive Plan
	2045 traffic projections	FDOT Central Florida Regional Planning Model
Environment and Natural Resources	Wetlands	National Wetlands Inventory
	Impaired waters	Florida Department of Environmental Protection
	Environmentally Sensitive Overlay Zone	USEPA DRASTIC model
	Springs Protection Overlay Zone	Marion County Comprehensive Plan
	Aquifer vulnerability areas	Marion County data resources
	Parks and recreation areas	
	Listed/protected plant and wildlife species concentration	
Resiliency	100 year flood zone	Federal Emergency Management Administration (FEMA)
Multimodal Accessibility and Equity	Sidewalk and bicycle lane gaps	American Community Survey
	Transit orientation index based on population density and EJ population	Inventory of sidewalks and bicycle lanes on federal aid eligible roadways
	EJ population identified by greater than county average minority and poverty population by Census Tract	
Tourism	Tourist attraction areas, including Recreational Vehicle Parks, Campgrounds, Museums, Boat Ramps, Equestrian Centers, and Trailheads	Ocala/Marion County Visitors and Convention Bureau
System Preservation/ Optimization and Reliability	Operational improvement needs	2018 ITS Strategic Plan
	System Operation and Maintenance needs	Marion County Comptroller

Traffic Congestion

One of the central metrics traditionally used in LRTP needs assessments uses forecasts of traffic congestion to identify mobility challenges on the roadway network. LRTP Goal 2, to *Provide Efficient Transportation that Promotes Economic Development*, includes an objective to address mobility needs and reduce the roadway congestion impacts of economic growth. The metric developed to represent this objective is based on the traffic forecasts simulated using the CFRPM, a regional travel demand model that includes the 9-county region in Central Florida and is maintained by the FDOT District 5. The LRTP project team coordinated closely with the FDOT modeling team to estimate 2045 traffic by starting with a simulation of future year demand, represented by 2045 population and employment forecasts, relative to the current existing roadway network. This type of analysis is designed to exaggerate traffic congestion in the future year, with the built-in assumption that long range transportation improvements will not be made to the network. While this is not a realistic scenario, it can be used to determine where improvements are needed, based on the future year demand on the system. The quantitative metric obtained from the model results is a ratio of traffic volume to roadway capacity (V/C), which measures the relationship between the number of cars on the roadways and the capacity of the respective roadway to accommodate the associated levels of traffic. The V/C metric for Marion County is displayed in **FIGURE 5.2**.

The most congested corridors in the County include SR 40, SR 200, CR 484, I-75 south of Ocala, US 441, and SR 464. The primary issues related to future year congestion are clearly concentrated in the southern half of the County, with significant challenges on the north/south corridors connecting Dunnellon, Belleview, Marion Oaks, and other areas in south Marion County to Ocala.

FIGURE 5.2: TRAFFIC CONGESTION



Data Source: Central Florida Regional Planning Model (CFRPM). Analysis: Kittelson.

Economic Development

Employment Growth

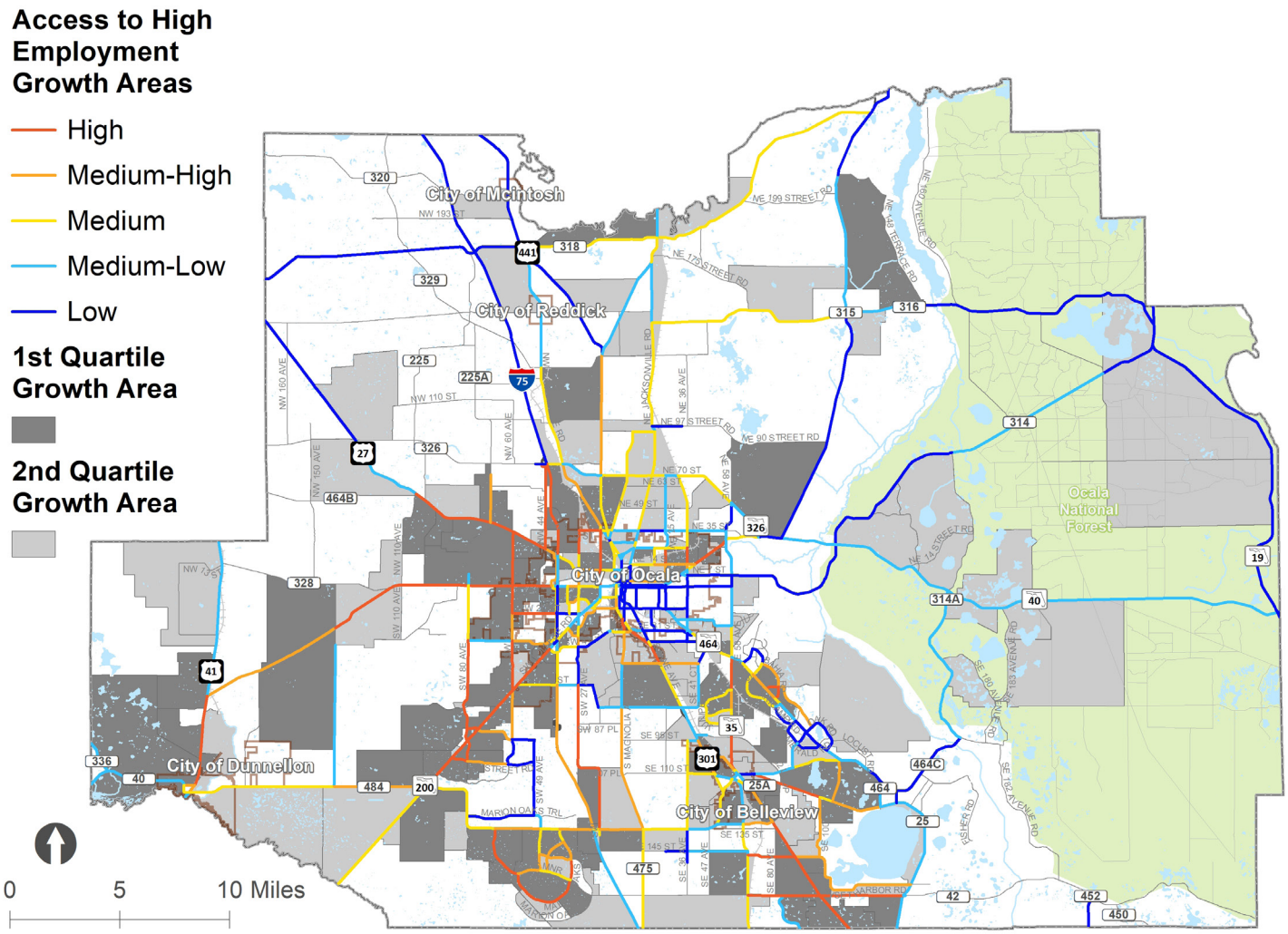
One of the principal purposes of the LRTP is to plan for the expected growth in demand on the transportation system, which is primarily a function of population and employment growth. With average population/employment growth of 45% expected in Marion County between 2015 and 2045, the County's infrastructure must be prepared both to accommodate the growth, to ensure the system can handle the added demand, but also to promote growth to further the economic development goals of the County. Goal 2, to *Provide Efficient Transportation that Promotes Economic Development*, includes an objective to improve access to high employment growth areas. Network segments were scored on a quartile scale based on the level of employment growth adjacent to them, as illustrated in **FIGURE 5.3**, with the roadways in the highest growth areas scoring highest.

The SR 40 West, SR 200, SR 464 and CR 484 corridors are the corridors with the highest employment growth, highlighting those primary corridors for needed infrastructure improvements as it relates to economic development.

Freight

The logistics and goods movement industry is one that has delivered multiple distribution center developments in Marion County, and with them thousands of new jobs. The economic development potential of this burgeoning industry in the County is significant, calling for the strong consideration of the associated infrastructure needs. LRTP Goal 2 includes an objective to foster greater economic competitiveness through enhanced, efficient movement of freight.

FIGURE 5.3: EMPLOYMENT GROWTH



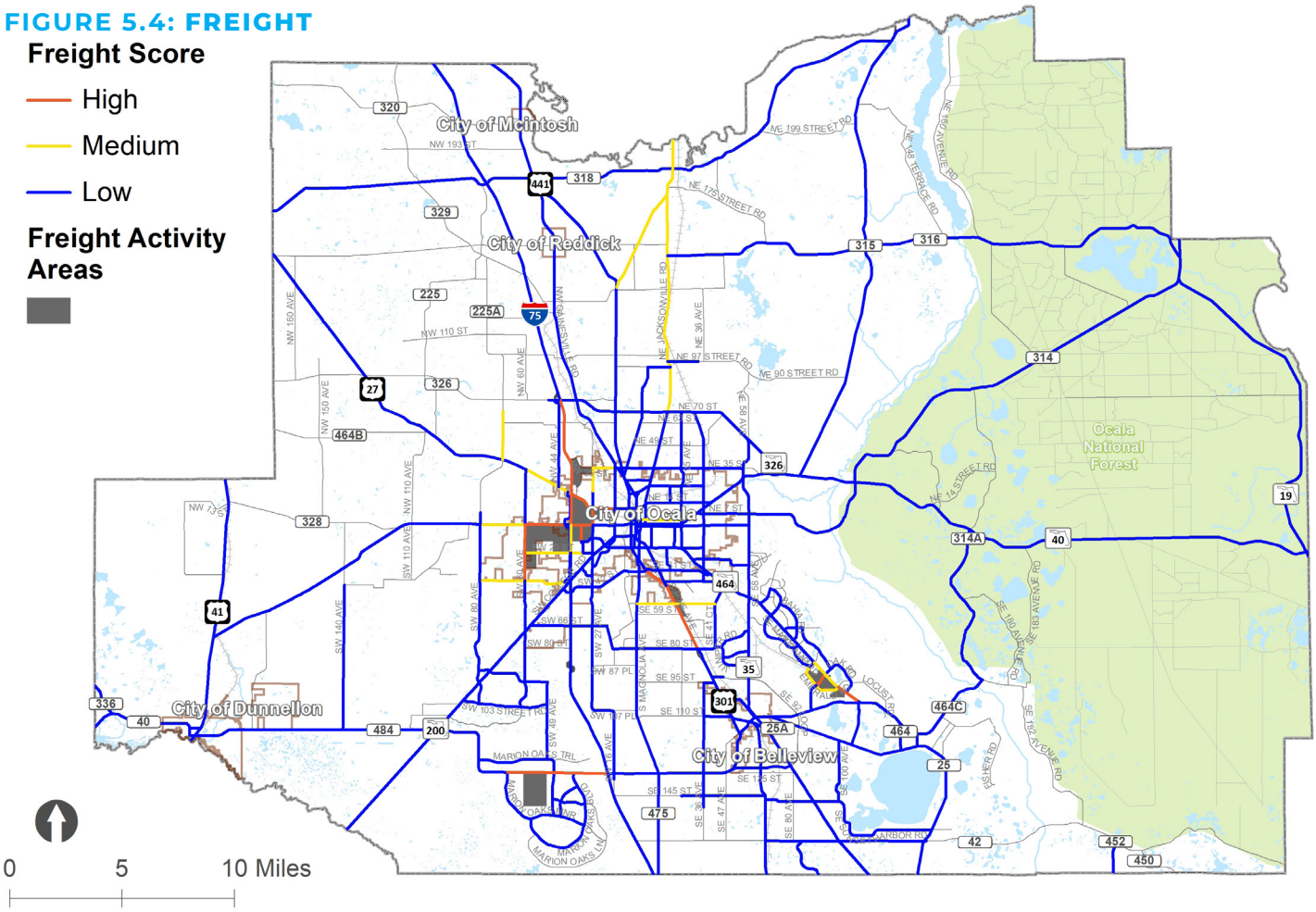
In addition to the distribution center developments that have been completed and are either under construction or planned for construction, recent trends associated with the COVID-19 pandemic have resulted in dramatic growth in delivery services, with a more than doubling of e-commerce in the first half of 2020, relative to the previous year, underlining the increasingly important consideration of the infrastructure needs to facilitate goods movement. The freight related aspects of the network needs assessment is based on a review of the Florida Freight Mobility and Trade Plan; identification of existing and planned Freight Activity Centers (FAC) throughout the County; and the assessment of heavy truck traffic count data for the Marion County roadway network. Activity centers incorporated into this analysis include:

- Industrial area southeast of the I-75/US 27 interchange (existing)
- Industrial area southwest of the I-75/SR 40 interchange (existing)
- Industrial area west of Maricamp Rd at Emerald Rd (existing)
- Ocala/Marion County Commerce Park (under development)
- Florida Crossroads Commerce Park (planned)

There are two separate elements to the freight metric that were developed based on the FAC and truck count data. The first assigns scores to network segments based on the level of access they provide to FACs. Segments that provide direct access to FACs were assigned the highest score. Segments providing indirect access, identified as segments from which one turn is required to access a FAC, were assigned a lower score, while segments requiring two or more turns to access a FAC were not scored. The truck count metric is based on the proportion of trucks, relative to total segment traffic and this metric was applied only to segments with truck versus personal automobile classified traffic counts. Segments with greater than 25% truck traffic were distinguished from segments with less than 25% trucks. A composite of the FAC and truck count metrics was used to assess the network, with those segments providing access to FACs and with significant observed truck traffic scoring highest. The resulting scoring is portrayed in **FIGURE 5.4**.

Primary corridors identifed as the most important freight corridors in Marion County include SR 40 East and the surrounding area; CR 484 in the Marion Oaks area; US 441 south of Ocala; and SR 464 in the Silver Springs Shores area.

FIGURE 5.4: FREIGHT

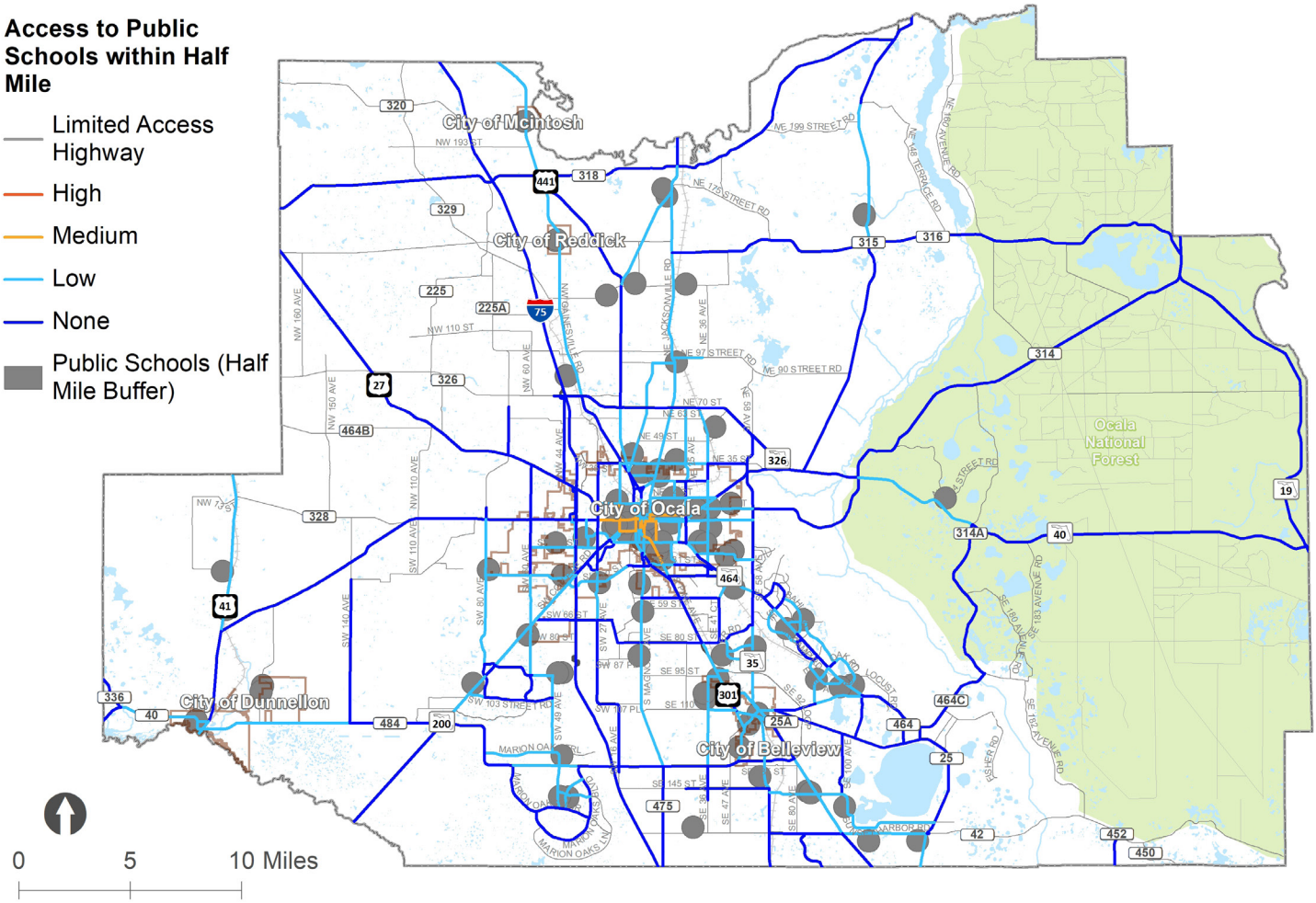


Safety

A primary goal of the TPO is the improvement of safety for pedestrians, bicyclists, and motorists in Marion County. The goals, objectives and strategies outlined in the Florida Strategic Highway Safety Plan (SHSP) and the Highway Safety Improvement Program are reflected in the LRTP Goals and Objectives as outlined in **Appendix E**.

The TPO has established safety goals and set specific targets to reduce fatalities and serious injuries, consistent with federal performance monitoring requirements. Goal 3 of the LRTP is to *Focus on Improving the Safety and Security of the Transportation System*. There are two safety objectives under this goal. The first is to improve safe access to and from schools and the second is to reduce fatalities and severe injuries resulting from traffic crashes. Three metrics were used to assess the transportation network for safety include proximity to schools, scored based on the number of schools within a half mile of network segments; crash severity, based on five years of crash history; and number of crashes involving bicyclists and pedestrians. The crash analysis used the University of Florida's Signal Four Analytics data from 2013 to 2017 to inform the following two metrics.

FIGURE 5.5: SAFE ACCESS TO SCHOOLS



- Equivalent Property Damage Only (EPDO) crash frequency score, which weights all crashes by level of severity
- Multimodal crash score, which is based on total number of pedestrian and bicycle crashes over 5 years

The safety scores for segments providing access to schools, by crash severity, and for crashes involving bicyclists and pedestrians, respectively, are displayed in **FIGURE 5.6** through **FIGURE 5.7**.

FIGURE 5.6: SAFETY CRASH SEVERITY

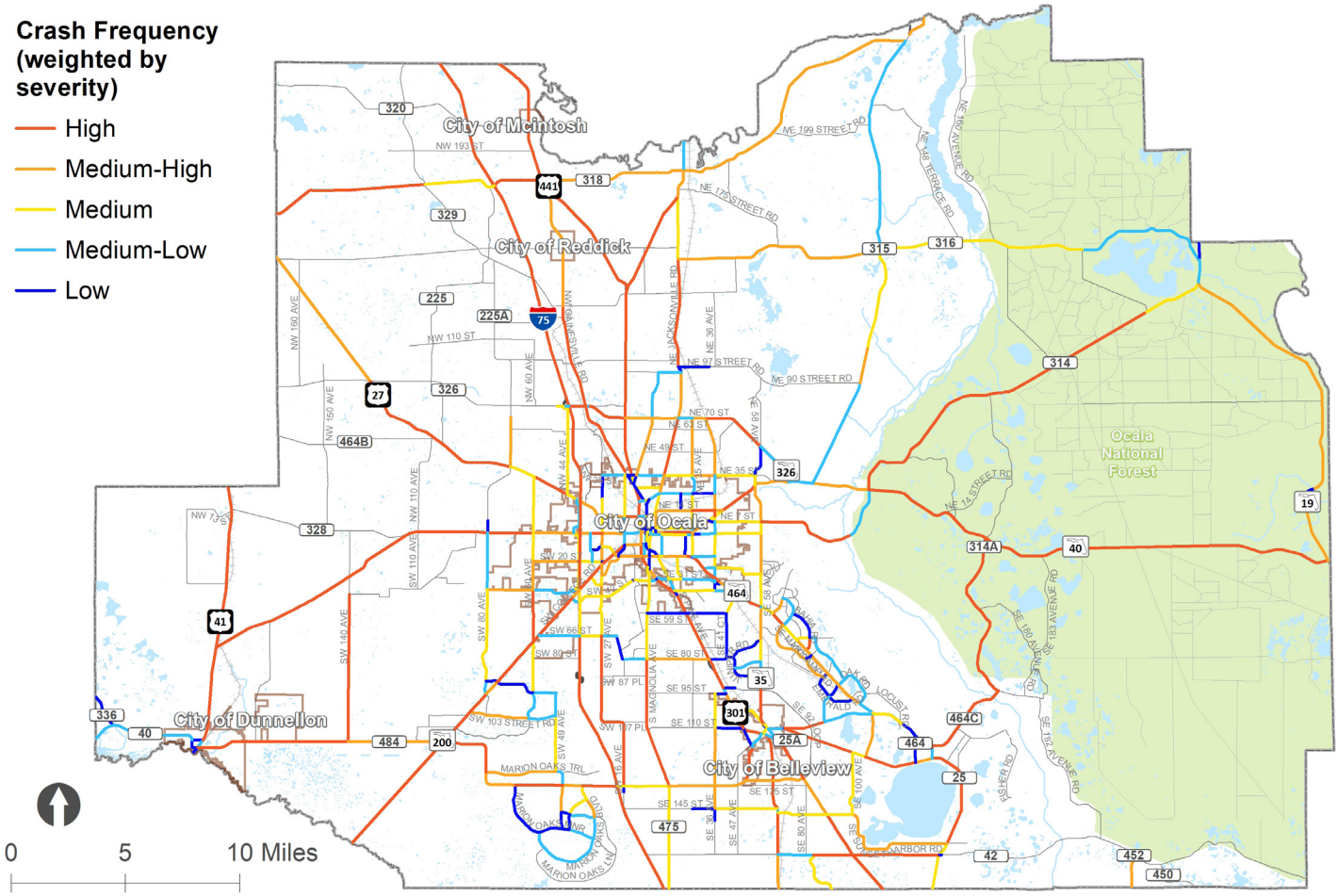
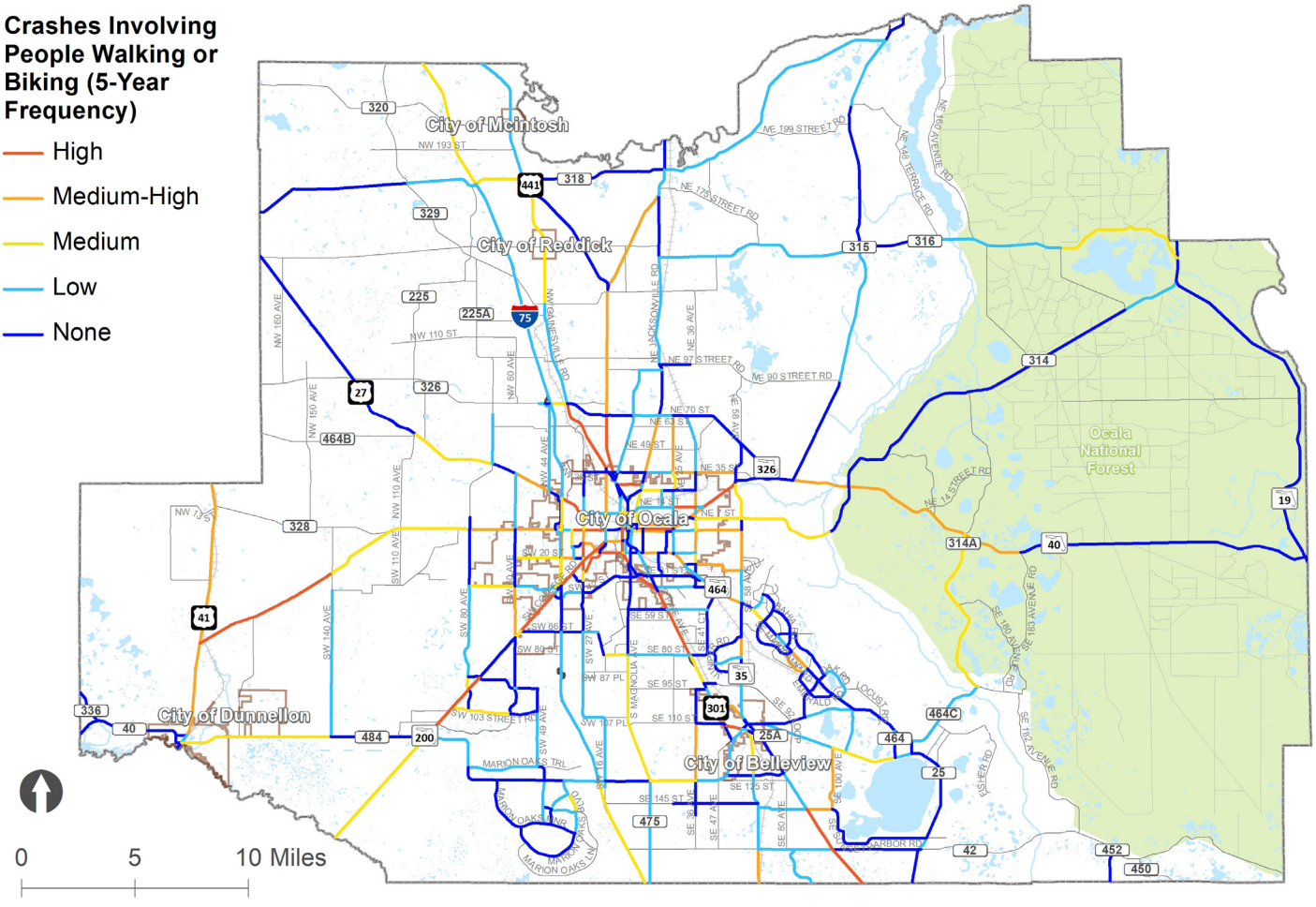


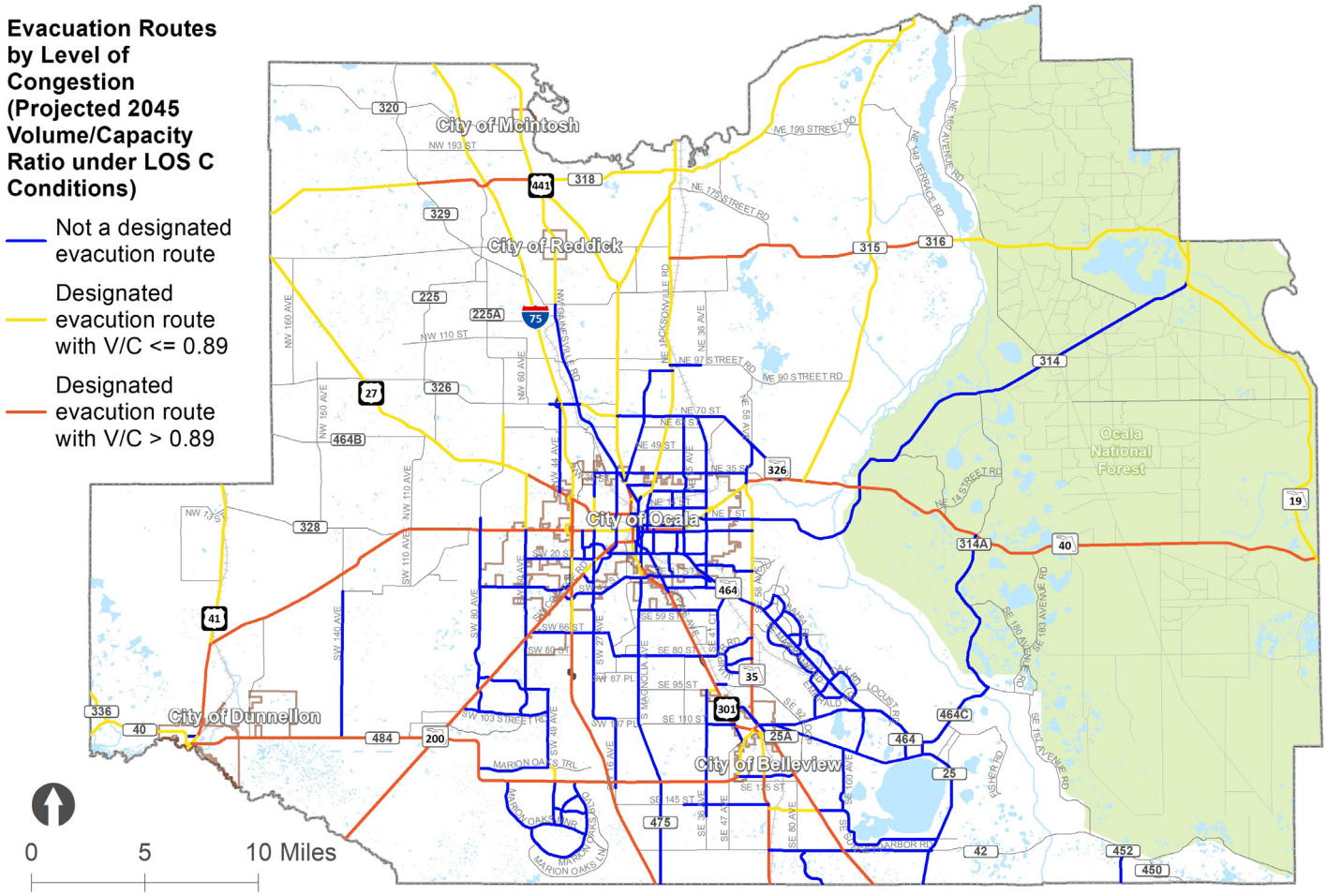
FIGURE 5.7: SAFETY MULTIMODAL CRASHES



Security

Security is defined in an objective under Goal 3 as the transportation system's capacity to facilitate evacuation in the event of a natural disaster. The metric established to assess security using this definition is based on the identified evacuation routes in the Marion County Comprehensive Plan and traffic forecasts on those facilities estimated by the CFRPM. The traffic congestion results used for this purpose represent 2045 peak period network performance. The metric itself is defined as volume to capacity ratio, which measures the relationship between the number of cars on the roadways and the capacity of the respective roadway to accommodate the associated levels of traffic and related to evacuation facilities, as depicted in **FIGURE 5.8**. The results of this analysis highlight similar corridors identified using the traffic congestion metric, effectively weighting those segments due to their increased significance as evacuation corridors in the composite score. Those corridors include SR 40, SR 200, I-75, US 441, and CR 484.

FIGURE 5.8: SECURITY



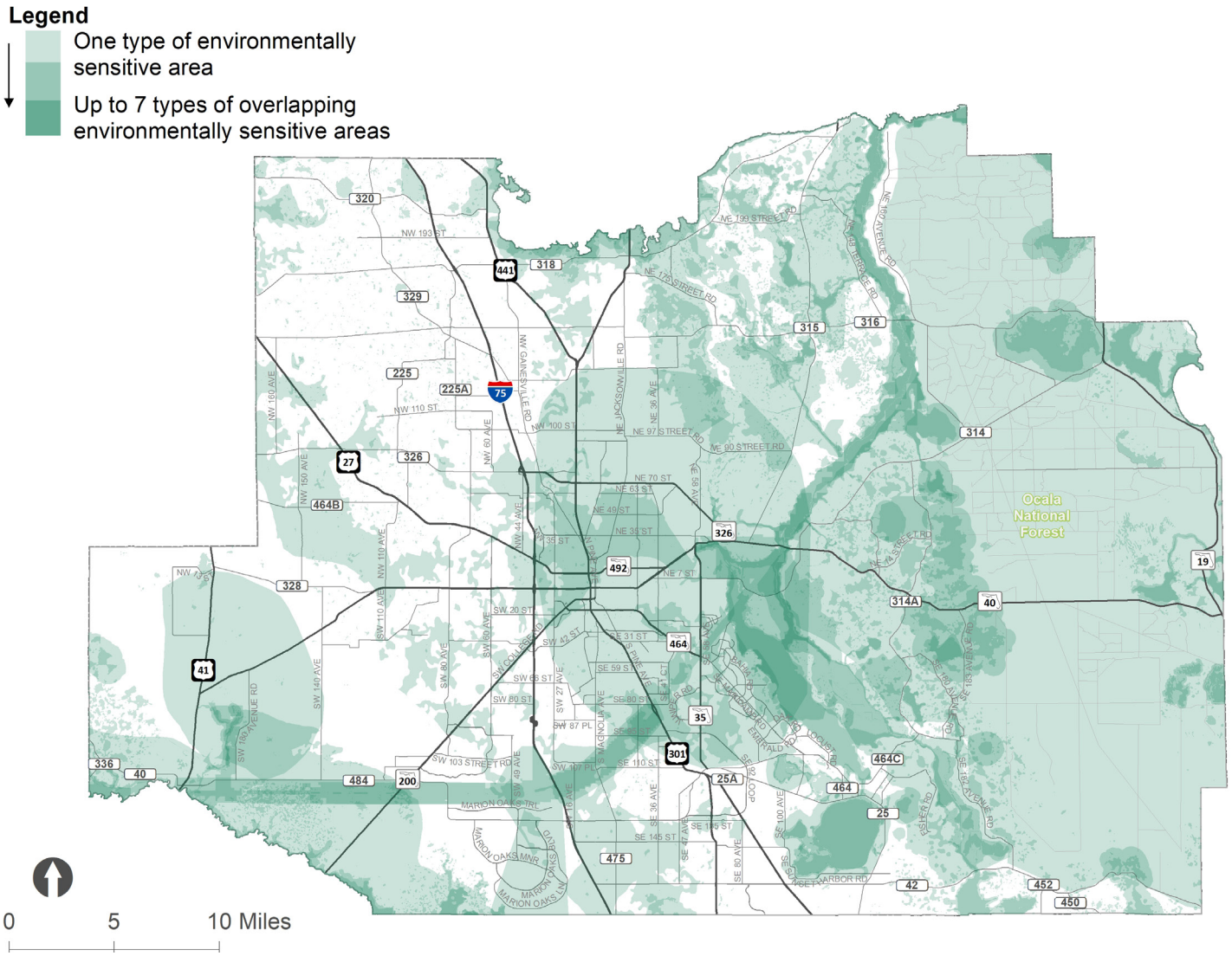
Environment

Environmental protection is represented in LRTP Goal 5, to *Protect Natural Resources and Create Quality Places*. The impact of transportation infrastructure on natural resources, which comprise a significant portion of the County's land area, is an important consideration, both for the sake of preserving the County's natural resources, as well as fostering the tourism economy that depends on them. A composite analysis was conducted to evaluate segments' impacts on natural resources and sensitive environmental areas, based on proximity and adjacency to these areas. The evaluation was scaled based on the combination of number of natural resources impacted and the magnitude of the impacted geographical area. The composite of natural resources, depicted in **FIGURE 5.9**, includes the following elements:

- Impaired Surface Waters – Florida Department of Environmental Protection (FDEP)
- Vulnerable Aquifer areas – FDEP, DRASTIC model
- Environmentally Sensitive Overlay Zones – Marion County Comprehensive Plan
- Parks and Recreational Areas – Marion County, FDEP, US Forest Service
- Listed sensitive species occurrences – FDEP, Florida Natural Areas Inventory
- Springs Protection Overlay Zones – Marion County Comprehensive Plan
- Wetlands – Florida Fish and Wildlife Conservation Commission (FWC), National Wetlands Inventory

The natural resource impact metrics used to evaluate needs improvements were not employed to assess the entire County network, as they are inherently project- rather than system-level measures. A more detailed description and individual maps of natural resources considered in this analysis are included in **Chapter 4**.

FIGURE 5.9: ENVIRONMENTAL COMPOSITE



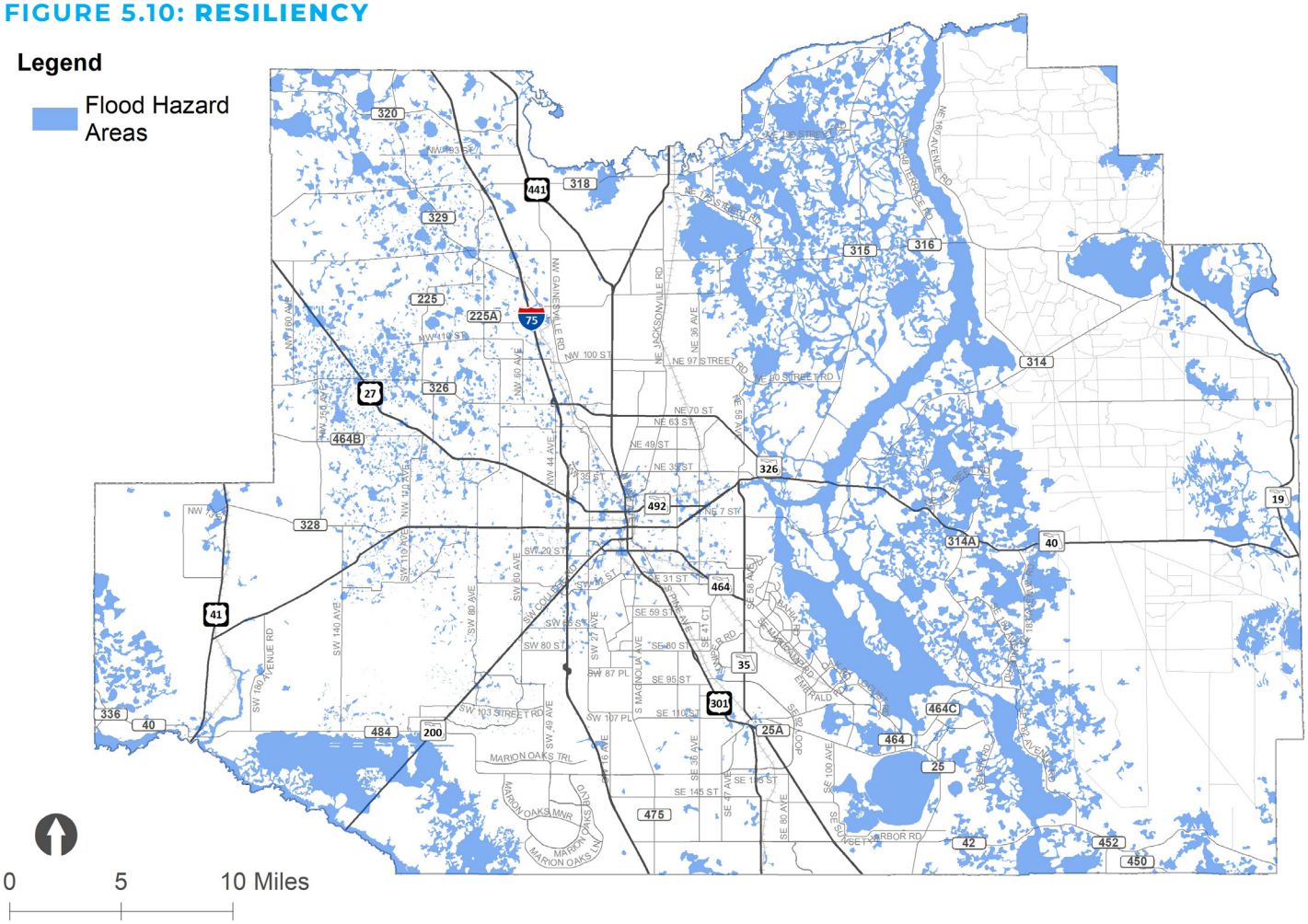
Resiliency

The improvement of the resiliency of the Marion County transportation infrastructure is one of three objectives under Goal 5 of the LRTP. The primary resiliency consideration in Marion County, given its largely low base elevation, is proneness to flooding events. The two broadly defined resiliency strategies that can be employed in a long-range planning context include mitigation and adaptation strategies. Mitigation strategies can include preventative measures to minimize the impact that flooding events have on the transportation infrastructure. Adaptation strategies, on the other hand, include improvements that make the infrastructure less vulnerable to the inevitable impacts of flooding events. These can include a variety of improvement strategies, including enhancing stormwater drainage capacity; creating redundancy in the County's traffic signal and ITS systems by investing in solar energy to power the systems; and increased maintenance to flood prone facilities, minimizing damage caused by flooding events.

Resiliency analysis completed for the 2045 LRTP, based on flood prone areas identified in the Marion County Comprehensive Plan, displayed in **FIGURE 5.10**, reflects a combination of mitigation and adaptation considerations. The adaptation measure rewards operational improvements that can be leveraged to employ resiliency improvements such as warning systems and alternative energy to power signals. The mitigation measure penalizes improvements in flood prone areas that add capacity, which encourage development in those flood prone areas thereby increasing the potential impacts of flooding events on the County infrastructure as a whole.

The resiliency metrics, like the environmental metrics, used to evaluate needs improvements were not employed to assess the entire County network, as they are inherently project- rather than system-level measures.

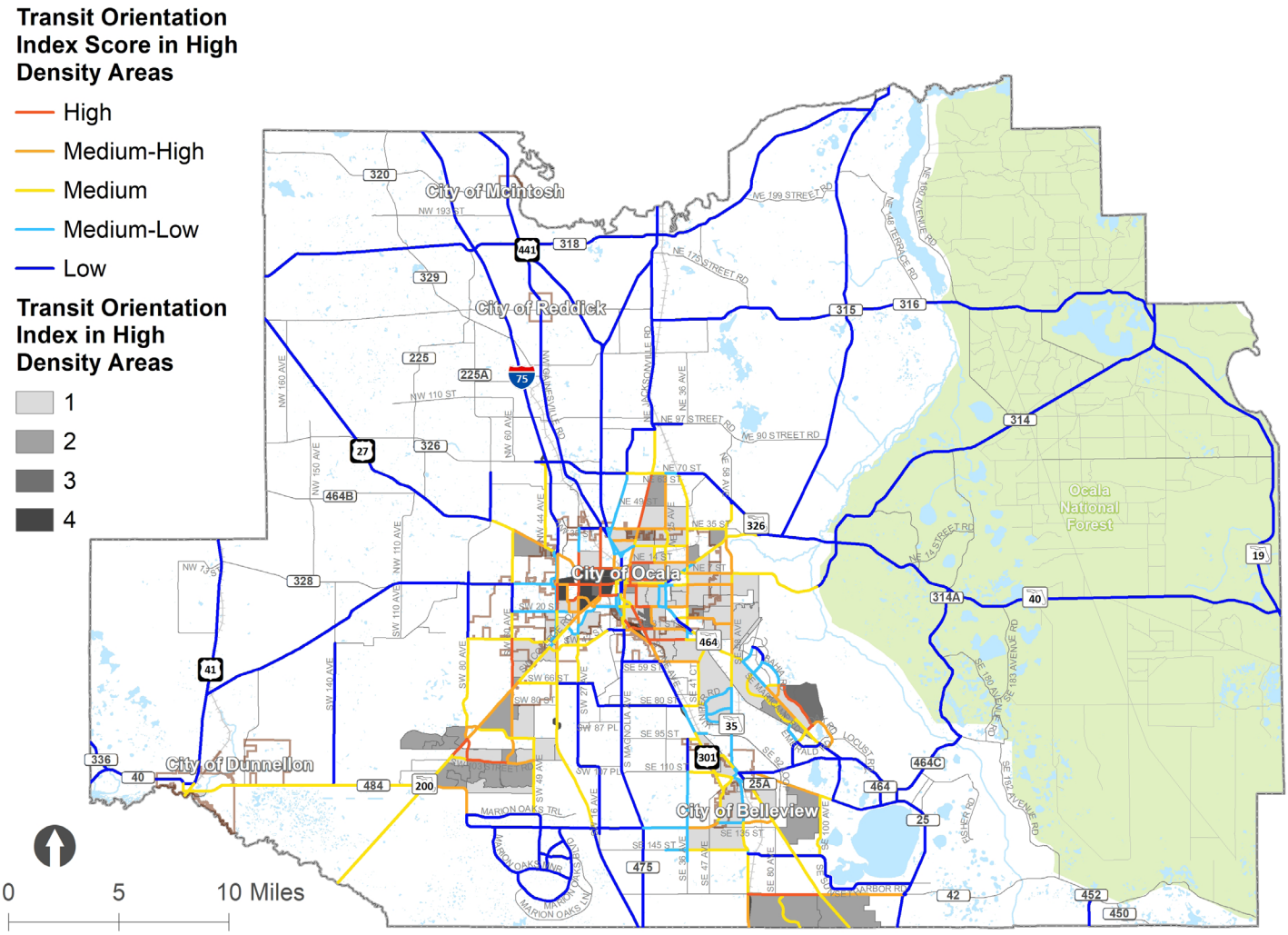
FIGURE 5.10: RESILIENCY



Multimodal Accessibility

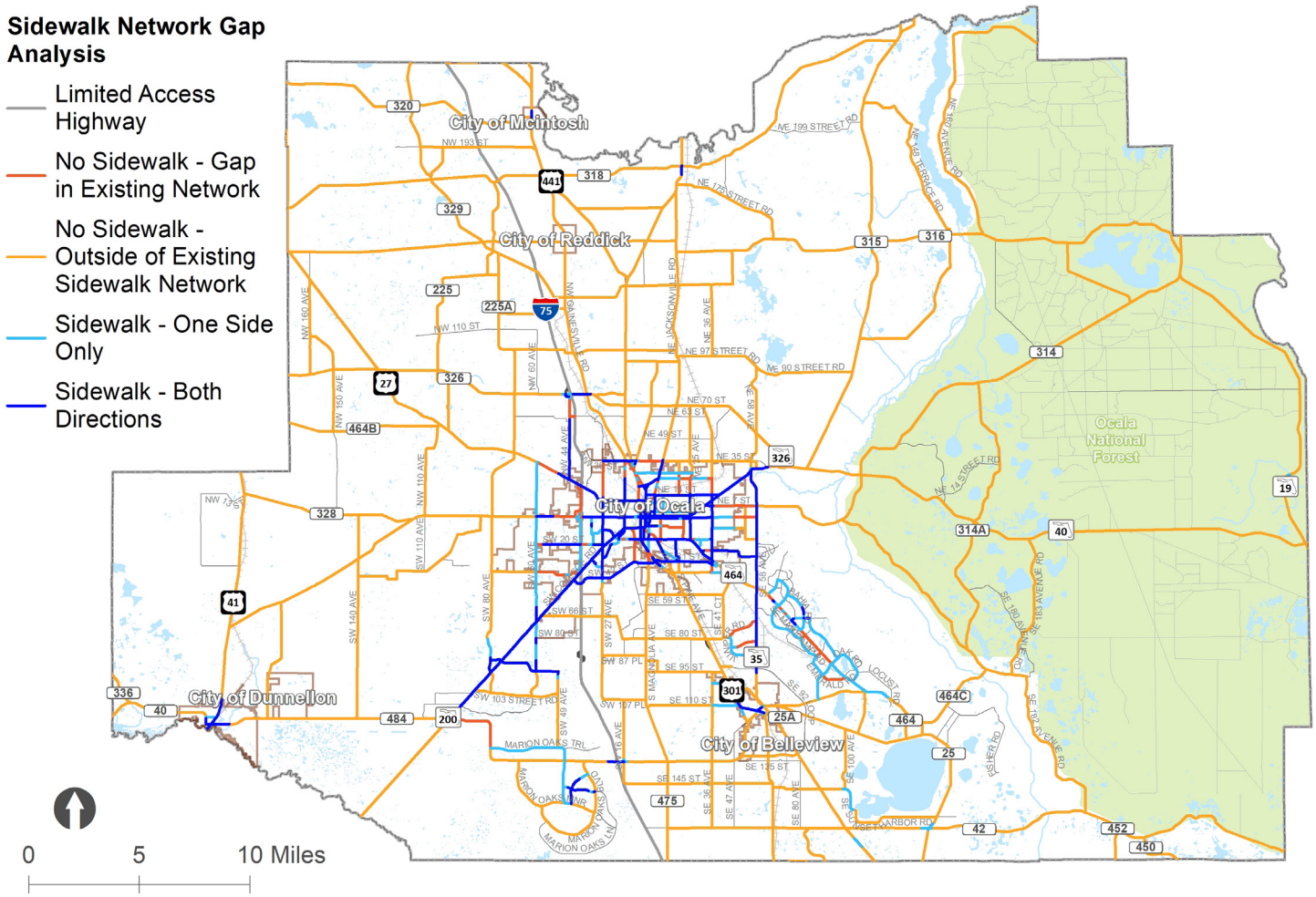
The encouragement and accommodation of alternative modes of transportation, specifically non-motorized bicycle, pedestrian and public transit modes, is the primary thrust of Goal 1, to *Promote travel choices that are multimodal and accessible*. There are three separate metrics used to assess the network and evaluate projects relative to non-automobile modes of travel. The first estimates the latent demand for public transit on segments through the application of a transit orientation index, which is based on population densities and transportation disadvantaged, or Environmental Justice, populations. The index scores EJ areas with significant population densities as most favorable for public transit service, in terms of the latent demand represented by these population characteristics. The areas in downtown Ocala and southeast and southwest of Ocala along the SR 200 and SR 464 corridors are the highest scoring areas in Marion County by this metric. The transit orientation scores computed for zones across the County were assigned to network segments adjacent to the respectively scored zones, as shown in **FIGURE 5.11**.

FIGURE 5.11: TRANSIT INDEX



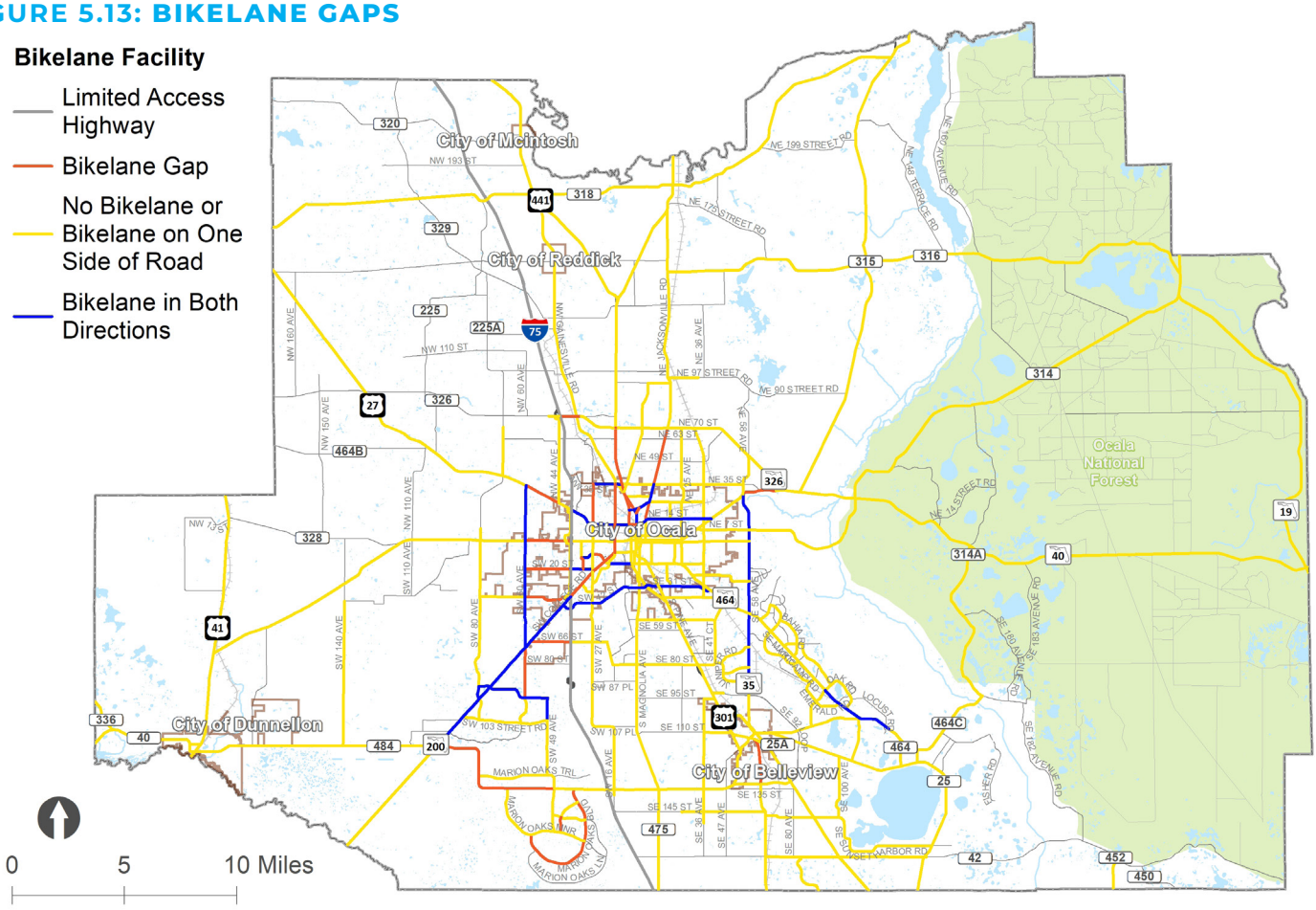
The second metric assessing the network relative to multimodal accessibility is based on sidewalk and bicycle lane gaps in the network. Gaps are distinguished in the scoring based on whether they are isolated in an area not characterized by multimodal infrastructure or the gaps are amidst broader continuous sidewalk or bicycle lane network, with the latter scoring scoring higher. Another distinction applied to the gap scoring is based on whether the gap is on both sides of the roadway or just one, with the former scoring higher. Roadway segments without bicycle lanes or sidewalk located in areas with generally good network connectivity are scored highest, while segments either with bicycle lanes or sidewalks were scored lowest. The scores are intended to assess the relative need for bicycle and pedestrian infrastructure improvements. The sidewalk and bicycle lane gap scoring results are displayed in **FIGURE 5.12** and **FIGURE 5.13**.

FIGURE 5.12: SIDEWALK GAPS



The third variable assessed in the multimodal accessibility evaluation addresses equity, assigning points to roadways in environmental justice areas defined by minority and impoverished population, as described in **Chapter 3**. The resulting three-variable Travel Choices score encapsulates transit viability, lack of multimodal infrastructure, and transportation disadvantaged areas, providing an equity-weighted composite measure of the need for or viability of alternative transportation options.

FIGURE 5.13: BIKELANE GAPS



Tourism

With close to 1.5 million Florida jobs supported directly or indirectly by tourism, the importance of the tourism industry in the State and in Marion County cannot be overstated. A unique feature of Marion County in the broader statewide tourism context is the outsized impact of the County's natural resources on the tourism sector of the County's economy, unlike the amusement park industry just 60 miles to the south in the Orlando region. Goal 5 of the LRTP, to *Protect Natural Resources and Create Quality Places*, includes an objective to enhance access to tourist destinations in the County.

The impact of tourism to the Marion County economy in 2019 was estimated by the Ocala/ Marion County Visitors and Convention Bureau to be more than $1 billion. Almost $700 million, or 70% includes direct expenditures by visitors in the County. The additional $300 million includes indirect and induced economic impacts, measured as the increased business and household spending resulting from the tourism revenues flowing into the County. Tourist attractions include a range of types, from recreational vehicle parks and campgrounds, to museums and equestrian centers, to trailheads and boat ramps, drawing almost two million tourists in 2019. Of those two million, about half are in-State residents and the rest from outside Florida.

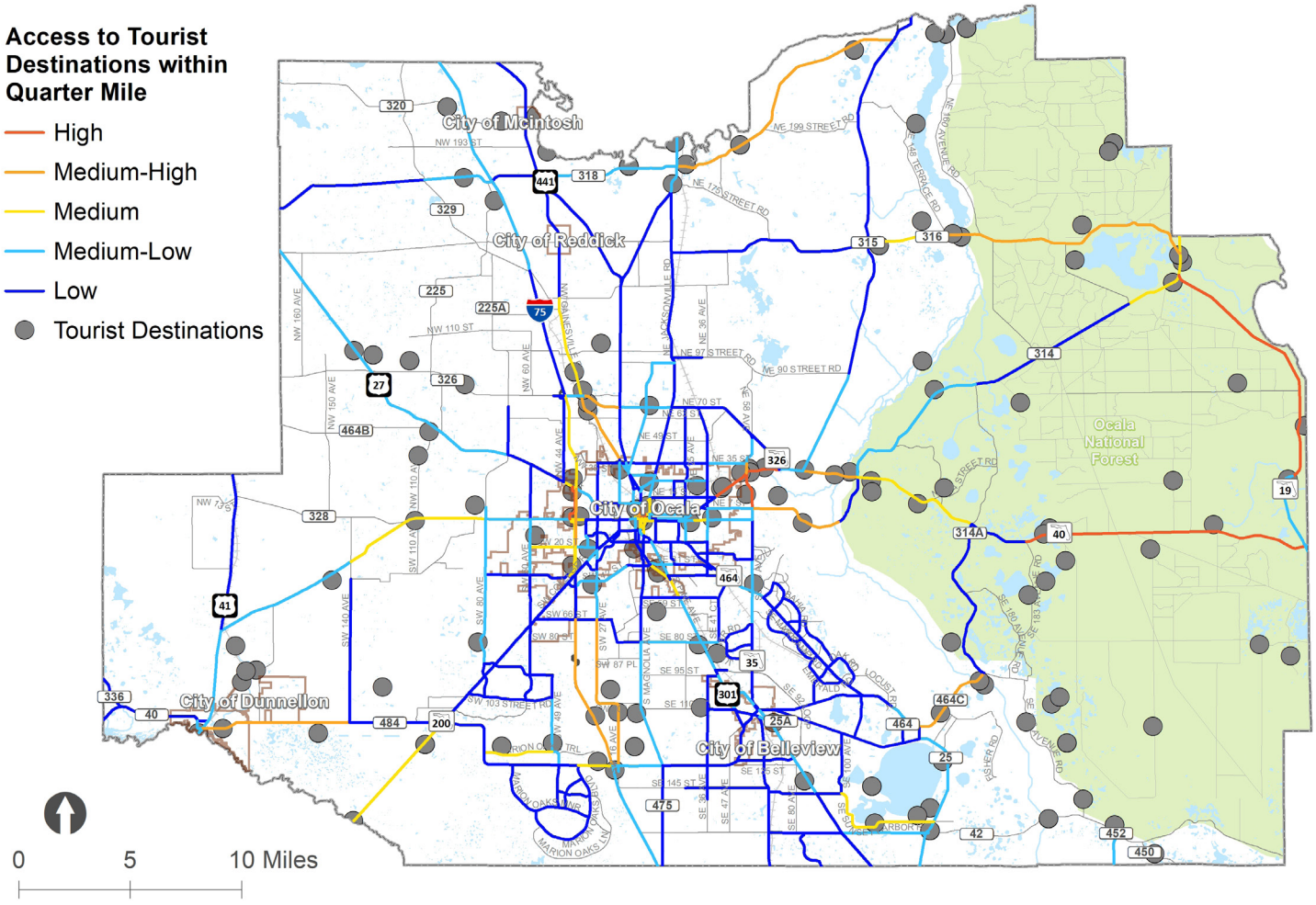
The FDOT Scenic Highways Program, established to showcase and increase awareness of the culture, recreational, natural, archeological, historical, and scenic value of some of Florida's state roadways, includes the Florida Black Bear Scenic Byway in Marion County. The Byway, including much of the eastern segment of SR 40 traversing the Ocala National Forest not only provides access to tourist attractions, it is an attraction in and of itself. Recent studies have documented the potential financial rewards that receiving a scenic highway designation can have on the local economy, underlining the importance of this resource to the economic health of the County, in addition to the natural health.

While the majority of tourist attractions in Marion County are outdoor activity-related, there are also more than 15 museums, a thriving dining and nightlife economy, and numerous historic sites that draw visitors. Maintaining and improving access to tourist attractions in Marion County is a critical economic consideration in the LRTP. More than one hundred attractions were identified and mapped for the purpose of assessing the transportation infrastructure providing access to them. The mapped sites include six distinct categories, including:

- 20 Recreational Vehicle Parks
- 30 Campgrounds
- 15 Museums
- 10 Boat Ramps
- 20 Equestrian Centers
- 10 Trailheads

The network assessment is based on the proximity of segments to land parcels identified as tourist attraction and weighted by the number of parcels, if greater than one. Use of proximity rather than adjacency enables recognition of network segments that provide indirect access to the tourist attractions as well as direct access. The access to tourist attractions segment scores are illustrated in **FIGURE 5.14**.

FIGURE 5.14: TOURISM



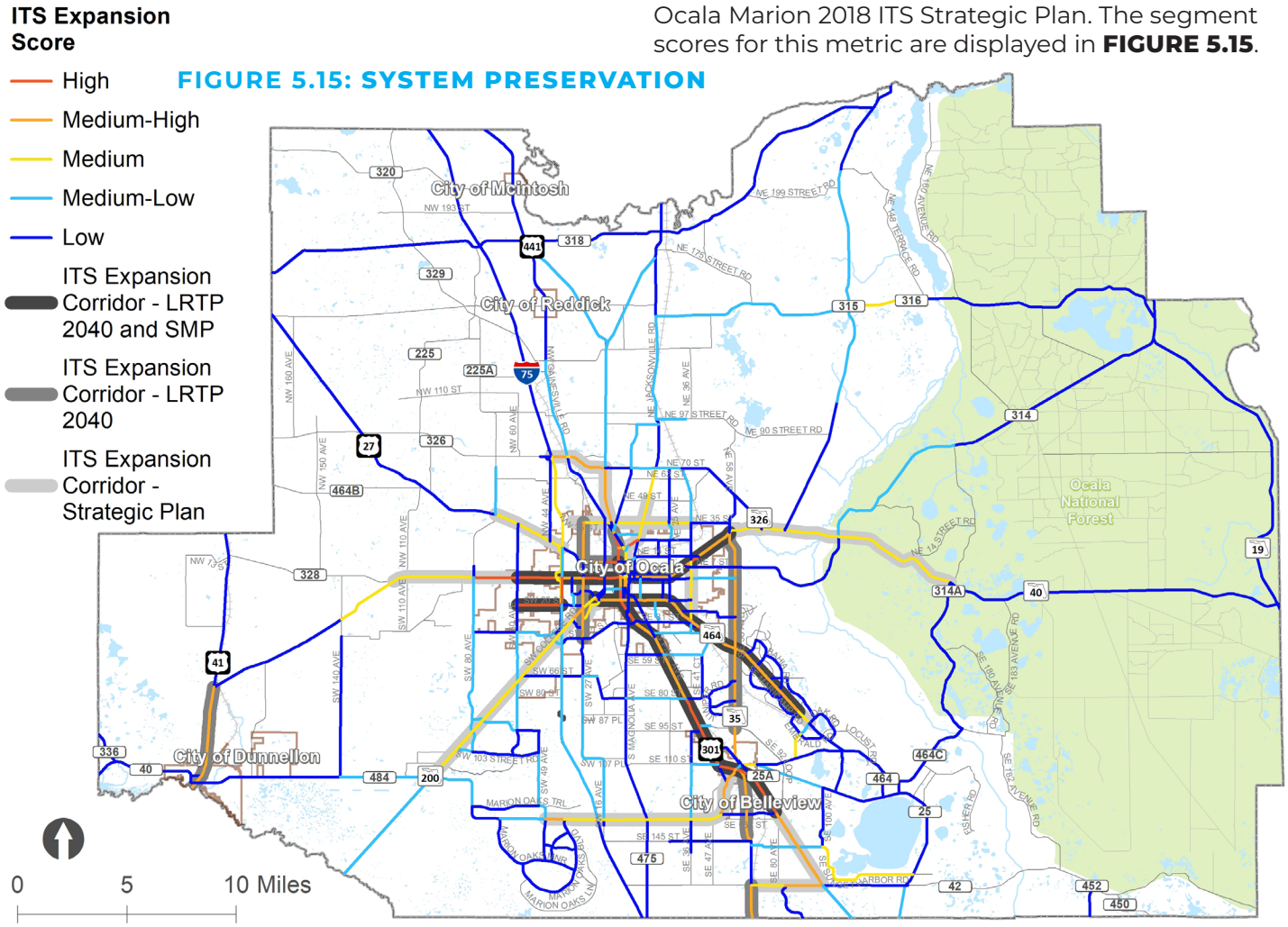
System Preservation

Investments in roadway infrastructure range from capacity projects like the construction of new roadways and widening existing roadways; and operational projects like improving intersections with the addition of turn lanes and improving the operation of existing roadways through traffic signal improvements and other technological improvements. Capacity projects are important, in many cases, to accommodate existing and future projected demand, where the resulting traffic surpasses existing roadway capacity. However, in many cases non-capacity improvements to existing roadways can be highly effective in the movement of traffic more efficiently.

Goal 6 of the LRTP, to *Optimize and Preserve Existing Infrastructure*, which was the most heavily weighted goal by the TPO Board, recognizes the need to make operational improvements to existing infrastructure in light of funding shortfalls to address the demand with added capacity in all cases. The System Preservation metric assigns a score to projects based on two general project characteristics. The first is based on whether the project is operational in nature, versus the addition of new roadways or added lanes to existing roadways.

The other metric is designed to score segments based on the existence of, or need for, technological infrastructure to support needed Intelligent Transportation Systems (ITS) infrastructure improvements. ITS includes advanced traffic signal operations; adaptive signal controls coordinating traffic signals on congested arterials; emergency vehicle preemptions systems allowing emergency vehicles to move through signalized intersections without delay; and the communications infrastructure enabling these systems to operate effectively. All of these technological improvements are designed to optimize traffic and realize significant reductions in congestion without the need for capital improvements. The segment scoring methodology assigns maximum points to those segments identified for needed ITS improvements, but also assigns points to those facilities that currently have ITS infrastructure, recognizing the need to update the technologies and facilities that intersect those facilities with existing ITS infrastructure. This scoring methodology is based on the evaluation methodology developed for the Ocala Marion 2018 ITS Strategic Plan. The segment scores for this metric are displayed in **FIGURE 5.15**.

FIGURE 5.15: SYSTEM PRESERVATION



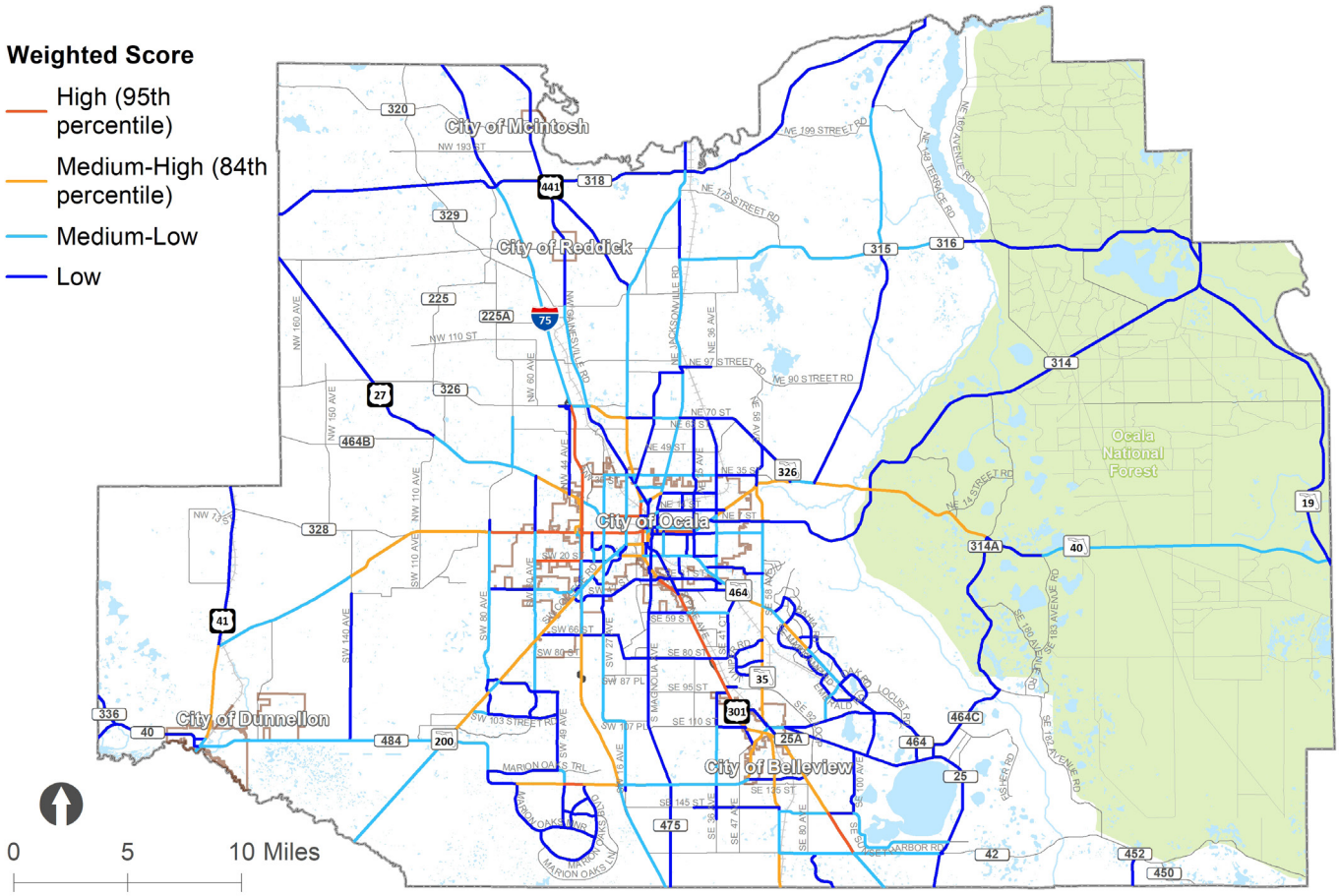
Needs Assessment Results

The individual metric scores described in the previous section were scaled, normalized, aggregated and weighted by goal to create goal-level scores for each network segment in the County. The weighted goal scores were summed for a single composite score assigned to the segments and are displayed in **FIGURE 5.16**. Segments scoring in the 75th percentile or higher were isolated and compared to projects in the Needs Plan. There are eight segments in the 75th percentile for which improvement needs had not been identified in the Plan Synthesis, including:

- NW 35th Ave – NW 49th St to NW 63rd St
- CR 484 – SR 200 to Marion Oaks Trail
- CR 484 – US 41 to SW 140th Ave
- SR 40 – SE 183rd Ave Rd to Lake County line
- NE Jacksonville Rd – NE 49th St to SR 326
- CR 316 – CR 315 to NE 148th Terrace Rd
- SE Sunset Harbor Rd – SE 100th Ave to CR 25
- Oak Rd – Emerald Rd to SE Maricamp Rd

Corridor studies on these segments were added to the Needs Plan as placeholders for potential projects based on further analysis. The scores assigned to all network segments were also associated with identified projects listed in the Plan Synthesis in **Appendix G**. The network segment scores are tabulated in **Appendix K**, with specific project scoring results arrayed in a matrix sorted by highest to lowest composite score. The matrix illustrates how much each individual metric contributes to the composite projects scores for each project.

FIGURE 5.16: NEEDS ASSESSMENT RESULTS



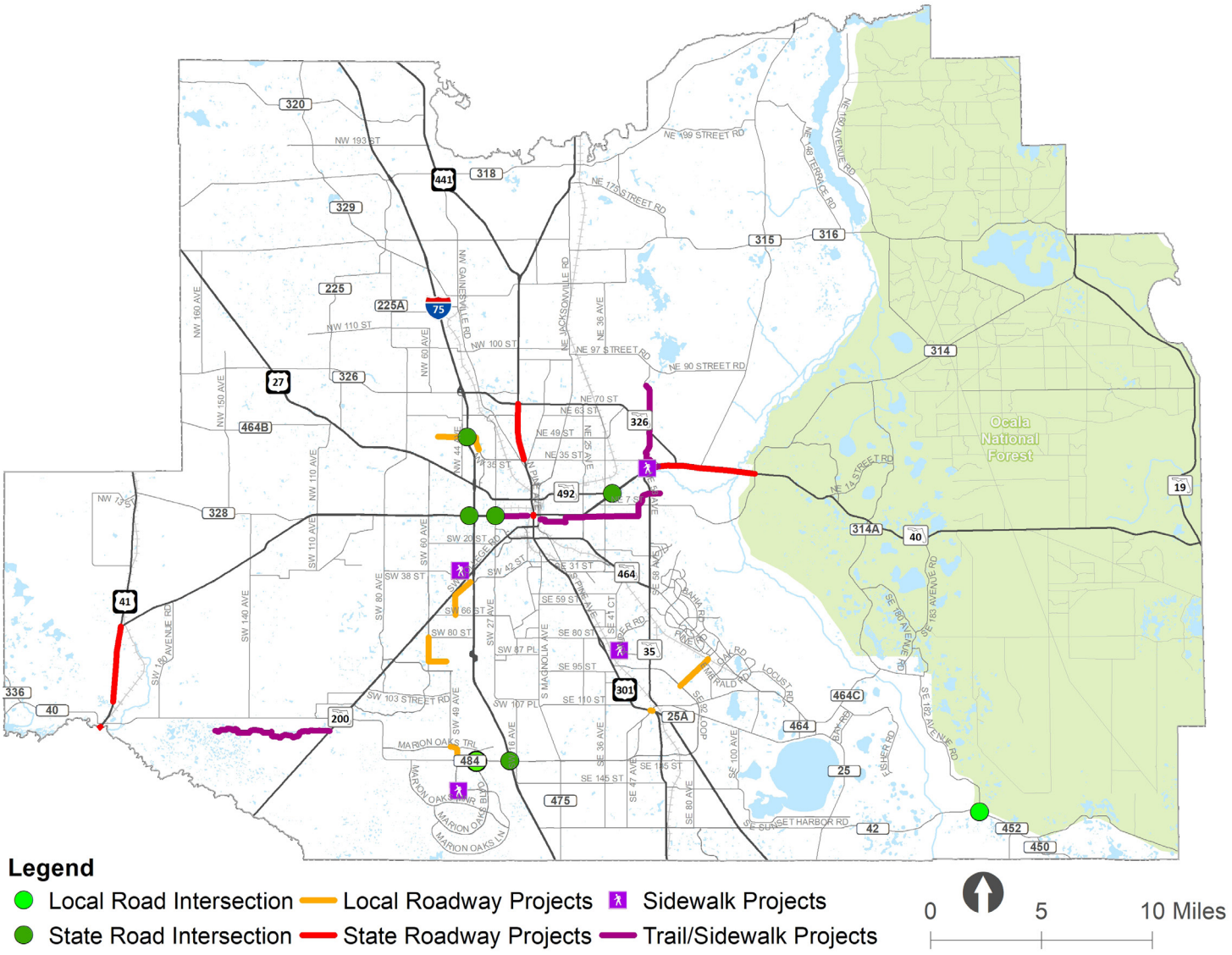
Short Term Improvements

The TPO's 2021-2025 Transportation Improvement Program (TIP) and Marion County's TIP outline the highest priority improvements and, in some cases those projects that have been in the pipeline for some years. Those priorities reflect the important investment strategies that are also reflected in the LRTP Goals and Objectives and investments in the outer years of the Cost Feasible Plan. The TIP represents the first five years of investments in the plan. The TIP also reflects over $160 million in roadway operation and maintenance investments, including resurfacing, traffic operational improvements, drainage and landscaping improvements. An additional $30 million is programmed for transit operations in the period between 2021 and 2025. Specific investments included in the TIP, organized by project type, are included in **TABLE 5.2** and illustrated in **FIGURE 5.17**.

TABLE 5.2: SHORT TERM ROADWAY AND NON-MOTORIZED IMPROVEMENTS

PROJECT TYPE	FACILITY	FROM	TO	IMPROVEMENT
State/Federal Funded Roadway Investmens	SR 45 (US 41)	SW 110TH St	N of SR 40	Add Lanes & Reconstruct
	SR 40	End of 4 Lanes	E of CR 314	Add Lanes & Reconstruct
	CR 484	SW 20TH Ave	CR 475A	Interchange Improvement
	SR 40	at SW 40th Ave and SW 27th Ave		Add Turn Lane(s)
	I-75(SR 93)	End of NW 49th St	End of NW 35th St	New Interchange
	US 441	SR 40	SR 40A (SW Broadway)	Traffic Ops Improvement
	E SR 40	At SR 492		Traffic Signals
	SR 40	SW 27th Ave	MLK Jr. Ave	Safety Project
	US 41/Williams St	Brittan Alexander Bridge	River Rd	Safety Project
	SR 25	NW 35th St	SR 326	Safety Project
	CR 42	at SE 182ND		Add Turn Lane(s)
Local Funded Roadway Investments	SE Abshier Blvd	SE Hames Rd	N of SE Agnew Rd	Traffic Signals
	Emerald Road Extension	SE 92nd Loop	Florida Northern Railroad	New 2 Lane
	NW 49th Street Ext	NW 44th Ave	NW 35th Ave	New 4 Lane
	NW 49th Street	1.1 miles west of NW 44th Ave	NW 44th Ave	New 2 Lane
	SW 49th/40th Ave	SW 66th St	SW 42nd St Flyover	New 4 Lane divided
	SW 49th Ave	Marion Oaks Trail	CR 484	New 4 Lane
	SW 90th St	SW 60th Ave	0.8 miles E of SW 60th Ave	New 2 Lane
	SW 60th Ave	SW 90th St	SW 80th St	Traffic Signals
	CR 484	at Marion Oaks Blvd		Add Turn Lanes, Modify Signals
Pedestrian/ Bicycle Investments	Silver Springs State Park			Pedestrian Bridges
	Pruitt Trail	SR 200	Pruitt Trailhead	Bike Path/Trail
	Indian Lake Trail	Silver Springs State Park	Indian Lake Park	Bike Path/Trail
	Dntn Ocala Trail	SE Osceola Ave	Silver Springs State Park	Bike Path/Trail
	SR 40	NW 27th Ave	SW 7th Ave	Sidewalks
	Marion Oaks-Sunrise/Horizon	Marion Oaks Golf Way	Marion Oaks Manor	Sidewalks
	Saddlewood Elementary Sidewalks			Sidewalks
	Legacy Elementary Sidewalks			Sidewalks
Technological Investments	Marion County/ Ocala ITS Operational Support			ITS Communication System

FIGURE 5.17: SHORT TERM IMPROVEMENTS



Transit and Multimodal Needs

There are more than 200 non-motorized infrastructure improvements identified in the Plan Synthesis, which includes a review of the County and municipal comprehensive plans, the 2035 Bicycle and Pedestrian Master Plan, the Regional Trails Facilities Plan, and others, for non-motorized improvement needs. Projects from these plans incorporated into the 2045 Needs Plan are depicted in **FIGURE 5.18** listed in **Appendix G**. There are also sixteen transit service improvements identified in the SunTran Transit Development Plan. The transit improvements include both improvement of existing fixed route transit services operated by SunTran and new transit services. The transit projects included in the 2045 Needs Plan, are also listed in **TABLE 5.3** and illustrated in **FIGURE 5.19**.

FIGURE 5.18: BICYCLE AND PEDESTRIAN NEEDS

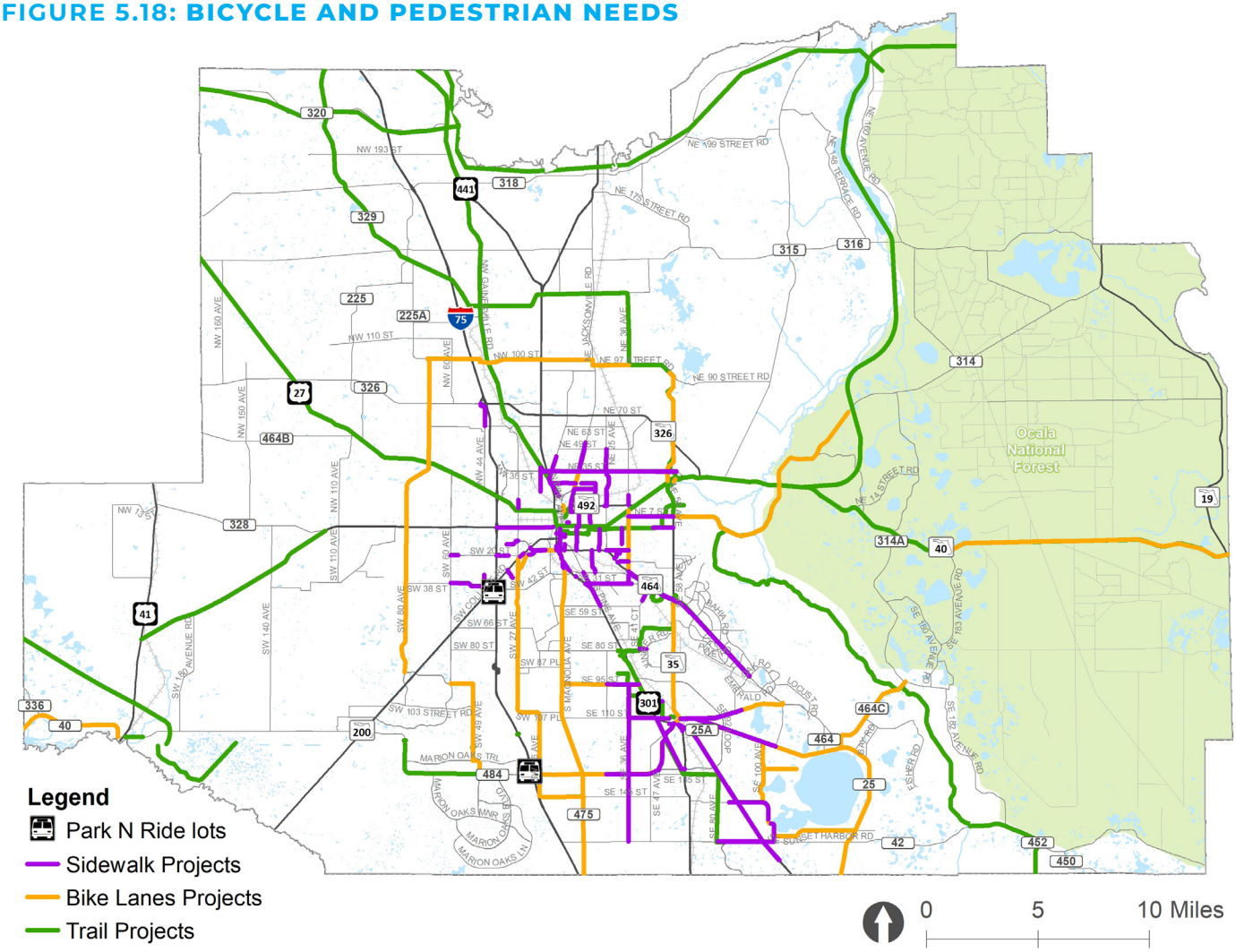
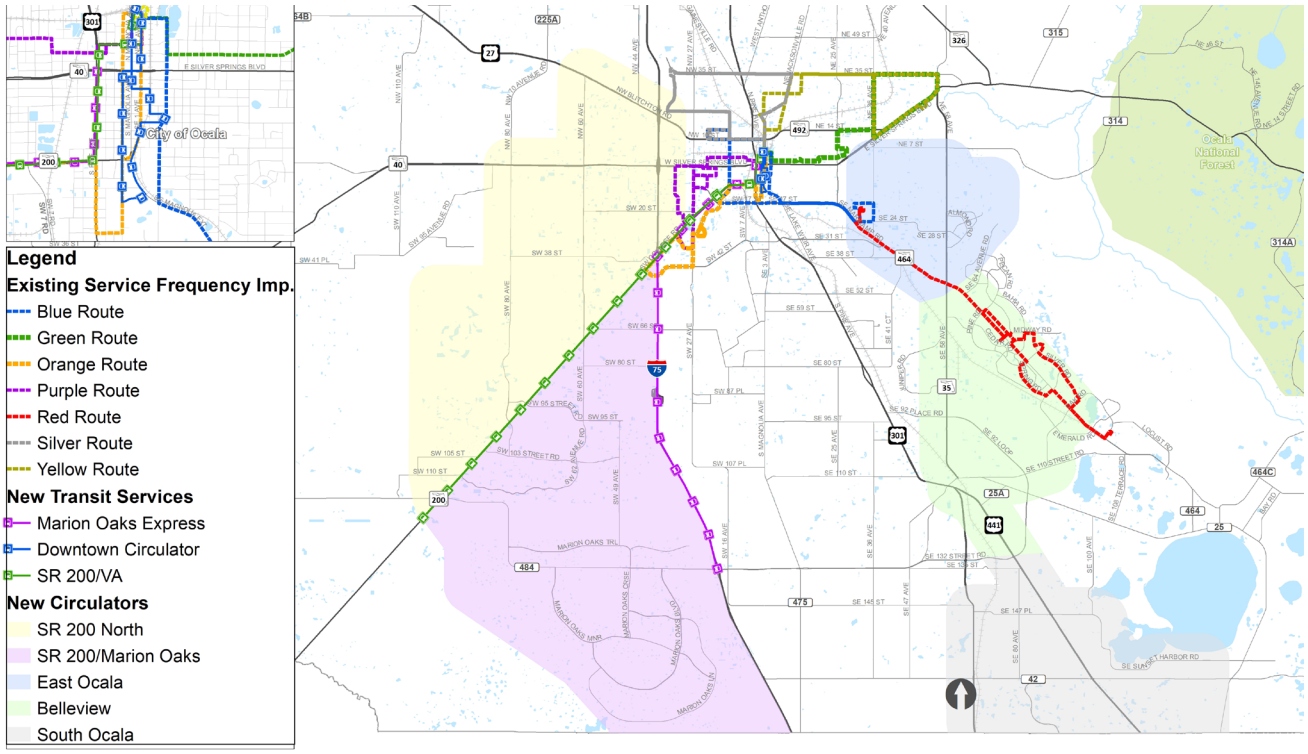


TABLE 5.3: TRANSIT IMPROVEMENTS

TRANSIT ROUTE	PROJECT DESCRIPTION
Green Route	**Existing Route Expansion (Frequency Improvements)**
Blue Route	
Purple Route	
Orange Route	
Red Route	
Yellow Route	
Silver Route	
Transit Shelters in varying locations	**Install New Transit Shelters**
Restroom Facility at Union Station	**Construct New Restroom Facility**
SR 200 VA Grant from Ocala to SW Marion Co.	**New Local Services**
Marion-Ocala Express from Ocala to Marion Oaks	**New Express Service**
SR 200/Marion Oaks Circulator	**New Circulator Service**
SR 200 North Circulator	
South Ocala Circulator	
East Ocala Circulator	
Belleview Circulator	
Downtown Circulator	

FIGURE 5.19: TRANSIT NEEDS



Roadway Capacity and Intersection Needs

There are more than 80 roadway and intersection improvements identified in the Plan Synthesis, including projects identified in County and municipal comprehensive plans, the 2040 LRTP, FDOT SIS Cost Feasible Plan, FDOT Freight and Mobility Plan and others. Projects from these plans include non-State roadway projects in **TABLE 5.4** and State roadway projects in **TABLE 5.5**. The tables do not include short term projects that are programmed for completion in the first five years of the plan, between 2021 and 2025, as they have already been budgeted. The projects in **TABLE 5.4** and **5.5** are illustrated in **FIGURE 5.20**.

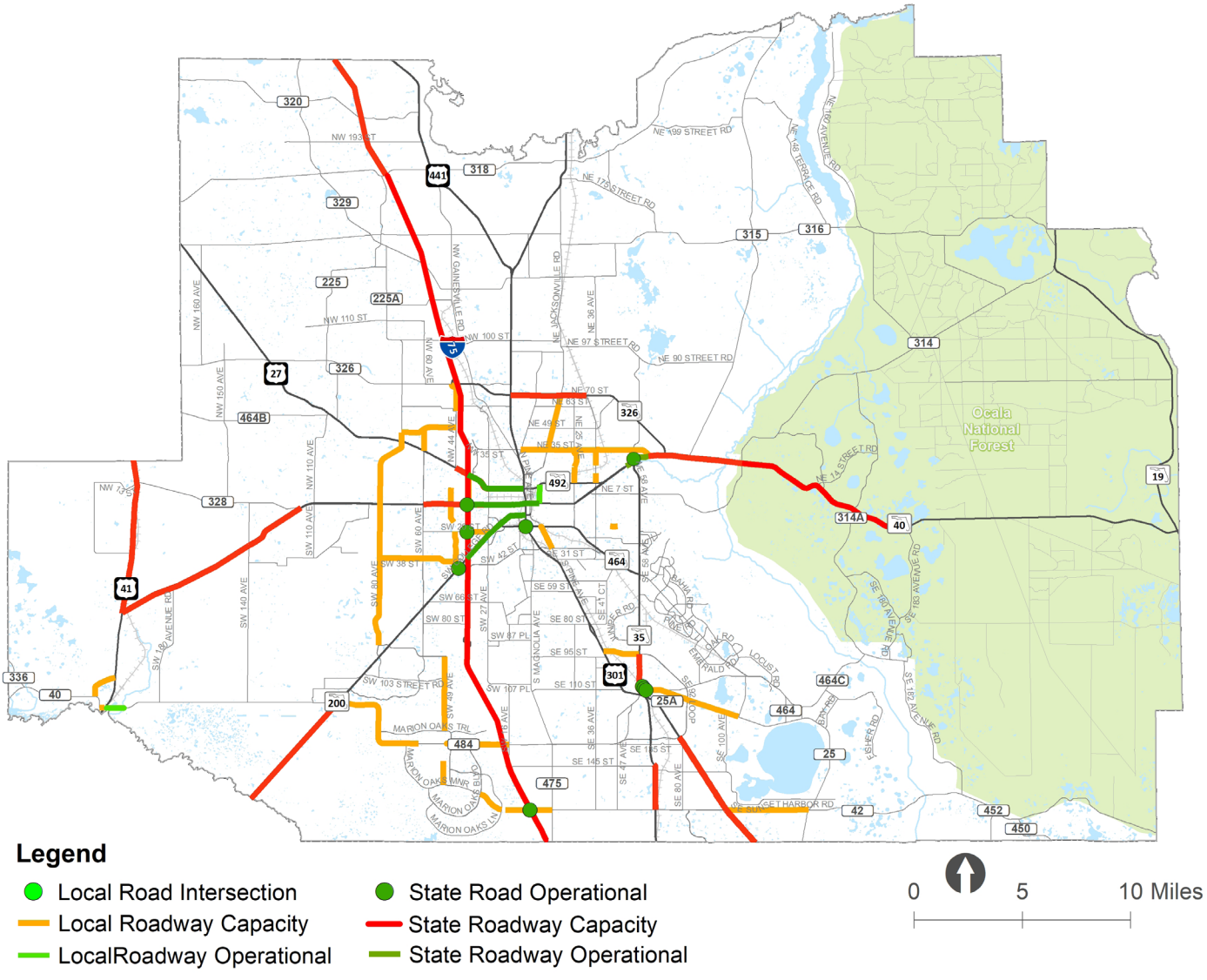
TABLE 5.4: NON-STATE ROADWAY CAPACITY AND OPERATIONAL IMPROVEMENTS

PROJECT ID	FACILITY	FROM	TO	DESCRIPTION
T8	CR 484/Pennsylvania Ave	Blue Run Park	Mary Street	Multimodal improvements
OPS20	Marion Oaks Manor Ext	Overpass at I-75		Grade separation
OPS57	NE 8th Ave	SR 40	SR 492	Complete Street
OPS72	W Pennsylvania Ave	Cedar St	US 41	Intersection geometry
R17	SW 44th Avenue	SR 200	SW 20th Street	New 4 lane
R18	SW 44th Avenue	SW 13th Street	SR 40	Widen to 4 lanes
R19	SW 44th Avenue	SR 40	NW 10th Street	New 4 lane
R20	SW 49th Ave	SW 95th Street	Marion Oaks Trail	Widen to 4 lanes
R26	CR 484	SW 49th Avenue	SW 20th Avenue Road	Widen to 6 lanes
R27	CR 484	SW 20th Avenue Road	CR 475A	Widen to 6 lanes
R28	NW 49th Street	NW 70th Avenue	1.1 mile west of NW 44th Avenue	New 2 lane
R29	NW 60th Avenue	US 27	NW 49th Street	New 2 lane
R30	NW 44th Avenue	NW 60th Street	SR 326	Widen to 4 lanes
R31	Dunnellon Bypass	CR 40	US 41	New 2 lane
R32	NE 36th Avenue	NE 14th Street	NE 25th Street	Widen to 4 lanes
R33	NE 36th Avenue	NE 25th Street	NE 35th Street	Widen to 4 lanes
R34	NE 25th Avenue	NE 14th Street	NE 24th Street	Widen to 4 lanes
R35	NE 25th Avenue	24th Street	NE 35th Street	Widen to 4 lanes
R36	NE 35th Street	W Anthony Rd	CR 200A	Widen to 4 lanes
R38	NE 35th Street	CR 200A	NE 25th Avenue	Widen to 4 lanes
R39	NE 35th Street	NE 25th Avenue	NE 36th Avenue	Widen to 4 lanes
R41	CR 25	SR 35	SE 92nd Loop	Widen to 4 lanes
R42	CR 25	SE 92nd Loop	SE 108th Terrace Rd	Widen to 4 lanes
R43	SW 20th Street	I-75	SR 200	Widen to 4 lanes
R44	SE 92nd Place Rd	US 441	SR 35	Widen to 4 lanes
R46	Lake Weir Avenue	SE 31st Street	SR 464	Widen to 4 lanes
R47	SE 17th Street	SE 44th Avenue	SE 47th Avenue	New 2 lane
R50	NE 35th St/NE 60th Ct	NE 36th Ave	SR 40	Widen to 4 lanes
R60	Marion Oaks Manor	SW 18th Ave Rd	CR 475	New 2 lane
R62	NW 37th Ave	SR 40	US 27	New 2 lane
R63	SW 40th Ave Realignment	at SR 200		Intersection geometry
R65	NW 70th Ave	US 27	NW 43rd St/NW 49th Street	Widen to 4 lanes
R66	SW 70th/80th Ave	SW 38th St	SR 40	Widen to 4 lanes
R69	SW 38th St	SW 80th Ave	SW 60th Ave	Widen to 4 lanes
R70	SW 38th St	SW 60th Ave	SW 43rd Ct	Widen to 4 lanes
R71	CR 484	Marion Oaks Pass	SR 200	Widen to 4 lanes
R72	CR 200A Ph 3	NE 35th St	SR 326	Widen to 4 lanes
R73	CR 42	US 441	CR 25	Widen to 4 lanes
R74	NW 70th/80th Ave	SR 40	US 27	Widen to 4 lanes
R75	SW 70th/80th Ave	SW 90th St	SW 38th St	Widen to 4 lanes
R76	SW 49th Ave	Marion Oaks Manor	SW 142nd Pl Rd	Widen to 4 lanes
R77	SW 165th St	Marion Oaks Blvd	Marion Oaks Lane	Widen to 4 lanes

TABLE 5.5: STATE ROADWAY CAPACITY AND OPERATIONAL IMPROVEMENTS

PROJECT ID	FACILITY	FROM	TO	DESCRIPTION
OPS1	I-75 (Interchange)	SR 40		Upgrade interchange
OPS46	SR 35	at Foss Rd, Robinson Rd, Hames Rd		Intersection geometry
OPS54	SR 40 - East Multimodal Imp.	NE 49th Terr	NE 60th Ct	Left turn lane
OPS55	SR 40	SR 35	0	Intersection geometry
OPS56	SR 40 Downtown Operational Imp.	US 441	NE 8th Ave	Complete Street
OPS58	SW 20th St	Interchange at I-75		New interchange
R1	SR 200	Citrus County Line	CR 484	Widen to 4 lanes
R2	US 301	CR 42	SE 143rd Place	Widen to 6 lanes
R3	US 441	Sumter County Line	CR 42	Widen to 6 lanes
R5	US 441	CR 42	SE 132nd Street Rd	Widen to 6 lanes
R7	SR 326	CR 200A	NE 36th Avenue	Widen to 4 lanes
R8	US 27	NW 44th Avenue	I-75	Widen to 6 lanes
R9	US 27	I-75	NW 27th Avenue	Widen to 6 lanes
R10	SR 35	CR 25	SE 92nd Place Rd	Widen to 4 lanes
R11	SR 40	US 41	SW 140th Avenue	Widen to 4 lanes
R12	SR 40	SW 140th Avenue	CR 328	Widen to 4 lanes
R13	SR 40	SW 60th Avenue	I-75	Widen to 6 lanes
R14	SR 40	I-75	SW 27th Avenue	Widen to 6 lanes
R15	US 41	SR 40	Levy County Line	Widen to 4 lanes
SIS1 (3423)	SR 40	E of CR 314	CR 314A	Add 2 to build 4 lanes
SIS10 (3433)	I-75	CR 484	CR 318	Add 2 to build 8 lanes
SIS12 (3442)	SR 326	SR 25/US301/US 441	Old US 301/CR200A	Add 2 to build 4 lanes
SIS13 (4106742)	SR 40	from end of 4 lanes	to East of CR 314	Add 2 to build 4 lanes
SIS2 (3424)	SR 40	CR 314A	Levy Hammock Rd	Add 2 to build 4 lanes
SIS3 (3485)	I-75	at US 27		Modify Interchange
SIS6 (3434)	I-75	CR 318	Marion/Alachua Co Line	Add 2 to build 8 lanes
SIS6 (3474)	I-75	CR 318	Marion/Alachua Co Line	Add 4 Special Use Lanes
SIS7 (3435)	I-75	CR 484	CR 318	Add 4 Special Use Lanes
SIS8 (3472)	I-75	Sumter/Marion Co Line	CR 484	Add 2 to build 8 lanes
SIS8 (3473)	I-75	Sumter/Marion Co Line	CR 484	Managed Lanes
TIP11	SR 40	SW 40th Ave	SW 27th Ave	Left turn lane
TIP17	US 441	at SR 464		Turn lane
TIP6	I-75 FRAME			ITS Communication System

FIGURE 5.20: ROADWAY CAPACITY AND OPERATIONAL NEEDS



Technology Projects

The development of technological solutions to transportation challenges in recent years represents a crucial component of the County's ability to address added demand on the system. This is particularly true in light of limited resources for more capital intensive improvements such as new or widened roadways. This is reflected in the TPO Board's assignment of the heaviest weight to the Optimize and Preserve Existing Infrastructure goal, relative to other LRTP goals.

The ITS plan developed by the TPO in 2008 recommended a number of technology improvements, including the construction of a new Traffic Management Center (TMC), traffic signal improvements on key corridors, traffic management at railroad crossings, expansion of the County's signal detection technology, and TMC integration with the regional TMC in Orlando. Many of these improvements have since been implemented, including the TMC and traffic signal improvements, and others are in progress. Ten years after completing the plan in 2008, the TPO completed an updated plan, the 2018 ITS Strategic Plan, building upon the original plan to improve the efficient movement of goods and people; improve safety and security; and improve the reliability of the system. The ITS plan identifies freight, evacuation corridors, transit, and bicycle/pedestrian as modes and systems for which ITS improvements provide benefits. The ITS plan and recommended improvements therein represent a critical strategy in the context of the broader LRTP, particularly in light of limited financial resources to address transportation challenges.

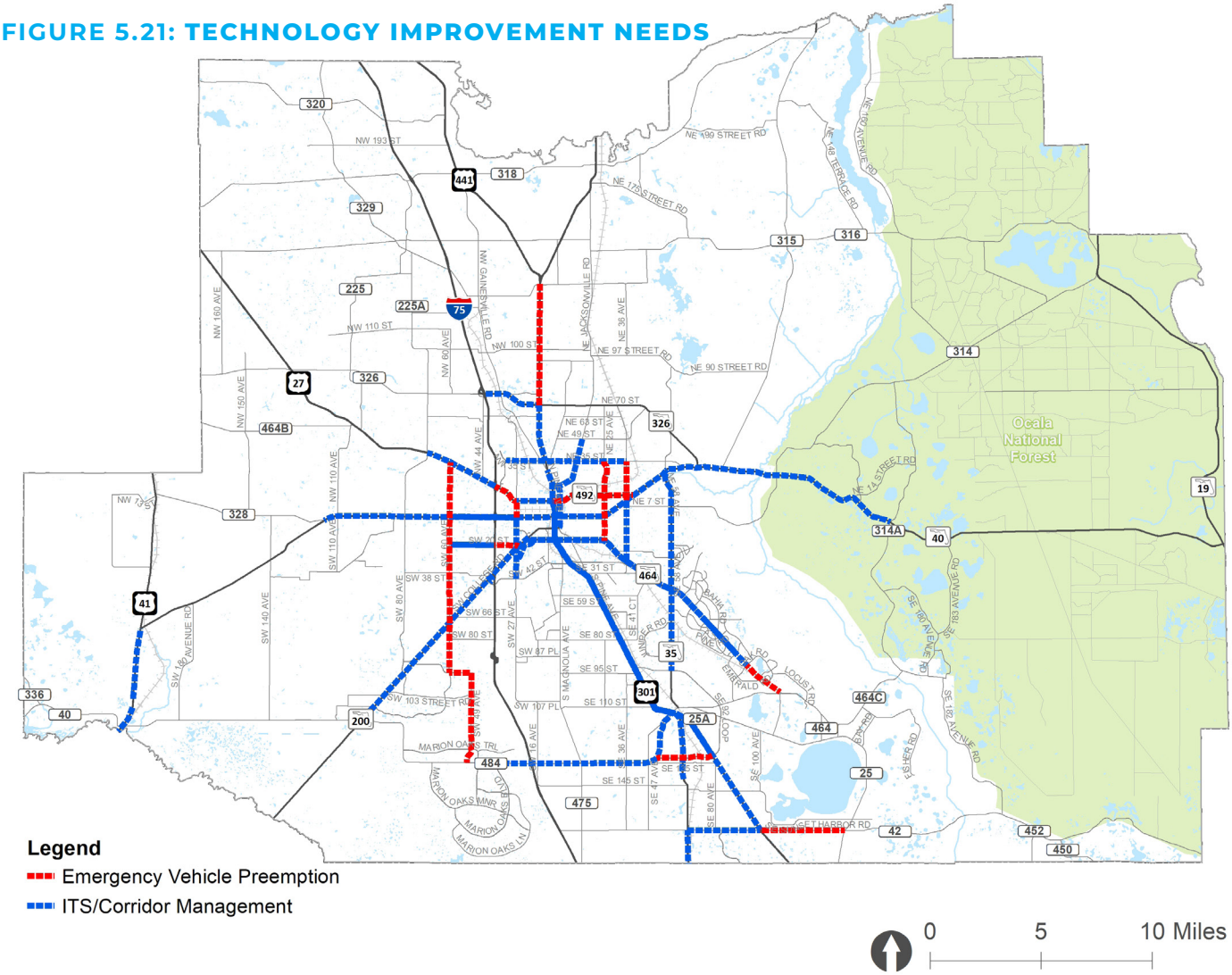
Specific recommendations in the 2018 plan identified the need for technological improvements at intersections on over fifty corridor segments in Marion County and thirteen corridors for special treatment at signalized intersection for emergency vehicles, coordinating signals electronically with emergency vehicles, improving safety and security in addition to mobility. The technology improvements are listed in **TABLE 5.6** and illustrated in **FIGURE 5.21**.

TABLE 5.6: ITS AND EMERGENCY VEHICLE PREEMPTION IMPROVEMENTS

PROJECT ID	FACILITY	FROM	TO	IMPROVEMENT
OPS5	US 301	Sumter County Line	CR 42	ITS
OPS6	US 301	SE 143rd Place	US 441	ITS
OPS7	US 441	SE 132nd Street Rd	US 301	ITS
OPS8	US 441	US 301	CR 475	ITS
OPS9	US 441	CR 475	SR 200	ITS
OPS10	US 441	SR 200	CR 25A	ITS
OPS12	US 27	NW 27th Avenue	US 441	ITS
OPS13	US 27	SW 27th Avenue	SR 35	ITS
OPS14	SR 35	SE 92nd Place Rd	SR 464	ITS
OPS15	SR 35	SR 464	SR 40	ITS
OPS16	SR 40	SW 60th Avenue	SR 35	ITS
OPS17	SR 464	SR 200	SR 35	ITS
OPS18	US 41	Citrus County Line	SW 111th Place Ln	ITS
OPS22	NW/SW 27th Avenue	SW 42nd Street	SR 200	ITS
OPS23	NW/SW 27th Avenue	SR 200	SR 40	ITS
OPS24	NW/SW 27th Avenue	US 27	NW 35th Street	ITS
OPS25	CR 464	SR 35	Midway Rd	ITS
OPS26	CR 464	Midway Rd	Oak Rd	ITS
OPS27	SW 20th Street	SW 60th Avenue	I-75	ITS
OPS28	US 27	CR 225	I-75	ITS
OPS29	SR 40	SR 35	CR 314A	ITS
OPS30	SR 326	I-75	SR 200A	ITS
OPS31	SR 200	CR 484	SR 464	ITS
OPS32	US 301/US 441	SE 165th St.	SR 464	ITS
OPS33	US 301	NW 35th St.	SR 326	ITS
OPS34	SR 40	Hwy 328	SW 27th Ave.	ITS
OPS35	SR 40	NE 1st Ave.	SE 25th Ave.	ITS
OPS36	E Magnolia Ave/E 1st Ave.	NE 20th St.	SR 200/SE 10th St	ITS
OPS37	SR 464	SR 200	Oak Rd	ITS

PROJECT ID	FACILITY	FROM	TO	IMPROVEMENT
OPS38	SE 36th Ave	SR 464	SR 40	ITS
OPS39	NW 35th St.	NW 35th Ave. Rd.	NE 36th Ave.	ITS
OPS41	SW 42nd St.	SR 200	SR 464	ITS
OPS42	CR 484	Marion Oaks Course	US 441	ITS
OPS43	Hwy 42	US 301	US 441	ITS
OPS44	SW 27th Ave/SW 19th AveRoad	SW 42nd St.	SR 464	ITS
OPS45	SW 20th St.	NW 60th Ave.	SR 200	ITS
OPS49	US 41	SW 111th Place Lane	SR 40	ITS
OPS50	SR 200A	US 301	NE 49th St.	ITS
OPS59	US 301	SR 326	W Hwy 329	Emergency vehicle preemption
OPS60	US 492	US 301	SR 40	Emergency vehicle preemption
OPS61	25th Ave	NE 35th St	SR 464	Emergency vehicle preemption
OPS62	NE 36th Ave	NE 35th St	SR 40	Emergency vehicle preemption
OPS63	NW 27th Ave	US 27	SR 40	Emergency vehicle preemption
OPS64	SW 20th St	I-75	SR 200	Emergency vehicle preemption
OPS65	60th Ave	US 27	SW 95th St	Emergency vehicle preemption
OPS66	SW 95th St	SW 60th Avenue	SW 49th Ave	Emergency vehicle preemption
OPS67	SW 49th Ave	SW 95th St	CR 484	Emergency vehicle preemption
OPS68	SE 132nd St	CR 484	US 441	Emergency vehicle preemption
OPS69	CR 42	US 441	Ocala Rd	Emergency vehicle preemption
OPS70	Maricamp Rd	Oak Rd	SE 108th Terrace Rd	Emergency vehicle preemption
OPS71	US 27	I-75	NW 27th Ave	Emergency vehicle preemption

FIGURE 5.21: TECHNOLOGY IMPROVEMENT NEEDS



Emerging Technologies

Other more advanced technological improvements represent an emerging trend in transportation infrastructure. The FDOT Office of Policy Planning released Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use Vehicles (ACES) in September 2018. ACES includes a variety of technologies that are designed to make our roadways function more safely and efficiently. The individual components of ACES include:

- **Automated Vehicles** – Self-driving vehicles that improve efficiency and safety of transportation by navigating without human control
- **Connected Vehicles** – Vehicles that communicate with each other (V2V), with road infrastructure and traffic signals (V2I) and cloud based programs (V2X) to improve safety and efficiency.
- **Electric Vehicles** – Vehicles that use one or more battery powered electric motors rather than combustion engines for propulsion.
- **Shared-Use Vehicles** – Vehicles that are owned and operated by one or more persons, organizations or companies including public transit, bicycles, electric scooters, cars, car pool, and ride-hailing services like Uber and Lyft.

The Central Florida Regional Planning Model (CFRPM), which encompasses the seven counties in Central Florida, was utilized by FDOT to test six ACES Scenarios ranging from Slow Roll to Robo Transit. The results of the test showed that vehicle miles traveled (VMT) increased as the ACES Scenario level increased, but that vehicle hours traveled (VHT) varied as the levels increased. There are still many unknowns when it comes to the future of ACES and it is anticipated that future LRTP cycles will place a heavier emphasis on ACES scenario planning.

I-75 Florida Regional Advanced Mobility Elements (FRAME)

A project that is being spearheaded by FDOT, in coordination with the City of Ocala and Marion County, is the I-75 Florida Regional Advanced Mobility Elements (FRAME) project. The purpose of FRAME is to enable motorists to avoid congestion on I-75 resulting from crashes and improve the reliability of the system in response to accidents and other events. The facilities that make up the FRAME system in Marion County include SR 200, SR 40, and US 27. The technological system of interconnectivity being employed on these roadways will enable communication between vehicles and traffic signals, taking advantage of existing and emerging technologies and building upon them. FRAME represents an integrated corridor management approach that uses Automated Traffic Signal Performance Measures and Connected Vehicle technology (CV) to accomplish the congestion and reliability objectives. The deployment of the FRAME system will enable real time information provided to motorists to alert them to incidents and identify the most efficient route available.

For years, motorists have already taken advantage of the capabilities of mobile devices, crowdsourced information, and existing Mobility as a Service applications to improve their travel and route decision making. FRAME will enhance that capability, providing expected speed, agility, and reliability improvements. Other components of the FRAME system include transit signal priority, enabling public transit vehicles to avoid congestion at signalized intersections, and enhanced pedestrian signals. In addition to the mobility and reliability improvements that will be achieved by the implementation of FRAME, FDOT estimates a reduction in crashes up to 74%.

Other Emerging Technologies and Guidance

Other emerging technologies, some of which are in pilot phases, others still in development, were explored. While for many, it is too early to assess their applicability, the following section describes several of them and provides some guidance as to their potential deployment in Marion County.

Mobility as a Service (MaaS, aka Uber, Lyft)

The trend: over the past ten years, transportation network companies (TNCs) have been able to leverage the shared economy, e-commerce, and the proliferation of smartphones to offer customer-focused, demand-responsive passenger services. New rideshare, delivery, microtransit, and micromobility services continue to evolve from this initial concept, offering mobility options using a variety of modes and price points.

The potential impact: Mobility as a Service offers the opportunity to transform how public transit may be delivered, especially to lower-density areas that are not cost-effective to serve with conventional fixed-route services. The speed with which these services can develop and deploy can disrupt traditional transportation infrastructure, especially as it relates to parking and curb management strategies.

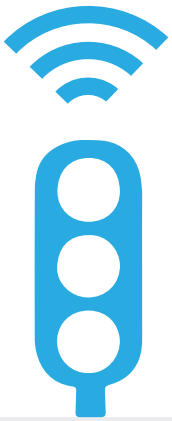
The approach: MaaS providers should be actively engaged as stakeholders in the planning process to understand their business model and its potential impact on local and regional transportation infrastructure. Special attention should be paid to how curb management and ITS strategies can evolve to leverage MaaS-generated data to create better real-time mobility management solutions.

Cooperative Intelligent Transportation Systems

The trends: Vehicle-to-Everything (V2X) technologies are making it possible for fleets of vehicles to collaborate amongst themselves to optimize the travel times and reliability of passenger and delivery services. Convergences in revenue systems (tolls, transit fares, and parking) are making it possible to cross-subsidize modes of travel, giving agencies and transportation providers with better ways of incentivizing optimal travel behavior. At the same time, crowdsourced traveler information and private navigation apps are providing the traveling public with route alternatives that, while faster, may select paths that include signals and facilities not optimized for higher volumes of traffic.

The potential impact: Transportation agencies that are able to integrate V2X technologies into their transportation infrastructure will be better able to engage with travelers, inform their travel decisions, and improve the overall safety and efficiency of the transportation network. Transportation agencies that are able to interface with the ITS solutions of private fleets (e.g. rideshares, delivery services, freight systems) will be able to have greater flexibility in how they plan, deliver, and manage new mobility solutions.

The approach: The planning process should regularly assess how to integrate V2X-based solutions into the planning, deployment, and operation of the transportation system The regional ITS architecture, and more specifically the CV technology being deployed as part of FRAME, in Marion County should be leveraged to deploy pilots that consider interfaces with the data generated by both public and private fleets of connected vehicles and services.



Automated Transportation Systems

The trend: While privately-owned vehicles with Advanced Driving Systems (ADS—formerly referred to as autonomous vehicles) may not see large scale deployments in the near future, low-speed automated shuttles, automated freight systems (including trucking and small-scale delivery drones), and aerial drone systems are seeing larger pilot programs rolled out in Florida and across the United States. It is likely that fleets of these vehicles will become more common over the next 10 years.

The potential impact: Automated freight systems offer the opportunity to improve the efficiency of the freight network; however, it is possible that automated delivery services may pose new localized congestion issues on the sidewalks, curbs, and roadways upon which they operate. Similarly, fleets equipped with ADS may be able to operate on narrower lane widths more safely than human-operated vehicles, reducing construction costs and improving the efficiency of the transportation system. That being said, Vehicle-to-Everything (V2X) infrastructure may be needed to manage the interfaces between human-operated vehicles and automated transportation systems, especially in early stages of ADS deployments.

The approach: The planning process should regularly assess the readiness of the TPO for automated systems from a technology, infrastructure, and policy perspective. Pilot deployments within Marion County should be encouraged to learn about the specific impacts of these technologies on the local transportation environment.

Electric Vehicles (EV)

The trend: Advances in battery technologies are making electric and hybrid vehicles more affordable to consumers, while an increasing number of public and private fleet operators are adopting electric vehicles. Recent experiments with electric-powered aircraft (including aerial drones and fixed-wing aircraft) may make these modes more viable options for new passenger and delivery services in urbanized areas in the future.

The impact: While electric vehicles offer the opportunity to reduce vehicle emissions, they do create new demands for charging infrastructure. The location, availability, and affordability of this infrastructure will affect the adoption rates of these vehicles in Marion County.

How can we plan for it? Scenario planning may be developed to include the impacts of different rates of EV adoption. Engagement with utility companies and EV manufacturers would help to clarify the impacts of these vehicles and their supporting infrastructure on long-range planning. Benchmarking the effectiveness of EVs (range, time necessary to charge) would help to understand the potential right-of-way and facility impacts of new charging infrastructure for land-based and aerial electric vehicles.

Converged Security (Cyber and Physical)

The trend: As the operating technology (OT) behind traffic systems becomes more advanced and more intertwined with both the Internet of Things (IoT) and public and private information technology (IT), there is a need to look at the security of transportation infrastructure from both a physical security and a cybersecurity perspective.

The potential impact: A converged security approach will allow the Marion County to deploy resilient transportation systems that embrace new technologies and interconnected systems while minimizing the threats posed by "black hats"—private and state-sponsored actors who may try to hack or disrupt Marion County transportation networks.

The approach: Consider additional coordination between the transportation planning, IT infrastructure planning, and security stakeholders. Converged security issues should also be addressed in resiliency planning moving forward.

Digital infrastructure

The trend: as transportation systems become more sophisticated and more connected, they are generating new data needs that were not previously anticipated in the IT plans of local agencies. V2X technologies, automated transportation systems, and new Mobility as a Service models are all anticipated to generate massive amounts of data, much of which could offer new insights into how transportation networks are planned, delivered, operated, and maintained.

The potential impact: New data sets from public and private transportation sources can create new opportunities in the Marion County economy; however, the impacts of this data on the digital infrastructure of local agencies (including data storage, security requirements, and transmission) need to be taken into account. The challenges of sharing data between multiple public and private partners also needs to be considered to support desired outcomes of the LRTP.

The approach: Local agency IT departments should be included in outreach efforts related to long-range planning to identify opportunities to deploy technology to achieve the goals of long range planning efforts.

The Ocala Marion 2018 ITS Strategic Plan is a key part of the LRTP, providing guidance to how new technologies can achieve two broad purposes. The first is to provide cost efficient solutions to congestion, reliability, and safety issues. The second purpose is to use ITS as an incremental step in the advancement of emerging technologies, which is a primary focus area of the FDOT, particularly in Central Florida. Indeed, the deployment of FRAME is indicative of that commitment. The continued coordination and collaboration between FDOT and local government partners will be crucial to the success of the program, in terms of a coordinated traffic management system, including staffing the TMCs. Data management strategies should be developed to support how data can be captured, stored, analyzed, and disseminated amongst public and private transportation partners.

Projects in Environmental Justice Areas

A summary of needed transportation improvements within Environmental Justice (EJ) areas provides an equity assessment of the Needs Plan. EJ is defined by the USEPA as the *fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies*. The achievement of environmental justice, then, is measured in two ways:

- The degree to which different segments of the population are protected from environmental hazards and
- The level of access people have to the decision-making process.

Both measures of EJ are addressed in the 2045 LRTP. The first is addressed through a EJ measure applied in the project evaluation and prioritization process, assessing projects in terms of their proximity to transportation disadvantaged populations, also referred to as EJ population. This metric is described in in the previous section. The second measure is addressed through the LRTP public involvement process, as described in **Chapter 3**. In both cases, the defining characteristic is the location of EJ population. The identification of this segment of the Marion County population was accomplished through the analysis US Census data on minority and low-income population levels.

The two criteria used to identify EJ population are low income and minority. The countywide average poverty rate in Marion County is 17.6% and the minority rate is 17.8%, in accordance with the Census data. Areas in the County with both a poverty and minority rate above the countywide averages, respectively, were considered EJ areas for the purpose of the LRTP analysis. A minimum population threshold was also applied to isolate areas with substantial population. The threshold for both minority and poverty is a minimum of 500. Areas meeting either the minority or poverty definition were also considered, particularly in the identification of workshop locations to provide adequate access to the planning process to those people. **TABLE 5.7** summarizes the Needs Plan in EJ versus non-EJ areas. Roadway improvements are represented in terms of cost, due to the high degree of variability in the cost of various improvements. Only the portions of projects in Environmental Justice areas are included in the cost/mileage summaries in the EJ Areas column. Other improvements are represented in terms of miles of improvements. As indicated in the table, 16% of non-motorized and 13% of motorized projects in the Needs Plan are located in EJ areas, as measured by population distribution in EJ versus non-EJ areas.

TABLE 5.7: INVESTMENTS IN ENVIRONMENTAL JUSTICE AREAS

	EJ AREAS	NON-EJ AREAS	TOTAL
Population	62,300	270,900	333,200
Roadway Needs	$194,256,000	$1,247,293,000	$1,441,549,000
Per Capita	$3,118	$4,604	$4,326
ITS Needs Mileage	49.1	169.7	225.4
Per thousand residents	0.79	0.63	0.68
Bicycle/Pedestrian Needs (mileage)	84	431	515
Per thousand residents	1.34	1.59	1.55
Public Transit Needs (route mileage)	45.2	92.4	137.6
Per thousand residents	0.73	0.34	0.41

Note: Project cost estimates are represented in present day cost. Multimodal and ITS improvements represent all candidate projects in boxed fund programs.

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CHAPTER 6. FINANCIAL REVENUE FORECASTS

The Ocala Marion LRTP is required, by federal law, to demonstrate the cost feasibility of improvements contained in the 2045 Cost Feasible Plan. The period between 2021 and 2025, reflecting the FDOT Work Program and local capital improvement programs, is based on available revenues in the short term, as projected by those agencies. Financial resources expected to be available during the remainder of the plan period, between 2026 and 2045, were projected based on a variety of data, including historical receipts, future population growth, expected changes in fuel efficiency, and inflation. **Appendix H** includes a detailed description of the forecasting process, including data source references for key inputs informing the forecasts.

The total revenue projected to be available between the years 2026 and 2045 for transportation capacity improvements is $2.3 billion, in Year of Expenditure (YOE) dollars. All revenues and costs in the revenue forecasts and Cost Feasible Plan are inflated to YOE dollars based on inflation rates provided by FDOT.

The revenues included in the forecast and used to develop the Cost Feasible Plan include both State/Federal funding and local funding. The local revenue sources include two primary existing sources of revenues, both of which are used by Marion County to fund transportation improvements. The first includes a combination of state- and locally-levied fuel taxes and the second includes the revenues collected from the County's transportation impact fee program. Other revenues used by SunTran to operate and maintain the public transit system in Marion County are summarized separately.

The State/Federal revenues include two funding programs available for transportation improvements in Marion County. One is allocated to projects by FDOT on the Strategic Intermodal System (SIS) and the second is the Other Roads & Right of Way program, which is forecast and provided to the TPO by FDOT to be allocated to cost feasible projects.

$2.08 BILLION

STATE/FEDERAL

$278 MILLION

COUNTY

Local Revenues

The fuel tax and impact fee revenues were forecast based on a combination of historical receipts, expected population growth in Marion County, projected economic growth, inflation, and current transportation impact fee rate schedules. The fuel tax revenue projections were adjusted to account for debt service obligations on a 2016 Local Option Fuel Tax bond and County transportation operation and maintenance costs. The balance of fuel tax revenues and impact fees, totaling $278 million for the plan period, are allocated to non-state roadway projects in the Cost Feasible Plan. **TABLE 6.1** includes the projected fuel tax and impact fee revenues allocated to the local roadway projects in the Cost Feasible Plan.

Other local revenue sources were forecast, but not included in the Cost Feasible Plan. These include local public transit revenue sources that are assumed to be absorbed by existing transit service costs and therefore are not available for new or enhanced services. Forecasts were also developed for potential new revenue sources not reflected in current policy and therefore not included in the Cost Feasible Plan. These include a sales surtax, which is currently in place, but sunsets in 2020, a property tax increase, and an increase in impact fee rates. The potential new revenues from these sources would add that do not reflect current policy could add more than two billion dollars to the plan. A detailed summary of these potential revenues is included in the following section and **Appendix H**.

TABLE 6.1: LOCAL REVENUES (IN 000'S YOE $)

		2026-2030	2031-2035	2036-2040	2041-2045	TOTAL
Impact Fees	East of I-75 Impact Fees	$7.1	$8.3	$11.0	$11.0	**$37.4**
	West of I-75 Impact Fees	$14.1	$16.6	$22.0	$22.0	**$74.7**
SUBTOTAL – IMPACT FEES		**$21.2**	**$24.9**	**$33.0**	**$33.0**	**$112.1**
State Levied Fuel Taxes	Constitutional Fuel Tax	$28.4	$33.4	$39.4	$46.4	**$147.6**
	County Fuel Tax	$12.5	$14.8	$17.4	$20.5	**$65.1**
Locally Levied Fuel Taxes	Ninth Cent Fuel Tax	$14.0	$16.3	$18.9	$21.8	**$70.9**
	5-cent Local Option Fuel Tax	$39.8	$46.4	$53.8	$62.1	**$202.0**
	6-cent Local Option Fuel Tax	$61.8	$72.1	$83.6	$96.4	**$313.8**
Debt/O&M Obligations	Debt Service (LOFT bond)	($15.9)	($0.0)	($0.0)	($0.0)	**($15.9)**
	County System O&M	($116.9)	($137.3)	($181.6)	($181.6)	**($617.5)**
SUBTOTAL – FUEL TAXES		**$23.70**	**$45.70**	**$31.50**	**$65.60**	**$166.00**
TOTAL		**$44.90**	**$70.60**	**$64.50**	**$98.60**	**$278.10**

AVAILABLE FOR CAPACITY IMPROVEMENTS

$278M

DEBT SERVICE

$16M

SYSTEM OPERATION AND MAINTENANCE

$617M

State/Federal Revenues

State and Federal revenues forecast by FDOT and provided to the TPO include numerous sources. There are three revenue programs in particular that are included in the Cost Feasible Plan. The first is the SIS funding program, allocated by FDOT to improvements of SIS facilities in Marion County, which include I-75 and portions of SR 40, US 27, and SR 326. The other programs include the Other Roads Construction & ROW program, which is allocated to roadway capacity projects and boxed fund programs in the Cost Feasible Plan, and the Transit program. The Transit program revenue forecast provided by FDOT was assumed to be available only for existing transit service costs and not allocated to transit improvements in the Cost Feasible Plan.

There are two levels of MPO/TPO designation that dictate federal funding levels for certain programs. A Transportation Management Area (TMA) designation, dependent on urbanized area population greater than 200,000, would trigger the allocation of additional federal funding to the TPO. While the TPO is not currently designated a TMA, if determined by the 2020 US Census that the urbanized area in Marion County comprises a TMA, it is estimated that the TPO would receive an additional $5 million annually in federal funding.

There are other funding programs, including Transportation Alternatives TALT and Transportation Regional Incentives Program (TRIP) that are regional in nature. Since the revenue forecasts for these programs were provided only for the broader Central Florida region, it is not appropriate to allocate these revenues to Marion County projects in the Cost Feasible Plan. **TABLE 6.2** includes the SIS and Other Roads funding estimates reflected in the Cost Feasible Plan. A summary of the regional programs and respective forecasts is provided in **Appendix H**.

Transit Funding

The revenues used by SunTran to operate the bus route services in Marion County include a mix of local, state and federal funds. Local funding sources include fare revenues, fuel refunds, and advertising revenues, as reported in the SunTran Transit Development Plan (TDP). Revenues forecast and reported in **TABLE 6.3** are based on 10-year forecasts reported in the TDP extrapolated to 2045 based on projected population growth in Marion County. It is assumed for the purpose of the LRTP that local operating funds needed to expand SunTran services will not be available, so State/Federal transit capital funding cannot be utilized for expansion of the transit system.

TABLE 6.2: STATE/FEDERAL REVENUES (IN 000'S YOE $)

	2026-2030	2031-2035	2036-2040	2041-2045	TOTAL
Strategic Intermodal System (SIS)	$185.3	$730.4	$349.9	$56.9	**$1,322.5**
Other Roads Construction & ROW*	$175.3	$189.2	$196.8	$196.8	**$758.2**
TOTAL	**$360.6**	**$580.9**	**$555.7**	**$287.4**	**$2,080.7**

*Other Roads Construction & ROW revenue estimates include 22% product support per FDOT guidance.

TABLE 6.3: STATE/FEDERAL AND LOCAL TRANSIT REVENUES (IN 000'S YOE $)

	2026-2030	2031-2035	2036-2040	2041-2045	TOTAL
Local SunTran	$7.3	$9.5	$11.6	$14.1	**$42.5**
State/Federal Transit	$44.8	$49.1	$51.1	$51.1	**$196.2**
TOTAL	**$52.1**	**$58.6**	**$62.7**	**$65.2**	**$238.7**

Potential New Revenue Sources

Other revenue sources that are not currently available, but could be instituted to fund transportation infrastructure improvements include private developer contributions, grants, and other tax revenue mechanisms. Estimates of potential revenues not included in forecasts developed for the LRTP Cost Feasible Plan can be estimated based on historical and future growth data, and include the balance of impact fee revenues, defined as the difference between the 2015 recommended rates and the effective rates; and a sales surtax. The sales surtax projection assumes the continuation of the current sales surtax, which sunsets in 2020, and assumes fifty percent of the revenues from the one percent tax would be dedicated to County transportation infrastructure improvements.

The revenue estimates in **TABLE 6.4** are reflected in year of expenditure dollars. In 2020 dollars, the estimates are approximately $700 million. The estimated cost of non-SIS unfunded roadway projects in the Needs Plan, based on the Cost Feasible Plan presented in **Chapter 7**, is approximately $750 million. The additional revenue, therefore, would enable the construction of almost all identified non-SIS roadway projects.

TABLE 6.4: POTENTIAL NEW REVENUE SOURCES (IN 000'S YOE $)

	2026-2030	2031-2035	2036-2040	2041-2045	TOTAL
Additional Impact Fees	$99.9	$117.3	$155.1	$155.1	**$527.4**
One Percent Sales Surtax (50%)	$142.34	$148.93	$154.86	$160.18	**$606.3**
TOTAL	**$242.2**	**$266.2**	**$309.9**	**$315.3**	**$1,133.7**

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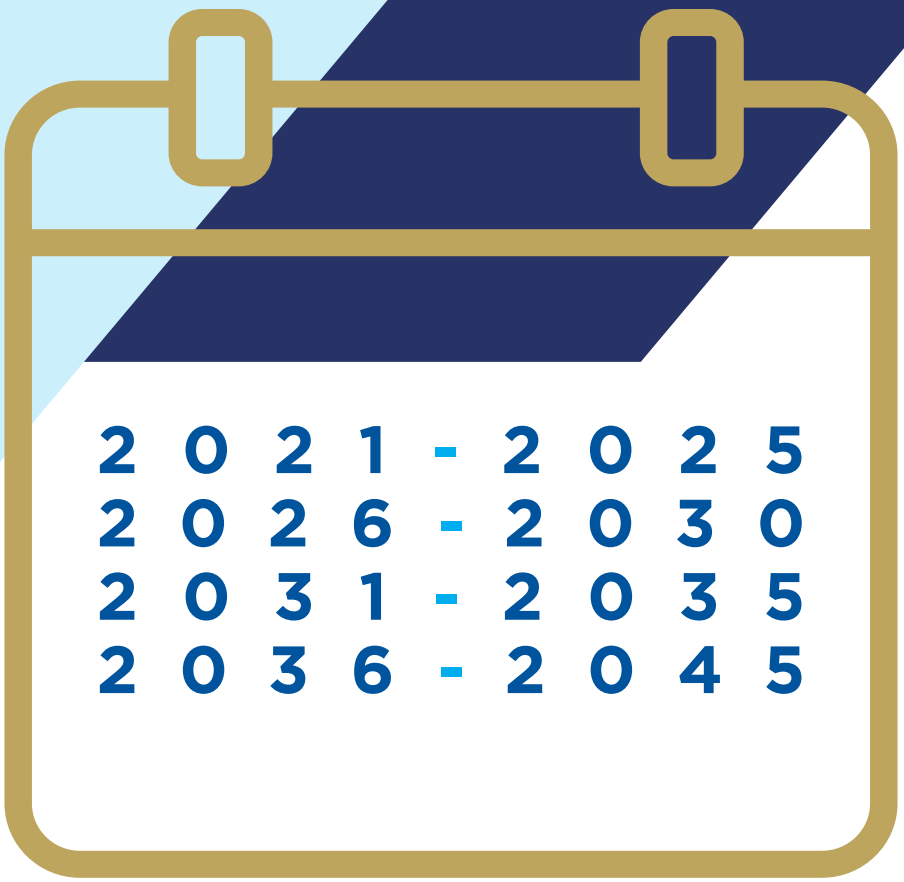
CHAPTER 7. FUNDING THE PLAN

Cost Feasible Plan

The culmination of the LRTP planning process is a Cost Feasible Plan (CFP) of multimodal improvement needs that address local needs, desires, and priorities based on public and stakeholder input; a performance-based needs assessment analysis; and revenue expected to be available in the future. The TPO's commitment to multi-faceted investment strategy that does not rely solely on traditional roadway capacity improvements is reflected in the package of improvements in the CFP.

The 2045 CFP also adheres to the federal requirement to practice performance-based planning through the analysis and prioritization of goal-specific data to estimate the need for infrastructure improvements as well as the impacts and benefits of the identified needs.

The CFP is structured in 5- and 10-year time bands, each of which is represented in year of expenditure dollars, inflated using rates prepared by the Florida Department of Transportation (FDOT). The first time band (2021-2025) includes improvements that have been programmed in the FDOT Work Program and the TPO Transportation Improvement Program. The remaining time bands include projects that were identified, prioritized, and included in respective bands based on project cost estimates and revenue forecasts, for which specific improvements are eligible.



Sixteen percent of the non-SIS projected revenue available for infrastructure improvements is allocated to three boxed fund categories of improvements in the 2026-2045 period. The three boxed fund programs include Intelligent Transportation System (ITS) projects, multimodal projects, and corridor studies. The remainder of the projected revenues are allocated to specific roadway projects, including both capacity and operational roadway improvements. Eighty-four percent of non-SIS revenues were allocated to state and local roadway improvements and the remaining sixteen percent to boxed funds programs. The Other Roads & ROW revenue program is a State/Federal funding source, but in non-Transportation Management Area regions, up to fifteen percent of the Other Roads revenues may be allocated to non-state facilities. In the 2045 CFP, twelve percent of this program funding was used to include four roadway improvement projects on non-state roadways, including:

- SW 44th Ave from SR 200 to SW 20th St – New 4-lane
- SW 44th Ave from SW 13th St to SR 40 – Widen to 4 lanes
- NW 44th Ave from SR 40 to NW 10th St – New 4-lane
- NW 44th Ave from NW 60th St to SR 326 – Widen to 4 lanes

Roadway Capacity and Operational Improvements

The Cost Feasible Plan includes almost 120 centerline miles of roadway capacity improvements, including widening existing roads and new roadway segments. It also includes thirteen intersection improvements, including one new interchange at I-75 and NW 49th St, two existing interchange improvements at US 27 and CR 484, and nine intersection improvements in various locations across the County. The total cost of non-SIS roadway improvements in the Cost Feasible Plan is $940.5 million, including the improvements funded in the first five years between 2021 and 2025. The prioritized roadway improvements included in the outer years of the Cost Feasible Plan are listed and mapped on the following pages by five-year timeband.

6% ITS

10% Multimodal

0.3% Corridor Studies

82% Roadway Capacity

2% Roadway Operational

Projects in Environmental Justice Areas

A summary of planned investments within Environmental Justice (EJ) areas provides an equity assessment of the Cost Feasible Plan. EJ is defined by the USEPA as the *fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies*. The achievement of environmental justice, then, is measured in two ways:

- The degree to which different segments of the population are protected from environmental hazards and
- The level of access people have to the decision-making process.

Both measures of EJ are addressed in the 2045 LRTP. The first is addressed through a EJ measure applied in the project evaluation and prioritization process, assessing projects in terms of their proximity to transportation disadvantaged populations, also referred to as EJ population. This metric is described in in the previous section. The second measure is addressed through the LRTP public involvement process, as described in **Chapter 3**. In both cases, the defining characteristic is the location of EJ population. The identification of this segment of the Marion County population was accomplished through the analysis US Census data on minority and low income population levels.

The two criteria used to identify EJ population are poverty and minority. The countywide average poverty rate in Marion County is 17.6% and the minority rate is 17.8%, in accordance with the Census data. Areas in the County with both a poverty and minority rate above the countywide averages, respectively, were considered EJ areas for the purpose of the LRTP analysis. A minimum population threshold was also applied to isolate areas with substantial population. The threshold for both minority and poverty is a minimum of 500. Areas meeting either the minority or poverty definition were also considered, particularly in the identification of workshop locations to provide adequate access to the planning process to those people. **TABLE 7.1** summarizes the cost feasible and unfunded needs projects in EJ versus non-EJ areas. Only the portions of projects in Environmental Justice areas are included in the cost/mileage summaries in the EJ Areas column. As indicated in the table, 16% of non-motorized and 26% of motorized projects in the Cost Feasible Plan are located in EJ areas, indicating a proportional distribution of investments, as measured by population distribution in EJ versus non-EJ areas.

TABLE 7.1: INVESTMENTS IN ENVIRONMENTAL JUSTICE AREAS

	EJ AREAS	NON-EJ AREAS	TOTAL
Population	62,300	270,900	333,200
Cost Feasible Roadway Projects	$132,930,000	$384,378,000	$517,308,000
Per Capita	$2,134	$1,419	$1,553
Unfunded Roadway Needs	$61,326,000	$862,915,000	$924,241,000
Per Capita	$984	$3,185	$2,774
ITS Improvements Mileage	49.1	169.7	218.9
Per thousand residents	0.79	0.63	0.66
Multimodal Improvements Total Mileage	84	431	515
Multimodal Improvements Total per thousand residents	1.34	1.59	1.55
Sidewalk Mileage	12	60	72
Bicycle Lane Mileage	22	159	181
Trail Mileage	49	213	262

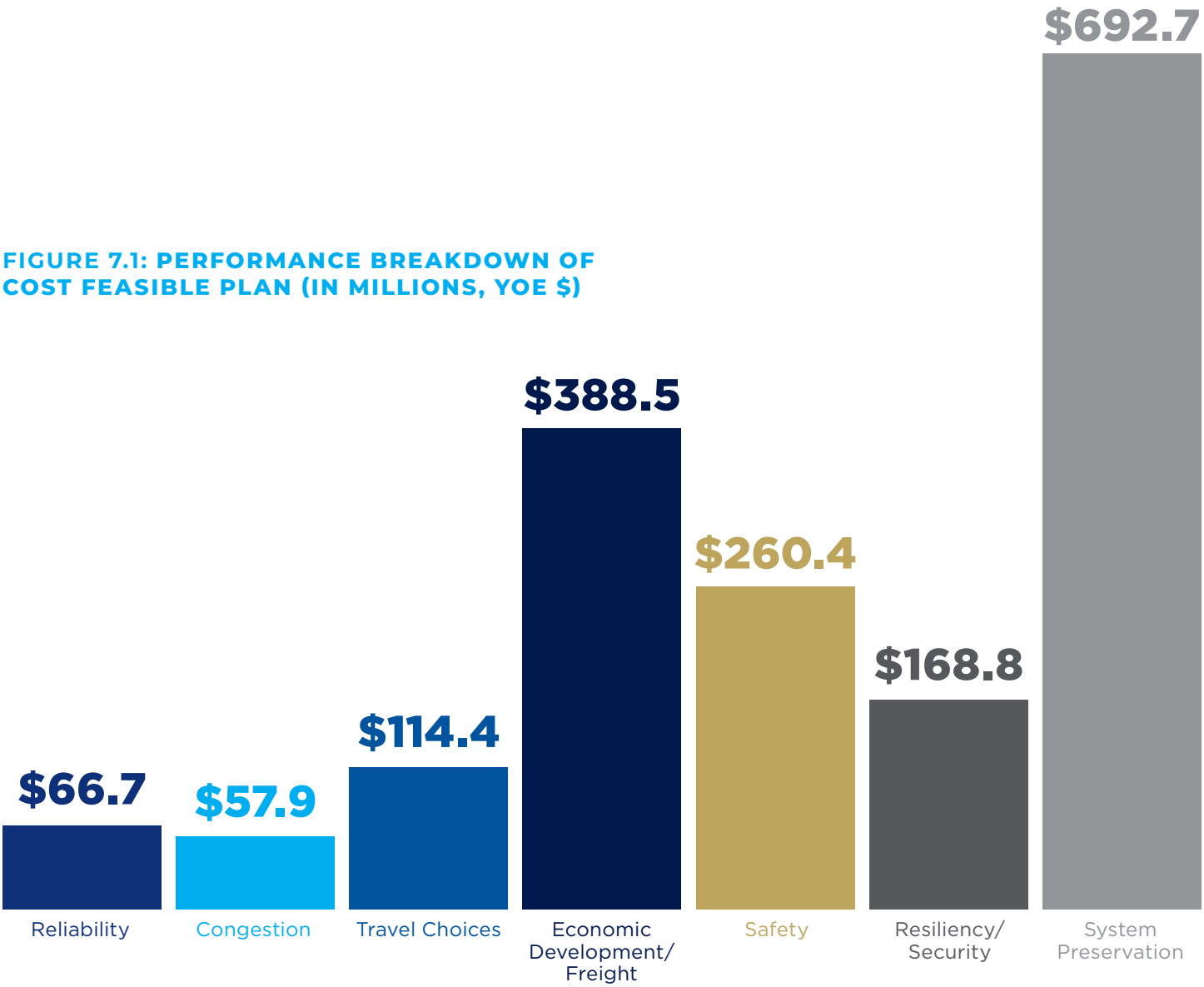
Note: Project cost estimates are represented in present day cost. Multimodal and ITS improvements represent all candidate projects in boxed fund programs.

Projects by Performance Category

Projects are also categorized in accordance with the data-based analysis described in **Chapter 5**. The performance categories assigned to projects include the primary, and in some cases primary and secondary performance groupings. While the distinction of performance category for any transportation infrastructure improvement is not necessarily exclusive of other categories, this assignment is intended to illustrate the main drivers of the multi variable project evaluation process by roadway segment. For example, safety is a primary consideration in any infrastructure improvement, but for some, based on crash history, safety is the primary driver of the improvement need.

The categories used for the Cost Feasible Plan summary illustrated in **FIGURE 7.1** include Reliability, Congestion, and Safety, which represent the first three federally required performance monitoring measures and targets described in **Appendix F**. The reliability allocation represented in **FIGURE 7.1** reflects both projects outlined in the Cost Feasible Plan by five-year timeband as well as the ITS boxed fund program allocation. Likewise, the Travel Choices category includes the Multimodal boxed fund program allocation. Other categories used in this summary include Economic Development/Freight, and Resiliency/Security. The latter category includes improvements identified on congested evacuation corridors, which are categorized as Resiliency due to their importance to facilitate an evacuation response to natural disasters, and as Security due to the role these facilities play ensuring the security of Marion County residents in the face of such a natural disaster.

FIGURE 7.1: PERFORMANCE BREAKDOWN OF COST FEASIBLE PLAN (IN MILLIONS, YOE $)



Note: Cost allocations do not sum to the Cost Feasible Plan total, as some project costs are reflected in more than one category.

FIGURE 7.2: 2021-2025 PROJECTS

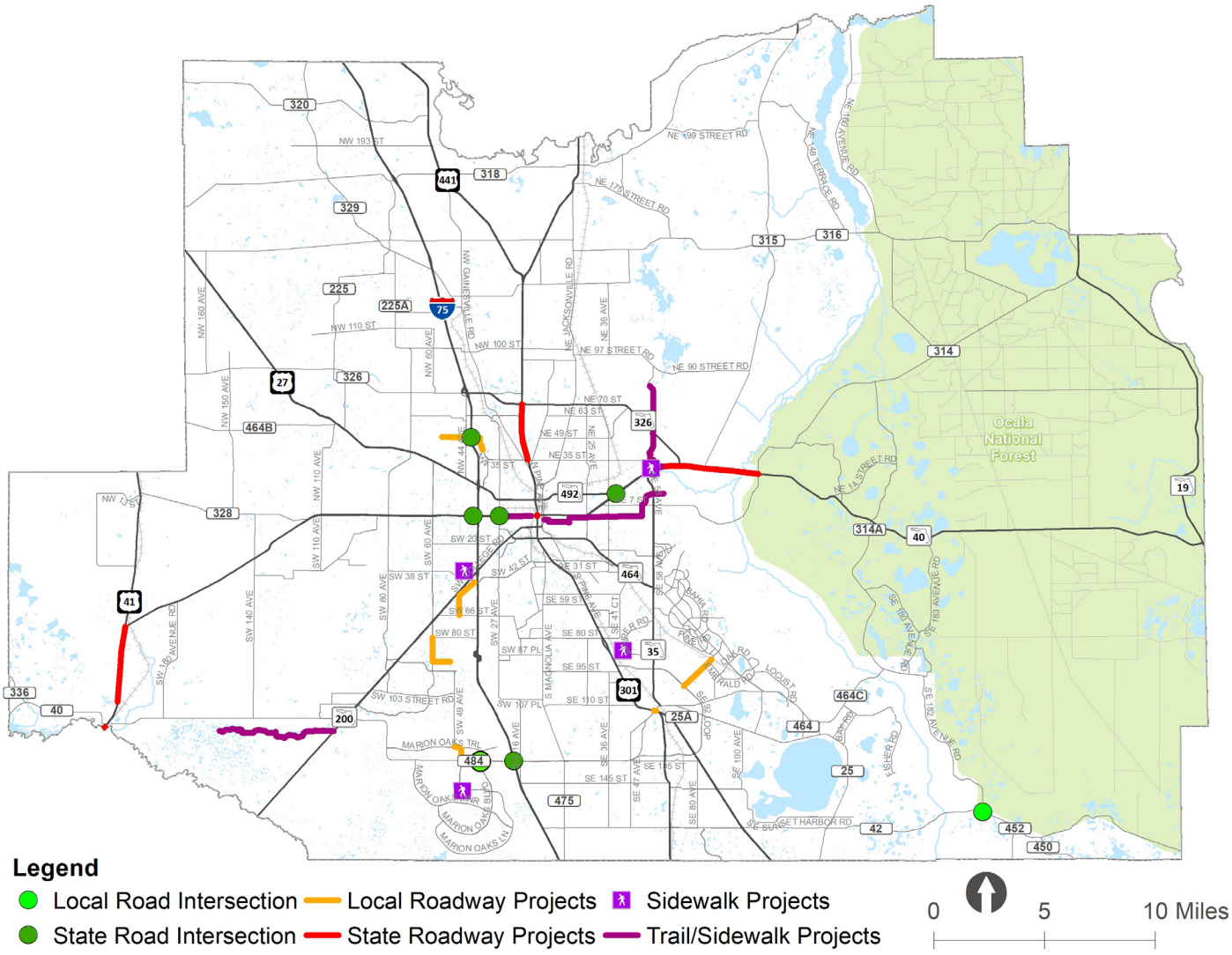


TABLE 7.2: 2021-2025 PROJECTS

PROJECT TYPE	FACILITY	FROM	TO	IMPROVEMENT
State/Federal Funded Roadway Investmens	SR 45 (US 41)	SW 110TH St	N of SR 40	Add Lanes & Reconstruct
	SR 40	End of 4 Lanes	E of CR 314	Add Lanes & Reconstruct
	CR 484	SW 20TH Ave	CR 475A	Interchange Improvement
	SR 40	at SW 40th Ave and SW 27th Ave		Add Turn Lane(s)
	I-75(SR 93)	End of NW 49th St	End of NW 35th St	New Interchange
	US 441	SR 40	SR 40A (SW Broadway)	Traffic Ops Improvement
	E SR 40	At SR 492		Traffic Signals
	SR 40	SW 27th Ave	MLK Jr. Ave	Safety Project
	US 41/Williams St	Brittan Alexander Bridge	River Rd	Safety Project
	SR 25	NW 35th St	SR 326	Safety Project
	CR 42	at SE 182ND		Add Turn Lane(s)
Local Funded Roadway Investments	SE Abshier Blvd	SE Hames Rd	N of SE Agnew Rd	Traffic Signals
	Emerald Road Extension	SE 92nd Loop	Florida Northern Railroad	New 2 Lane
	NW 49th Street Ext	NW 44th Ave	NW 35th Ave	New 4 Lane
	NW 49th Street	1.1 miles west of NW 44th Ave	NW 44th Ave	New 2 Lane
	SW 49th/40th Ave	SW 66th St	SW 42nd St Flyover	New 4 Lane divided
	SW 49th Ave	Marion Oaks Trail	CR 484	New 4 Lane
	SW 90th St	SW 60th Ave	0.8 miles E of SW 60th Ave	New 2 Lane
	SW 60th Ave	SW 90th St	SW 80th St	Traffic Signals
	CR 484	at Marion Oaks Blvd		Add Turn Lanes, Modify Signals
Pedestrian/ Bicycle Investments	Silver Springs State Park			Pedestrian Bridges
	Pruitt Trail	SR 200	Pruitt Trailhead	Bike Path/Trail
	Indian Lake Trail	Silver Springs State Park	Indian Lake Park	Bike Path/Trail
	Downtown Ocala Trail	SE Osceola Ave	Silver Springs State Park	Bike Path/Trail
	SR 40	NW 27th Ave	SW 7th Ave	Sidewalks
	Marion Oaks-Sunrise/Horizon	Marion Oaks Golf Way	Marion Oaks Manor	Sidewalks
	Saddlewood Elementary Sidewalks			Sidewalks
	Legacy Elementary Sidewalks			Sidewalks
Technological Investments	Marion County/ Ocala ITS Operational Support			ITS Communication System

FIGURE 7.3: 2026-2030 PROJECTS

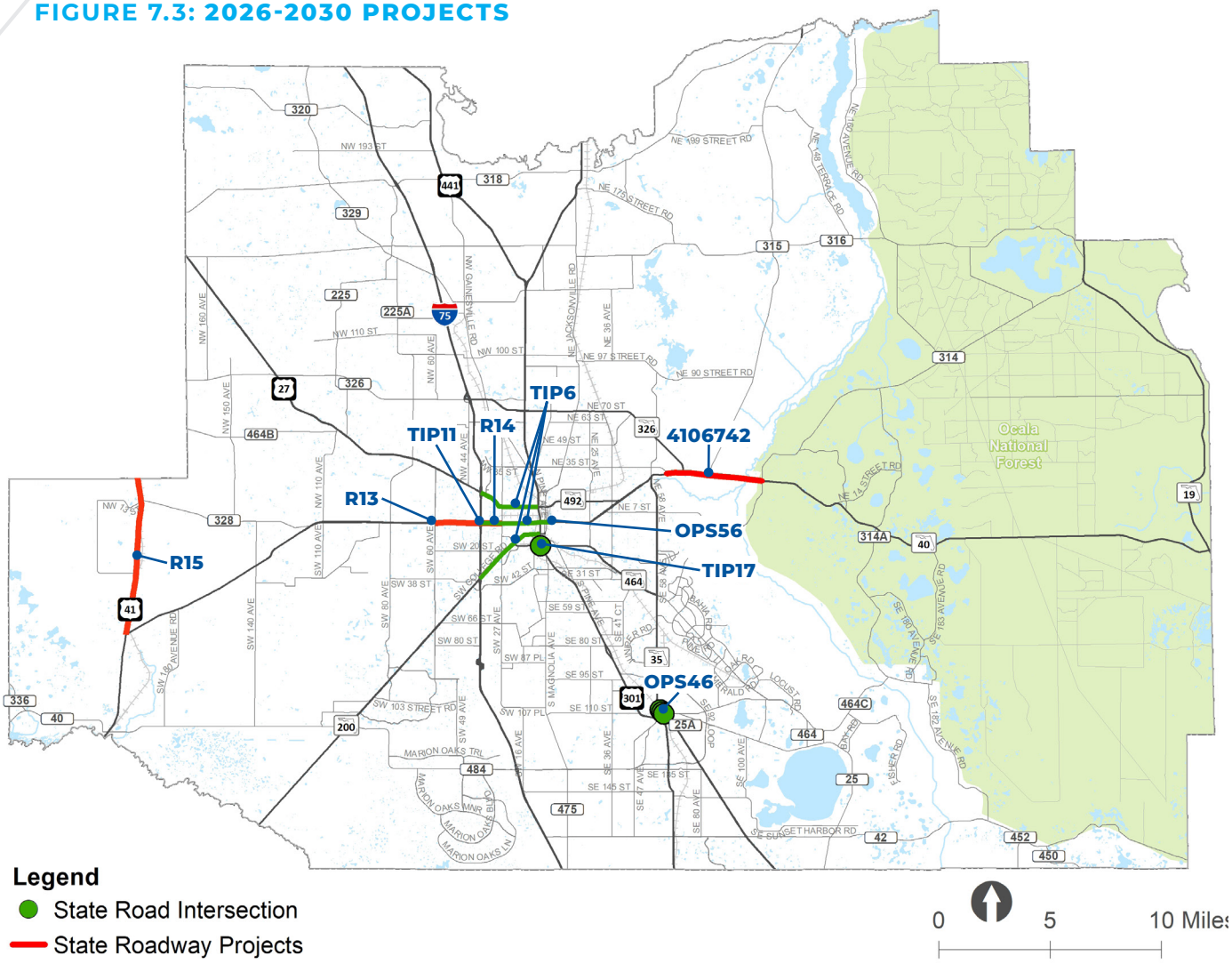


TABLE 7.3: 2026-2030 PROJECTS

FUNDING	ID	FACILITY	FROM	TO	PROJECT DESCRIPTION
State/ Federal Funded	TIP6	I-75 FRAME Off System			ITS infrastructure
	TIP17	US 441	at SR 464		Turn lane
	TIP11	SR 40	SW 40th Ave	SW 27th Ave	Left turn lane
	R15	US 41	SR 40	Levy County Line	Widen to 4 lanes
	OPS46	SR 35	at Foss Rd, Robinson Rd, Hames Rd		Intersection geometry
	R13	SR 40	SW 60th Avenue	I-75	Widen to 6 lanes
	R14	SR 40	I-75	SW 27th Avenue	Widen to 6 lanes
	OPS56	SR 40 Downtown Operational Imp.	US 441	NE 8th Ave	Complete Street
	4106742	SR 40	from end of 4 lanes	to East of CR 314	Widen to 4 lanes

FIGURE 7.4: 2031-2035 PROJECTS

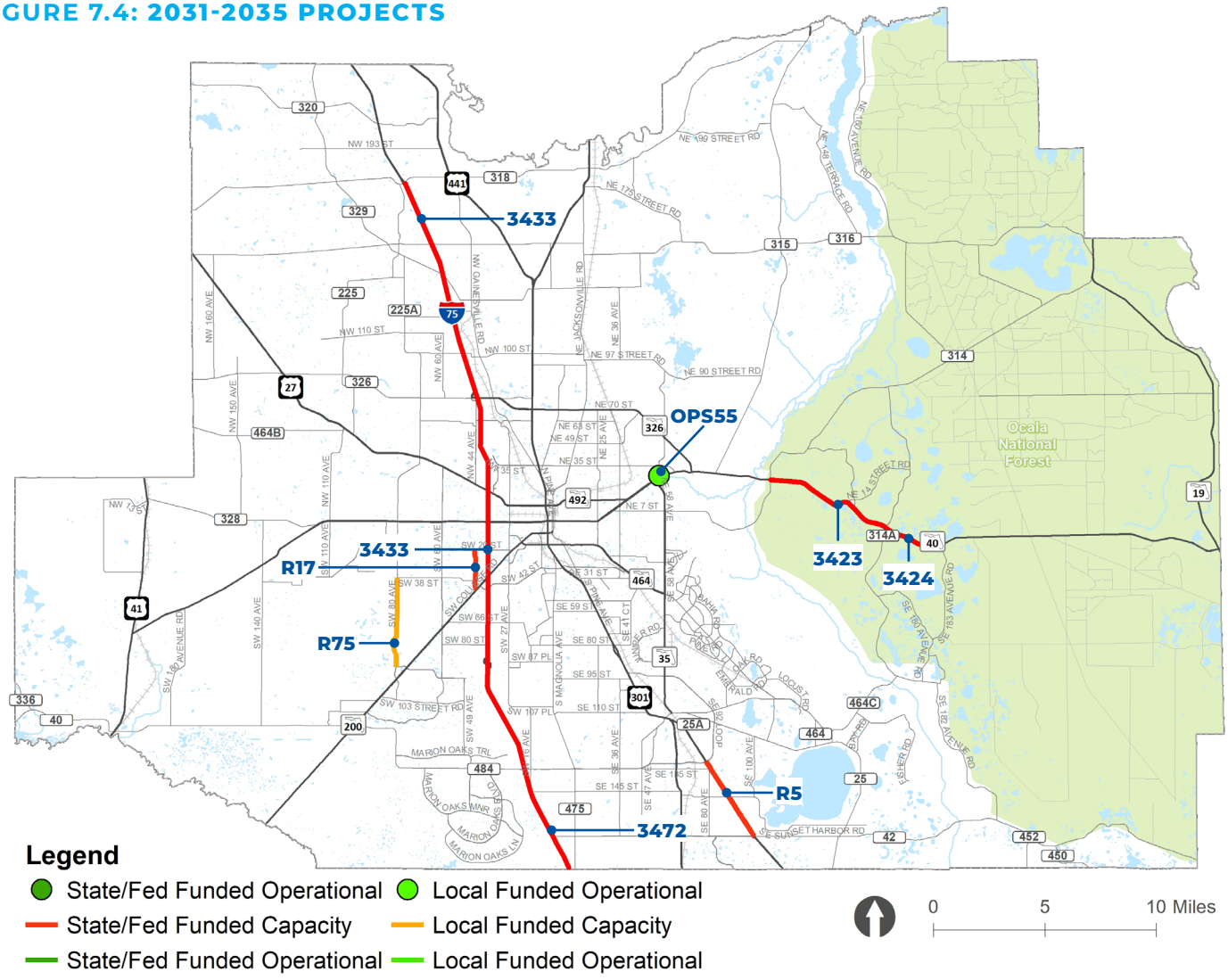


TABLE 7.4: 2031-2035 PROJECTS

FUNDING	ID	FACILITY	FROM	TO	PROJECT DESCRIPTION
State/ Federal Funded	R5	US 441	CR 42	SE 132nd Street Rd	Widen to 6 lanes
	R17	SW 44th Avenue	SR 200	SW 20th Street	New 4 lane
	OPS55	SR 40	SR 35		Intersection geometry
	3472	I-75	Sumter/Marion Co Line	CR 484	Widen to 8 lanes
	3433	I-75	CR 484	CR 318	Widen to 8 lanes
	3423	SR 40	E of CR 314	CR 314A	Widen to 4 lanes
	3424	SR 40	CR 314A	Levy Hammock Rd	Widen to 4 lanes
Locally Funded	R75	SW 70th/80th Ave	SW 90th St	SW 38th St	Widen to 4 lanes

FIGURE 7.5: 2036-2040 PROJECTS

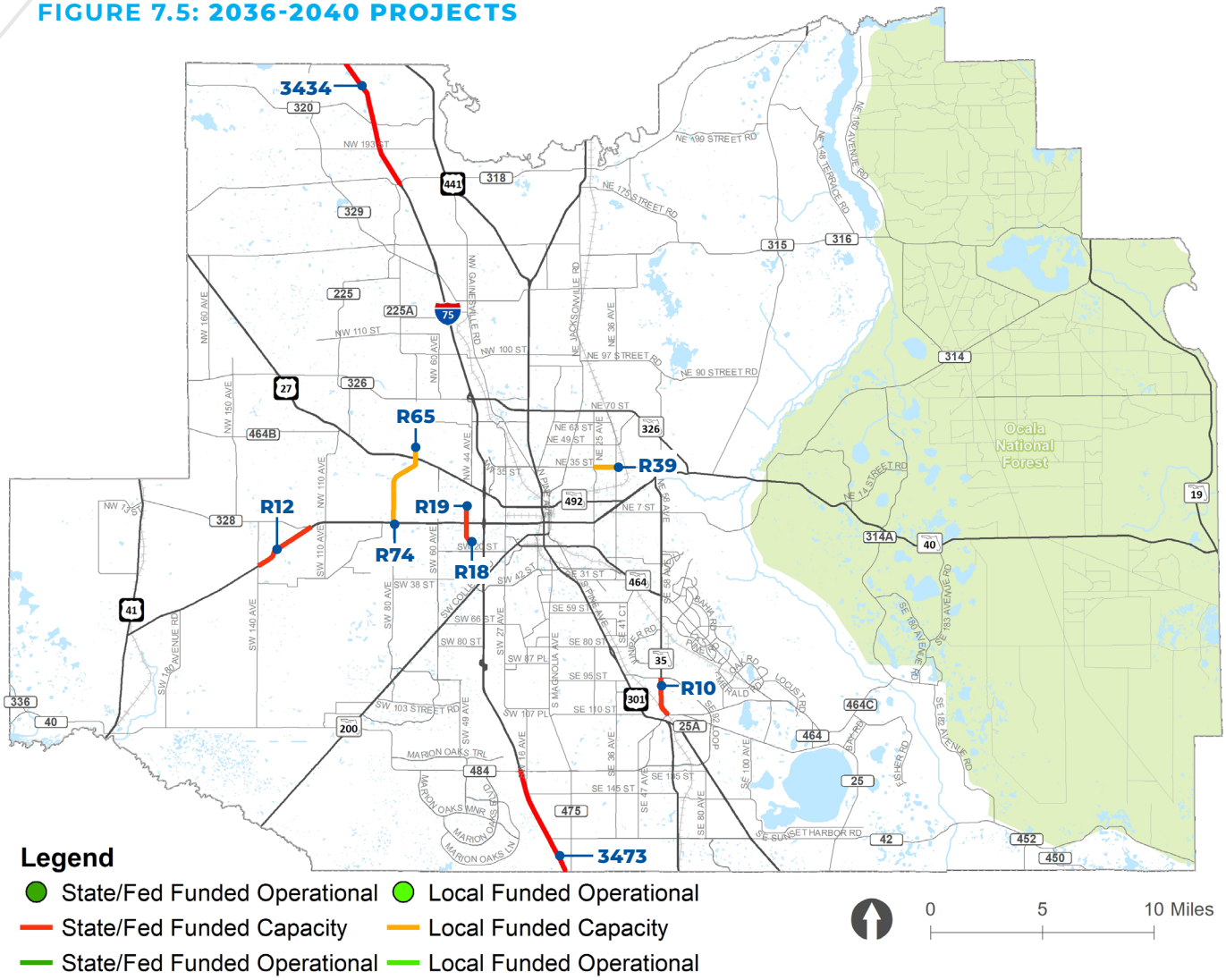


TABLE 7.5: 2036-2040 PROJECTS

FUNDING	ID	FACILITY	FROM	TO	PROJECT DESCRIPTION
State/ Federal Funded	R12	SR 40	SW 140th Avenue	CR 328	Widen to 4 lanes
	R10	SR 35	CR 25	SE 92nd Place Rd	Widen to 4 lanes
	R18	SW 44th Avenue	SW 13th St	SR 40	Widen to 4 lanes
	R19	NW 44th Avenue	SR 40	NW 10th Street	New 4 lane
	3434	I-75	CR 318	Marion/Alachua Co Line	Widen to 8 lanes
	3473	I-75	Sumter/Marion Co Line	CR 484	Managed Lanes
Locally Funded	R74	NW 70th/80th Ave	SR 40	US 27	Widen to 4 lanes
	R65	NW 70th Ave	US 27	NW 43rd St/NW 49th Street	Widen to 4 lanes
	R39	NE 35th Street	NE 25th Avenue	NE 36th Avenue	Widen to 4 lanes

FIGURE 7.6: 2041-2045 PROJECTS

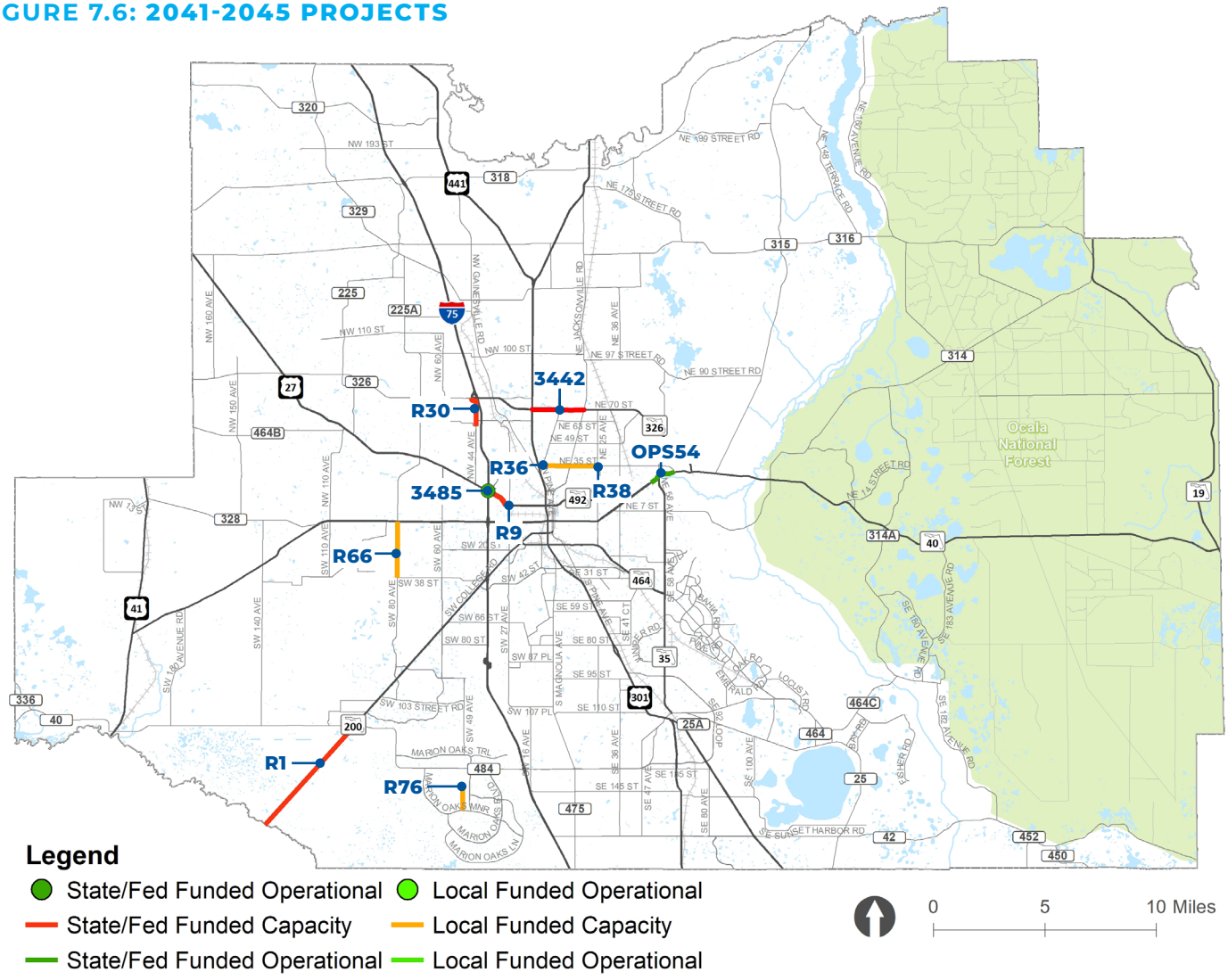


TABLE 7.6: 2041-2045 PROJECTS

FUNDING	ID	FACILITY	FROM	TO	PROJECT DESCRIPTION
State/ Federal Funded	R9	US 27	I-75	NW 27th Avenue	Widen to 6 lanes
	R1	SR 200	Citrus County Line	CR 484	Widen to 4 lanes
	R30	NW 44th Avenue	NW 60th Street	SR 326	Widen to 4 lanes
	OPS54	SR 40 - East Multimodal Imp.	NE 49th Terr	NE 60th Ct	Left turn lane
	3485	I-75	at US 27		Modify Interchange
	3442	SR 326	SR 25/US301/US 441	Old US 301/CR200A	Widen to 4 lanes
Locally Funded	R36	NE 35th St	W Anthony Rd	SR 200A	Widen to 4 lanes
	R38	NE 35th St	SR 200A	NE 25th Ave	Widen to 4 lanes
	R66	SW 70th/80th Ave	SW 38th St	SR 40	Widen to 4 lanes
	R76	SW 49th Ave	Marion Oaks Manor	SW 142nd Pl Rd	Widen to 4 lanes

Boxed Fund Projects

The Corridor Studies, ITS, and Multimodal boxed funds programs include more than 200 projects identified through the system needs assessment described in **Chapter 5**, the 2018 ITS Strategic Plan, and the TPO's bicycle, pedestrian, and regional trails plans reviewed in the Plan Synthesis, respectively. The boxed funds projects are listed in the following tables and illustrated on respective maps.

TABLE 7.7: BOXED FUNDS PROGRAMS

FUNDING	FACILITY	FROM	TO
Corridor Studies Boxed Fund	NW 35th Ave.	NW 49th St	NW 63rd St
	CR 484	SR 200	Marion Oaks Tr
	CR 484	US 41	SW 140th Ave
	SR 40	SE 183rd Ave Rd	Lake Co line
	NE Jacksonville Rd	NE 49th St	SR 326
	CR 316	CR 315	NE 148th Terr Rd
	SE Sunset Harbor Rd	SE 100th Ave	CR 25
	Oak Rd	Emerald Rd	SE Maricamp Rd
ITS Boxed Funds Program ITS Intersection Improvements	SR 40	SW 60th Avenue	SR 35
	SR 40	Hwy 328	SW 27th Ave.
	US 27	SW 27th Avenue	SR 35
	US 301/US 441	SE 165th St.	SR 464
	US 441	US 301	CR 475
	US 441	SR 200	CR 25A
	CR 484	Marion Oaks Course	US 441
	SW 20th Street	SW 60th Avenue	I-75
	SW 20th St.	NW 60th Ave.	SR 200
	US 27	NW 27th Avenue	US 441
	SR 40	NE 1st Ave.	SE 25th Ave.
	US 27	CR 225	I-75
	US 441	SE 132nd Street Rd	US 301
	US 41	SW 111th Place Lane	SR 40
	US 441	CR 475	SR 200
	SR 200	CR 484	SR 464
	SR 40	SR 35	CR 314A
	US 301	SE 143rd Place	US 441
	US 301	NW 35th St.	SR 326
	CR 464	Midway Rd	Oak Rd
	SR 464	SR 200	Oak Rd
	US 301	Sumter County Line	CR 42
	SR 35	SE 92nd Place Rd	SR 464
	CR 464	SR 35	Midway Rd
	SR 464	SR 200	SR 35
	SR 200A	US 301	NE 49th St.
	NW/SW 27th Avenue	US 27	NW 35th Street
	E Magnolia Ave/E 1st Ave.	NE 20th St.	SR 200/SE 10th St
	SR 326	I-75	SR 200A
	Hwy 42	US 301	US 441
	US 41	Citrus County Line	SW 111th Place Ln

FUNDING	FACILITY	FROM	TO
ITS Boxed Funds Program ITS Intersection Improvements	SW 42nd St.	SR 200	SR 464
	NW/SW 27th Avenue	SW 42nd Street	SR 200
	NW/SW 27th Avenue	SR 200	SR 40
	SR 35	SR 464	SR 40
	NW 35th St.	NW 35th Ave. Rd.	NE 36th Ave.
	SE 36th Ave	SR 464	SR 40
	SW 27th Ave/SW 19th AveRoad	SW 42nd St.	SR 464
ITS Boxed Funds Program Emergency Vehicle Preemption Intersection Improvements	US 27	I-75	NW 27th Ave
	NW 27th Ave	US 27	SR 40
	60th Ave	US 27	SW 95th St
	US 301	SR 326	W Hwy 329
	CR 42	US 441	Ocala Rd
	NE 36th Ave	NE 35th St	SR 40
	Maricamp Rd	Oak Rd	SE 108th Terrace Rd
	US 492	US 301	SR 40
	SW 20th St	I-75	SR 200
	SW 49th Ave	SW 95th St	CR 484
	25th Ave	NE 35th St	SR 464
	SE 132nd St	CR 484	US 441
	SW 95th St	SW 60th Avenue	SW 49th Ave

FIGURE 7.7: CORRIDOR STUDIES AND ITS BOXED FUNDS PROJECTS

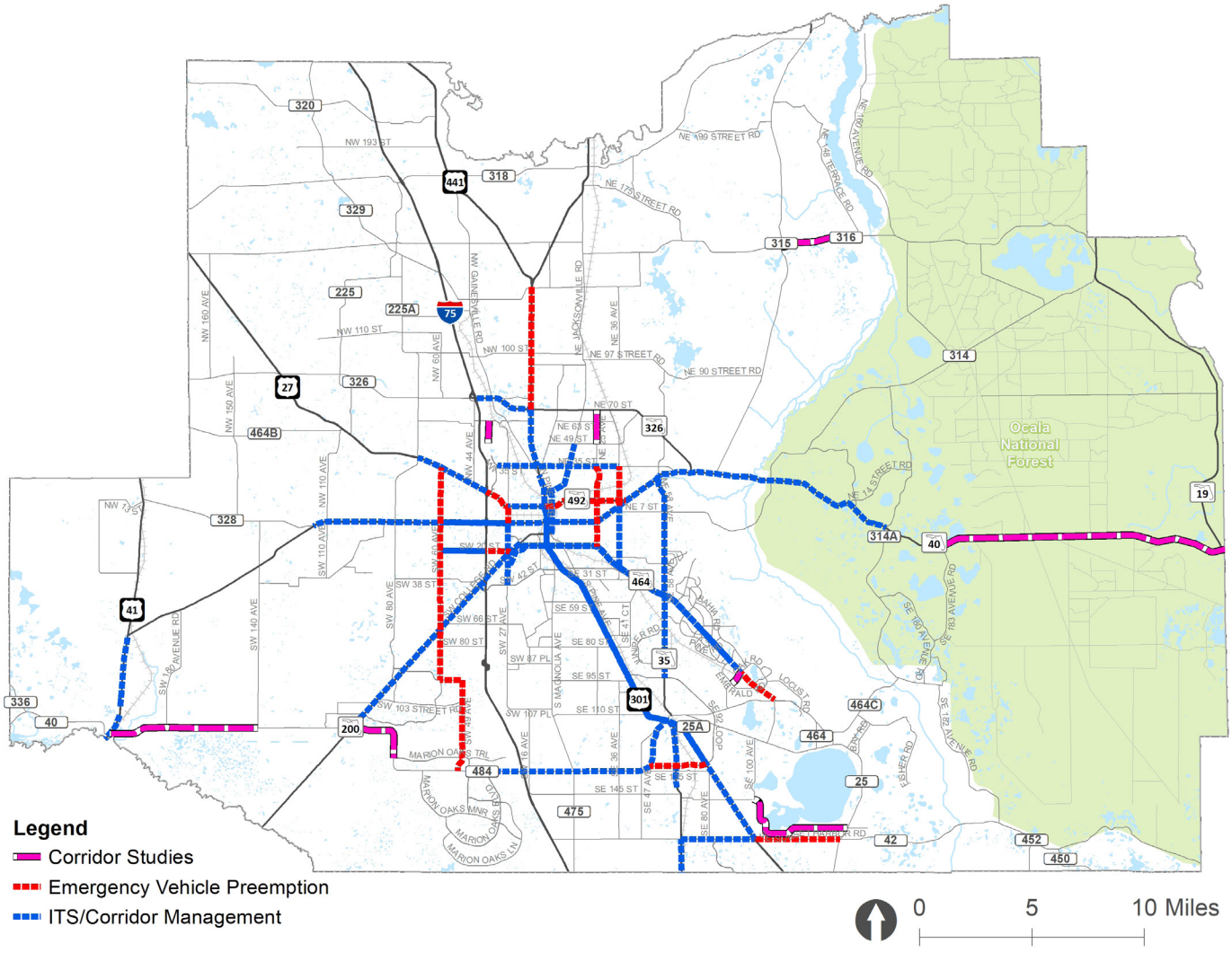


TABLE 7.8: MULTIMODAL BOXED FUND PROJECTS

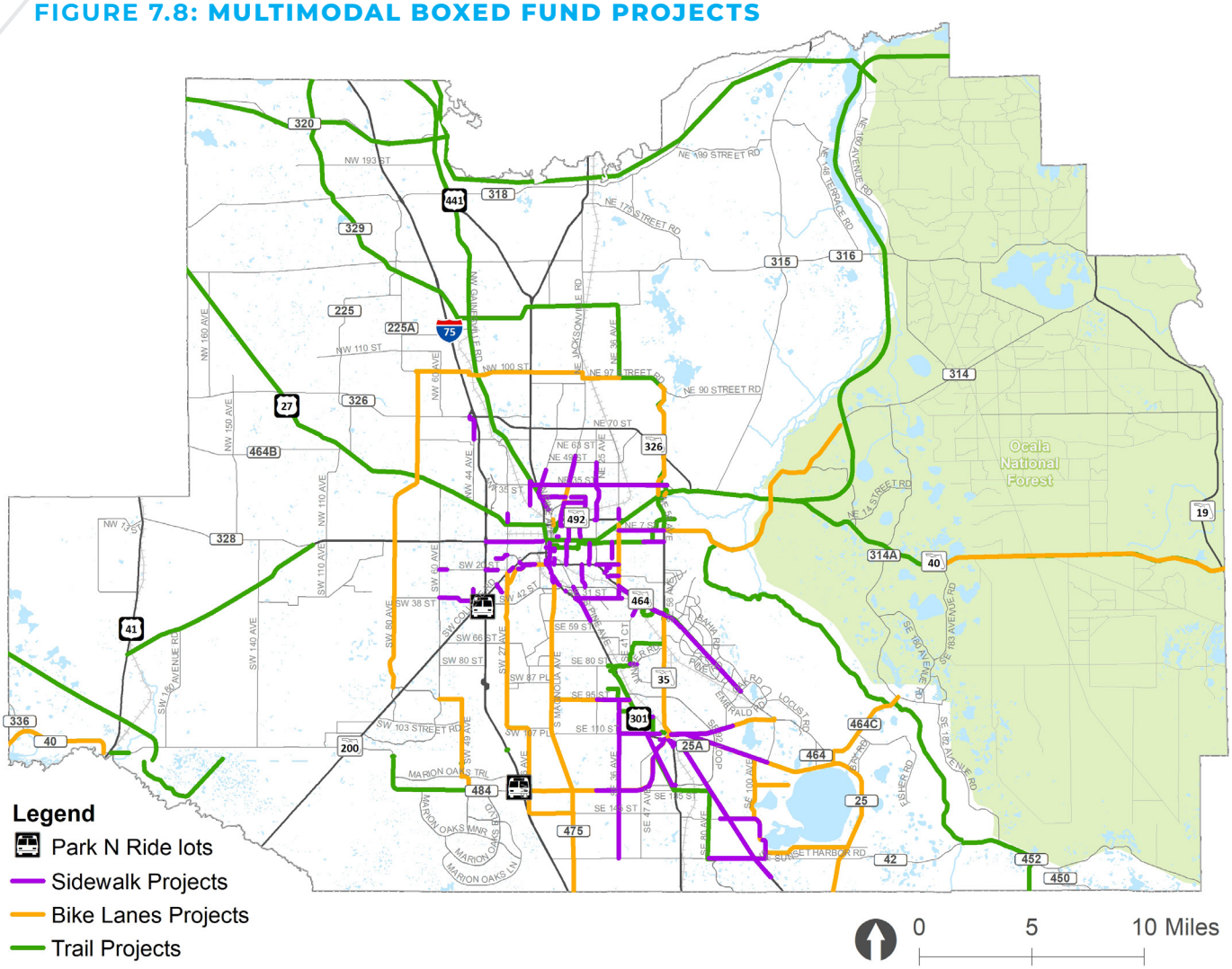
BOXED FUND	FACILITY	FROM	TO
Multimodal Boxed Fund Transit Station Projects	CR 484 at I-75		shared park-and-ride lots
	SR200 W of I-75		shared park-and-ride lots
Multimodal Boxed Fund Sidewalk Projects	CR 42 (SE Hwy 42)	SE 80th Ave	SE 105th Ave
	CR 484	SE 25th Ave	US 441
	E Fort King St	NE 48th Ave	NE 58th Ave
	Marion Oaks-Sunrise/Horizon	Marion Oaks Golf Way	Marion Oaks Manor
	N Magnolia Ave	NW 28th St	NW 20th St
	NE 10th St	NE 8th Ave	NE 9th St
	NE 12th Ave	NE 14th St	Silver Springs Blvd
	NE 14th St	NE 24th Ave	NE 25th Ave
	NE 17th Ave	NE 14th St	NE 3rd St
	NE 19th Ave	NE 28th St	NE 14th St
	NE 24th St	NE Jacksonville Rd	NE 19th Ave
	NE 25th Ave	NE 14th St	NE 49th St
	NE 28th St	NE 12th Court	NE 19th Ave
	NE 28th St	US 301	E of NE Jacksonville Rd
	NE 35th St	US 441	NE 59th Terr
	NE 36th Ave	NE 14th St	NE 20th Pl
	NE 3rd St	NE Tuscawilla Ave	NE Sanchez Ave
	NE 7th St	NE 36th Ave	NE 58th Ave
	NE 8th Ave	NE 10th St	NE Jacksonville Rd
	NE Jacksonville Rd	NE 53rd St	NE 35th St
	NW 16th Ave	NW Gainesville Rd	NW 31st St
	NW 27th Ave	S of NW 17th St	NW Old Blitchton Rd
	NW 35th St	NW 16th Ave	US 441
	NW 44th Ave	W Hwy 326	NW 63rd St
	NW Gainesville Rd	NW 37th St	S of NW 35th St
	NW MLK Jr Ave	NW 31st St	NW 22nd St
	SE 102nd Pl	US 441	SE 52nd Ct
	SE 110th St	SE 36th Ave	SE 55th Ct
	SE 110th St Rd	SE Baseline Rd	SE 90th Ct
	SE 110th St/CR25	SE Baseline Rd	SE 109th Terrace Rd
	SE 113th St	Hames Rd	SE 56th Ave
	SE 11th Ave	Silver Springs Blvd	SE 17th St
	SE 132nd St Rd	SE 55th Ave Rd	US 301
	SE 147th Pl	SE 84th Terr	US 441
	SE 17th St	SE 30th St	SE 32nd Ave
	SE 17th St	SE 25th Ave	SE 36th Ave
	SE 18th Ave	SE 17th St	SE 28th Loop
	SE 19th Ave	SE 28th St	SE 31st St
	SE 1st Ave	SW 1st Ave	SW 6th St
	SE 22nd Ave	E Fort King St	SE 17th St

BOXED FUND	FACILITY	FROM	TO
Multimodal Boxed Fund Sidewalk Projects	SE 24th St	SE Maricamp Rd	SE 36th Ave
	SE 30th Ave	SE 32nd Ave	Existing sidewalk to the south
	SE 32nd Ave	SE Fort Kiing St	SE 13th St
	SE 36th Ave	SE 95th St	SE Hwy 42
	SE 38th St	SE 38th St / SE 36th St	SE 37th Ct
	SE 38th St	SE Lake Weir Ave	SE 31st St
	SE 3rd Ave	SE 6th St	SE 8th ST
	SE 3rd Ave	S Magnolia Ave	SE 17th St
	SE 44th Ave Rd	SE 48th Place Rd	SE Maricamp Rd
	SE 55th Ave Rd	US 27 (SE Ashbier Blvd)	SE 132nd St Rd
	SE 79th St	SE 41st Ct	Juniper Rd
	SE 95th St	Cross Florida Trail	US 441
	SE Lake Weir Ave	SE 31st St	SE 38th St
	SE Maricamp Rd	SE 36th Ave	Oak Rd
	SE Sunset Harbor Rd	US 441	CR 42 (SE Hwy 42)
	SR 200	SW 20th St	SW 17th Rd
	SR 40 - West Multimodal Improvement	CSX Rail Bridge	I-75
	SW 13th St	SW 33rd Ave	SW 12th Ave
	SW 17th St	SW College Rd	SW 12th Ave
	SW 19th Ave Rd	SW 17th St	W of SW 21st Ave
	SW 1st Ave	US 27 (S Pine Ave)	SW 29th St Rd
	SW 1st Ave	SW Fort King St	US 441
	SW 20th St	SW 60th Ave	SW 57th Ave
	SW 20th St	I-75	SW 31st Ave
	SW 32nd Ave	SW College Rd	SW 31st Rd
	SW 32nd Ave	SW 34th Cir	SW 34th Ave
	SW 38th St	SW 60th Ave	SW 48th Ave
	SW 40th St	SW 48th Ave	SW 43rd Ct
	SW 43rd Ct	SW 32nd Pl	SW 44th St
	SW 5th St	SW 1st Ave	Pine Ave
	SW College Rd	SW 39th St	SW 17th St
	US 27 (Pine Ave)	W of SE 10th Ave	SE 10th Ave
	US 27 (S Pine Ave)	SE 38th St	SE 52nd St
	US 27 (S Pine Ave)	SE 3rd Ave	SE 30th St
	US 301	SE 62nd Ave	SE 115th Ln
	US 301	W Anthony Rd	NW 28th St
	US 441	SW 15th Pl	SW 17th St
	US 441	US 301	SE 173rd St
	W Anthony Rd	NW 34th Pl	US 301
	W Anthony Rd	NW 44th St	NW 35th St

BOXED FUND	FACILITY	FROM	TO
	NE 97th Street Rd	NE 58th Ave	CR 200A
	CR 200A	NE 97th Street Rd	NE 100th St
	NE/NW 100th St/NE 97th St	NE 36th Ave	CR 225A
	CR 225A	NE 100th St	SR 40
	SW 80th Ave	SR 40	SW 90th St
	SW 95th Street Rd	SW 60th Ave	SW 49th Ave
	SW 49th Ave	SW 95th Street Rd	Marion Oaks Course
	Marion Oaks Course	SW 49th Ave	CR 484
	CR 484	SW 16th Ave	SR 25 (Hames Rd)
	SR 25 (Hames Rd)	US 441	SR 35 (Baseline Rd)
	SR 35 (Baseline Rd)	SR 25 (Hames Rd)	SE Maricamp Rd
	SR 35 (Baseline Rd)	SR 40	NE 97th Street Rd
	CR 25 (Ocala Rd)	SR 35 (Baseline Rd)	SE Sunset Harbor Rd
	SE Sunset Harbor Rd	CR 25 (Ocala Rd)	SE 100th Ave
	SE 100th Ave	SE Sunset Harbor Rd	CR 25 (Ocala Rd)
	SE 132nd Place	SE 100th Ave	Carney Island Park Entrance
Multimodal Boxed Fund	Withlacoochee Bay Trail	Downtown Dunnellon	Levy County line
	Villages Trail	Lake Weir	Lake County line
Bicycle Facility Projects	SR 40 to Silver Springs State Park Connection	Half Mile Creek Trailhead	Silver Springs State Park
	Indian Lake State Forest Connection	Half Mile Creek Trailhead	Indian Lake State Forest
	CR 200A	NE 35th St	CR 200
	SR 40	CR 328	US 41
	CR 42	CR 475	County line
	SE 110 Street Rd	CR 25	SE Maricamp Rd
	CR 464C	CR 25	CR 314A
	CR 475A (SW 27 Ave)	SR 200	CR 475
	CR 475 (S Magnolia Ave)	US 27	South County line
	CR 314	SR 35	CR 214A
	CR 314A	CR 314	CR 464C
	SE 36th Ave	SR 40	Maricamp Rd
	SE 95th St	CR 475	US 441
	NE Osceola Ave	Bonnie Heath Blvd	NE 14th St
	SW 19th Ave Rd	SW 27th Ave	SW 17th St
	SR 464	SR 200	US 441
	SR 40 (Black Bear Trail)	SE 183rd Rd	US 17 (Volusia Co)

BOXED FUND	FACILITY	FROM	TO
Multimodal Boxed Fund Trail Projects	Indian Lake Trail	Silver Springs State Park	Indian Lake Trailhead
	Silver Springs Bikeway Phase II	Baseline Paved Trail - North Trailhead	CR 42
	Ocala to Silver Springs Trail	Osceola Trail / Ocala City Hall	Silver Springs State Park
	Silver Springs to Hawthorne Trail	Silver Springs State Park	Alachua County Line; Hawthorne
	Santos to Baseline, US441 crossing	Baseline Trailhead	Santos Trailhead
	CR484 Pennsylvania Ave Multi-Modal	Blue Run Park	Mary Street
	Watula Trail & NE 8th Road Trail	Tuscawilla Art Park	CR 200A/SE Jacksonville Road
	Nature Coast Trail	Levy County Line	CR 484
	Belleview to Greenway Trail	Lake Lillian Park	Cross Florida Greenway
	SE Maricamp Rd.	SE 31st St	Baseline/SE 58th Ave
	CR 484	Cross Florida Greenway	Designated bike lane on CR 484
	Ocala-Summerfield Rd./ SE 135th St./SE 80th Ave.	CR 484	Mulberry Grove Pool and Recreation Center
	Maricamp Rd.	Baseline/SE 58th Ave	Designated bike lane E of Oak Rd
	Bonnie Heath Blvd.	NW 60th Avenue	NW Hwy 225A
	US 441 to Mcintosh to Ocala Connector	Mcintosh	Ocala Connector
	Cannon-Dunnellon Segment	Pruitt Trailhead	Bridges Rd Trailhead
	Black Bear Trail	Silver Springs State Park	Wildcat Lake Boat Ramp
	Lake County Connection	along SE HWY 42 and SE HWY 452	
	Gainesville to Ocala Corridor	Alachua County Line to	NE 58th Ave
	Orange Creek Corridor	Alachua County Line	Ocklawaha River
	Silver River to Bronson Corridor	Levy County Line	NE 58th Ave
	Williston to Orange Creek Corridor	Levy County to	Alachua County Line
	CR 484 trail tunnel	N of paved trail tunnel on CFG	
	SW 49th Ave trail tunnel	at existing trail tunnel across CFG	
	I-75 landbridge	at CFG	
	Forest High School SRTS	SE 38th St/SE 47th Ave	Ocala Rotary Sportsplex
	Bikeway to Silver Springs gap	N end of Silver Springs Bikeway II	Silver Springs State Park
	Multi use path	Osceola Ave	Silver Springs Trail

FIGURE 7.8: MULTIMODAL BOXED FUND PROJECTS



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Project Funding Summary

The projects included in the cost feasible plan are summarized by phase, funding source, and timeband in the following tables.

TABLE 7.9: STATE/FEDRALLY FUNDED PROJECTS (NON-SIS) - COSTS IN 000'S YOE $

ID	Perf. Focus	Facility	From	To	Project Descriptsion	Funding Program
2386481		SR 45 (US 41)	SW 110TH St	N of SR 40	Add Lanes & Reconstruct	State/Federal
4336511		CR 484	SW 20TH Ave	CR 475A	Interchange Improvement	State/Federal
						State/Federal
						Local
4336611		US 441	SR 40	SR 40A (SW Broadway)	Traffic Ops Improvement	State/Federal
						State/Federal
						State/Federal
						Local
4457011		SE Abshier Blvd	SE Hames Rd	N of SE Agnew Rd	Traffic Signals	State/Federal
4458001		E SR 40	at SR 492		Traffic Signals	State/Federal
4348441		CR 42	at SE 182nd		Add Left Turn Lane(s)	State/Federal
4413661		SR 40	SW 27th Ave	MLK Jr. Ave	Safety Project	State/Federal
4456871		US 41 N/S Williams St	Brittain Alexander Bridge	River Rd	Safety Project	State/Federal
4458021		SR 25	NW 35th St	SR 326	Safety Project	State/Federal
4261791		Silver Springs State Park			Pedestrian Bridges	State/Federal
4354842		Pruitt Trail	SR 200	Pruitt Trailhead	Bike Path/Trail	State/Federal
4367551		Indian Lake Trail	Silver Springs State Park	Indian Lake Park	Bike Path/Trail	State/Federal
4367561		Downtown Ocala Trail	SE Osceola Ave	Silver Springs State Park	Bike Path/Trail	State/Federal
4375962		SR 40	NW 27th Ave	SW 7th Ave	Sidewalks	State/Federal
4408801		Marion Oaks-Sunrise/Horizon	Marion Oaks Golf Way	Marion Oaks Manor	Sidewalks	State/Federal
4364742		Saddlewood Elementary Sidewalks			Sidewalks	State/Federal
4364743		Legacy Elementary Sidewalks			Sidewalks	
4363611		Marion County/ Ocala ITS Operational Support			ITS Communication System	
TIP6	Reliability, Congestion	I-75 FRAME Off System			ITS infrastructure	Other Roads
TIP17	Reliability	US 441	at SR 464		Turn lane	Other Roads
TIP11	Freight Mobility	SR 40	SW 40th Ave	SW 27th Ave	Left turn lane	Other Roads
R15	Multimodal Safety, Resiliency/ Security	US 41	SR 40	Levy County Line	Widen to 4 lanes	Other Roads
OPS46	Resiliency/ Security	SR 35	at Foss Rd, Robinson Rd, Hames Rd		Intersection geometry	Other Roads
R13	Freight Mobility	SR 40	SW 60th Avenue	I-75	Widen to 6 lanes	Other Roads
R14	Freight Mobility	SR 40	I-75	SW 27th Avenue	Widen to 6 lanes	Other Roads
OPS56	Reliability, Resiliency/ Security	SR 40 Downtown Operational Imp.	US 441	NE 8th Ave	Complete Street	Other Roads
R5	Resiliency/ Security, Economic Dvlpt	US 441	CR 42	SE 132nd Street Rd	Widen to 6 lanes	Other Roads
OPS55	Reliability, Economic Dvlpt	SR 40	SR 35		Intersection geometry	Other Roads
R17	Travel Choices, Economic Dvlpt	SW 44th Avenue	SR 200	SW 20th Street	New 4 lane	Other Roads
R18	Freight Mobility, Accessibility	SW 44th Avenue	SW 13th Street	SR 40	Widen to 4 lanes	Other Roads

	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				
	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Total Cost
		$500.0		$43,306.8																	$43,806.8
			$1,930.0																		$1,930.0
				$9,494.5																	$9,494.5
				$22.5																	$22.5
		$63.0																			$63.0
			$1,929.0																		$1,929.0
				$2,202.5																	$2,202.5
				$613.9																	$613.9
		$410.0		$1,208.5																	$1,618.5
		$210.0		$786.3																	$996.3
				$407.2																	$407.2
				$543.2																	$543.2
		$160.0		$429.2																	$589.2
		$440.0		$2,164.3																	$2,604.3
				$2,658.8																	$2,658.8
				$2,158.0																	$2,158.0
		$155.0																			$155.0
		$253.0																			$253.0
		$446.0		$921.9																	$1,367.9
		$36.2																			$36.2
				$317.1																	$317.1
				$1,441.7																	$1,441.7
		$1,000.0																			$1,000.0
						$107.0	$178.8	$1,144.9													$1,430.7
			$395.0		$10.6	$31.9	$42.6	$212.9													$693.1
			$3,429.5					$275.0													$3,704.5
					$2,514.0	$7,541.9	$37,709.6	$40,206.1													$87,971.6
					$561.7	$561.7	$842.6	$5,617.3													$7,583.4
					$661.8	$1,985.5	$9,927.3	$13,236.3													$25,810.9
					$314.1	$942.2	$4,711.0	$6,281.4													$12,248.7
					$164.8	$494.3	$659.1	$3,295.6													$4,613.8
					$2,587.2					$9,113.8	$45,569.2	$60,758.9									$118,029.1
									$219.9		$329.8	$1,010.7									$1,560.4
					$918.6	$2,755.8	$11,023.2					$21,573.1									$36,270.6
					$308.4	$925.3										$9,579.7					$10,813.4

ID	Perf. Focus	Facility	From	To	Project Descriptsion	Funding Program
R12	Congestion	SR 40	SW 140th Avenue	CR 328	Widen to 4 lanes	Other Roads
R19	Travel Choices, Economic Dvlpt	NW 44th Avenue	SR 40	NW 10th Street	New 4 lane	Other Roads
R10	Resiliency/ Security	SR 35	CR 25	SE 92nd Place Rd	Widen to 4 lanes	Other Roads
R30	Economic Dvlpt	NW 44th Avenue	NW 60th Street	SR 326	Widen to 4 lanes	Other Roads
R9	Freight Mobility	US 27	I-75	NW 27th Avenue	Widen to 6 lanes	Other Roads
R1	Safety	SR 200	Citrus County Line	CR 484	Widen to 4 lanes	Other Roads
OPS54	Economic Dvlpt, Resiliency/ Security	SR 40 - East Multimodal Imp.	NE 49th Terr	NE 60th Ct	Left turn lane	Other Roads
SUBTOTAL Other Roadways, Non-SIS State/Federal						

TABLE 7.10: STRATEGIC INTERMODAL SYSTEM (SIS) PROJECTS - COSTS IN 000'S YOE $

ID	Facility	From	To	Project Descriptsion	Funding Program
4106742	SR 40	from end of 4 lanes	to East of CR 314	Widen to 4 lanes	SIS
4352091	I-75	at End of NW 49th St	End of NW 35th St	New Interchange	SIS
3472	I-75	Sumter/Marion Co Line	CR 484	Widen to 8 lanes	SIS
3433	I-75	CR 484	CR 318	Widen to 8 lanes	SIS
3435	I-75	CR 484	CR 318	Add 4 Special Use Lanes	SIS
3423	SR 40	E of CR 314	CR 314A	Widen to 4 lanes	SIS
3424	SR 40	CR 314A	Levy Hammock Rd	Widen to 4 lanes	SIS
3434	I-75	CR 318	Marion/Alachua Co Line	Widen to 8 lanes	SIS
3474	I-75	CR 318	Marion/Alachua Co Line	Add 4 Special Use Lanes	SIS
3473	I-75	Sumter/Marion Co Line	CR 484	Managed Lanes	SIS
3485	I-75	at US 27		Modify Interchange	SIS
3442	SR 326	SR 25/US301/US 441	Old US 301/CR200A	Widen to 4 lanes	SIS
SUBTOTAL SIS					

Note: Cost feasible SIS proejcts reflect 2018 SIS Cost Feasible Plan

TABLE 7.11: LOCALLY FUNDED PROJECTS - COSTS IN 000'S YOE $

ID	Perf. Focus	Facility	From	To	Project Descriptsion	Funding Program
R40	Economic Dvlpt	Emerald Rd Extension	SE 92nd Loop	Florida Northern Railroad	New 2 lane	TIF East Fuel Taxes
R16*	Economic Dvlpt	NW 49th/35th St	NW 44th Ave	North End of Limerock Pit	New 4 lane divided w/ interchange	TIF East TIF West Fuel Taxes Sales Tax
R28	Travel Choices	NW 49th/35th St	1.1 mi W of NW 44th Ave	NW 44th Ave	New 2 lane	TIF West
R56	Economic Dvlpt	SW 49th/40th Ave	SW 66th St	SW 42nd St Flyover	New 4 lane divided	TIF West Sales Tax Maint. Fund
R61	Economic Dvlpt	SW 49th Ave	CR 484	900 Feet N of Marion Oaks Tr	New 4 lane divided	Sales Tax
C10	Not Evaluated	SW 90th St	SW 60th Ave	0.8 miles E of SW 60th Ave	New 2 lane	TIF West
INT2	Not Evaluated	SW 60th Ave	SW 90th St	SW 80th St	Signalization projects	TIF West

**partially funded in SIS plan - see 4352091 in Table 10.*

	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				
	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Total Cost
									$1,242.8	$3,728.3	$18,641.3					$32,872.9					$56,485.2
													$599.8	$1,799.4		$11,995.8					$14,394.9
													$979.1	$2,937.3	$14,686.5	$19,582.1					$38,185.0
																	$765.6	$2,296.9	$9,187.6	$15,312.6	$27,562.8
																	$1,249.5	$3,748.6	$18,742.9	$24,990.6	$48,731.6
													$3,276.1	$9,828.3	$45,865.3					$65,521.8	$124,491.4
																	$12.8	$38.5	$51.4	$257.0	$359.7
	$-	$3,673.2	$7,683.4	$68,676.5	$8,041.2	$15,345.6	$65,094.1	$70,269.6	$1,462.6	$12,842.1	$64,540.3	$83,342.7	$4,855.0	$14,564.9	$60,551.8	$74,030.4	$2,028.0	$6,084.0	$27,981.9	$106,082.0	$697,149.4

	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				
	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Total Cost
			$5,587.3					$185,303.0													$190,890.3
				$40,597.5																	$40,597.5
										$22,100.0	$81,700.0	$237,314.0									$341,114.0
										$11,325.0		$111,355.0									$122,680.0
									$3,000.0	$26,400.0											$29,400.0
										$12,118.0	$26,254.0	$119,082.0									$157,454.0
										$1,398.0	$2,738.0	$13,741.0									$17,877.0
										$6,000.0					$24,000.0	$77,013.0					$107,013.0
									$2,500.0	$8,000.0											$10,500.0
									$9,690.0	$32,300.0					$25,000.0	$223,875.0					$290,865.0
										$1,950.0										$27,391.0	$29,341.0
										$1,460.0									$5,850.0	$23,619.0	$30,929.0
	$-	$-	$5,587.3	$40,597.5	$-	$-	$-	$185,303.0	$15,190.0	$123,051.0	$110,692.0	$481,492.0	$-	$-	$49,000.0	$300,888.0	$-	$-	$5,850.0	$51,010.0	$1,368,660.8

	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				
	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Total Cost
			$650.0	$6,080.0																	$6,730.0
				$2,940.0																	$2,940.0
				$3,609.9																	$3,609.9
				$2,209.9																	$2,209.9
				$2,600.0																	$2,600.0
			$5,700.0																		$5,700.0
				$2,000.0																	$2,000.0
				$669.1																	$669.1
				$4,626.9																	$4,626.9
				$1,500.0																	$1,500.0
				$4,700.0																	$4,700.0
		$300.0	$70.0	$2,300.0																	$2,670.0
				$355.0																	$355.0

ID	Perf. Focus	Facility	From	To	Project Descriptsion	Funding Program
OPS53	Preservation, Economy	Marion Oaks Blvd	Marion Oaks Blvd	CR 484	Intersection geometry	TIF West
R75	Economic Dvlpt	SW 70th/80th Ave	SW 90th St	SW 38th St	Widen to 4 lanes	Fuel Taxes
R74	Economic Dvlpt	NW 70th/80th Ave	SR 40	US 27	Widen to 4 lanes	Fuel Taxes
						TIF West
R65	Economic Dvlpt	NW 70th Ave	US 27	NW 43rd St/NW 49th Street	Widen to 4 lanes	TIF West
R39	Safety, Economic Dvlpt	NE 35th Street	NE 25th Avenue	NE 36th Avenue	Widen to 4 lanes	TIF East
R36	Safety, Economic Dvlpt	NE 35th Street	W Anthony Rd	CR 200A	Widen to 4 lanes	TIF East
						Fuel Taxes
R38	Safety, Economic Dvlpt	NE 35th Street	CR 200A	NE 25th Avenue	Widen to 4 lanes	TIF East
						Fuel Taxes
R66	Economic Dvlpt	SW 70th/80th Ave	SW 38th St	SR 40	Widen to 4 lanes	TIF West
						Fuel Taxes
R76	Economic Dvlpt	SW 49th Ave	Marion Oaks Manor	SW 142nd Pl Rd	Widen to 4 lanes	TIF West
						Fuel Taxes
SUBTOTAL TIF EAST						
SUBTOTAL TIF WEST						
SUBTOTAL FUEL TAXES						
OTHER						

TABLE 7.12: BOXED FUNDS PROGRAMS - COSTS IN 000'S YOE $

ITS Boxed Fund	Other Roads
	Fuel Taxes
Multimodal Boxed Fund	Other Roads
	Fuel Taxes
Corridor Studies Boxed Fund	Other Roads

System Operation and Maintenance

Preservation of the existing transportation infrastructure in Marion County is a top priority, as specified by the LRTP goal to Optimize and Preserve Existing Infrastructure, which is the most heavily weighted LRTP goal. The estimated costs of operating and maintaining the existing County roadways, SunTran public transit system, and State Highway System (SHS) in Marion County are reflected in **TABLE 7.13** and, in the case of County roadways and transit, are subtracted from available revenues prior to considering other improvements to the network. In the case of the SHS, the figures represent districtwide estimates for FDOT, District Five.

TABLE 7.13: SYSTEM OPERATION & MAINTENANCE - COSTS IN 000'S YOE $

Marion County Roadways*	Fuel Taxes
SunTran	Local
	State/Federal
State Highway System**	State/Federal

**Countywide estimate based on 2020 County budget, extrapolated for future years*
***Districtwide estimate for FDOT District 5*

	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				
	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Total Cost
			$40.0	$425.0																	**$465.0**
					$1,449.8	$4,349.5	$15,948.0					$34,048.78									**$55,796.1**
					$1,198.8											$29,295.2					**$58,305.5**
						$3,596.3					$16,891.5					$7,323.8					
					$151.4	$454.2	$2,270.8									$4,702.2					**$7,578.5**
					$355.7	$1,067.0					$6,264.7					$11,047.5					**$18,735.0**
			$2,280.0																	$10,763.9	**$15,734.8**
																				$2,691.0	
			$1,530.0				$2,316.8													$1,346.9	**$17,316.1**
																				$12,122.3	
													$1,372.9	$4,118.8					$16,475.2	$2,745.9	**$49,425.7**
																				$24,712.8	
													$604.1	$1,812.3						$4,832.7	**$21,747.3**
																			$7,249.1	$7,249.1	
	$-	$-	**$4,460.0**	**$9,689.9**	**$355.7**	**$1,067.0**	**$2,316.8**	$-	$-	$-	**$6,264.7**	$-	$-	$-	$-	**$11,047.5**	$-	$-	$-	**$12,110.8**	**$47,312.5**
	$-	**$300.0**	**$110.0**	**$7,959.0**	**$151.4**	**$4,050.4**	**$2,270.8**	$-	$-	$-	**$16,891.5**	$-	**$1,977.0**	**$5,931.1**	$-	**$12,026.0**	$-	$-	**$16,475.2**	**$7,578.6**	**$75,721.1**
	$-	$-	$-	**$5,540.0**	**$2,648.6**	**$4,349.5**	**$15,948.0**	$-	$-	$-	$-	**$34,048.8**	$-	$-	$-	**$29,295.2**	$-	$-	**$7,249.1**	**$46,775.2**	**$145,854.3**
	$-	$-	**$5,700.0**	**$10,826.9**	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	$-	**$16,526.9**

	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	
						Total Cost
	NA	$9,000.0	$12,000.0	$12,000.0	$16,000.0	**$49,000.0**
	NA	$2,000.0	$2,000.0	$2,000.0	$5,000.0	**$11,000.0**
	NA	$13,000.0	$19,000.0	$22,000.0	$34,000.0	**$88,000.0**
	NA	$1,000.0	$5,000.0	$2,000.0	$4,000.0	**$12,000.0**
	NA	$1,500.0	$1,500.0	NA	NA	**$3,000.0**

	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	
						Total Cost
	$93,164.7	$116,900.0	$137,300.0	$181,600.0	$181,600.0	**$617,400.0**
	$12,020.3	$7,300.0	$9,500.0	$11,600.0	$14,100.0	**$42,500.0**
	$21,816.9	$44,800.0	$49,100.0	$51,100.0	$51,100.0	**$196,100.0**
	$2,362,000.0	$2,785,000.0	$3,006,000.0	$3,108,500.0	$3,108,500.0	**$12,008,000.0**

Corridor Summaries

The primary travel corridors in Marion County include one limited access facility and a number of principal and major arterial roadways that connect the major activity centers within the County and to the broader region outside the County. Twelve corridors were identified based on their levels of traffic, functional classification, and identified improvement needs. These corridors include:

- SR 200
- SR 40
- US 41
- I-75
- SR 464
- US 27 (west of I-75)
- US 301/US 441/US 27
- SR 492
- SR 326
- SR 35
- CR 484
- CR 25/25A

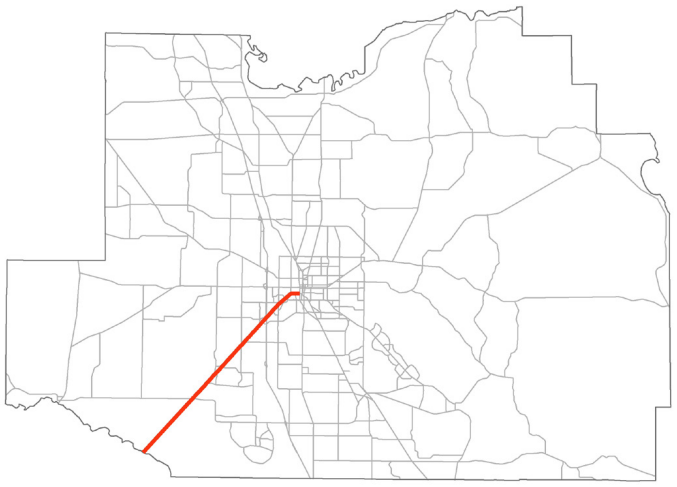
There are multiple improvement needs on all these corridors, including roadway capacity, roadway operational improvements, technological improvements, and multimodal projects. The corridor summaries on the following pages include a comprehensive accounting of needed improvements, including cost feasible, boxed fund, and unfunded improvements on these corridors. The variety of improvement needs for any given corridor can represent opportunities to advance multiple types of corridor improvements during the project development process, potentially achieving economy of scale. The corridor summaries are intended to provide a comprehensive needs assessment by corridor and a resource to implementing agencies to take advantage of the potential economies of scale or, at a minimum, to prevent preclusion of certain improvements during the implementation of others. While not all improvements on the summaries are cost feasible, indeed for some corridors there no cost feasible improvements apart from boxed fund projects, they provide an important reference to potential improvements. In some cases, the summaries include improvements on intersecting facilities, particularly with respect to sidewalk or bicycle facility needs, as they can inform the context and needs of connecting facilities during project development phases.

The summaries are specific to the identified corridors and do not include all projects in the LRTP Needs Plan, nor do they include all projects in the Cost Feasible Plan. They include only the primary corridors and respective improvement needs.

SR 200

SR 200 is a key north/south arterial connecting the growing suburban area in southwest Marion County with downtown Ocala. There are several major activity centers on this corridor, including the College of Central Florida, and one of the largest growth rates in the County, in terms of both population and employment. Improvements identified in this corridor include bicycle and sidewalk infrastructure, ITS infrastructure, and new transit service providing a mobility alternative on this congested corridor.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
TIP6	Roadway operations	2026-2030	I-75 FRAME Off System			ITS
R1	Roadway capacity	2036-2040	SR 200	Citrus County Line	CR 484	Add 2 lanes
B36	Bike	Multimodal Boxed Fund Program	SW 19th Ave Rd	SW 27th Ave	SW 17th St	5' paved shoulder
SW5	Pedestrian		SW College Rd	SW 39th St	SW 17th St	fill sidewalk gap
SW6			US?27 (S Pine Ave)	SE 3rd Ave	SE 30th St	fill sidewalk gap
SW16			SW 32nd Ave	SW College Rd	SW 31st Rd	fill sidewalk gap
SW23			SW 43rd Ct	SW 32nd Pl	SW 44th St	fill sidewalk gap
SW35			SW 1st Ave	SW 10th St	SW 11th St	fill sidewalk gap
OPS41	Roadway operations	ITS Boxed Fund Program	SW 42nd St.	SR 200	SR 464	ITS/Corridor Management
OPS31			SR 200	CR 484	SR 464	ITS/Corridor Management
OPS50			SR 200A	US 301	NE 49th St.	ITS/Corridor Management
OPS64			SW 20th St	I-75	SR 200	Emergency vehicle preemption
OPS50			SR 200A	NE 49th St	US 301	ITS/Corridor management
R63	Roadway operations	Unfunded	SW 40th Ave	at SR 200		Intersection realignment
R43	Roadway capacity		SW 20th Street	I-75	SR 200	Add 2 Lanes
PT9	Transit		SR 200/VA	Ocala	Ocala	New Local Services
PT4			Orange Route			Existing Routes expansion (Frequency Improvements)

Reference Documents

Ocala Marion FY 2020/21 - 2024/25 Transportation Improvement Program

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

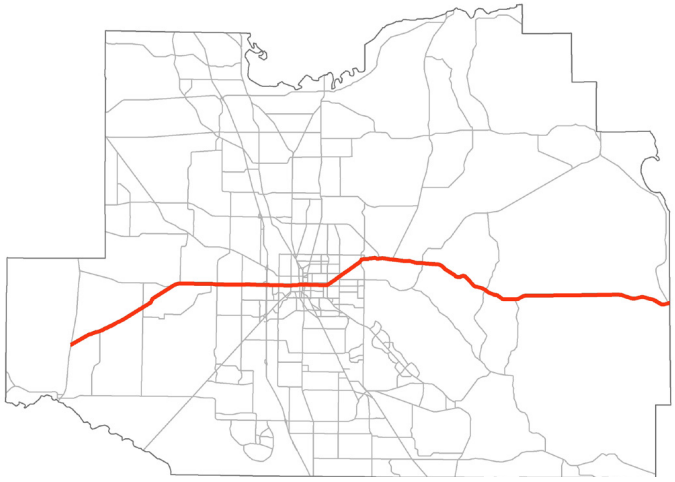
Ocala Marion Regional Trails Facilities Plan

SunTran Transit Development Plan

SR 40

SR 40 is the primary east/west arterial extending the entire distance between the Lake County line to the east and the Citrus County line to the west and intersecting the center of downtown Ocala. The portion of SR 40 east of SR 326 is a Strategic Intermodal System (SIS) facility, with a roadway widening project in the SIS cost feasible plan. The portion to the west is also planned for roadway widenings. There are also bicycle, sidewalk, trail, ITS, and transit improvements needed in this important corridor.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
TIP11	Roadway operations	2026-2030	SR 40	SW 40th Ave	SW 27th Ave	Add turn lanes
SIS13	Roadway capacity	2026-2030	SR 40	End of 4 lanes	CR 314	Add lanes & reconstruct
R13			SR 40	SW 60th Ave	I-75	Add 2 lanes
R14			SR 40	I-75	SW 27th Ave	Add 2 lanes
OPS56	Roadway operations		SR 40 Downtown Operational Imp.	US 441	NE 8th Ave	Pedestrian and traffic ops improvements
SIS1	Roadway capacity	2031-2035	SR 40	CR 314	CR 314A	Add 2 lanes
SIS2			SR 40	CR 314A	Levy Hammock Rd	Add 2 lanes
OPS55	Roadway operations		SR 40	SR 35		Intersection reconstruction
R12	Roadway capacity	2036-2040	SR 40	SW 140th Ave	CR 328	Add 2 lanes
OPS54	Roadway operations	2041-2045	SR 40 - East Multimodal Imp.	SW 140th Terr	NE 60th Ct	Add turn lanes, enhance illumination, ped. safety
C4	Corridor Study	Corridor Studies Boxed Fund Program	SR 40	SE 183rd Ave Rd	Lake Co Line	Corridor Study (capacity, safety)
TIP25	Bike	Multimodal Boxed Fund Program	SR 40 (Black Bear Trail)	SE 183rd Rd	US 17 (Volusia Co)	Bike path
B22	Bike		SR 40 to Silver Springs State Park Connection	Half Mile Creek Trailhead	US 41	Bicycle bridge or underpass
B25	Mulituse Trail		SR 40	CR 328	SE 17th St	5' pave shoulder
SW11	Pedestrian		SE 11th Ave	Silver Springs Blvd	Ocala	Fill sidewalk gap
SW199	Pedestrian		SR 40 - West Multimodal Improvement	CSX Rail Bridge	I-75	Sidewalk widening, reconditioning
T18	Trails		Black Bear Trail	Silver Springs State Park	Wildcat Lake Boat Ramp	Multi use trail
T5	Trails		Silver Springs to Hawthorne Trail	Silver Springs State Park	Alachua County Line; Hawthorne	Multi use trail
T3	Trails		Ocala to Silver Springs Trail	Osceola Trail / Ocala City Hall	Silver Springs State Park	Multi use trail
B18	Bike		Withlacoochee Bay Trail	Downtown Dunnellon	Levy County Line	12' shared use path
SW98	Pedestrian		NE 12th Ave	NE 14th St	Silver Springs Blvd	Fill sidewalk gap

SR 40 Cont'd

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
OPS35	Roadway operations	ITS Boxed Fund Program	SR 40	NE 1st Ave.	SE 25th Ave	ITS/Corridor Management
OPS16			SR 40	SW 60th Avenue	SR 35	ITS/Corridor Management
OPS34			SR 40	Hwy 328	SW 27th Ave	ITS/Corridor Management
OPS29			SR 40	SR 35	CR 314A	ITS/Corridor Management
OPS57	Roadway operations	Unfunded	NE 8th Ave	SR 40	SR 492	Remove 2 lanes, add multimodal enhancements
R11	Roadway capacity		SR 40	US 41	SW 140th Avenue	Add 2 lanes
PT1	Transit		Green Route			Existing Routes expansion (Frequency Improvements)
PT6			Yellow Route			Existing Routes expansion (Frequency Improvements)

Reference Documents

FDOT Strategic Intermodal System 2045 Cost Feasible Plan

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

Ocala Marion Regional Trails Facilities Plan

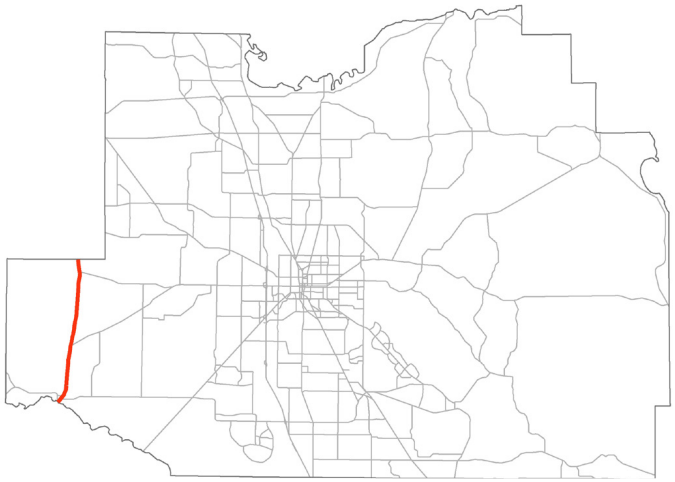
SunTran Transit Development Plan

Ocala Marion FY 2020/21 - 2024/25 Transportation Improvement Program

US 41

US 41 extends through the southwest corner of Marion County, serving as a regional north/south arterial that passes through downtown Dunnellon. Needed improvements on this short corridor within the County include ITS infrastructure and roadway widening with a multi-use trail.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
OPS18	Roadway operations	ITS Boxed Fund Program	US 41	Citrus County Line	SW 111th Place Lane	ITS/Corridor Management
OPS49			US 41	SW 111th Place Lane	SR 40	ITS/Corridor Management
R31	Roadway capacity	Unfunded	Dunnellon Bypass	CR 40	US 41	New 2 lanes
R15			US 41	SR 40	Levy County Line	Add 2 Lanes, multi-use trail
R53			US 41	SW 111th Place Lane	SR 40	Widen to 4 lanes, multi-use trail

Reference Documents

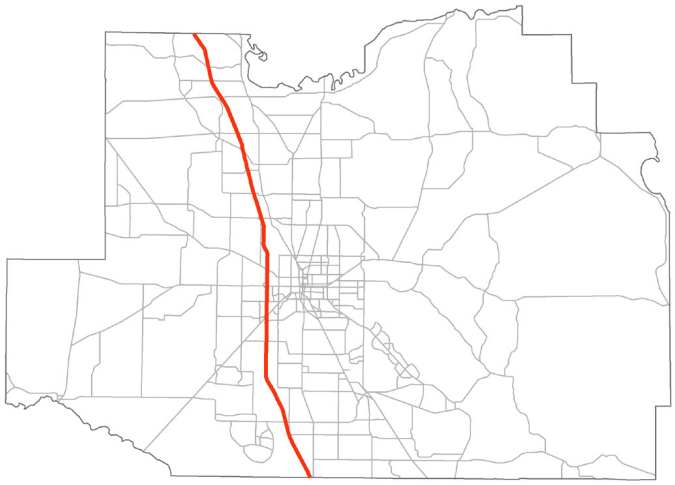
Ocala Marion ITS Strategic Plan

Marion County Comprehensive Plan

Interstate 75

Interstate 75 is the primary north south artery in Marion County, serving regional and inter-regional travel. As a Strategic Intermodal System (SIS) facility, improvements on I-75 are planned by FDOT. Projects on I-75 in the LRTP include widenings, managed lanes, and interchange improvements, including one new interchange at NW 49th St and modification of the interchange at US 27. Other needed improvements in this corridor include ITS infrastructure on parallel routes and new express bus service connecting the south part of Marion County with downtown Ocala.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
4352091	Roadway capacity	2021-2025	I-75	at End of NW 49th St	End of NW 35th St	New Interchange
SIS10		2031-2035	I-75	CR 484	CR 318	Add 2 lanes to build 8
SIS7			I-75	CR 484	CR 318	Add 4 anes (special use lanes)
SIS14			I-75	Sumter/Marion county	CR 484	Add 2 lanes to build 8
SIS6		2036-2040	I-75 (Mainline)	CR 318	Alachua County Line	Add 2 lanes
SIS8			I-75	Sumter/Marion county	CR 484	Managed lanes
SIS3	Roadway operations	2041-2045	I-75	at US 27		Interchangemodification
T32	Trails	Multimodal Boxed Fund Program	I-75 landbridge	at CFG		Replace and possibly enhance landbridge
OPS1	Roadway operations	Unfunded	I-75 (Interchange)	SR 40		Operational Improvements
OPS2			I-75 (Interchange)	CR 484		Operational Improvements
OPS20			Marion Oaks Manor Ext	Overpass at I-75		New Overpass
OPS21			SW 95th St	Interchange at I-75		New Interchange
OPS22			NW/SW 27th Ave	SW 42nd Street	SR 200	ITS/Corridor Management
OPS23			NW/SW 27th Ave	SR 200	SR 40	ITS/Corridor management
OPS58			SW 20th St	Interchange at I-75		New Interchange
PT22	Transit		Marion Oaks Express			New Service
PT3			Purple Route			Existing Routes Expansion (Frequency Improvements)

Reference Documents

FDOT Strategic Intermodal System 2045 Cost Feasible Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

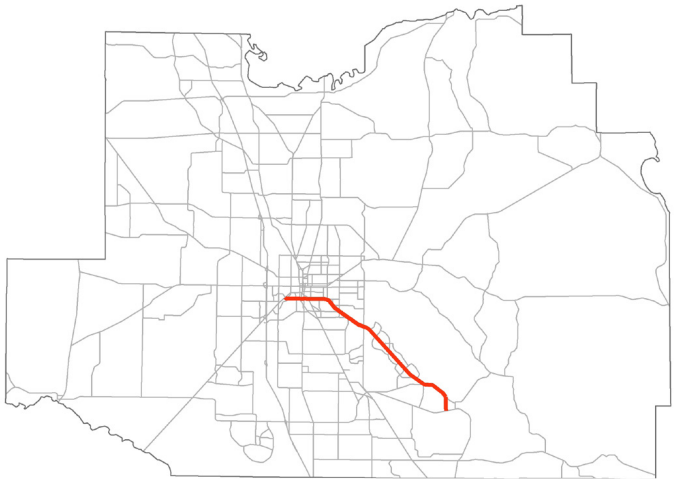
Ocala Marion Regional Trails Facilities Plan

SunTran Transit Development Plan

SR 464

SR 464 is north/south roadway connecting Silver Springs Shores and Ocklawaha in southeast Marion County to downtown Ocala. The area near Oak Rd was also identified as a freight activity center and the potential for freight movement related infrastructure improvements. Other needs identified in this corridor include multiple bicycle, sidewalk, and trail projects on SR 464 and intersecting roadways. ITS infrastructure improvements and frequency improvements to the existing Blue and Red bus routes are also needed.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
C8	Corridor Study	Corridor Studies Boxed Fund Program	Oak Rd	Emerald Rd	SE Maricamp Rd	Corridor Study (capacity, goods movement)
B37	Bike	Multimodal Boxed Fund Program	SR 464	SR 200	US 441	5' paved shoulder
SW12			SE 18th Ave	SE 17th St	SE 28th Loop	fill sidewalk gap
SW53			SE 38th St	SE Lake Weir Ave	SE 31st St	fill sidewalk gap
SW137			SE Maricamp Rd	Bahia Ave	Oak Rd	fill sidewalk gap
SW13			SE 3rd Ave	S Magnolia Ave	SE 17th St	fill sidewalk gap
SW19			SE 22nd Ave	E Fort King St	SE 17th St	fill sidewalk gap
SW20			SE 24th St	SE Maricamp Rd	SE 36th Ave	fill sidewalk gap
SW29			SE Maricamp Rd	SE 36th Ave	SE 38th St	fill sidewalk gap
SW65			SW 17th St	SW College Road	SW 12th Ave	fill sidewalk gap
SW72			SE Lake Weir Ave	SE 31st St	SE 38th St	fill sidewalk gap
SW86			SW 19th Ave Rd	SW 17th St	W of SW 21st Ave	fill sidewalk gap
SW129			SE Maricamp Rd	SE 44th Ave	Pine Road	fill sidewalk gap
SW128			SE Maricamp Rd	SE 31st St	SE 44th Ave Rd	fill sidewalk gap
SW148			SE 44th Ave Rd	SE 48th Place Rd	SE Maricamp Rd	fill sidewalk gap
SW191			SE 30th Ave	SE 32nd Ave	Existing sidewalk to the south	Connectivity to the park and YMCA
T33	Trails		Forest High School SRTS	SE 38th St/ SE 47th Ave	Ocala Rotary Sportsplex	Multi use trail
T28			Cannon-Dunnellon Segment	Pruitt Trailhead	Bridges Rd Trailhead	Multi use trail
T12			SE Maricamp Rd.	SE 31st St	Baseline/SE 58th Ave	12' shared use path
T15			Maricamp Rd.	Baseline/SE 58th Ave	Designated bike lane east of Oak Rd	12' shared use path

SR 464 Cont'd

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
OPS17	Roadway operations	ITS Boxed Fund Program	SR 464	SR 200	Sr 35	ITS/Corridor Management
OPS44			SW 27th Ave/SW 19th AveRoad	SW 42nd St	SR 464	ITS/Corridor Management
OPS37			SR 464	SR 200	Oak Rd	ITS/Corridor Management
OPS26			CR 464	Midway Rd	Oak Rd	ITS/Corridor Management
OPS70			Maricamp Rd	Oak Rd	SE 108th Terr Rd	Emergency vehicle preemption
PT2	Transit	Unfunded	Blue Route			Existing Routes expansion (Frequency Improvements)
PT5			Red Route			Existing Routes expansion (Frequency Improvements)

Reference Documents

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

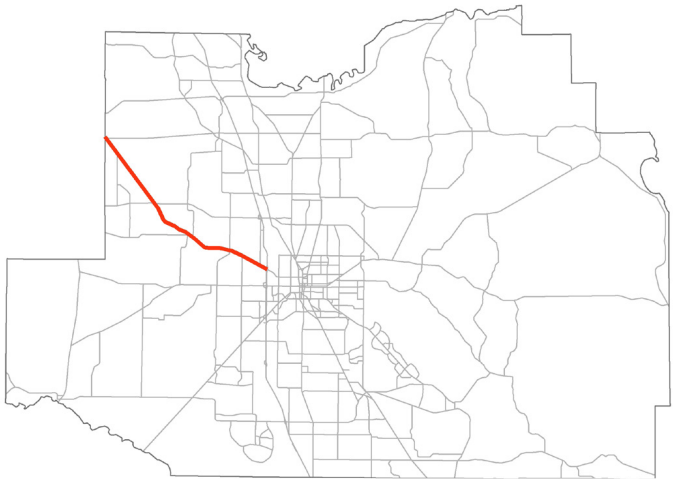
Ocala Marion Regional Trails Facilities Plan

SunTran Transit Development Plan

US 27

The portion of US 27 west of I-75 is a SIS facility that connects I-75 with US 19 to the west. The SIS cost feasible plan includes an improvement to the existing interchange at US 27 and I-75. Other needs identified on the segment of US 27 east of I-75 include roadway widening and ITS infrastructure improvements.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
R9	Roadway capacity	2041-2045	US 27	I-75	NW 27th Avenue	Add 2 lanes
T26	Trails	Multimodal Boxed Fund Program	Silver River to Bronson Corridor	Levy County Line	NE 58th Ave	Multi use trail
T16			Bonnie Heath Blvd.	NW 60th Avenue	NW Hwy 225A	12' multi use trail
OPS12	Roadway operations	ITS Boxed Fund Program	US 27	NW 27th Avenue	US 441	ITS/Corridor Management
OPS28			US 27	NW 70th Ave.	I-75	ITS/Corridor Management
OPS71			US 27	I-75	NW 27th Ave	Emergency vehicle preemption
R8	Roadway capacity	Unfunded	US 27	NW 44th Avenue	I-75	Add 2 lanes
R29			NW 60th Avenue	US 27	NW 49th Street	New 2 Lane

Reference Documents

Ocala Marion ITS Strategic Plan

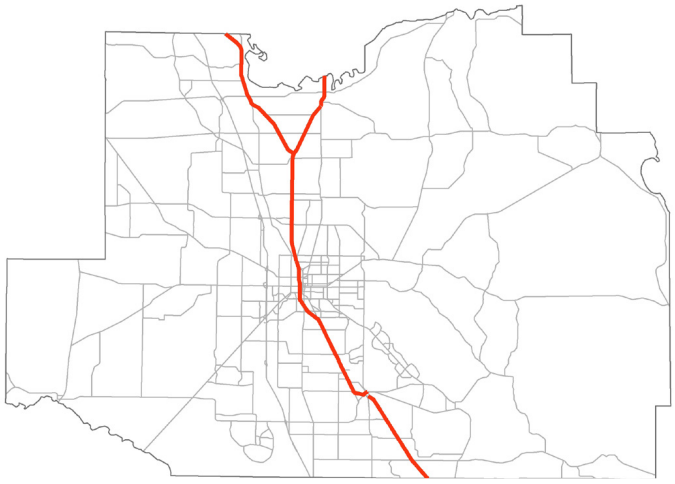
Ocala Marion 2035 Bicycle & Pedestrian Master Plan

Ocala Marion Regional Trails Facilities Plan

SR 301/US 441/US 27

The US 441/US301/US27 corridor extends from the southeast corner of the County to the Alachua County line to the north, bisecting downtown Ocala. It is a regionally significant corridor connecting Lady Lake in Lake County with Belleview, Ocala, and Gainesville to the north. Extensive infrastructure needs were identified on the corridor, consisting of two roadway widening projects on the south end and many sidewalk and trail improvements on intersecting roadways. ITS infrastructure and transit service improvement were also identified providing service between Belleview and Ocala.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
R5	Roadway capacity	2031-2035	US 441	CR 42	SE 132nd Street Rd	Add 2 lanes
B34	Bike	Multimodal Boxed Fund Program	SE 95th St	CR 475	US 441	5' paved shoulder
SW102	Pedestrian		US 441	US 301	Del Webb Blvd	fill sidewalk gap
SW196			SE 110th St	US 301	Lilian Lake Park	Crossing at US 441
SW2			US 27 (S Pine Ave)	SE 38th St	SE 52nd St	fill sidewalk gap
SW4			US 27 (S Pine Ave)	SE 3rd Ave	SE 30th St	fill sidewalk gap
SW7			US 301	W Anthony Rd	NW 28th St	fill sidewalk gap
SW15			N Magnolia Ave	NW 28th St	NW 20th St	fill sidewalk gap
SW18			SW 1st Ave	SW 15th Pl	SW 17th St	fill sidewalk gap
SW37			NE 28th St	US 301	E of NE Jacksonville Rd	fill sidewalk gap
SW74			W Anthony Rd	NW 34th Pl	US 301	fill sidewalk gap
SW91			NW 35th St	NW 16th Ave	US 301	fill sidewalk gap
SW101			SW 5th St	SW 1st Ave	Pine Ave	fill sidewalk gap
SW104			SE 110th St	SE 36th Ave	US 441	fill sidewalk gap
SW107			SE 102nd Pl	US 441	SE 52nd Ct	fill sidewalk gap
SW108			SE 95th St	Cross Florida Trail	US 441	fill sidewalk gap
SW70			NE 35th St	US 301	NE 25th Ave	fill sidewalk gap
SW180			US 441	Del Webb Blvd	SE 147th Pl	fill sidewalk gap
SW176			US 27 (Pine Ave)	W of SE 10th Ave	SE 10th Ave	fill sidewalk gap
SW172			SE 147th Pl	SE 84th Terr	US 441	fill sidewalk gap
SW171			SE Sunset Harbor Rd	US 441	SE 95th Ave	fill sidewalk gap
SW177			US 441	SE Sunset Harbor Rd	SE 173rd St	fill sidewalk gap
SW114			SE 55th Ave Rd	US 27 (SE Ashbier Blvd)	SE 132nd St Rd	fill sidewalk gap
SW192			SW 1st Ave	Ft. King St	SE Pine Ave	Fills critical sidewalk gap

SR 301/US 441/US 27 Cont'd

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
SW63	Pedestrian	Multimodal Boxed Fund Program	SW 1st Ave	US 27 (S Pine Ave)	SW 29th St Rd	fill sidewalk gap
SW197			US 301	SE 62nd Ave	SE 115th Ln	Add sidewalks on N side of street
SW198			SE 113th St	Hames Rd	SE 56th Ave	Add sidewalks on N side of street
T11	Trails		Belleview to Greenway Trail	Lake Lillian Park	Cross Florida Greenway	
T17			US 441 to Mcintosh to Ocala Connector	Mcintosh	Ocala Connector	12' multi use trail
T14			Ocala-Summerfield Rd./ SE 135th St./SE 80th Ave.			sharrows, signage, traffic calming
OPS36	Roadway operations	ITS Boxed Fund Program	E Magnolia Ave/E 1st Ave.	NE 20th St.	SR 200/SE 10th St	ITS/Corridor Management
OPS5			US 301	Sumter County Line	CR 42	ITS/Corridor Management
OPS6			US 301	SE 143rd Place	US 441	ITS/Corridor Management
OPS7			US 441	SE 132nd Street Rd	US 301	ITS/Corridor Management
OPS8			US 441	US 301	CR 475	ITS/Corridor Management
OPS9			US 441	CR 475	SR 200	ITS/Corridor Management
OPS10			US 441	SR 200	CR 25A	ITS/Corridor Management
OPS13			US 27	SW 27th Avenue	SR 35	ITS/Corridor Management
OPS32			US 301/US 441	SE 165th St.	SR 464	ITS/Corridor Management
OPS33			US 301	NW 35th St.	SR 326	ITS/Corridor Management
OPS59			US 301	SR 326	W Hwy 329	Emergency vehicle preemption
R2	Roadway capacity	Unfunded	US 301	CR 42	SE 143rd Place	Add 2 lanes
R3			US 441	Sumter County Line	CR 42	Add 2 lanes
R46			Lake Weir Avenue	SE 31st Street	SR 464	Add 2 Lanes
PT32	Transit		Downtown Circulator			New Circulator Service
TIP17	Roadway operations		US 441	at SR 464		Traffic ops improvement

Reference Documents

Ocala Marion FY 2020/21 - 2024/25 Transportation Improvement Program

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

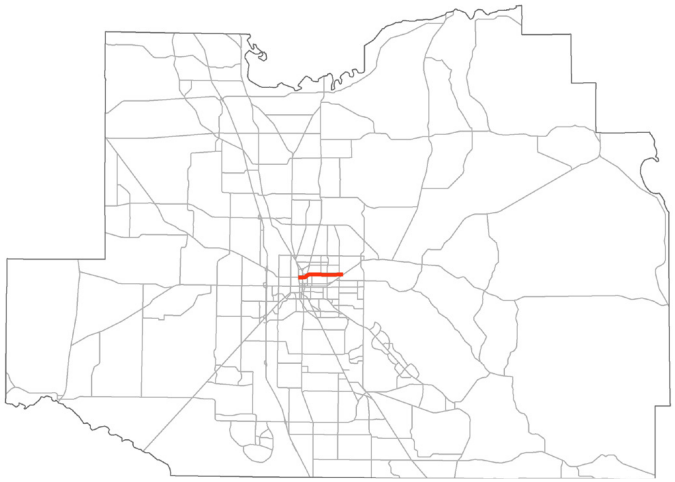
Ocala Marion Regional Trails Facilities Plan

SunTran Transit Development Plan

SR 492

SR 492 is an east/west roadway connecting US 441 to SR 40 to the east. A range of improvement types were identified and included in the needs plan, including a roadway widening and ITS infrastructure.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
B35	Bike	Multimodal Boxed Fund Program	NE Osceola Ave	Bonnie Heath Blvd	NE 14th St	5' paved shoulder
SW3	Pedestrian		NE 14th St	NE 24th Ave	NE 25th Ave	fill sidewalk gap
SW187			NE 17th Ave	NE 14th St	NE 3rd St	Improves school, crossing guard, transit access
SW25			NE 19th Ave	NE 28th St	NE 14th St	fill sidewalk gap
SW32			NE 8th Ave	NE Jacksonville Rd	NE 10th St	fill sidewalk gap
SW64			NE 36th Ave	NE 14th St	NE 20th Pl	fill sidewalk gap
SW87			NE 25th Ave	NE 14th St	NE 49th St	fill sidewalk gap
T9	Trails		Watula Trail & NE 8th Road Trail	Tuscawilla Art Park	CR 200A/SE Jacksonville Road	
OPS60	Roadway operations	ITS Boxed Fund Program	US 492	US 301	SR 40	Emergency vehicle preemption
PT29	Transit	Unfunded	Silver Route			Existing Routes expansion (Frequency Improvements)
R32	Roadway capacity		NE 36th Avenue	NE 14th Street	NE 20th Place	Add 2 Lanes
R33			NE 36th Avenue	NE 25th Street	NE 35th Street	Add 2 Lanes
R34			NE 25th Avenue	NE 14th Street	NE 24th Street	Add 2 Lanes

Reference Documents

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

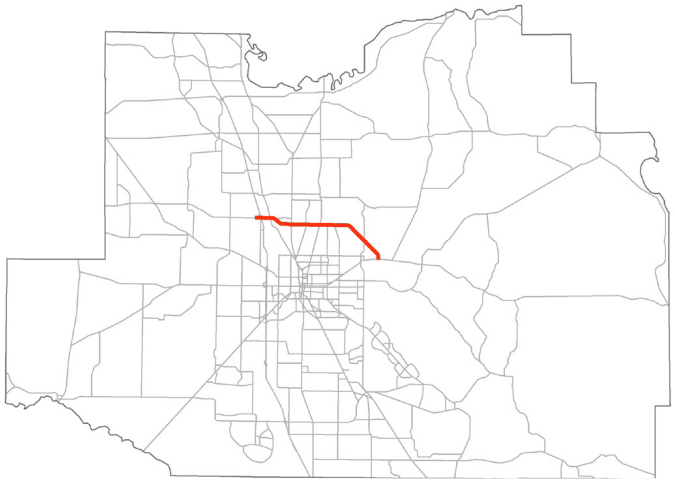
Ocala Marion Regional Trails Facilities Plan

SunTran Transit Development Plan

SR 326

SR 326 provides a bypass route connecting SR 40 to the east with US 441 and I-75 on the west side of Ocala. The roadway is a Strategic Intermodal System (SIS) facility and is currently scheduled for widening in the outer years of the SIS cost feasible plan. Widening of the non-SIS portion of the roadway west of I-75 is also included in the needs plan, as well as a sidewalk improvement on an intersecting roadway in that segment.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
R30	Roadway capacity	2041-2045	NW 44th Avenue	NW 60th Street	SR 326	Add 2 Lanes
SIS12		2041-2045	SR 326	US 441	CR 200A	Add 2 lanes
OPS30	Roadway operations	ITS Boxed Fund Program	SR 326	I-75	SR 200A	ITS/Corridor Management
R72	Roadway capacity	Unfunded	CR 200A Ph 3	NE 35th St	SR 326	Add 2 lanes
R7			SR 326	CR 200A	NE 36th Avenue	Add 2 lanes

Reference Documents

FDOT Strategic Intermodal System 2045 Cost Feasible Plan

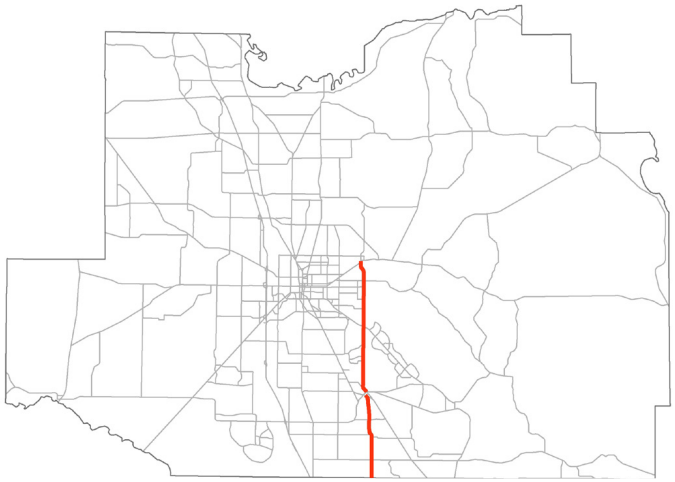
Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

SR 35

SR 35 is a north south roadway on the east side of Marion County, connecting US 441 in Belleview to SR 40 to the north. Intersection improvements, roadway widening, ITS infrastructure, and non-motorized needs are included in this corridor on SR 35 and intersecting roadways in the needs plan.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
OPS46	Roadway operations	2026-2030	SR 35	Foss Rd		Intersection improvement
R10	Roadway capacity	2036-2040	SR 35	CR 25	SE 92nd Place Rd	Add 2 lanes
SW83	Pedestrian	Multimodal Boxed Fund Program	NE 7th St	NE 36th St	NE 58th Ave	fill sidewalk gap
SW118	Pedestrian		E Fort King St	NE 48th Ave	NE 58th Ave	fill sidewalk gap
SW174	Pedestrian		NE 35th St	NE 48th Terr	NE 59th Terr	fill sidewalk gap
B11	Bike		SR 35 (Baseline Rd)	SR 25 (Hames Rd)	SE Maricamp Rd	Designated bike lane
B12	Bike		SR 35 (Baseline Rd)	SR 40	NE 97th Street Rd	Designated bike lane
T34	Trails		Bikeway to Silver Springs gap	N end of Silver Springs Bikeway II	Silver Springs State Park	Multi use trail
T7	Trails		Santos to Baseline, US 441 crossing	Santos to Baseline	US 441 Crossing	
T34	Trails		Bikeway to Silver Springs gap	N end of Silver Springs Bikeway II	Silver Springs State Park	Multi use trail
OPS14	Roadway operations	ITS Boxed Fund Program	SR 35	SE 92nd Place Rd	SR 464	ITS/Corridor Management
OPS15	Roadway operations		SR 35	SR 464	SR 40	ITS/Corridor Management
R44	Roadway capacity	Unfunded	SE 92nd Place Rd	US 441	SR 35	Add 2 Lanes

Reference Documents

Ocala Marion ITS Strategic Plan

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

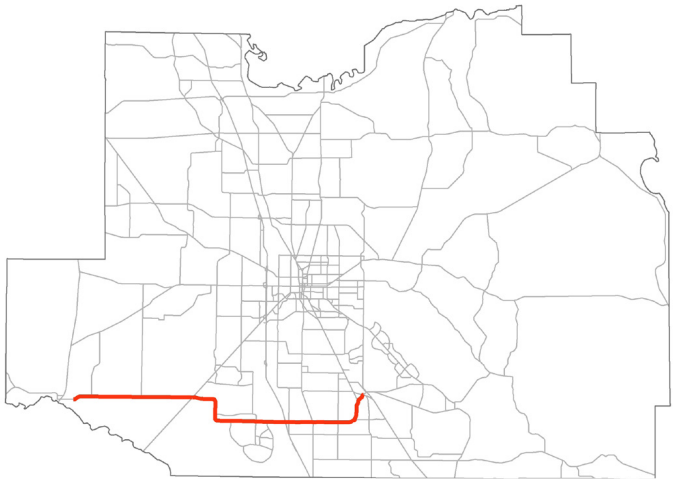
Ocala Marion Regional Trails Facilities Plan

Marion County Comprehensive Plan

CR 484

CR 484 is the primary east/west roadway in south Marion County. This corridor connects Belleview to Marion Oaks to the west and extends to Dunnellon in the southwest corner of the County. This is a critical corridor with significant single family residential growth in Marion Oaks, as well as a planned distribution center development at the Florida Crossroads Commerce Park near Marion Oaks. Identified needs include roadway widenings; sidewalk, trail, and bicycle lane improvements; and ITS infrastructure improvements. The system needs assessment evaluation identified traffic congestion and safety as key issues in this corridor.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
C2	Corridor study	Corridor Studies Boxed Fund Program	CR 484	SR 200	Marion Oaks Tr	Corridor Study (capacity, safety)
C3	Corridor study		CR 484	US 41	SW 140th Ave	Corridor Study (capacity, safety)
SW183	Pedestrian	Multimodal Boxed Fund Program	SE 132nd St Rd	SE 55th Ave Rd	US 301	fill sidewalk gap
SW182			CR 484	SE 30th Ct	SE 36th Ave	fill sidewalk gap
SW181			CR 484	SE 25th Ave	SE 132nd St Rd	fill sidewalk gap
SW112			CR 484	US 27 (SE Ashbier Blvd)	CR 484/SE 132nd St Rd	fill sidewalk gap
SW105			SE 36th Ave	SE 95th St	SE Highway 42	fill sidewalk gap
T10	Trails		Nature Coast Trail	Levy County Line	CR 484	12' multi use trail
T13			CR 484	Cross Florida Greenway	Designated bike lane on CR 484	12' multi use trail
T29			CR 484 trail tunnel	N of paved trail tunnel on CFG		Trail tunnel
T8			CR484 Pennsylvania Ave Multi-Modal	Blue Run Park	Mary Street	12' multi use trail
B9	Bike		CR 484	SW 16th Ave	SR 25 (Hames Rd)	5' paved shoulder
B8			Marion Oaks Course	SW 49th Ave	CR 484	5' paved shoulder
OPS42	Roadway operations	ITS Boxed Fund Program	SR 484	Marion Oaks Course	US 441	ITS/Corridor Management
OPS53	Roadway operations	Illustrative	Marion Oaks Blvd	Marion Oaks Blvd	CR 484	Reconfigure intersection

CR 484 Cont'd

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
OPS72	Roadway capacity	Unfunded	CR 484	Marion Oaks Pass	SR 200	Add 2 lanes
R64			CR 484	SW 49th Avenue	Marion Oaks Pass	Add 2 lanes
R60			Marion Oaks Manor	SW 18th Ave Rd	CR 475	New 2 lanes
R27			CR 484	SW 20th Avenue Road	CR 475A	Add 2 Lanes
R26			CR 484	SW 49th Avenue	SW 20th Avenue Road	Add 2 Lanes
R67			Marion Oaks Manor	Marion Oaks Blvd	Marion Oaks Dr	Complete EB lanes
R71	Roadway operations		W Pennsylvania Ave	Cedar St	US 41	Intersection reconstruction

Reference Documents

Ocala Marion ITS Strategic Plan

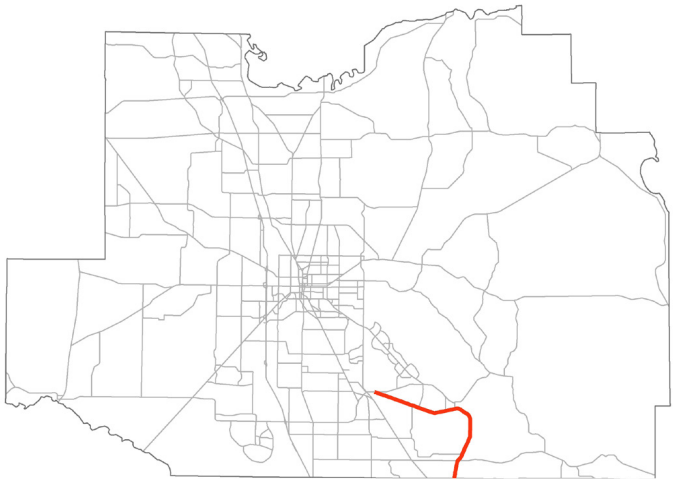
Ocala Marion 2035 Bicycle & Pedestrian Master Plan

Ocala Marion Regional Trails Facilities Plan

CR 25/25A

The CR 25 and CR 25A corridor circumventing Lake Weir in southeast Marion County connects US 441 south of the Lake County line to US 441 in Belleview, passing through the communities of Weirsdale and Ocklawaha on the south and north sides of the lake, respectively. Identified needs on this corridor and intersecting roadways include roadway widening and sidewalk/bicycle lane infrastructure improvements. The system needs assessment evaluation identified traffic congestion and safety as key issues in this corridor.

Corridor Map



Corridor Projects

NAME	PROJECT TYPE	PERIOD	FACILITY	FROM	TO	DESCRIPTION
C7	Corridor study	Corridor Studies Boxed Fund Program	SE Sunset Harbor Rd	SE 100th Ave	CR 25	Corridor Study (capacity, safety)
SW110	Pedestrian	Multimodal Boxed Fund Program	SE 110th St Rd	SE Baseline Rd	SE 90th Ct	fill sidewalk gap
SW113			SE 110th St/CR 25	SE Baseline Rd	CR 25A	fill sidewalk gap
SW126			CR 25	SE 110th St Rd	E of SE 80th Ct	fill sidewalk gap
SW80			NW Gainesville Rd	NW 37th St	S of NW 35th St	fill sidewalk gap
SW127			CR 25	SR 25A	SE 108th Terr Rd	fill sidewalk gap
B19	Bike		Villages Trail	Lake Weir	Lake County line	12' shared use path
B10			SR 25 (Hames Rd)	US 441	SR 35 (Baseline Rd)	5' paved shoulder
B13			CR 25 (Ocala Rd)	SR 35 (Baseline Rd)	SE Sunset Harbor Rd	5' paved shoulder
B14			SE Sunset Harbor Rd	CR 25 (Ocala Rd)	SE 100th Ave	5' paved shoulder
B15			SE 100th Ave	SE Sunset Harbor Rd	CR 25 (Ocala Rd)	5' paved shoulder
B27			SE 110 Street Rd	CR 25	SE Maricamp Rd	5' paved shoulder
R41	Roadway capacity	Unfunded	CR 25	SR 35	SE 92nd Loop	Add 2 Lanes
R42			CR 25	SE 92nd Loop	SE 108th Terrace Rd	Add 2 Lanes

Reference Documents

Ocala Marion 2035 Bicycle & Pedestrian Master Plan

Unfunded Projects

Resources available to address infrastructure improvement needs are rarely sufficient to implement all identified projects. There are a number of improvements that remain unfunded, in the context of the LRTP and the Cost Feasible Plan. Unfunded needs include mostly roadway capacity improvements, interchange improvements, and transit service improvements identified in the Needs Plan. A list of unfunded needs is presented in **TABLE 7.14** and **FIGURE 7.9**.

TABLE 7.14: UNFUNDED PROJECTS

PROJECT TYPE	FACILITY	FROM	TO	PROJECT DESCRIPTION
Roadway Projects	I-75 (Interchange)	SR 40		Upgrade interchange
	Marion Oaks Manor Ext	Overpass at I-75		Grade separation
	NE 8th Ave	SR 40	SR 492	Complete Street
	SW 20th St	Interchange at I-75		New interchange
	W Pennsylvania Ave	Cedar St	US 41	Intersection geometry
	SR 40	US 41	SW 140th Avenue	Widen to 4 lanes
	US 301	CR 42	SE 143rd Place	Widen to 6 lanes
	SW 49th Ave	SW 95th Street	Marion Oaks Trail	Widen to 4 lanes
	CR 484	SW 49th Avenue	SW 20th Avenue Road	Widen to 6 lanes
	CR 484	SW 20th Avenue Road	CR 475A	Widen to 6 lanes
	NW 49th Street	NW 70th Avenue	1.1 mile west of NW 44th Avenue	New 2 lane
	NW 60th Avenue	US 27	NW 49th Street	New 2 lane
	US 441	Sumter County Line	CR 42	Widen to 6 lanes
	Dunnellon Bypass	CR 40	US 41	New 2 lane
	NE 36th Avenue	NE 14th Street	NE 25th Street	Widen to 4 lanes
	NE 36th Avenue	NE 25th Street	NE 35th Street	Widen to 4 lanes
	NE 25th Avenue	NE 14th Street	NE 24th Street	Widen to 4 lanes
	NE 25th Avenue	24th Street	NE 35th Street	Widen to 4 lanes
	CR 25	SR 35	SE 92nd Loop	Widen to 4 lanes
	CR 25	SE 92nd Loop	SE 108th Terrace Rd	Widen to 4 lanes
	SW 20th Street	I-75	SR 200	Widen to 4 lanes
	SE 92nd Place Rd	US 441	SR 35	Widen to 4 lanes
	Lake Weir Avenue	SE 31st Street	SR 464	Widen to 4 lanes
	SE 17th Street	SE 44th Avenue	SE 47th Avenue	New 2 lane
	CR484/Pennsylvania Ave	Blue Run Park	Mary Street	Multimodal improvements
	NE 35th St/NE 60th Ct	NE 36th Ave	SR 40	Widen to 4 lanes
	Marion Oaks Manor	SW 18th Ave Rd	CR 475	New 2 lane
	NW 37th Ave	SR 40	US 27	New 2 lane
	NW 37th Ave	SR 40	US 27	New 2 lane
	SW 40th Ave Realignment	at SR 200		Intersection geometry
	SW 38th St	SW 80th Ave	SW 60th Ave	Widen to 4 lanes
	SR 326	CR 200A	NE 36th Avenue	Widen to 4 lanes
	SW 38th St	SW 60th Ave	SW 43rd Ct	Widen to 4 lanes
	CR 484	Marion Oaks Pass	SR 200	Widen to 4 lanes
	CR 200A Ph 3	NE 35th St	SR 326	Widen to 4 lanes

PROJECT TYPE	FACILITY	FROM	TO	PROJECT DESCRIPTION
Roadway Projects	CR 42	US 441	CR 25	Widen to 4 lanes
	SW 165th St	Marion Oaks Blvd	Marion Oaks Lane	Widen to 4 lanes
	US 27	NW 44th Avenue	I-75	Widen to 6 lanes
	I-75	CR 318	Marion/Alachua Co Line	Add 4 Special Use Lanes
	I-75	CR 484	CR 318	Add 4 Special Use Lanes
Transit Projects	Green Route			Frequency improvement
	Blue Route			Frequency improvement
	Purple Route			Frequency improvement
	Orange Route			Frequency improvement
	Red Route			Frequency improvement
	Yellow Route			Frequency improvement
	Silver Route			Frequency improvement
	SR 200 North Circulator			New Circulator Service
	SR 200/Marion Oaks Circulator			New Circulator Service
	East Ocala Circular			New Circulator Service
	Belleview Circular			New Circulator Service
	South Ocala Circulator			New Circulator Service
	Downtown Circulator			New Circulator Service
	Marion-Ocala Express			New Express Services
	SR 200/VA			New Local Service
	varying locations			Transit Shelters
	Union Station			Restroom facility

FIGURE 7.9: UNFUNDED ROADWAY PROJECTS

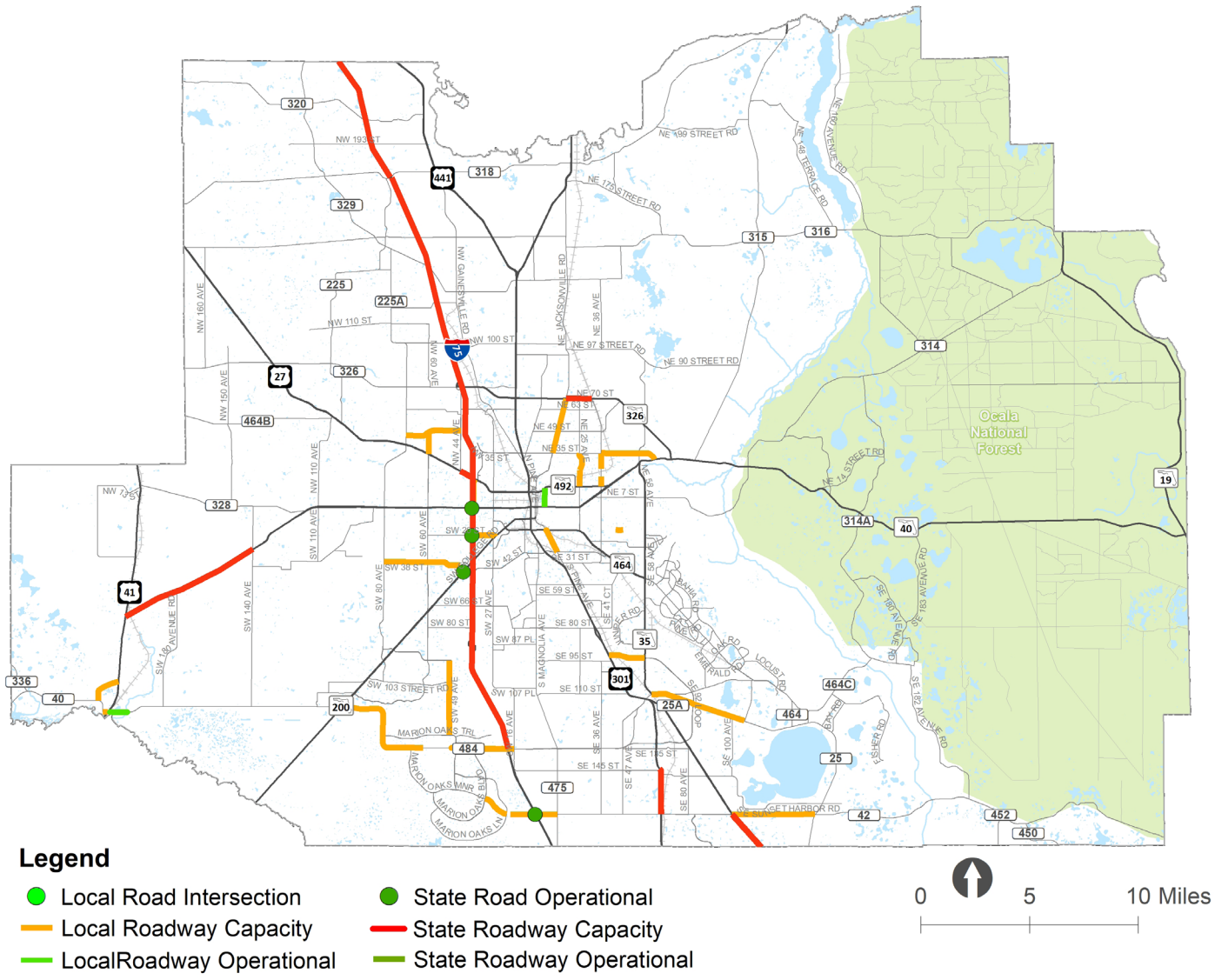
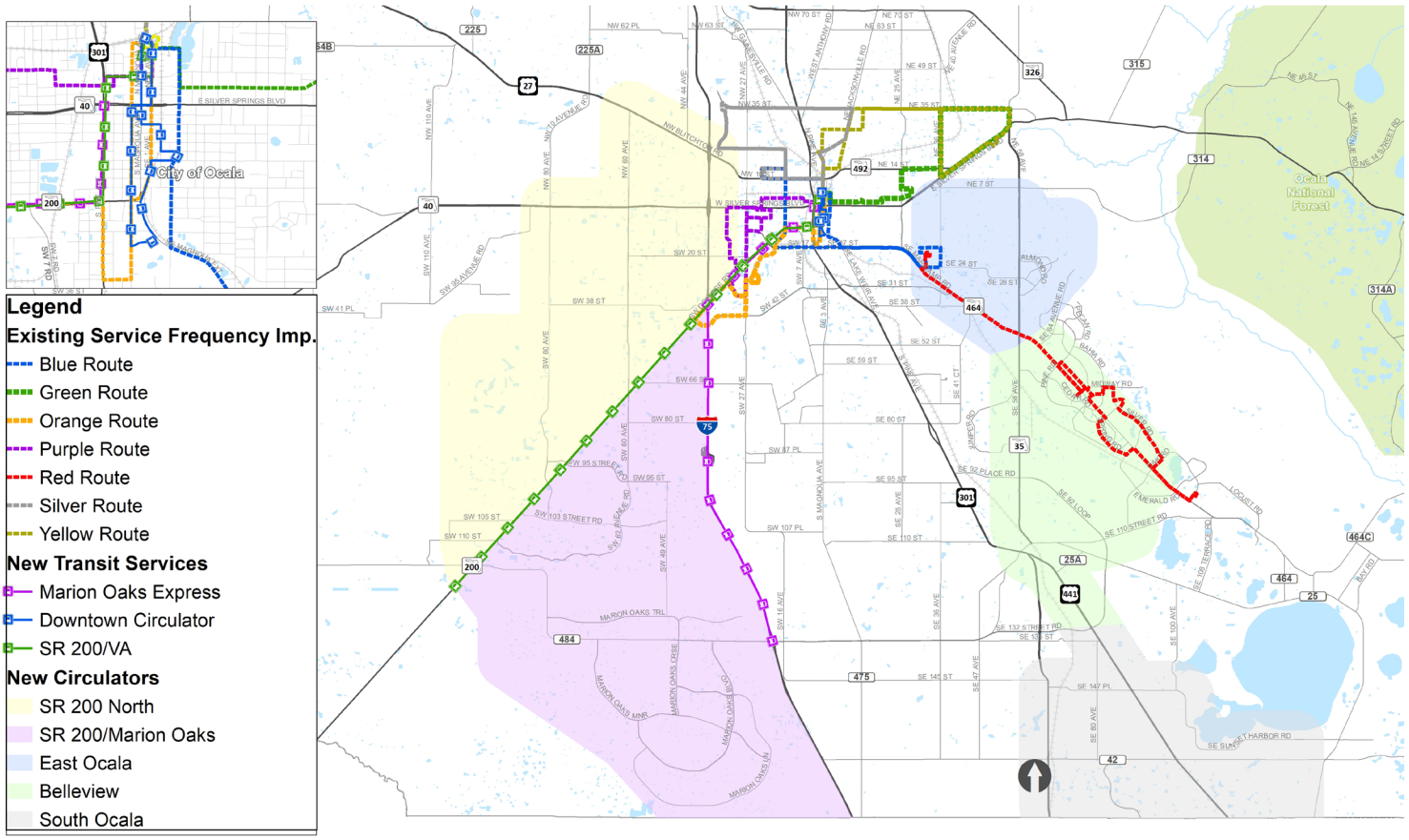


FIGURE 7.10: UNFUNDED TRANSIT PROJECTS



CHAPTER 8. PLAN AMENDMENT AND IMPLEMENTATION

Implementing the Plan

Implementation of the LRTP Cost Feasible Plan relies on a closely coordinated inter-agency process whereby implementing agencies program available funding, including the resources necessary to design, acquire right of way, and construct the infrastructure improvements. Continued collaboration between the TPO and its planning and implementation agency partners is critical to maintain consistency between the LRTP and local priorities. There are several components of the 2045 LRTP, and the plan update process in particular, that can facilitate ongoing collaboration and implementation of the LRTP. Chief among them is a continued focus on system and facility performance as a primary basis for investment decisions. The TPO can leverage the performance monitoring and target setting results to support this process. Other features include the Corridor Summaries presented in **Chapter 7** and the extensive public and stakeholder engagement program that facilitated the LRTP update.

Performance Based Planning.

The system performance report in **Appendix F** and the system needs assessment and project evaluation process presented in **Chapter 5** describe a monitoring, target setting, and planning approach based on data analysis to inform transportation investment decisions. The TPO should continue to support a data-driven process that integrates prioritization, target setting and monitoring to sustain this performance-based planning trend.

Corridor Action Plan Approach.

The LRTP is a multimodal plan that includes motorized and non-motorized improvements, but also operational and capacity improvements. In many cases, a variety of improvements were identified in a single respective corridor. The Corridors Summaries section of **Chapter 7** compiles and presents all relevant projects for the primary transportation corridors within Marion County. This format provides a useful resource that can be used to track and focus on the multimodal and multi-faceted approach to addressing challenges on the respective corridors.

Stakeholder Driven Process.

The 2045 LRTP update used a multi-layered stakeholder engagement process that involved the public, the business and freight community, the intergovernmental community, and the natural resources community to support an effective and realistic decision-making process. Continued coordination with these various stakeholders is crucial to maintaining focus on Marion County priorities and challenges.

Scenario Planning.

While scenario planning is not part of the 2045 LRTP update approach, it is one of the trends in long range planning that helps to frame the future in terms of multiple potential scenarios, rather than assume a particular scenario. Scenario Planning represents an increasingly important approach, given the rapidly changing landscape of transportation challenges and solutions. One clear example is the emergence of new technologies and options that alter how people interact with transportation infrastructure. The FDOT's I-75 FRAME project in Marion County, described in **Chapter 5** of this document, is the beginning of a a safer, more efficient system that relies on technology to solve problems affordably. This project, other potential emerging technologies, and their collective impact on development patterns and transportation performance should be monitored by the TPO to take advantage of their benefits and study the potential of expanding these strategies.

Amending the Plan

The next regularly scheduled plan update will occur in 2025, in adherence with the federal requirement to update the LRTP at least every five years. That schedule does not, however, preclude regular updates to the plan that do not necessarily involve the full plan update process described in the early chapters of this document. The TPO has established a biannual LRTP amendment schedule. The two cycles of amendments are tentatively scheduled for May and November of every year. There are two types of updates that can be made that do not require a full plan update process.:

Administrative modifications can be made to the plan to reflect marginal changes in project funding sources, project cost, or year of implementation. These types of modifications do not require a public involvement process or a review of the entire cost feasible plan to demonstrate cost feasibility.

Plan amendments can also be made if the TPO wants to add a new project or projects to the cost feasible plan or if the scope and cost of a project in the Cost Feasible Plan changes by a margin of fifty percent or greater. Such an amendment does require adherence to the TPO's Public Involvement Plan and analysis determining that the Cost Feasible Plan is in fact still demonstrably cost feasible, relative to updated project costs and revenues by timeband.

The LRTP can be amended at any time, provided the required process is followed, depending on the nature of the amendment. The amended plan must be adopted officially by the TPO Governing Board as if it were adopting a new LRTP. There is at least one expected amendment that will likely occur in 2021 to reflect updates currently being made to the Florida Transportation Plan. Projects on the States Strategic Intermodal System (SIS) will most likely need to be changed to reflect that plan update. FDOT will alert the TPO as to when the FTP update is complete and the TPO can amend the LRTP at that time to reflect FDOT's SIS priorities and project development plans.

OCALA MARION 2045

RACING TOWARD A CONNECTED FUTURE

TPO OCALA MARION TRANSPORTATION PLANNING ORGANIZATION