



2045 Long Range Transportation Plan: The Route to 2045

Adopted October 5, 2020



Charlotte County-Punta Gorda
Metropolitan Planning Organization



PREFACE

This document was prepared by the Charlotte County-Punta Gorda Metropolitan Planning Organization (MPO) in cooperation with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Florida Department of Transportation (FDOT), District 1.

The preparation of this report has been financed in part through grant(s) from FHWA and FTA, U.S. Department of Transportation (USDOT), 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 USDOT.

This document is consistent with the requirements of Fixing America's Surface Transportation (FAST) Act, which was signed into law on December 4, 2015.

Further, it is hereby certified that the planning process of the MPO 2045 LRTP is in conformance with the provisions of 23 C.F.R. 450, 23 U.S.C. 134, and 339.175(7) Florida Statutes, and is consistent with all Federal and State requirements.

Detailed technical documentation was prepared during the development of the 2045 LRTP. These technical reports are available by request to the MPO. This document has been developed to demonstrate compliance of the plan development process with the federal and state requirements.

This document includes an Executive Summary, a complete summary document that is accessible for all and can be found on the MPO website. It provides a concise, citizen-friendly summary of the 2045 LRTP, including the adopted Cost Feasible Plan.

In accordance with Title VI of the Civil Rights Act of 1964 and other nondiscrimination laws, public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, familial, or income status. It is a priority of the MPO that all citizens of Charlotte County are given the opportunity to participate in the transportation planning process including low-income individuals, persons with disabilities, and persons with limited English proficiency. You may contact the MPO's Title VI Specialist at (941) 883-3535 if you have any discrimination complaints.



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Charlotte County-Punta Gorda MPO Staff

Gary D. Harrell, MPO Executive Director

Sammy Edara, Planner

Laks Gurram, Principal Planner

Gene Klara, Planner

Bekie Leslie, Administration Services Coordinator

Wendy Scott, Transit Planner

L RTP Subcommittee

Mitchell Austin, City of Punta Gorda

Joshua Hudson, Charlotte County Economic
Development

Ravi Kamarajugadda, Charlotte County Public
Works

Ron Ridenour, Charlotte County Airport Authority

Michael Tisch, Florida Department of
Transportation

Matt Trepal, Charlotte County Community
Development



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Supplemental Technical Reports

2045 LRTP Public Participation Plan

Technical Report 1: Goals and Objectives

Technical Report 2: Public Participation Summary

Technical Report 3: SE Data Review and 2045 Forecast

Technical Report 4: Financial Resources

Technical Report 5: Sociocultural and Environmental Justice

Technical Report 6: Needs and Cost Feasible Plan Development



Chapter 1: Introduction



1.1 Introduction

The United States Congress passed the Federal-Aid Highway Act of 1962, which required the formation of a Metropolitan Planning Organization (MPO) for any urbanized area with a population greater than 50,000. MPOs are federally funded transportation policymaking organizations made up of local government and transportation providers. Congress created MPOs to ensure that existing and future expenditures of governmental funds for transportation projects and programs are based on a continuing, cooperative, and comprehensive (“3-C”) planning process. Statewide and metropolitan transportation planning processes are governed by federal law (23 U.S.C. §§ 134-135). The Charlotte County-Punta Gorda MPO was created in July 1992 and is made up of representatives from the Charlotte County Board of County Commissioners, the Charlotte County Airport Authority, the City of Punta Gorda, and the Florida Department of Transportation (FDOT) District One Secretary.

The most significant aspect of the Charlotte County-Punta Gorda MPO’s mission is to ensure future mobility for residents and visitors in Charlotte County and Punta Gorda, as well as a portion of southwest DeSoto County within the MPO’s planning area boundary. To do so, the MPO guides the transportation planning process which includes the development of the Long Range Transportation Plan (LRTP) to identify future transportation improvements.

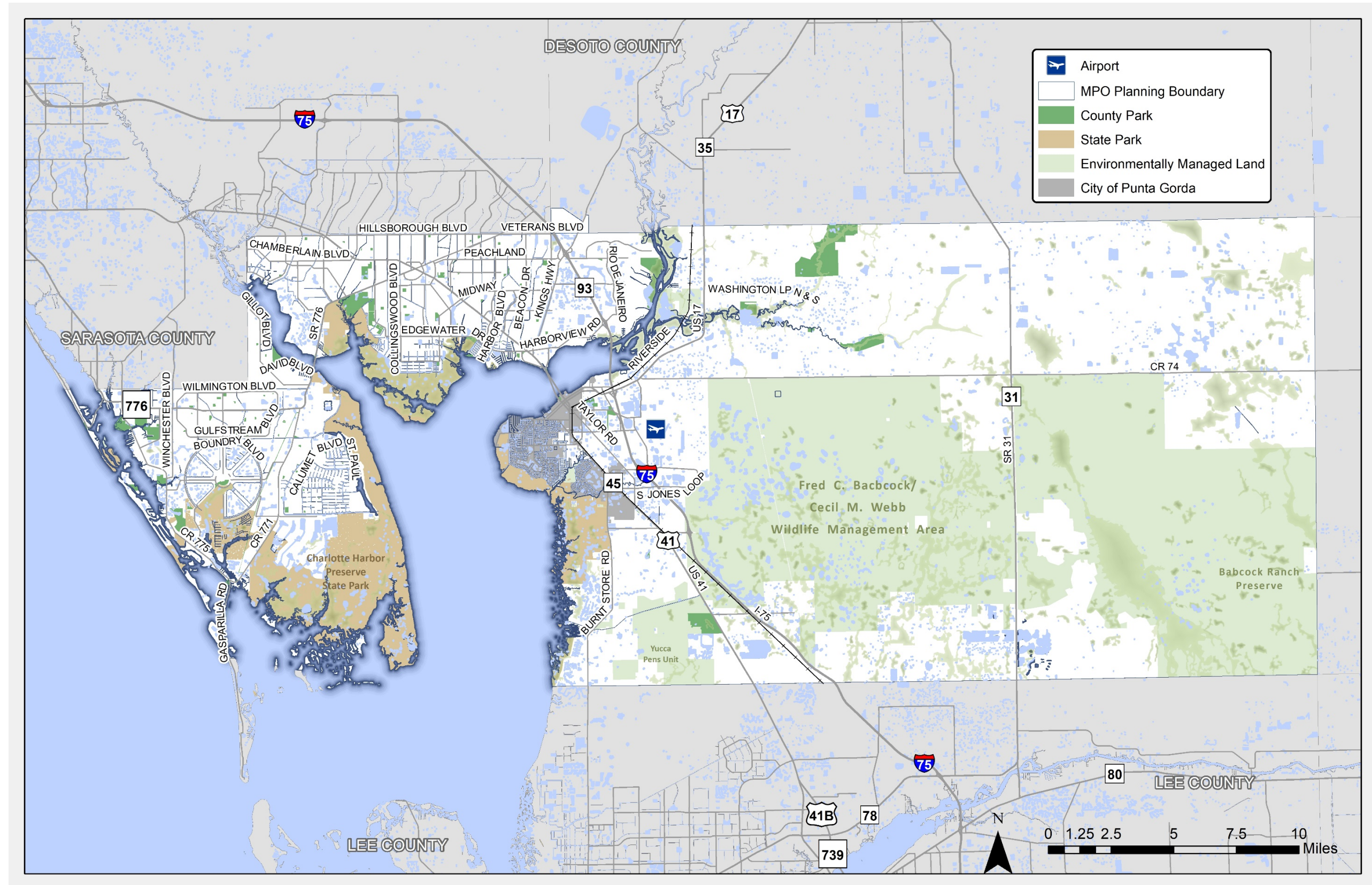
The LRTP is required by the Federal Highway Administration (FHWA) to identify strategies to ensure current and future mobility needs. The analysis used to develop the plan is based on population and employment projections, the expected travel patterns, and amount of travel to the year 2045. The plan is updated every five years to refine the long-term strategy for the transportation system based on changes in transportation needs and outlook for the MPO’s planning area.

The short-range component of the LRTP is the Transportation Improvement Program (TIP), which covers the first five years. The TIP identifies, prioritizes, and allocates funding for transportation projects and is updated annually. Projects must be in the LRTP to be added to the TIP.

The LRTP meets federal guidelines with the adoption of a set of goals and objectives that allow potential projects’ performance to be measured. This ensures the projects included in the LRTP best address the goals and vision established by the MPO.

Route to 2045 is the brand name for the LRTP, coined by the Charlotte County Punta Gorda MPO, that identifies the “route” to meet the transportation needs of the MPO’s planning area for the next 25 years. The plan addresses cost feasible highway, transit, bicycle, and pedestrian projects through the year 2045. The improvements identified in this Plan highlights the future multimodal needs and enhance safety and security within the planning area boundary. The map in **Figure 1-1** shows the planning area and key features within the MPO’s planning area.

Figure 1-1 Charlotte County-Punta Gorda MPO Planning Area Map



1.2 Mapping the Route to 2045

The LRTP establishes a vision to address the transportation system needs through cost feasible improvements over the next 25 years. The multimodal plan documented in this report outlines highways; public transportation (transit); and bicycle, pedestrian, and multi-use trail facilities. The purpose of this plan is to address federal and state requirements by identifying projects that are cost feasible for each mode of travel.

This 2045 LRTP represents a significant and visionary effort to address the long-term transportation needs of Charlotte County, City of Punta Gorda, and the southwest corner of DeSoto County. Key highlights of this plan include:

- Population and employment forecasts that consider growth in the existing core and current plans for the Babcock Ranch Development in the eastern portion of the county.
- Updated revenue projections from federal, State, and local transportation sources.
- Extensive public involvement included in-person meetings and workshops, multiple online surveys, an interactive online mapping application, and the MPO's first "cost feasible" virtual workshops.
- A review of existing public transportation priorities and incorporation of the first-ever Charlotte County Regional Bicycle/Pedestrian Master Plan.



Improving intersections along SR 776, like this one at the Charlotte Regional Sports Park, are key locations identified in the Route to 2045 LRTP.

1.3 Plan Development

There are two major aspects required in the development of the LRTP. The first is the identification of the transportation needs of the community. Second is determining how will we pay for the needs (Cost Feasible). The identification of needs considers projected growth and how it may affect the transportation system, and the community's aspirations for the future. The Cost Feasible Plan identifies the needs that can be funded with available transportation revenues. The LRTP addresses the surface transportation network including roadways, transit, and non-motorized (bicycle and pedestrian) facilities.

This document summarizes the 2045 LRTP components in both map and tabular formats while providing an overview of the process followed for establishing a community vision and goals that guided the LRTP development. **Figure 1-2** provides an overview of the steps that were followed in developing the results and recommendations for the LRTP. **Appendix A** provides a checklist demonstrating how and where the long range transportation planning requirements identified in State Statutes and Federal Regulations have been addressed.

Figure 1-2: Route to 2045 Development Process



The Riverwalk Live Oak Point was dedicated by the Board of County Commissioners on June 2, 2016 and connects with the Riverwalk to the west under US 41.

1.4 About this Document

Route to 2045 is organized into 10 chapters, as follows:

Chapter 1: Introduction – This chapter introduces the plan, the purpose of the plan, and why the plan is updated every five years.

Chapter 2: 2045 LRTP Guidance – This chapter presents the MPO’s policy-related goals and objectives adopted by the MPO Board to guide the plan development process, compliance with federal and state guidelines, and the effectiveness measures used to evaluate the performance of the cost feasible plan. Included in this chapter is the Existing Plus Committed (E+C) Network that outlines the existing transportation system with the improvements committed to be built by 2025 through the TIP.

Chapter 3: Future Population and Employment Growth – This chapter presents the approach and planning assumptions used in the plan, including the anticipated population and employment growth.

Chapter 4: 2045 LRTP Public Participation – This chapter outlines the public engagement process taken throughout the update of the Route to 2045 LRTP.

Chapter 5: Environment/Socio-Cultural – This chapter provides an overview of the natural and human environments by describing the environmental, socio-cultural resources, and community resources within Charlotte County. This chapter also outlines the strategies available for mitigating environmental impacts as well as identifying populations groups that have traditionally experienced disproportionately high and adverse effects from transportation funding decisions under the Environmental Justice definition.

Chapter 6: Congestion Management Process– This chapter outlines the process followed by the Charlotte County-Punta Gorda MPO to reduce congestion and improve safety using operational and travel demand strategies.

Chapter 7: 2045 Needs – This chapter outlines the multimodal Needs Plan for all transportation modes. The Needs Plan includes roads (highway), public transportation (transit), and bicycle and pedestrian improvements identified as needed without financial constraints applied. Also, this chapter outlines the following elements of the transportation program: goods movement, transportation safety and security (including hazard mitigation), assessment of the socio-cultural effects, environmental mitigation, and advancing technologies.

Chapter 8: 2045 Cost Feasible Plan – This chapter outlines the project prioritization process and assumptions of reasonably available revenues for transportation. Using these assumptions, the needed transportation projects are narrowed down to create the fiscally constrained Cost Feasible Plan.

Chapter 9: Plan Performance – This chapter describes the performance of the 2045 Cost Feasible transportation network compared to the E+C Network.

Chapter 10: Realizing the Route to 2045 – This chapter documents issues and activities the MPO will need to consider in implementing the projects and objectives of the LRTP.



Chapter 2: 2045 LRTP Guidance



2.1 Setting the Stage for Route to 2045

The foundation of the LRTP process began with developing the vision, goals, and objectives to guide the decisions and define how the MPO expects to meet the future growth and travel needs through implementation of the plan. The primary step in developing the vision and goals for Route to 2045 was to review the existing vision and goals in the previous LRTP to determine their relevance with federal and state planning requirements including the FAST Act and the Florida Transportation Plan (FTP) Policy Element. Additionally, the goals were reviewed for alignment with local comprehensive plans and other relevant planning reports.

Since the Vision Statement and Goals set the foundation for the entire planning effort, it is important that they reflect the direction of the community. The vision, goals, and objectives from the 2040 LRTP were determined to be relevant for 2045 with minor revisions. The LRTP Subcommittee met to review the 2040 goals and refined the goals to reflect current activities and community vision. The LRTP vision and goals are listed below.

2.2 Route to 2045 Vision and Goals

Provide an efficient and reliable multimodal transportation system that supports safe, resilient and accessible transportation choices that enhance the quality of life for all who live, visit, work, and play in the County.



GOAL 1
Ensure **Efficient Travel** for all
Modes of Transportation



GOAL 2
Expand **Transportation Choices** for Everyone




GOAL 3
Preserve **Natural Spaces** While
Promoting a Healthy Community





GOAL 4
Support **Vibrant Centers** and
the Local Economy



GOAL 5
Enhance **Safety and Security** for
Everyone

 GOAL 1: Ensure Efficient Travel for all Modes of Transportation	
Objective 1	Preserve the quality and integrity of the existing transportation system.
Objective 2	Promote the reduction of vehicle miles traveled (VMT) per capita.
Objective 3	Maintain a minimum adopted level of service (LOS) D for arterials and collector roads, unless a different LOS standard is adopted by the local or state government.
Objective 4	Manage and maintain access in order to preserve or improve traffic flow or enhance economic activity along major roads based on context classification.
Objective 5	Make transportation investments that improve efficiency, such as the use of Intelligent Transportation Systems (ITS) technologies, and travel time reliability for the transportation system.

 GOAL 2: Expand Transportation Choices for Everyone	
Objective 1	Provide locally and regionally interconnected Complete Street and trail networks that accommodate all users, including bicyclists and pedestrians and reflect local Comprehensive Plans.
Objective 2	Enhance connectivity to essential services for elderly populations, persons with disabilities, and the transportation disadvantaged.
Objective 3	Enhance the transit system to meet the community's needs and ensure transit stops include seating, shelter, signage, trees/ landscaping, sidewalks, and bicycle storage, as feasible.
Objective 4	Repurpose or preserve railroad corridors for multimodal uses other than automobile travel.

 GOAL 3: Preserve Natural Spaces While Promoting a Healthy Community	
Objective 1	Coordinate transportation and land use planning.
Objective 2	Promote transportation investments that protect the existing natural resources, such as parks, preserves, and waterways, and limit investment in projects that impact environmentally sensitive lands.
Objective 3	Promote alternative transportation, improve air quality and reduce dependence on fossil fuels.
Objective 4	Implement aesthetic design elements in transportation improvements based on context classification.



GOAL 4: Support **Vibrant Centers and the Local Economy**

Objective 1	Consider all existing and potential federal, state, private, and local revenue sources to develop a financially feasible multimodal transportation plan.
Objective 2	Prioritize transportation projects that serve existing and future economic and activity centers that are proven to provide the greatest return on investment.
Objective 3	Encourage access to and from the Punta Gorda Airport to other modes of transportation.
Objective 4	Ensure that local/regional freight corridors are maintained to accommodate heavy vehicles and ample capacity for efficient freight .



GOAL 5: Enhance **Safety and Security for Everyone**

Objective 1	Invest in transportation improvements that reduce the rate, frequency, and severity of crashes.
Objective 2	Maintain sufficient capacities and mitigate hazard impacts on key evacuation routes in preparation of hurricanes and other events.
Objective 3	Utilize the MPO's Congestion Management Plan to improve safety through reliability and predictability on the transportation system.
Objective 4	Encourage state and local governments to retrofit existing roads with bicycle and pedestrian facilities and related safety elements during the repairing and repaving process and to include such facilities during road design and construction.

The Federal Highway Administration and the Federal Transit Administration work with FDOT, the Metropolitan Planning Organization Advisory Council (MPOAC) and Florida's MPOs to identify and document expectations relating to meeting federal long range planning requirements. In addition to identifying technical and administrative topics, this guidance outlines the new requirements and emerging issues MPO's need to address in the LRTP.

2.3 Consistency with Federal and State Plans

On December 4, 2015, the Fixing America's Surface Transportation Act (FAST Act), which was signed into law by President Obama. The FAST Act is the first federal law passed in more than a decade that provides long-term funding for surface transportation planning and investment. As with previous transportation laws, the FAST Act includes a series of metropolitan planning factors that ensure that the work of the MPO is based on a continuous, cooperative, and comprehensive process.

With the passage of the FAST Act, two additional planning factors have been added. The following ten planning factors are to be applied to the metropolitan planning process for all MPOs, including the Charlotte County-Punta Gorda MPO:

- 1) **Economic Vitality:** Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- 2) **Safety:** Increase the safety of the transportation system for motorized and non-motorized users.
- 3) **Security:** Increase the security of the transportation system for motorized and non-motorized users.
- 4) **Accessibility:** Increase accessibility and mobility of people and freight.
- 5) **Environment:** 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.
- 6) **Connectivity:** Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- 7) **Efficient Management:** Promote efficient system management and operation.
- 8) **Preservation:** Emphasize the preservation of the existing transportation system.
- 9) **Resiliency:** Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- 10) **Enhance Travel:** Enhance travel and tourism.

Consistency with the Federal Planning Factors and Goals of the Florida Transportation Plan (FTP) are critical components of the Charlotte County-Punta Gorda MPO 2045 LRTP. Demonstrating this consistency is a major milestone in conducting the LRTP and ensuring that the planning conducted by the MPO meets and supports the expectations of the Federal and State requirements.

Table 2-1 provides the correlation between the Goals of the FTP and the Goals of the 2045 LRTP.

Table 2-1: Comparison of Florida Transportation Plan and Route to 2045 Goals

2015 FDOT FTP Policy Element Goals	Charlotte County-Punta Gorda 2045 LRTP Goals
1. Safety & Security for Residents, Visitors, and Businesses.	Goal 5 – Safety and Security
2. Agile, Resilient, and Quality Infrastructure.	Goal 1 – Efficient Travel Goal 5 – Safety and Security
3. Efficient and Reliable Mobility for People and Freight.	Goal 1 – Efficient Travel Goal 4 – Vibrant Centers Goal 5 – Safety and Security
4. More Transportation Choices for People and Freight.	Goal 2 – Transportation Choices Goal 3 – Natural Spaces Goal 4 – Vibrant Centers
5. Transportation Solutions that Support Florida’s Global Economic Competitiveness.	Goal 1 – Efficient Travel Goal 4 – Vibrant Centers
6. Transportation Solutions that Support Quality Places to Live, Learn, Work, and Play.	Goal 2 – Transportation Choices Goal 3 – Natural Spaces Goal 5 – Safety and Security
7. Transportation Solutions that Support Florida’s Environment and Conserve Energy.	Goal 2 – Transportation Choices Goal 3 – Natural Spaces

Table 2-2 demonstrates the consistency between the ten Federal Planning Factors listed in the FAST Act and the Goals of the LRTP. These Planning Factors outline the federal position on planning. The Goals identified by the MPO are aligned with these factors.

Table 2-2: Comparison of Federal Planning Factors and Route to 2045 Goals

Charlotte County-Punta Gorda MPO 2045 LRTP	Goal 1 Efficient Travel	Goal 2 Transportation Choices	Goal 3 Natural Spaces	Goal 4 Vibrant Centers	Goal 5 Safety & Security
FAST Act Planning Factors					
1- Support Economic Vitality					
2- Increase Safety					
3 - Increase Security					
4 - Increase Accessibility and Mobility of People and Freight					
5 - Improve Quality of Life, Environment, Energy Conservation, and Plan Consistency					
6 - Integration and Connectivity					
7 - System Management					
8 - Preservation of Existing Transportation System					
9 - Improve Resiliency and Reliability					
10 - Enhance Travel and Tourism					

2.4 Consistency with Comprehensive Plans

A review of local comprehensive plans was conducted to ensure that the LRTP goals align with the local comprehensive plans and expectations for growth. **Table 2-3** provides a series of representative objectives and policies from the adopted Comprehensive Plans of Charlotte County and the City of Punta Gorda relative to the Goals of the 2045 LRTP.

Table 2-3: Matrix of 2045 LRTP Goals and Comprehensive Plan Policies

Comprehensive Plan Element	LRTP Goal 1:	LRTP Goal 2:	LRTP Goal 3:	LRTP Goal 4:	LRTP Goal 5:
Charlotte County Transportation Element	Policy 1.1.1 Policy 1.2.4 Policy 1.2.5 Objective 2.3 Objective 5.1	Policy 1.2.1 Policy 2.6.4 Objective 3.1	Policy 1.2.11 Objective 2.4 Objective 2.6	Objective 1.3 Objective 1.5 Policy 2.3.4 Objective 4.1	Policy 1.2.2 Policy 1.2.12 Objective 2.10 Objective 5.2
Charlotte County Future Land Use Element	Policy 1.1.3	Goal 4	Policy 1.1.1 Policy 1.1.5 Policy 2.2.2	Goal 5	Policy 2.4.7
City of Punta Gorda Transportation Element	Policy 7.2.1.5 Objective 7.2.1.6 Objective 7.3.14	Objective 7.1.1 Policy 7.2.5.1 Objective 7.3.12	Objective 7.1.4 Goal 7.3	Objective 7.1.3 Policy 7.2.1.4 Objective 7.2.3	Policy 7.2.1.3 Objective 7.2.4 Objective 7.3.10
City of Punta Gorda Future Land Use Element	Objective 1.1.2 Policy 1.1.4.2	Policy 1.1.14.2	Policy 1.1.3.3 Objective 1.1.5	Policy 1.1.4.3	Complete Streets Resolution

An additional 8 relevant land use plans from agencies within Charlotte County-Punta Gorda MPO's jurisdiction were also reviewed for consistency with the LRTP goals. **Technical Report 1** provides a detailed review of the plans including, Community Redevelopment Plans, Bicycle Pedestrian Master Plans, Punta Gorda Airport Master Plan Update, Transportation Master Plans, and the Punta Gorda Transportation Buildout Study. The above-mentioned goals and objectives have been determined to be consistent with these plans.

Preservation of coastal and environmental assets are major consideration when identifying future transportation projects.



2.5 System Performance Measures

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan and Metropolitan Transportation Planning Final Rule which modified 23 CFR Part 450 and 49 CFR Part 613. Through revisions to the Code of Federal Regulations, this rule detailed how state DOTs and MPOs must implement a suite of related transportation planning and transportation performance management provisions of MAP-21 and the FAST Act.

A series of Performance Measures were developed for the 2040 LRTP that served as the basis for developing the Performance Measures for the Route to 2045 LRTP. These Performance Measures will determine the extent to which Objectives are achieved under the Cost Feasible Plan (**Chapter 7**) developed for the 2045 LRTP. **Table 2-4** lists the Performance Measures and the associated LRTP Goals.



Roundabouts constructed along Edgewater Drive provide for a safer intersection for drivers, walkers, and cyclists.

Table 2-4: L RTP Performance Measures

Supporting Performance Measures	L RTP Goal	Source
Roadway Lane Miles	1	2040 L RTP
Total Vehicle Miles Traveled (VMT) per capita	1	2040 L RTP
Total Vehicle Hours Traveled (VHT) per capita	1	2040 L RTP
Percent VMT at a V/C Ratio > 1.0	1	2040 L RTP
Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR)*	1	Federally Required
Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR)*	1	Federally Required
Transit Miles of Service	2	2040 L RTP
Daily Transit Ridership	2	2040 L RTP
People within ¼ mile of Transit	2	2040 L RTP
Jobs within ¼ mile of Transit	2	2040 L RTP
Transit Dependent within ¼ mile of Transit	2	2040 L RTP
Miles of Bicycle Facilities	2	2040 L RTP
Miles of Sidewalks	2	2040 L RTP
Miles/projects that facilitate the tourist economy in Charlotte County	2	New
Number of roadway centerline miles designated as scenic corridors	3	New
Consistency of growth projections with Comprehensive Plan growth strategy	3	New
Policy commitment of long-range transportation plan to evaluate and mitigate environmental impacts	3	New
Centerline miles of roadways identified as complete streets	3	New
Percent of roadway centerline miles providing access to major activity centers that are congested	4	New
Freight travel time reliability (Truck Travel Time Reliability Index)*	4	Federally Required
Level of funding set aside for short-term congestion and mobility management strategies	5	New
Percent of emergency evacuation route roadway centerline miles that are congested during peak travel periods	5	New
Number of fatalities*	5	Federally Required
Rate of fatalities per 100 million vehicle miles traveled*	5	Federally Required
Number of serious injuries*	5	Federally Required
Rate of serious injuries per 100 million vehicle miles traveled*	5	Federally Required
Number of non-motorized fatalities and serious injuries*	5	Federally Required

*- federally Required Transportation Performance Measure

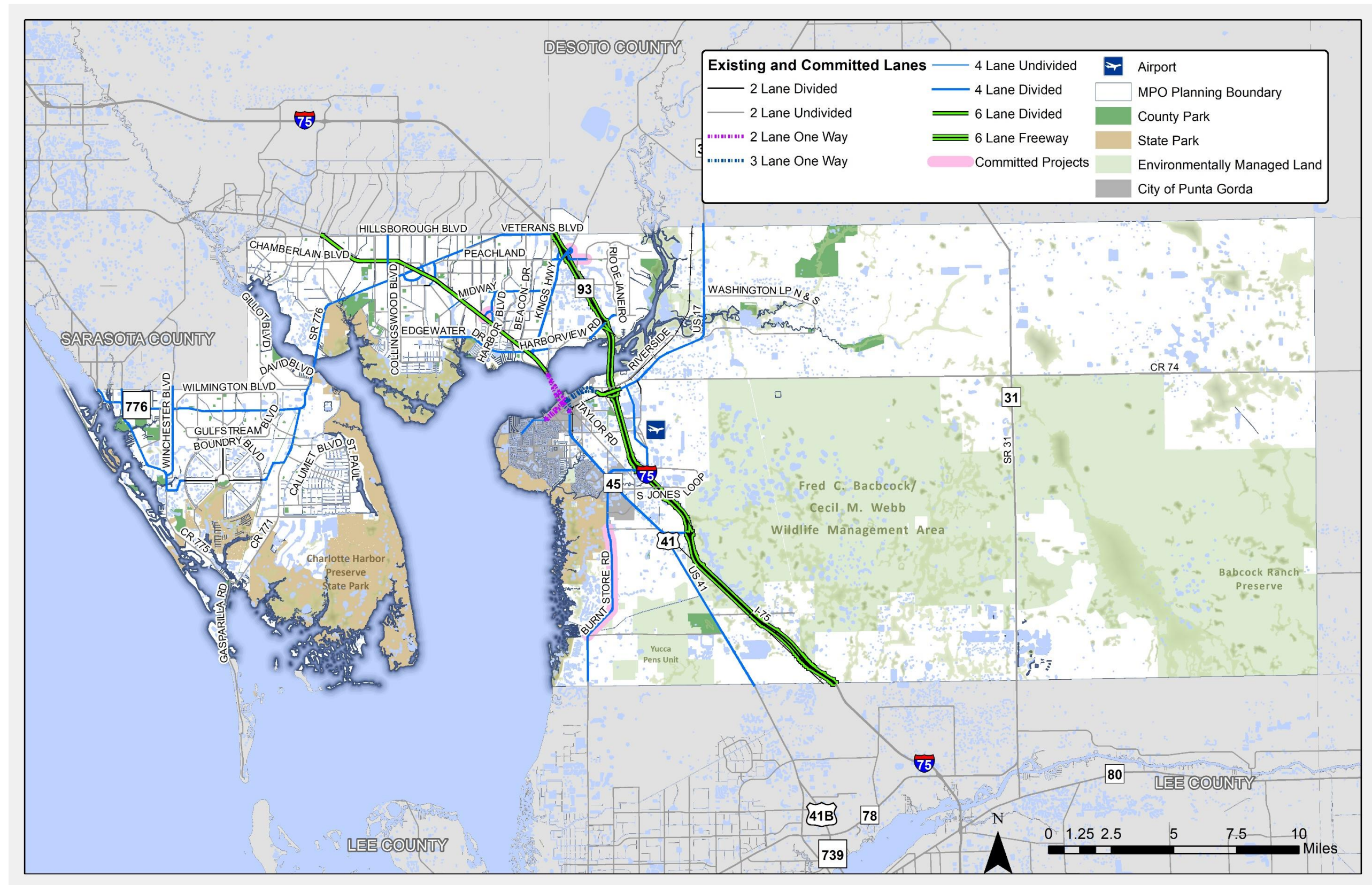
2.6 Existing and Committed Transportation Conditions

The Existing plus Committed (E+C) roadway network was examined to ensure that projects currently under construction and the committed five-year planned improvements were included for the LRTP analysis. The analysis is necessary to ensure that all future long range improvement projects being considered for the 2045 LRTP, have a common and accurate starting point from which to build on. As part of the development of the D1RPM, the E+C roadway network was reviewed for compliance with E+C improvements in the current five-year improvement schedule. The committed roadway improvements are listed in **Table 2-5** below and illustrated in **Figure 2-1**.

Table 2-5: Five Year Committed Capacity Improvements

Project Limits	Project Description	Funding Status
Burnt Store Road: Zemel Road to Scham Road	Widen to 4 lanes	Under construction
Edgewater Drive (Phase 3): Midway Blvd to Collingswood Blvd	Widen to 4 lanes	Preliminary Engineering funded with extension of Local Option Sales Tax
Edgewater Drive (Phase 4): Collingswood Blvd to Samantha Ave	Road Realignment and Bridge Construction	Construction funded with extension of Local Options Sales Tax
Edgewater Drive/Flamingo (Phase 5): Collingswood Blvd to SR 776	Widen to 4 lanes	Preliminary Engineering funded with extension of Local Option Sales Tax
N Jones Loop Road: Burnt Store Road to Piper Road	Widen to 6 lanes	Project Development and Engineering Study underway
SR 776: CR 775 to Spinnaker Blvd	Widen to 6 lanes	Project Development and Engineering Study funded
Harbor View Road: Melbourne Street to I-75	Widen to 4 lanes	Construction funded with extension of Local Option Sales Tax
US 17 (Marion and Olympia): US 41 to Marlympia Way	Lane Repurposing	Project Development and Engineering Study funded
SR 31 @ CR 74	Roundabout	Right-of-Way funded
SR 776 @ Flamingo Blvd	Turn lanes	Construction funded
SR 776 @ Charlotte Sports Park	Turn lanes	Design funded

Figure 2-1: Existing and Committed Number of Lanes





Chapter 3: Future Population & Employment Growth



3.1 Population and Employment Growth

Socioeconomic data, such as population and employment information, are a vital component of travel demand forecasting models used for transportation and hazard mitigation planning. Changes and shifts in demographic and socio-economic trends will continue to impact future transportation needs throughout Charlotte County.

Figure 3-1 and **Table 3-1** show that Charlotte County’s population forecast will be 260,550 persons with a projected employment total of approximately 77,051 employees in 2045. This represents an increase in population of 94,993 persons and 28,092 employees from 2015 to 2045. The forecasted population and employment for Charlotte County from 2015 to 2045 represents an annualized growth rate of around 1.5 percent. In 2020, the State of Florida implemented stay-at-home orders and social distancing regulations in response to COVID-19. This global pandemic is one example of uncertainties that exist when projecting future populations. While short periods of high growth or decline have existed and will continue to exist, the population forecast to 2045 is based on an expectation of averaged growth over the time period. As seen in historic population estimates, peaks and valleys have existed in Charlotte County that coincide with catastrophic natural events such as Hurricane Charley and times of economic prosperity.

Figure 3-1: Historic Population Growth and Forecast (2000-2045)

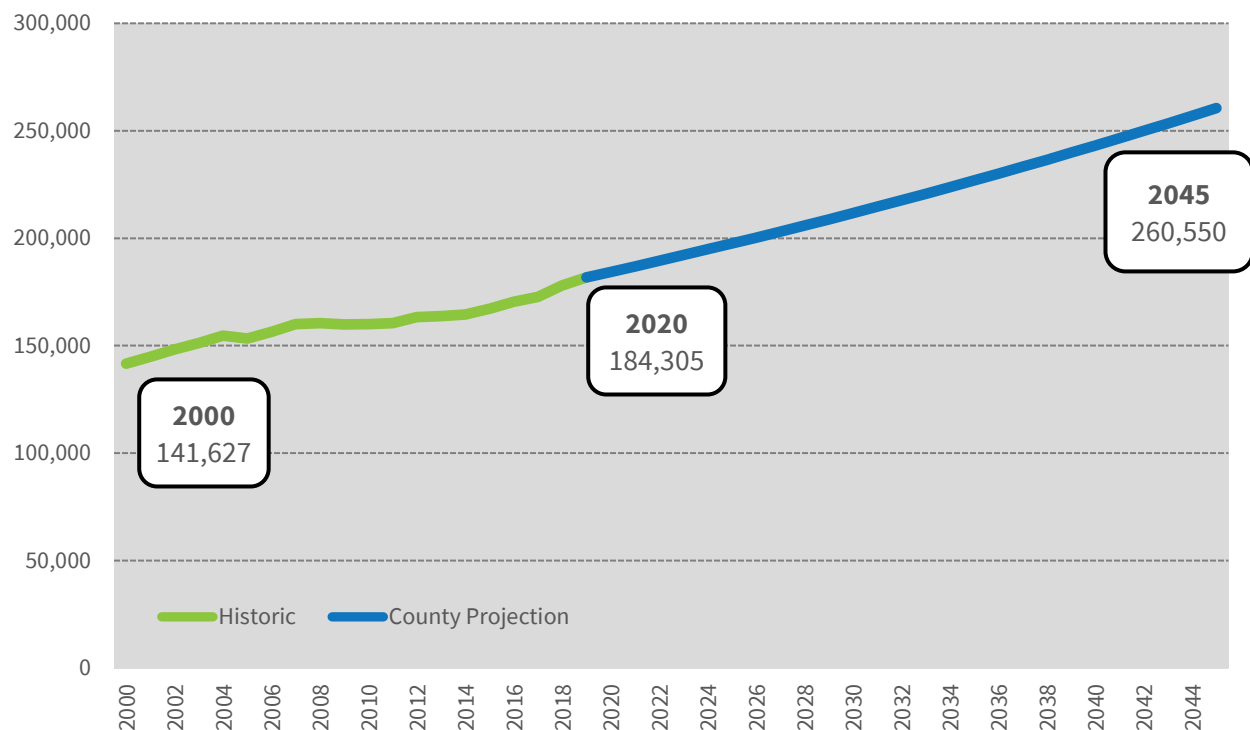


Table 3-1: Population and Employment Forecasts

Variable	2015	2045	Growth	A.G.R*
Household Population	165,557	260,550	94,993	1.52%
Dwelling Units	97,813	153,144	55,331	1.51%
Resident Workers	98,790	156,330	57,540	1.54%
Total Employees	48,959	77,051	28,092	1.52%

*A.G.R = Annual Growth Rate

The recommended population and employment forecasts assume that over the next thirty years:

- Industrial employment in Charlotte County will increase slower than the rate of population growth.
- Commercial employment will continue to grow at a faster rate than the projected population growth.
- The relationship between population and employment is expected to remain constant.



Table 3-2 summarizes the employment forecast by employee type that were used for estimating future travel demand. The employment types include broad categorization of jobs as industrial, commercial, and service. **Table 3-2** summarizes majority of new jobs will be in the service sector consistent with current employment opportunities in Charlotte County.

Table 3-2: Employment Forecast by Employee Type

Variable	2015	2045	Growth
Industrial Employment	4,874	7,546	2,672
Commercial Employment	14,174	23,673	9,499
Service Employment	29,911	45,832	15,921
Total Employment	48,959	77,051	28,092

Using the County’s planning areas shown in **Figure 3-2**, the majority of growth is expected to occur in South County. Details on the existing and projected growth are shown in **Table 3-3**. The high growth expected in South County is driven by approved developments like Babcock Ranch, Heritage Landing and others. The remainder of this chapter provides a summary of the approved developments and the growth forecasts used for developing the 2045 LRTP.

Figure 3-2: Charlotte County Planning Areas

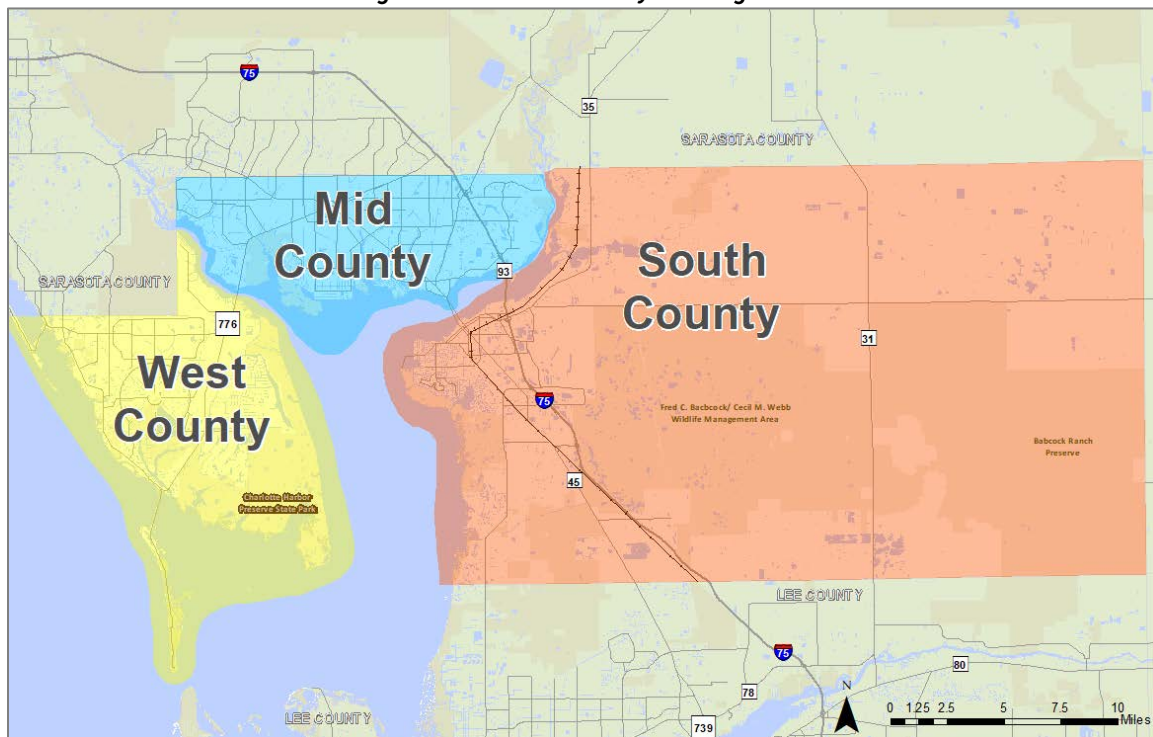


Table 3-3: Existing and Future Population and Employment by Planning Area

Variable	2015	2045	Growth
South County			
Dwelling Units	17,471	48,118	30,647
Population	25,014	87,116	62,102
Employment	15,826	31,788	15,962
Mid County			
Dwelling Units	50,995	68,309	17,314
Population	92,790	116,291	23,501
Employment	26,456	35,572	9,116
West County			
Dwelling Units	29,347	36,717	7,370
Population	47,753	57,143	9,390
Employment	6,677	9,691	3,014

3.2 Growth Allocation

Forecasting population and employment for the year 2045 includes not only estimating the number of people living and working in Charlotte County, but also allocating the people and jobs geographically throughout the County.

Population and employment growth were allocated to subareas of the County to Traffic Analysis Zones (TAZs), which are used for estimating future traffic and use of the transportation system. Approved or planned developments were incorporated into this allocation. Land Use controls through the County and City Comprehensive Plans were also used for determining availability for future growth potential. Coordination with County and City planners identified the major developments and expectations for growth through 2045. Major development areas within Charlotte County (such as Babcock Ranch, Sunseekers, and West Port which is in Murdock Village) are shown in **Figure 3-3**.

Figure 3-4 shows the growth in household population along with the total 2045 population that was estimated. Likewise, **Figure 3-5** shows projected growth in employment along with the 2045 employment estimates.

Figure 3-3: Major Development Areas

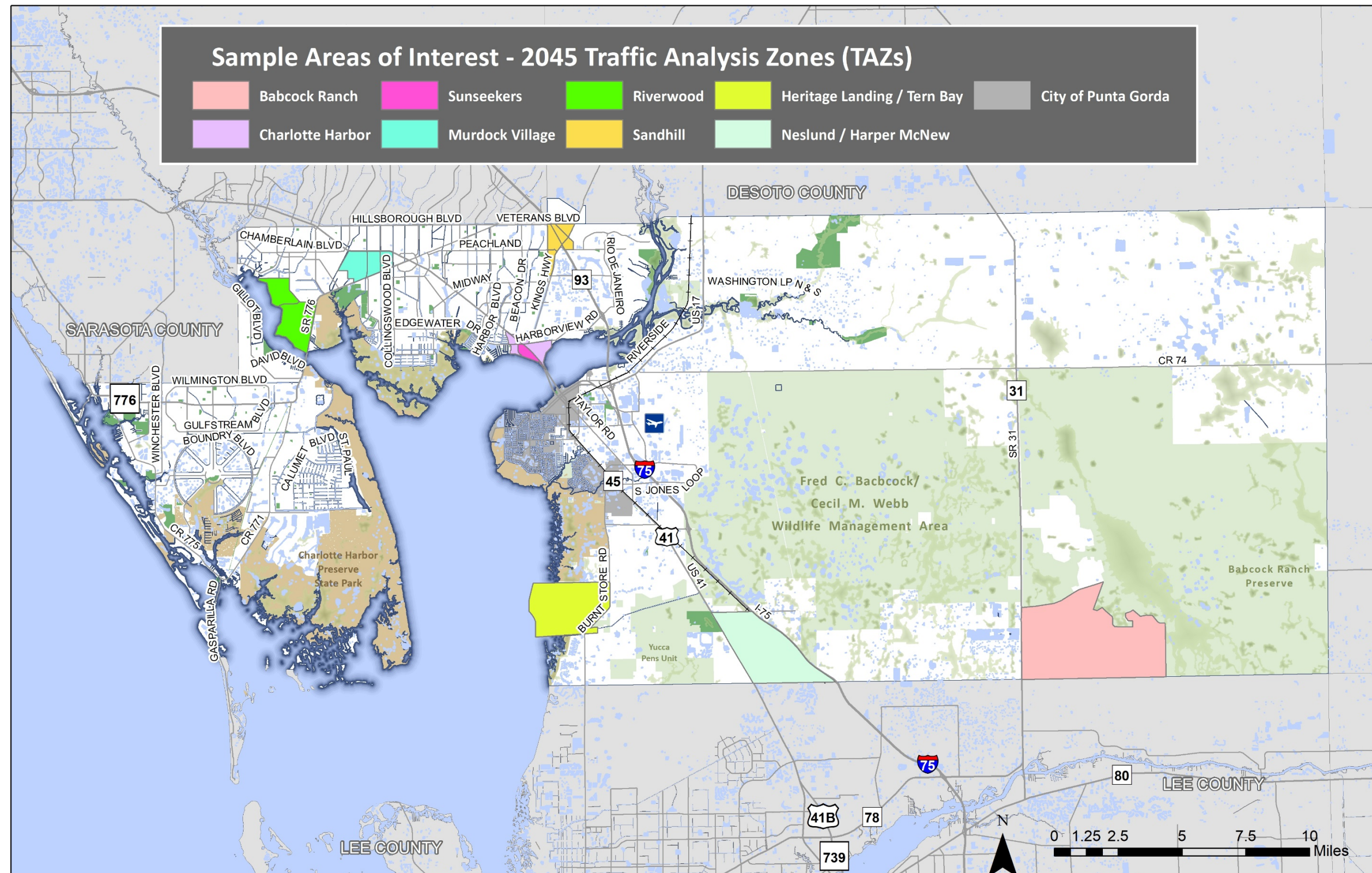
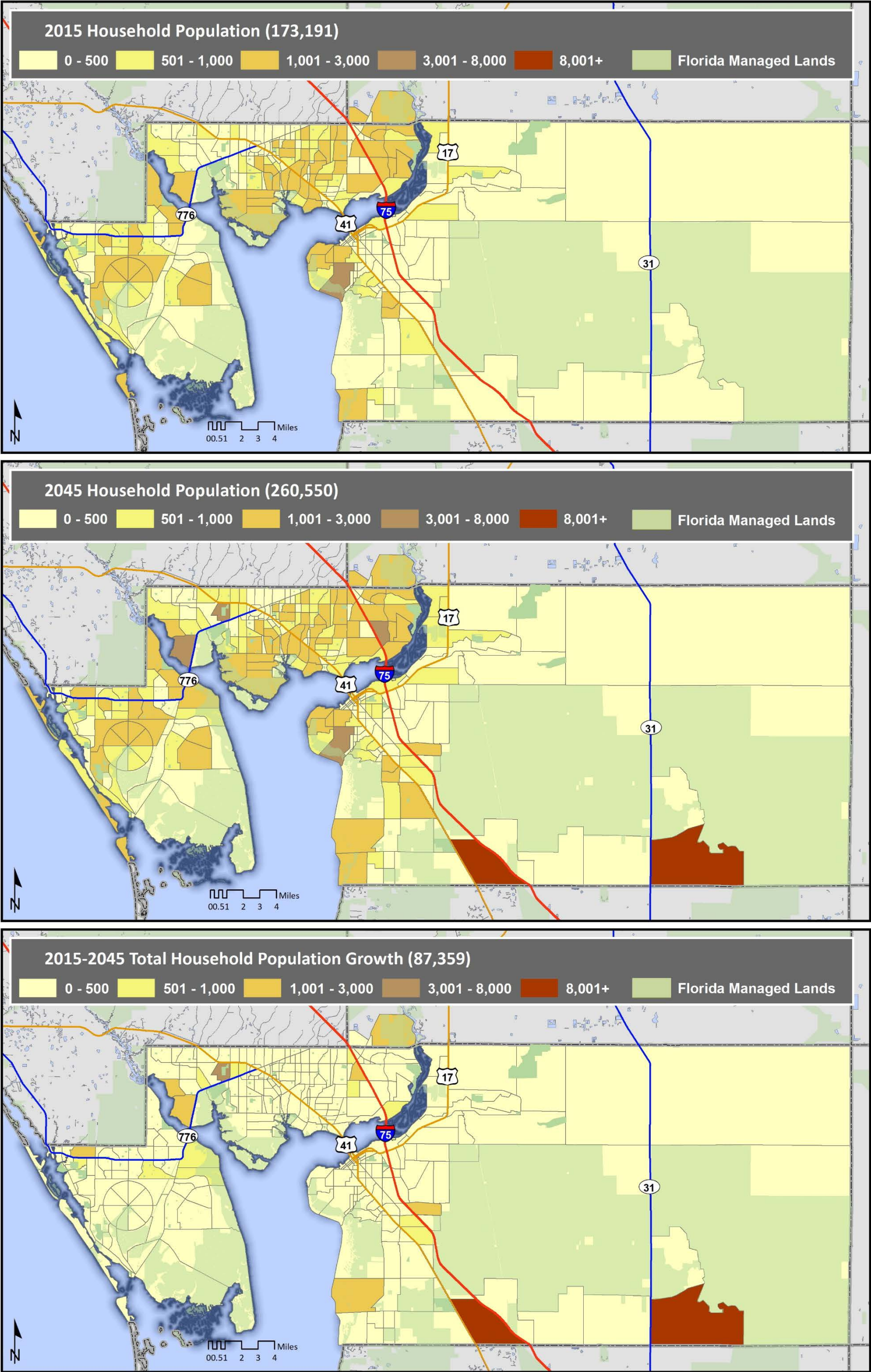
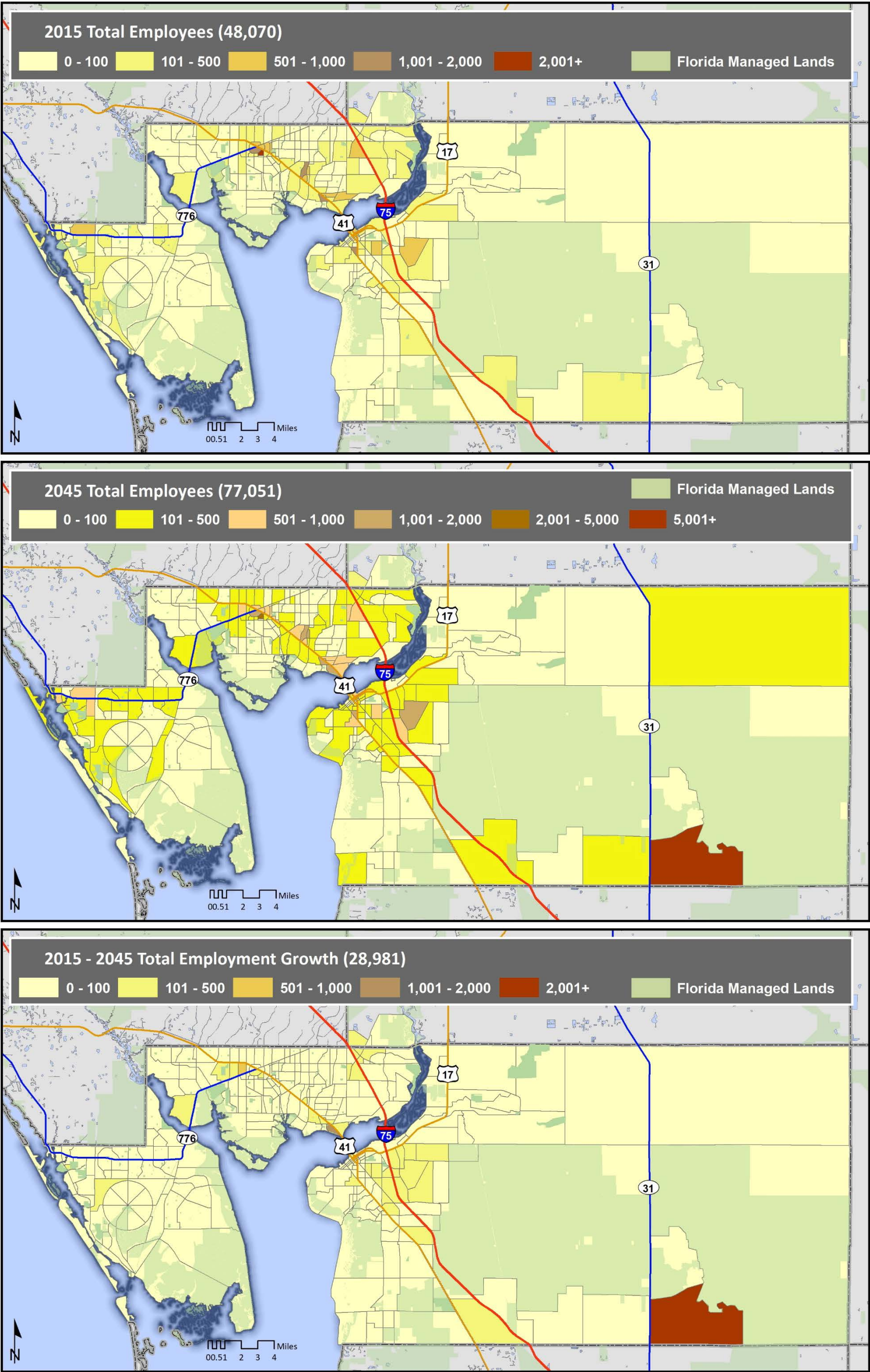


Figure 3-4: Growth in Population and 2045 Forecast



March, 2020

Figure 3-5: Growth in Employment and 2045 Forecast



March, 2020



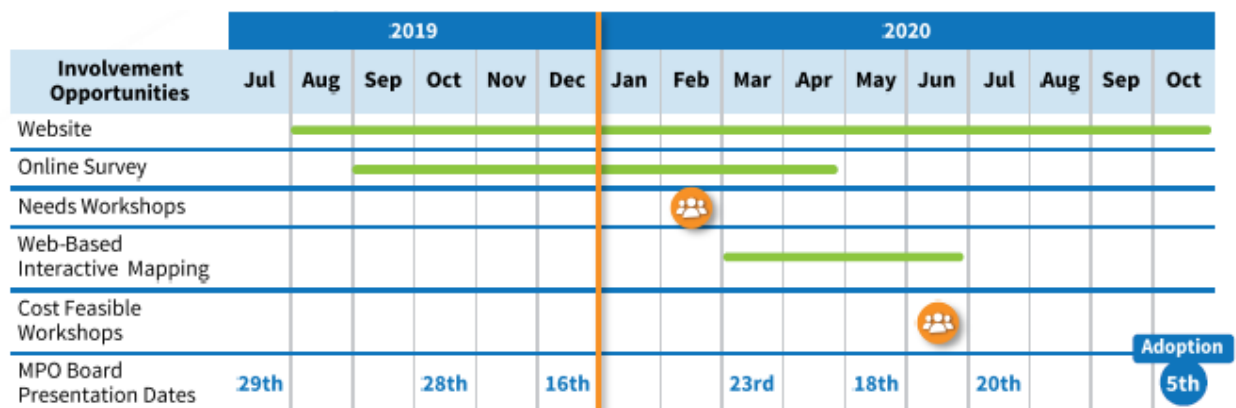
Chapter 4: 2045 LRTP Public Participation



4.1 Public Participation

Public involvement is a crucial part in building a credible and trusting relationship between transportation agencies and the community they serve. Successfully engaging a broad cross-section of residents, visitors, business owners, employers, agencies, advocacy groups and other interested parties enables the Metropolitan Planning Organization (MPO) to create a vision for the future that serves its constituents. Effective engagement fosters partnerships, builds awareness, and educates stakeholders about the transportation planning process, and attempts to promote active listening and fruitful, two-way dialogue. To be in consistent with Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990, the public involvement efforts recognized and addressed potential obstacles to participation in the planning process. Special attention was paid to participation of minority, low-income and transit-dependent individuals, and those with a low English proficiency. To ensure full and fair participation in the transportation decision-making process by all potentially affected citizens, the MPO provided public notice and allowed for public comment at key decision points in the Long Range Transportation Plan (LRTP) update process. This included outreach efforts for obtaining active public involvement early in the planning and document preparation process.

As a condition to receive federal transportation capital and planning assistance, the MPO must comply with Federal and Florida State requirements in addressing public involvement in transportation planning. The MPO meets public involvement requirements set forth in 23 C.F.R. 450.316 and Title 23 of the United States Code at the Federal level and Section 339.175 of the Florida Statutes. Chapter 339 requires citizens, public agencies and other known interested parties be provided a reasonable opportunity to comment and provide input on the LRTP. To meet this requirement, a specific 2045 LRTP Public Involvement Plan (PIP) was developed to ensure that federal requirements for public participation were met. This PIP is consistent with the MPO's adopted Public Participation Plan (PPP), and served a resource for the public as the LRTP was being updated.



Public Involvement Activity Schedule in the Route to 2045 Newsletter

4.2 Public Involvement Activities and Communication Tools

Effective public participation relies upon the use of a broad spectrum of techniques to gather input. The following tools and strategies were used to reach out to the public and provide a forum for open discussion and opportunities to comment on the 2045 LRTP:

- Stakeholder Interviews
- Board & Committee Meetings
- Press Releases and Public Notices
- Email Blasts
- Newsletters
- Online Surveys
- Project Branded Business Cards
- In-Person Workshops
- Virtual Workshops
- TV and Newspaper Interviews
- Project Webpage
- Online Interactive Mapping
- Print and Social Media Ads
- Video Aired on CCTV and Website

A key communication tool used to communicate with the public was to prepare the business cards shown below. These cards were distributed in public gathering spaces and included information about the LRTP. A QR code was included which, when scanned using a mobile device, directed individuals to the MPO's website for more information.



Additional strategies and tools used for communicating with the public are included in the following sections and described more fully in **Technical Report 2**.

As a result of the outreach and engagement of the public, more than 800 people participated in the development of the 2045 LRTP. **Figure 4-1** provides a summary of Route to 2045 public involvement activities and the number of participants involved.

Figure 4-1: Summary of Route to 2045 Public Involvement Activities



4.3 Public Involvement Approach

The public involvement activities were divided into three phases that engaged the public, local stakeholders, and elected leaders (**Figure 4-2**). Phase I was designed to establish the vision for 2045 and “big picture” transportation topics. Phase II focused on the technical work of identifying transportation needs and improvements throughout the MPO’s planning area. Phase III prioritized transportation projects evaluated projects for cost feasibility and identified steps for implementation.

In addition to specific outreach and engagement activities with the public, monthly updates were provided to the MPO Board, Technical Advisory Committee (TAC), Bicycle/Pedestrian Advisory Committee (BPAC), and Citizens’ Advisory Committee (CAC) throughout the LRTP update. Opportunities for public comment were provided at each of these meetings as well.

Figure 4-2: Public Involvement Phases and Activities



PHASE I – VISIONING & BIG PICTURE

Activities: Stakeholder Interviews, MPO Board and Committee Meetings, Headliner Activity, Newsletter



PHASE II – NEEDS PLAN

Activities: In-person Needs Workshops, Online Survey, Interactive Mapping Activity



Phase III – COST FEASIBLE PLAN & IMPLEMENTATION

Activities: Virtual Workshop, Online Cost Feasible Survey, 30-Day Comment Period

Phase I: Visioning and Big Picture

Phase I of public involvement consisted of interviews with key stakeholders and briefings with the MPO Board and the Technical and Citizen Advisory Committees. These engagement activities were used to gather input from elected officials and stakeholders on the transportation system, future growth, economic development trends, and future transportation needs.

Stakeholder Interviews

In-person and phone interviews were conducted in June and July 2019 with nine key stakeholders interviewed. The goal of the interviews was to obtain input on future growth and transportation investments needed to best serve all of Charlotte County through the year 2045. Key comments and recurring themes from these interviews helped to frame and guide later public involvement activities throughout Plan development. The main transportation themes from the interviews included preserving existing transportation infrastructure, improving freight movement, and improving safety and transportation options for pedestrians and bicyclists. **Table 4-1** provides a list of those contacted and interviewed as a part of Route to 2045 outreach efforts.

Table 4-1: Stakeholder Information

Name & Position	Organization
Raymond Sandrock, County Administrator	Charlotte County
Howard Kunik, City Manager	City of Punta-Gorda
Wendie Vestfall, Tourism Development Director	Punta Gorda/Englewood Beach Visitor and Convention Bureau (VCB)
Micah Richins, Chief Operating Officer	Sunseeker Resorts
Gary Nelson, Senior Vice President of Planning and Development	Kitson & Partners (Babcock Ranch)
Jim Parrish, Chief Executive Officer	Charlotte County Airport Authority
Jennifer Hecker, Executive Director	Charlotte Harbor National Estuary Program (CHNEP)
Dave Gammon, Director	Charlotte County Economic Development
Shane Simmons, President	Cheney Brothers Inc.

Prior to the LRTP update, Charlotte County Transit conducted stakeholder interviews in January and February of 2019 as a part of the 2020-2029 Transit Development Plan (TDP) update. These interviews were conducted to gather input from policy, agency, and community leaders regarding the future of the Charlotte County Transit System (CCT). Main themes from the TDP stakeholder interviews indicated the need for more transit options in Charlotte County, including innovative solutions to increase access to key employment and commercial hubs on the US-41 corridor. Additionally, transit services that accommodate the needs of older adults was emphasized in the interviews. The responses from the interviews and main themes from the TDP were taken into consideration and incorporated into the 2045 LRTP update to provide more input on transit service. **Table 4-2** shows the list of stakeholders contacted and interviewed in the 2020-2029 TDP update.

Table 4-2: Charlotte Rides TDP Stakeholder Information

Name & Position	Organization
Ken Doherty, Chairman	Board of County Commissioners
Christopher Constance, Commissioner	Board of County Commissioners
Bill Truex, Commissioner	Board of County Commissioners
Stephen R. Deutsch, Commissioner	Board of County Commissioners
Joe Tiseo, Commissioner	Board of County Commissioners
Gordon Burger, Director	Budget & Administrative Services
Carrie Hussey, Director	Human Services
Dave Gammon, Interim Director	Economic Development
Larry Brown, Officer, Veterans Affairs	Local Coordinating Board
Cornelius Moore, Florida Dept. of Children & Families	Local Coordinating Board
Mike Mansfield, CEO/Executive Director Charlotte County Habitat for Humanity	Transportation Disadvantaged Local Coordinating Board
Cindy Montgomery, Workforce Development	CareerSource Southwest Florida-LCB Member
Angie Matthiessen, Executive Director	United Way of Charlotte County
Nancy Johnson, Chief Executive Officer	TEAM Punta Gorda
Eric DeYoung, President	TEAM Punta Gorda
James W. Herston, Business Owner	Charlotte Harbor Redevelopment Agency (CRA) Advisory Committee
Lucienne Pears, Vice President of Economic and Business Development	Kitson & Partners (Babcock Ranch)
Stephen Carter, Member Chair	TEAM Parkside and Bicycle Pedestrian Advisory Committee

MPO Board and Committee Visioning Meetings

The visioning workshops were designed to gather input from the MPO Board and TAC/CAC Advisory Committees regarding the direction and the vision for the 2045 LRTP. The workshops were held on July 17, 2019 and July 29, 2019 as noted in **Table 4-3**. Two activities were conducted at the workshops to solicit feedback regarding current and future transportation needs in the County. The first activity was a headliner activity to envision the most desired and most feared newspaper headlines in 2045. **Figure 4-3** shows the range of headlines that were received from Board and Committee members for this activity. The second activity included a series of questions where Board and Committee members provided their input regarding future growth, transportation funding, and investment in transportation modes. A full list of responses and results from these workshops are included in **Technical Report 2**.

Table 4-3: Phase I Committee and Board Workshops

Meeting and Date	Participants
TAC / CAC Visioning Workshop (7/17/19)	19
MPO Board Kick-Off Meeting/ Visioning Workshop (7/29/19)	16

Figure 4-3: Best Newspaper Headlines for Year 2045



Newsletter

A newsletter was prepared and distributed to keep the MPO partners and the public informed and updated on the 2045 LRTP process. The newsletter outlined the overall framework of the LRTP and provided information on how to get involved in the LRTP process. The newsletter was written in a citizen friendly style and targeted for a non-technical audience, using infographics to convey concepts in a user-friendly manner. Electronic versions of the newsletter were distributed via the MPO's website and through an e-mail blast utilizing the MPO's contact list.



Public participation and opportunities for comment were provided at each MPO Board and Committee Meeting.

Figure 4-4: 2045 LRTP Newsletter

Why Should I Get Involved with Route to 2045?

- It's closer than you think!** While the year 2045 seems like a long way off, projects identified in the LRTP can begin to be implemented much sooner.
- It's your future.** Whether you walk, ride your bike, drive or rely on public transportation, this plan sets the vision for how you'll be able to get around in the future.
- We would like your help** setting priorities based on our goals of:
 - Ensure Efficient Travel for all Modes of Transportation
 - Expand Transportation Choices for Everyone
 - Preserve Natural Spaces While Promoting a Healthy Community
 - Promote Vibrant Centers and the Local Economy
 - Enhance Safety and Security for Everyone

How Can I Get Involved with Route to 2045?

- Visit our website
- Attend meetings and workshops
- Take our surveys and provide comments, ideas and concerns

For more information about the MPO, please visit our website at www.ccmppo.com/wp. Here you will find information about previous and upcoming Board and Committee meetings, review the 2045 LRTP and other planning documents.

To be part of the 2045 LRTP or share your ideas, please contact:

MPO Staff
Charlotte County-Punta Gorda MPO
941.883.3535 or email us at office@ccmpo.com

2045 Long Range Transportation Plan (LRTP)
"Charting our Course to the Future!"

Be assured your opinions and ideas matter - they do- and we welcome your participation!

www.ccmppo.com/wp

Phase II: Needs Plan

Phase II of public involvement focused on identifying transportation needs and improvement opportunities for the Charlotte County transportation network. Public involvement activities were conducted to seek input from Charlotte County residents about current and future transportation needs in the County.

L RTP Video

The MPO produced a short and informative video in collaboration with staff from Charlotte County’s government access television station, CC-TV-20. The video provided an overview of the MPO’s role in carrying out the federal requirements for Metropolitan Planning and starred members of the BPAC and CAC. Created to optimize virtual public involvement in the 2045 LRTP process and to meet Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) encouragements to use new technologies and engagement platforms in transportation planning, the video was screened at the needs plan public workshops, shared with partner agencies, and made available on the MPO’s website.



CC-TV staff interviewed a member of the BPAC while riding along Cape Haze Pioneer Trail in West County as part of the LRTP Video.



Web-Based Needs Plan Survey

A web-based survey was conducted to gain insights on the community's vision and priorities for the transportation network to ensure the 2045 LRTP reflected the needs and desires of the community. Input was collected on future growth, transportation challenges, and possible transportation solutions. The survey process was conducted primarily online, with a link to the survey questionnaire available on the MPO's website. A paper survey questionnaire was made available at the public workshops or by request. The survey was active from November 13, 2019 until April 15, 2020. During that time period, 657 survey questionnaires were successfully completed by residents and visitors who live or work in Charlotte County.



A Charlotte County resident completes the online Needs Survey during the Workshop

Needs Plan Workshops

Workshops were held in each of Charlotte County's three distinct geographic areas to provide the public with an opportunity to discuss the LRTP with the planning team. The workshop activities were designed to solicit input from participants on solutions to improve mobility in Charlotte County and, identify transportation improvement projects. Attendees were invited to view informational display boards and provide input through completing the web-based survey, speaking with staff, filling out comment forms, and participating in the interactive mapping activity. Overall, 52 people attended the three workshops. The workshops were held at the following times and locations:

- Tringali Community Center
 - 3460 North Access Rd, Englewood- February 25, 2020; 2:00 p.m.-4:00 p.m.
- Mid County Library Meeting Room C
 - 2050 Forrest Nelson Blvd, Port Charlotte - February 26, 2020; 10:00 a.m.-12:00 p.m.
- Punta Gorda Library
 - 401 Shreve St, Punta Gorda - February 26, 2020; 2:00 p.m.-4:00 p.m.



MPO staff and Charlotte County residents at Needs workshops

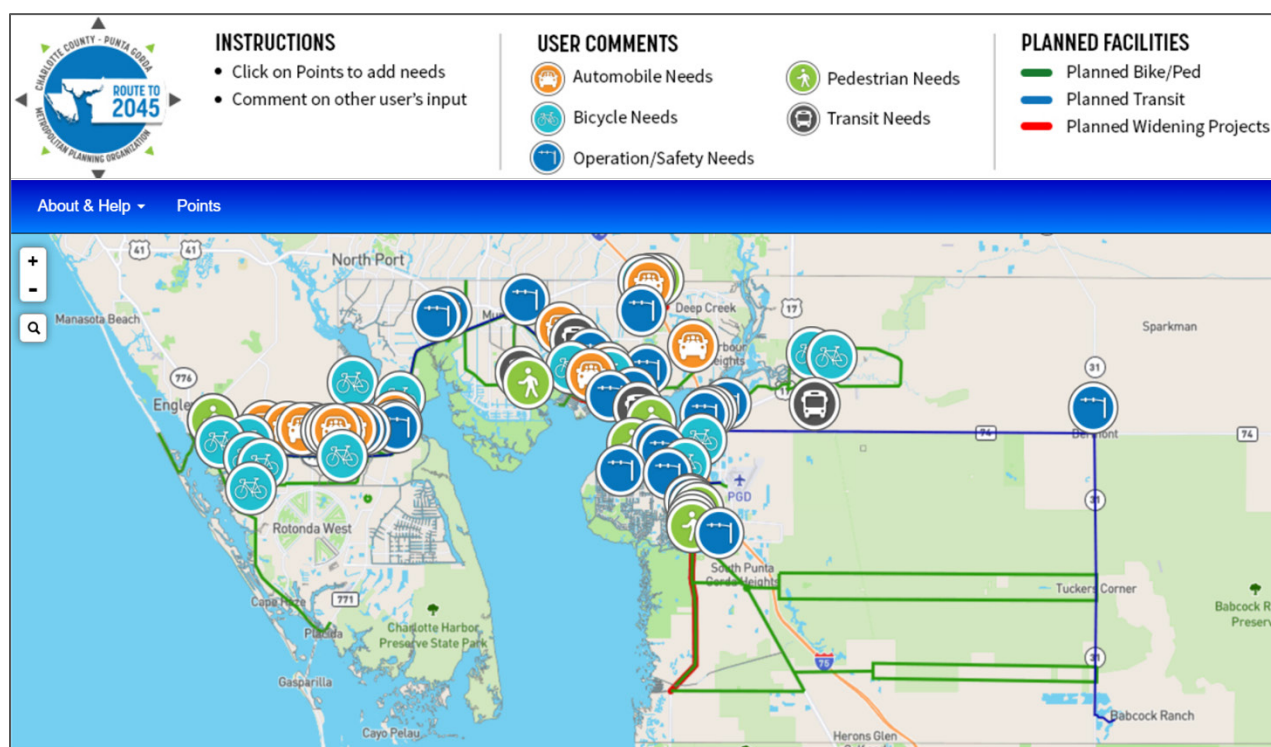
Web-Based Interactive Mapping Activity

The goal of the web-based interactive mapping activity was to receive citizen input on specific location-based transportation challenges, needs, and opportunities in the Charlotte County transportation network. The web-based interactive mapping activity was made available to respondents from February 25, 2020 through May 15, 2020. The web map provided an opportunity for residents to identify locations in Charlotte County where transportation challenges exist or where transportation improvements are needed. Participants had three ways to engage with the map and provide their input. These options included:

- Selecting a transportation need category (automobile, bicycle, pedestrian, transit, operation/safety) and placing a pin on the map where that need exists,
- Commenting on a pin already placed on the map, or
- “Liking” or “Disliking” a comment.

The mapping activity resulted in the placement of 72 locations/pins, 106 comments, and 56 “likes” and “dislikes”. The main transportation issues that were identified included operation/safety improvements, automobile needs, and bicycle/pedestrian improvements. This data was utilized to inform the prioritization of transportation projects included the Needs Plan. **Figure 4-5** shows all public comments received in the web-based mapping activity.

Figure 4-5:Route to 2045 Interactive Web Map Activity



Phase III: Cost Feasible Plan and Implementation

Phase III of public involvement included prioritizing transportation projects identified through technical analysis and the Needs Workshops. These projects were prioritized against available revenues to help finalize the community’s vision for the region’s transportation system over the next 25 years. Virtual workshops, an online survey, and a 30-day comment period were organized to gather input from wide range of individuals to prioritize transportation improvements and projects.

Cost Feasible Virtual Workshops and Survey

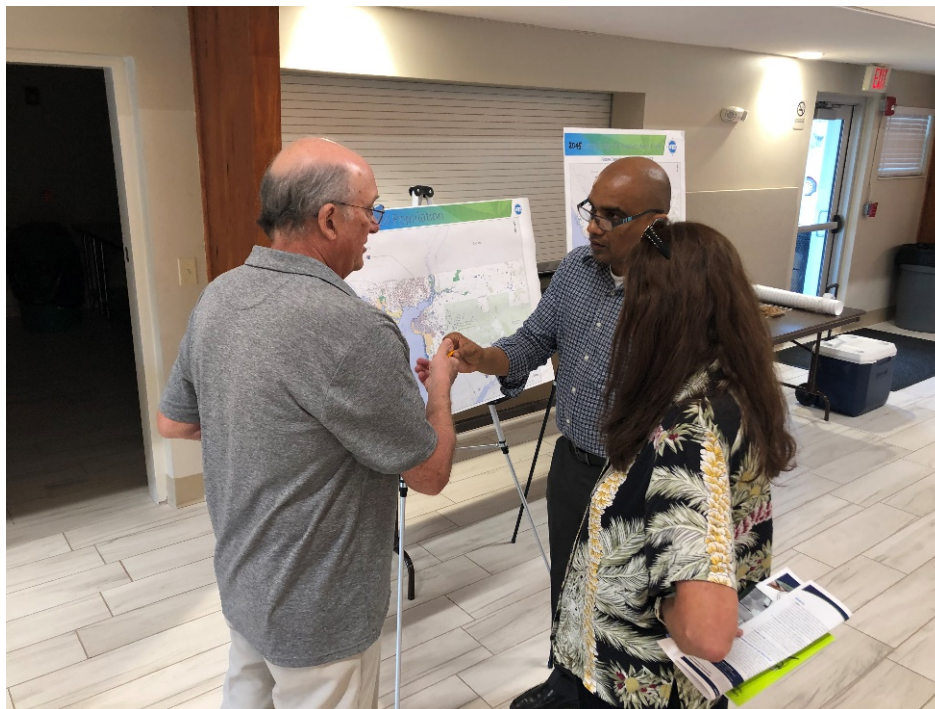
Due to the outbreak of coronavirus, the Cost Feasible Plan workshops were organized in a virtual format to solicit input. The MPO made a significant effort to adapt the in-person public workshops into online events to provide meaningful opportunities for citizens to participate in the final stages of the LRTP development. Two virtual workshops held on June 24, 2020 and June 30, 2020 with over 40 people in attendance. The virtual workshop presentations provided an overview of the region’s transportation needs, available revenues, and proposed transportation projects.

The virtual workshops were followed by online survey that provided a chance for citizens to weigh in on existing transportation priorities, make suggestions for revisions, and identify priorities based on funding availability. The survey was available for public input from June 22, 2020 to July 7, 2020 on the MPO's website. Overall, 52 survey questionnaires were successfully completed by residents and visitors who live or work in Charlotte County.

30-Day Comment Period and Board Adoption

The MPO encouraged public participation in the development, review, and adoption process of the LRTP created many opportunities for the public to participate during the 2045 LRTP update process. In addition to the public outreach conducted for the Needs Plan and Cost Feasible Plan, the MPO provided a 30-day review and comment period for the 2045 LRTP draft report prior to adoption by the MPO Board on October 5, 2020. This comment and review period ended on September 2, 2020.

The draft 2045 LRTP report was posted on the MPO's website and citizens and stakeholders were encouraged to provide input through phone calls, emails, or online comments forms up until the date of the LRTP adoption by the MPO Board (October 5, 2020). The MPO continued to maintain and update the 2045 LRTP project website (www.ccmpo.com) with the draft 2045 LRTP report and other relevant project materials including workshop recordings and meeting presentations.



Members of the Public and MPO staff at the Needs Workshop discuss future growth in population and employment.



Chapter 5: Environmental / Socio-Cultural Effects & Environmental Justice



5.1 Environmental Mitigation

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands air quality, and groundwater resources. In situations where impacts cannot be completely avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs. The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts. In the State of Florida, environmental mitigation for transportation projects is completed through a partnership between the MPO, FDOT, and regulatory agencies, such as Water Management Districts and the Florida Department of Environmental Protection and the US Environmental Protection Agency among others.

When addressing mitigation there are general guidelines and protocols associated with avoiding impacts, minimizing impacts, or mitigating for impacts when impacts are unavoidable. These guidelines can be applied at the planning level, when MPOs are identifying areas of potential environmental concern during the development of a transportation project. Environmental mitigation activities include the following:

- Avoidance of impacts altogether
- Minimizing a proposed activity/project size or its involvement
- Repairing, rehabilitating, or restoring the affected environment
- Reducing or eliminating impacts over time through preservation and maintenance
- Compensating for environmental impacts by providing appropriate or alternate environmental resources of equivalent or greater value, on or off-site.

Table 5-1 outlines potential environmental mitigation opportunities which can be considered when addressing environmental impacts from future projects listed in the LRTP. Preparing for specific mitigation strategies can be challenging over the course of the long-range transportation plan. Unforeseen funding circumstances or natural disasters such as, global or statewide pandemics, hurricanes, tornadoes, flooding, fire hazards, permitting disputes between regulatory agencies are common challenges to environmental mitigation. Such challenges can be met by a well planned and executed public involvement program. Additionally, the preparation of Efficient Transportation Decision Making (ETDM) processes and utilization of Environmental Screening Tools. These approaches provide assurance that mitigation opportunities are identified, considered, evaluated, and viable as the plan is developed and projects are advanced. Through these approaches, the State of Florida along with its MPO partners ensures that mitigation will occur to offset the adverse effects of proposed transportation projects.

Mitigation of transportation impacts to air quality is also an important consideration of the MPO's decision making process. Because vehicle emissions pollute the air, improving air quality and reducing congestion can be accomplished through funding of multimodal transportation solutions. The evaluation known as air-quality conformity is required by the Clean Air Act which was revised last in 1990. This evaluation compares the transportation related emissions resulting from travel and the funding

decisions included in the MPO's plans to determine if future air quality will meet the clean air standards. Data collected from air monitoring stations is used to determine if current air quality standards are being met. Since Charlotte County has been designated as an area that meets the current standards, an evaluation of future air quality is not required. However, the MPO still pursues a blend of multimodal transportation projects in an effort to maintain clean air for the region. Focusing on bicycle and pedestrian modes of travel and improvements to intersections where traffic is congested are ways the MPO is looking to mitigate for the air quality impacts of transportation.

Table 5-1: Potential Environmental Mitigation Strategies

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

5.2 Resiliency

As a precursor to the 2035 LRTP, the MPO partnered with the Department of Urban and Regional Planning at Florida State University to conduct a Hazard Mitigation Study. The study identified roadways vulnerable to flooding and natural threats including Sea Level Rise and Storm Surge. As part of the project prioritization, the MPO has continued to use this study and incorporate updated information for identifying potential cost feasible projects. Updated information used include the National Oceanic and Atmospheric Administration's updated 2020 flood plain maps and the medium sea level rise prediction from the University of Florida's Sea Level Scenario Sketch Planning Tool. While roadways susceptible to sea level rise received the highest scores, this is assuming these roadways will be designed and engineered with mitigation features for dealing with sea level rise and not for prioritizing additional roadways in vulnerable areas.

5.3 Socio-Cultural Effects and Environmental Justice

Environmental Justice (EJ) is broadly defined by the Federal Highway Administration as “identifying and addressing disproportionately high and adverse effects of the Federal Highway Administration’s programs, policies and activities on minority and low-income populations to achieve an equitable distribution of benefits and burdens.” The FHWA considers EJ in all phases of project development including planning, environmental review, design, right-of-way, construction, and maintenance and operations. The FHWA also considers EJ in all other programs and activities, including public involvement, freight planning, safety, Tribal consultation, and the Title VI civil rights program.¹ Outside of EJ and Title VI, federal laws protect a variety of other groups including, but not limited to: the elderly, the disabled, and those who have Limited English proficiency (LEP).

Like many Florida Counties, Charlotte County is made up of mix of ethnicities, incomes, and individuals of diverse needs. Identifying concentrations of populations with diverse needs across the county will aid in assessing the demands and impact upon Charlotte County’s transportation and transit system and help target public investments to areas with specific needs in an efficient manner.

A geographic analysis was conducted to identify census block groups with higher concentrations of each of the EJ factors to produce Equity Assessment Areas. To identify these areas, a GIS-based Transportation Planning Equity Tool was used to objectively identify concentrations of EJ areas and other protected groups, as well as develop a composite of indicators that identifies high concentrations of people traditionally underrepresented in the Transportation Planning Process.

Technical Memorandum 5 provides a detailed description of the methodology and framework used to rank block groups for the composite scores.

The following six factors, based on socio-economic measures obtained from the U.S. Census Bureau’s 2017 American Community Survey (ACS) 5-year estimates, were evaluated to identify Equity Assessment Areas and other protected groups, in Charlotte County.

- **Non-white/non-Hispanic:** percentage of the population that identify themselves as a race other than white or of Hispanic ethnicity.
- **Hispanic:** percentage of the population that identify themselves as of Hispanic origin.
- **English proficiency:** percentage of people five years of age or older who identified as speaking English less than ‘very well.’
- **Age 65 or older:** percentage of population age 65 or older.
- **Zero vehicle households:** percentage of population without access to a vehicle.
- **Below Poverty:** Low-Income persons are defined as persons or households whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. The 2019 HHS guidelines are presented in **Table 5-2**. The 2017 ACS 5-year dataset uses the 2019 HHS poverty guidelines to determine how many households are considered low-income in the county. For reference, the county-wide average household size is 2.31 persons with an average median income is \$46,511.

¹ https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_fhwa/

Figure 5-1 illustrates the Environmental Justice areas resulting from this Equity Assessment within Charlotte County Punta Gorda region.

Table 5-2: 2019 Federal household and poverty thresholds

Persons in Family/Household	Poverty Guideline
1	\$12,490
2	\$16,910
3	\$21,330
4	\$25,750
5	\$30,170
6	\$34,590
7	\$39,010
8	\$43,430

Source: <https://aspe.hhs.gov/poverty-guidelines>

Note: For families/households with more than 8 persons, add \$4,420 for each additional person.

The LRTP development process included efforts to assess countywide performance of transportation projects regarding socio-cultural effects and environmental justice. The process also seeks to ensure equal access to transportation systems and the transportation planning process. The analysis focuses on areas with a high concentration of minority, low-income, and other traditionally under-served and under-represented populations. **Technical Report 6** includes additional details on the prioritization process and **Technical Report 5** provides analysis of transportation investment in EJ areas.

Facility Inventory

In addition to identifying Equity Assessment Areas a community facilities inventory to evaluate the level of access provided by LRTP projects. Community-based facilities in Charlotte County were inventoried to identify major trip generators or employers within the county and that are likely to attract a variety of population segments due to their community-oriented nature. Community facilities and services are important for maintaining quality of life; not only are the amount and distribution of these facilities and services important, but a person's ability to access them is an equally important consideration for the LRTP. Community facilities included parks and recreation facilities, libraries, schools, and hospitals. The assessment was performed using GIS software. The community facilities inventory was verified and updated as needed for the 2045 LRTP.

Table 5-3 provides summary information on community facilities and services in Charlotte County and **Figure 5-2** shows their locations. Future transportation projects that provide greater access to these community facilities will have positive social-cultural impacts.

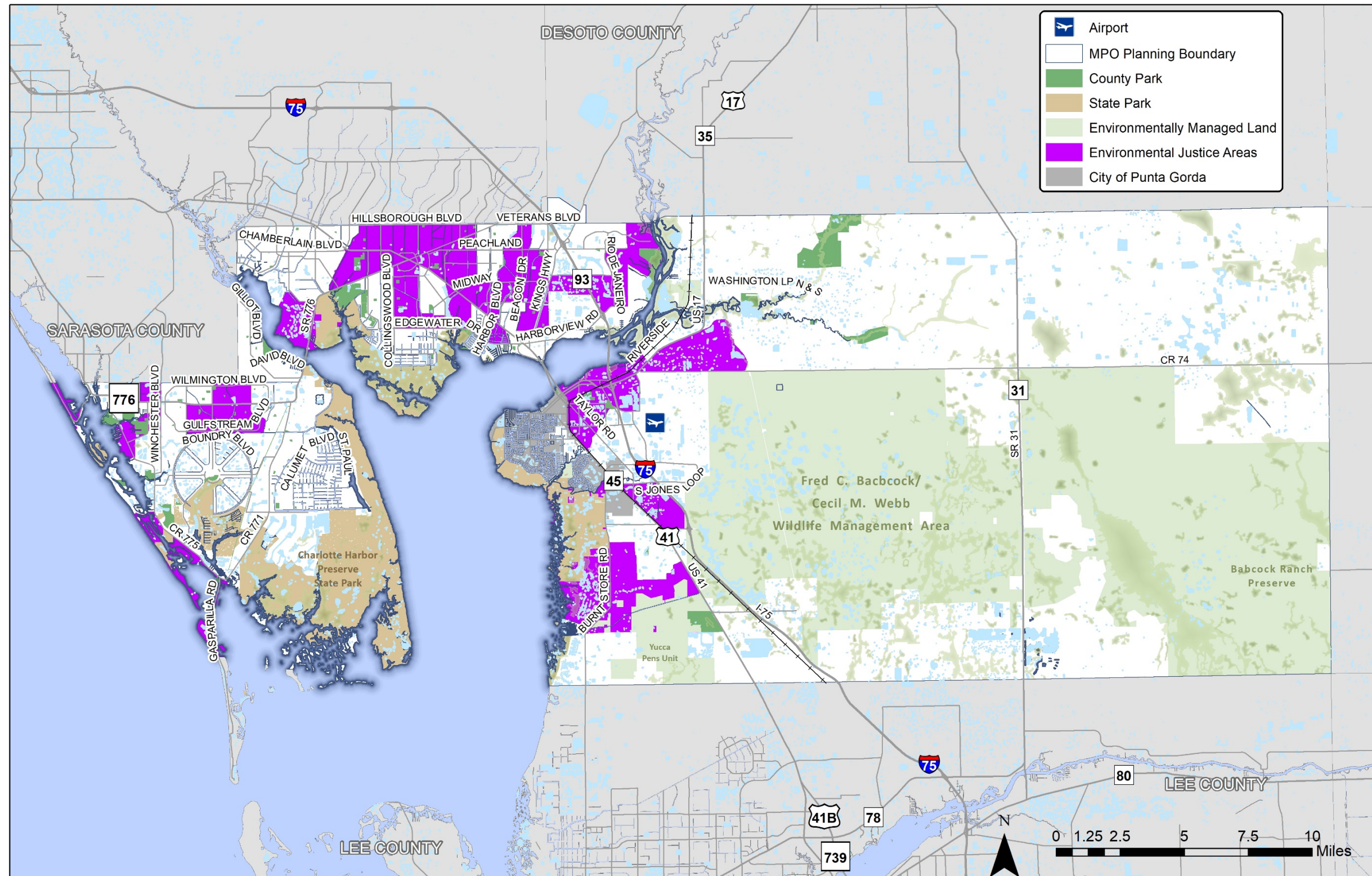
Table 5-3: Summary Information on Community Facilities

Facility Type	Number of Facilities
Churches	186
Parks	76
Schools	37
Public Facilities	26

Fire Stations	18
Hospital/Clinics	4
Libraries	4
Airports	2

Source: Charlotte County GIS

Figure 5-1: Environmental Justice Equity Areas





Chapter 6: Congestion Management



6.1 Introduction

The Congestion Management Process (CMP) is a management system and process conducted to improve traffic operations and safety through operational improvements and strategies that reduce travel demand. Federal regulations require that metropolitan areas use a CMP while planning transportation investments. The CMP uses a number of analytic tools to define and identify congestion within a region, corridor, and activity center, or project area.

The CMP is also used to develop and select appropriate strategies to reduce congestion or mitigate the impacts of congestion. Greater availability of data, enhanced tools for data management and modeling, expanded use of intelligent transportation systems, and opportunities for regional cooperation and collaboration can improve the active management of the regional transportation system. The CMP addresses congestion through effective management and operations.

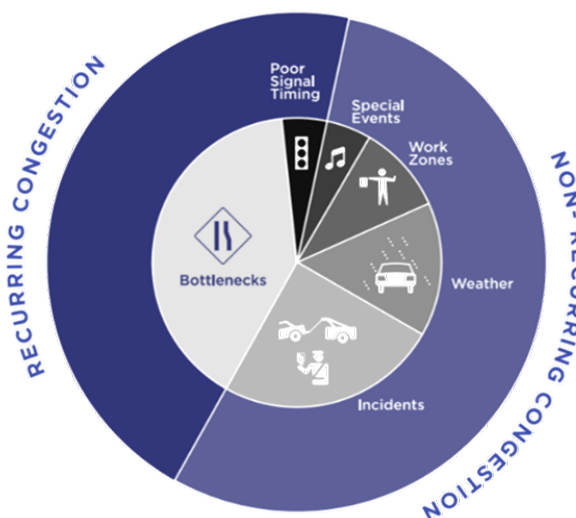
6.1.1 Causes of Congestion

The process of congestion management begins by understanding the causes of the congestion. Congestion results from the interaction between many different sources but can be broadly classified into two categories:

- **Recurring congestion** – when the number of vehicles attempting to use a roadway exceeds the capacity of that roadway during peak travel periods (e.g. commute hours). This type of congestion is predictable because travel routes follow a specific pattern with regards to time of day and route selection.
- **Non-recurring congestion** – unexpected or non-regular disruptions to the normal flow of traffic on a roadway (e.g. traffic incidents, weather, road construction and maintenance, special events). This type of congestion is more difficult to measure and predict.

Figure 6-1 shows the results of a national study conducted by FHWA on the sources of congestion and the type/category of congestion. The figure shows that while bottlenecks account the largest source disruption, non-recurring congestion events (e.g. special events, work zones, weather, incidents) account for over half of the causes of congestion. This national data is widely used in CMP updates due to the lack of comprehensive local studies on the causes of congestion. The data suggest that local causes are likely to be similar, with bottlenecks and traffic incidents typically being the top two causes of congestion.

Figure 6-1: Causes of Congestion



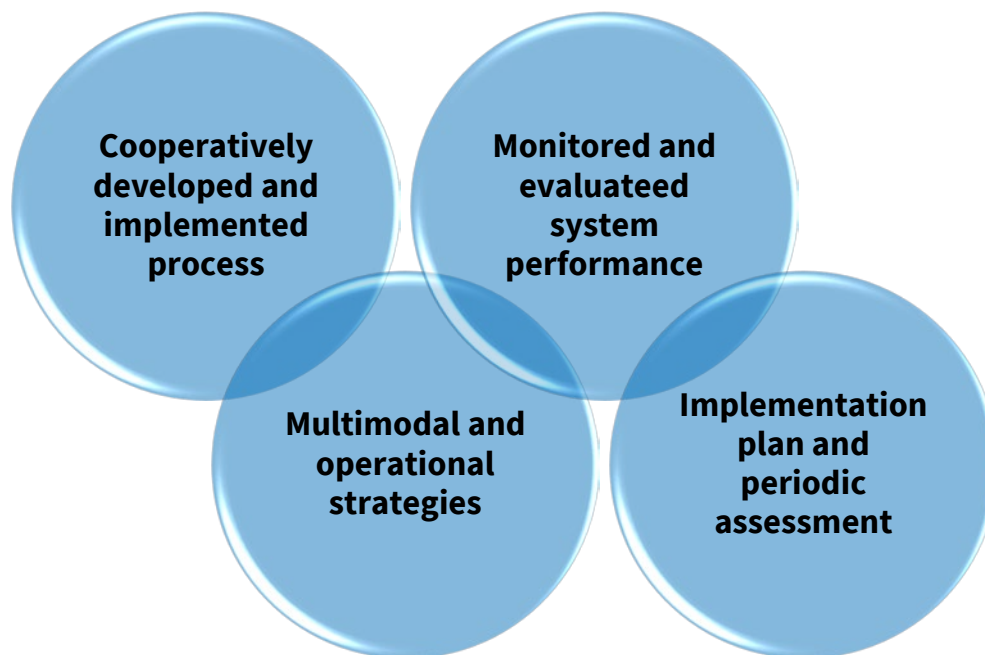
Source: FHWA, "Incorporating Travel Time Reliability into the Congestion Management Process: A Primer."

6.1.2 Federal Requirements

The initial federal requirements for congestion management were introduced by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and were continued under the successor law, the Transportation Equity Act for the 21st Century (TEA-21). The Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was passed into law in August 2005, and the requirements were further evolved under Moving Ahead for Progress in the 21st Century Act (MAP-21) signed into law on July 6, 2012.

Fixing America’s Surface Transportation Act, or the FAST Act, was passed on December 4, 2015. The FAST Act included the previous requirements for an MPO serving a population of greater than 200,000 to include a CMP. While the Charlotte County-Punta Gorda MPO Area does not exceed that threshold, Florida Statutes require that all MPOs develop a Congestion Management Process. Consistent with guidance provided by FHWA, the intent of the CMP Update is to “address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system.” A summary of the key points of the CMP is provided in **Figure 6-2**.

Figure 6-2: Key Components of the Congestion Management Process



6.1.3 National Goals

A key feature of MAP-21 and continued in the FAST Act is the establishment of a performance-based program. The results of having a CMP is for MPO's to develop priorities for funding projects that collectively will make progress toward the achievement of the following national goals:

1. **Safety** to achieve a significant reduction in traffic fatalities and serious injuries
2. **Infrastructure condition** to keep the highway infrastructure in good repair
3. **Congestion reduction** to achieve a significant reduction in congestion on the National Highway System (NHS)
4. **System reliability** to improve the efficiency of the surface transportation system
5. **Freight movement and economic vitality** to improve the national freight network, strengthen the ability of rural communities to access trade markets, and support regional economic development
6. **Environmental sustainability** to enhance the performance of the transportation system while protecting the natural environment
7. **Reduced project delivery delays** to reduce project costs, promote the economy, and expedite the movement of people and goods by eliminating delays in project development and delivery, including reducing regulatory burdens and improving agencies' work practices.

6.1.4 Congestion Management Process Eight Actions

Developing a CMP typically follows an approach consisting of eight-actions. The CMP looks at management and operations as well as other strategies, focusing on developing objectives that drive performance-based planning for responding to congestion.

The CMP is based upon objectives articulated in the LRTP. The CMP incorporates specific, measurable, agreed-upon, realistic, and time-bound objectives that reflect regional goals. And, as an integral part of the planning process, the CMP feeds projects and strategies directly into the LRTP and TIP. **Figure 6-3** summarizes framework for the CMP process as described in the FHWA's Congestion Management Process: A Guidebook.

Figure 6-3: Congestion Management Process 8-Step Framework



Source: Federal Highway Administration (FHWA), “Congestion Management Process: A Guidebook”, 2011.

6.2 Identifying Congested Areas

Using the Existing plus Committed network (discussed in **Chapter 2**), an assessment of projected roadway congestion was conducted using existing traffic counts and estimated growth rates. Traffic Counts collected by the City of Punta Gorda, Charlotte County and FDOT were assigned to the major roadway corridors. Using historic trends, future traffic volumes were estimated for the year 2024 to analyze the existing plus committed conditions. A complete listing of the results of this analysis is listed in **Technical Report 6** and illustrated in **Figure 6-4**.

Identifying existing and projected deficiencies is one method of determining the future transportation needs. The roadway needs include projects to address expanded capacity as well as addressing safety operational and mobility needs.

Analysis of traffic crashes is another method of identifying areas of congestion. **Figure 6-5** highlights the locations within Charlotte County when traffic congestion and hot spot crash locations are considered together. Locations along US 41, within the City of Punta Gorda and the I-75 at Kings Highway interchange appear as the congested and high-crash locations.

Figure 6-4: Existing Plus Committed Roadway Volume to Capacity Ratios

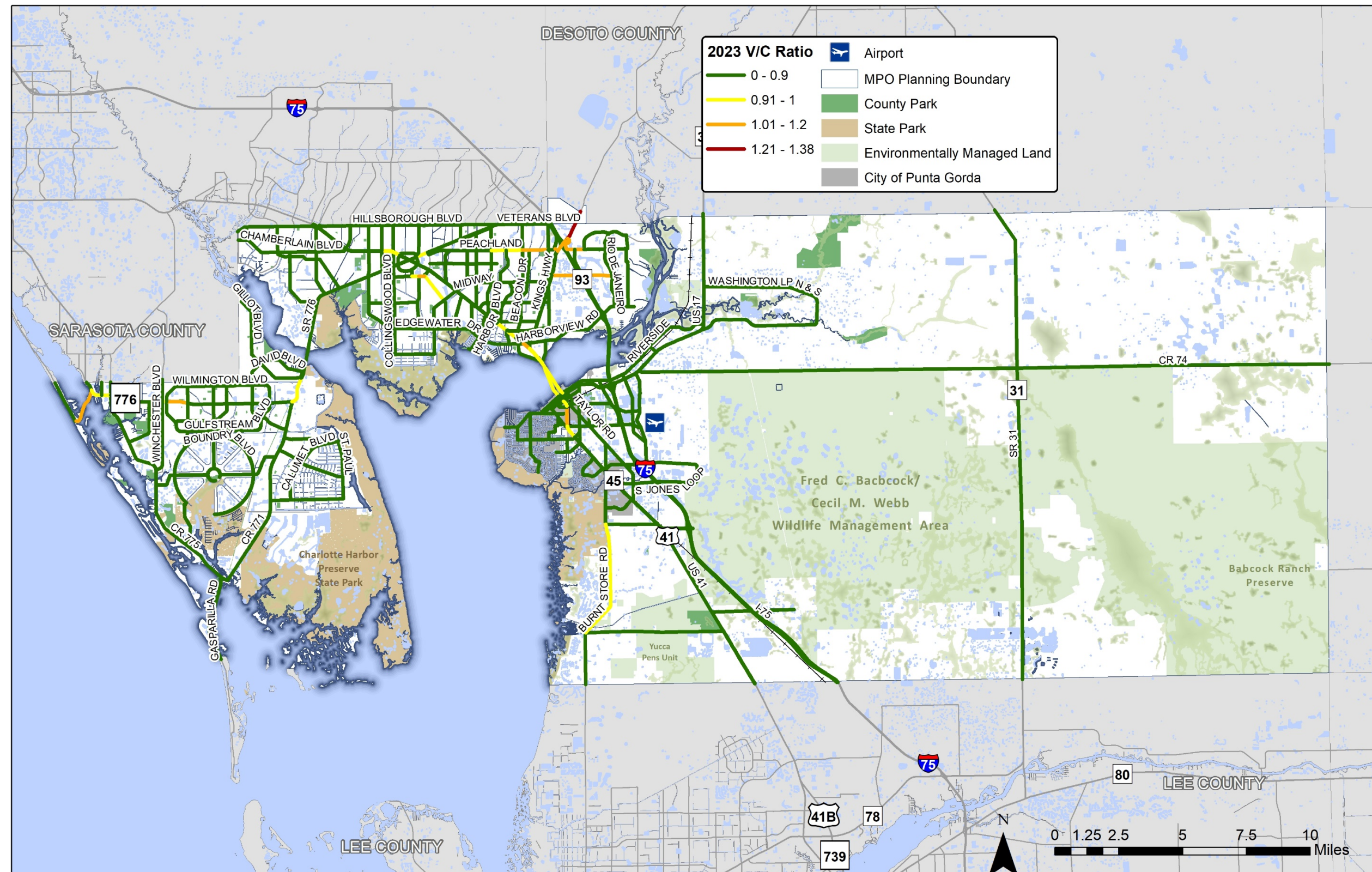
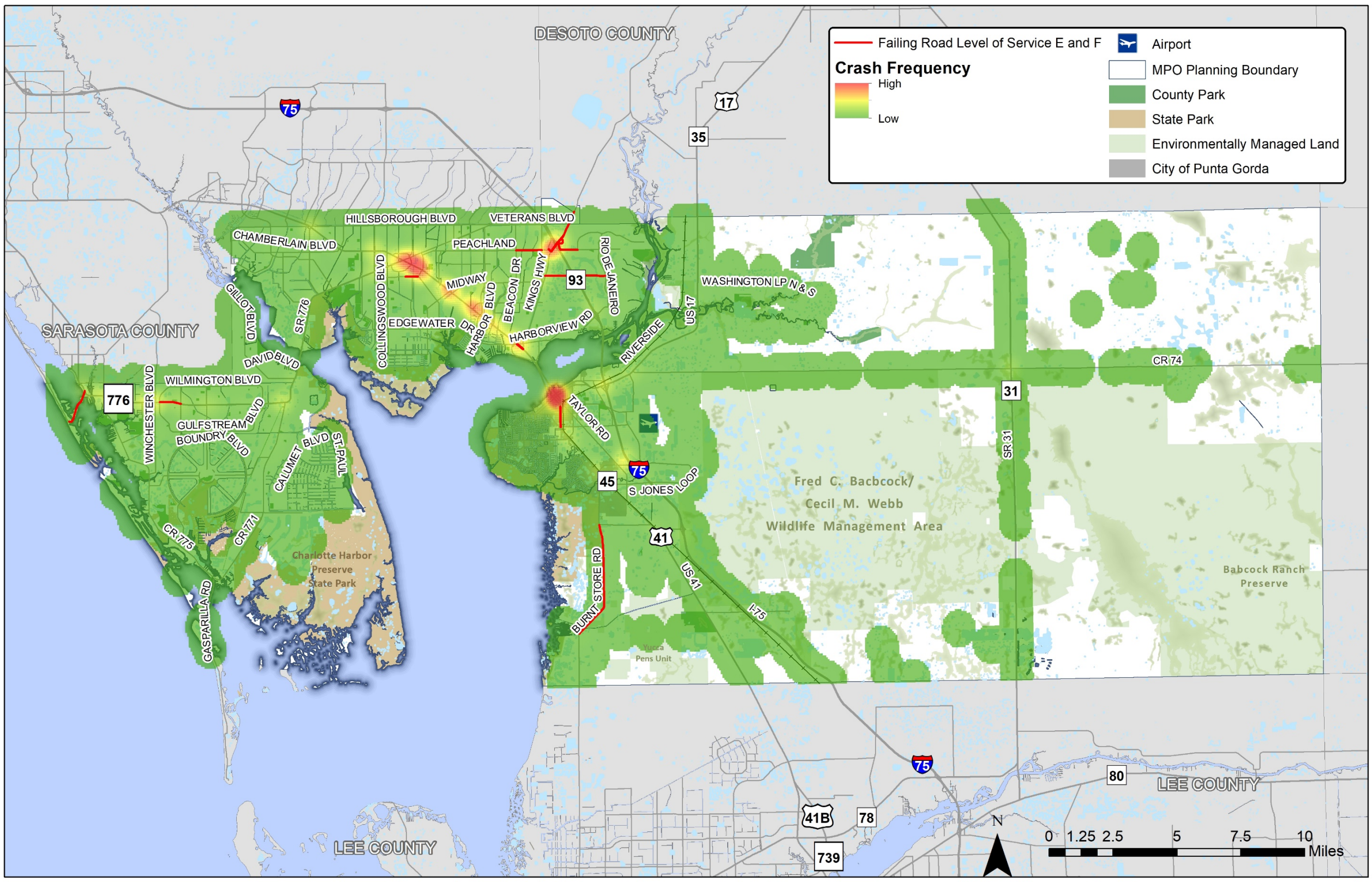


Figure 6-5: Congested and High Crash Locations



6.3 Analysis of Crashes

Providing and improving safety of the transportation system is crucial to the health and well-being of residents, visitors and business travelers in Charlotte County. As a federally required component of the metropolitan transportation planning process, safety is analyzed within this section through the combination of GIS and the FDOT's Crash Analysis Reporting System (CARS).

Under the Federal Highway Safety Improvement Program (HSIP), five performance measures have been established for evaluating safe traveling conditions on the highway system. These measures became effective on April 14, 2016 and were developed to consider the safety of motorists, bicyclists, and pedestrians. The goal of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, supported by the following five performance measures established under MAP-21 and reinforced through the FAST Act.

- PM 1 Number of fatalities
- PM 2 Rate of fatalities
(measured against roadway traffic volumes)
- PM 3 Number of serious injuries
- PM 4 Rate of serious injuries
(measured against roadway traffic volumes)
- PM 5 Number of non-motorized (bicycle and pedestrian)
fatalities and serious injuries

In addition to reporting on the established performance measures, the Florida Department of Transportation (FDOT) and the MPO are now responsible for establishing annually reported targets for each of these five measures. The State of Florida and the MPO have adopted a Vision Zero approach for establishing safety targets. **Appendix B** includes a discussion of the Vision Zero targets.

Since crash data from any given year may have extreme peaks or valleys, a rolling five-year average of the data is used as the basis for evaluating crash patterns and trends. The visualizations and data analysis for 2045 LRTP utilized crash data from 2014 to 2018. **Table 6-1** provides a complete summary of the crashes and analysis of the roadway conditions, causal factors, and severity of the resulting injuries. Figure 6-6 illustrates how the five-year averages of crashes have trended recently. A similar comparison of the fatalities and serious injury crashes is shown in **Figure 6-7**.

Maps illustrating the locations of fatalities (**Figure 6-8**), serious injuries (**Figure 6-9**), and non-motorized fatalities and serious injuries (**Figure 6-10**) are also included consistent with the federally required performance measures.

Table 6-1: Summary of Traffic Crashes from 2014-2018

Charlotte County		2014	2015	2016	2017	2018	5-Year Total Crashes
Crash Type	Animal	20	15	13	20	39	107
	Angle	354	411	434	415	436	2,050
	Bike	20	25	23	25	37	130
	Head-On	84	62	69	65	27	307
	Left-turn	242	274	290	309	325	1,440
	Other	1,604	2,056	2,071	1,992	1,464	9,187
	Overturn	31	56	42	57	88	274
	Pedestrian	37	22	27	30	70	186
	Rear-end	1,247	1,447	1,528	1,505	1,140	6,867
	Right-turn	43	38	41	41	54	217
	Run Off-road	266	226	229	240	536	1,497
	Sideswipe	346	429	531	529	257	2,092
	Unknown	189	109	117	114	809	1,338
	<i>Total</i>	<i>4,483</i>	<i>5,170</i>	<i>5,415</i>	<i>5,342</i>	<i>5,282</i>	<i>25,692</i>
Injury Severity	Fatal	19	22	29	24	25	119
	Incapacitating	84	103	98	74	93	452
	Non-Incapacitating	285	384	310	360	331	1,670
	Possible	531	622	689	621	635	3,098
	None	3,564	4,039	4,289	4,263	4,198	20,353
	<i>Total</i>	<i>4,483</i>	<i>5,170</i>	<i>5,415</i>	<i>5,342</i>	<i>5,282</i>	<i>25,692</i>
Lighting Condition	Daylight	3,537	4,031	4,301	4,272	4,242	20,383
	Dawn	56	51	56	60	66	289
	Dusk	128	146	132	108	111	625
	Dark-Lighted	451	575	586	578	544	2,734
	Dark-Not Lighted	265	337	314	301	288	1,505
	Dark-Unknown Lighting	46	30	26	23	31	156
	<i>Total</i>	<i>4,483</i>	<i>5,170</i>	<i>5,415</i>	<i>5,342</i>	<i>5,282</i>	<i>25,692</i>
Surface Conditions	Dry	3,712	4,464	4,771	4,769	4,697	22,413
	Wet	509	654	592	528	555	2,838
	Mud, Dirt, Gravel	11	15	10	6	12	54
	Oil	0	0	1	1	0	2
	Water (Standing, Moving)	9	5	8	12	2	36
	Other, Explain in Narrative	5	0	7	8	4	24
	Unknown	237	32	26	18	12	325
	<i>Total</i>	<i>4,483</i>	<i>5,170</i>	<i>5,415</i>	<i>5,342</i>	<i>5,282</i>	<i>25,692</i>

Figure 6-6: Trend of Crashes in Charlotte County

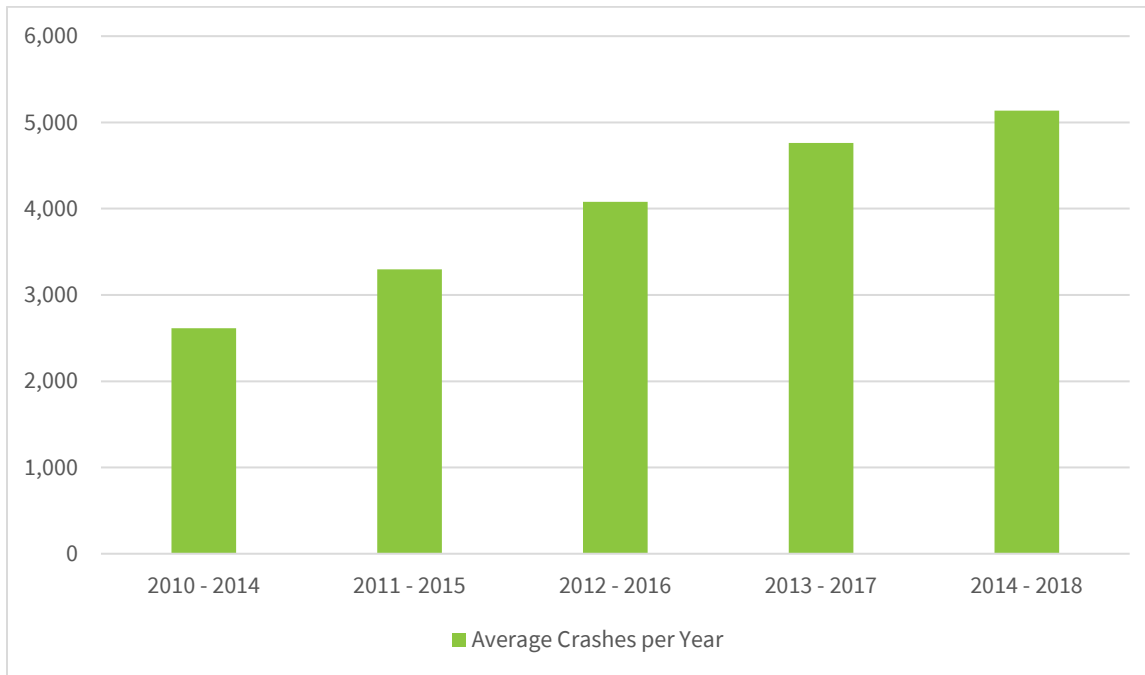


Figure 6-7: Trend of Fatal and Serious Injury Crashes in Charlotte County

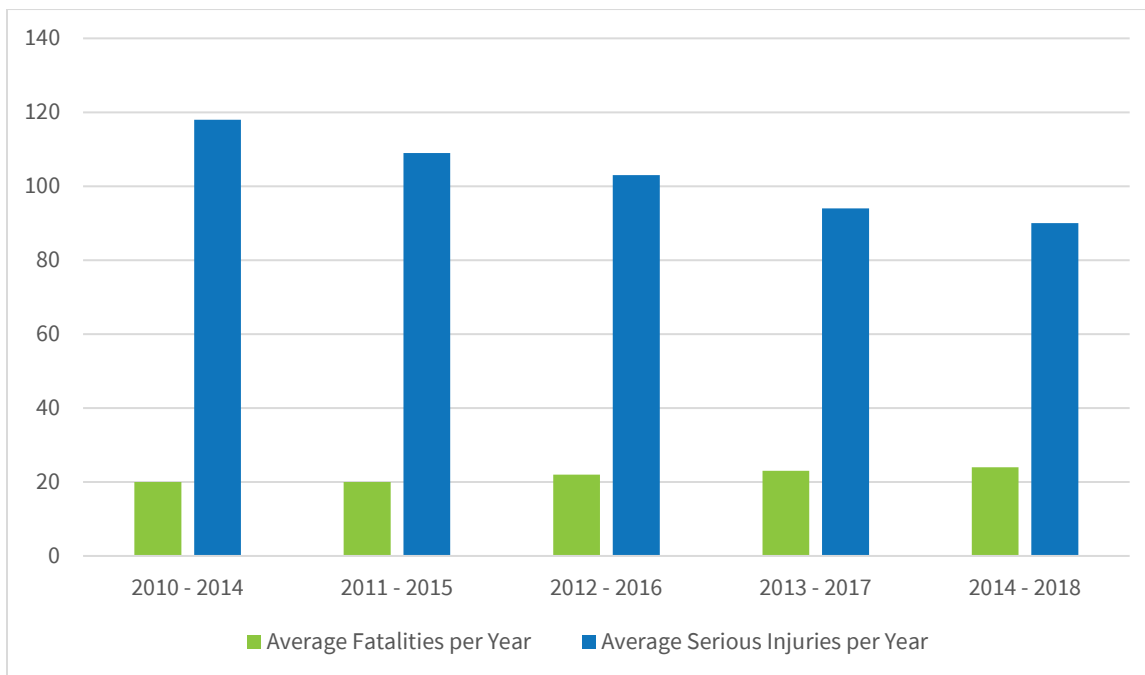


Figure 6-8: Fatal Crash Locations in Charlotte County (2014-2018)

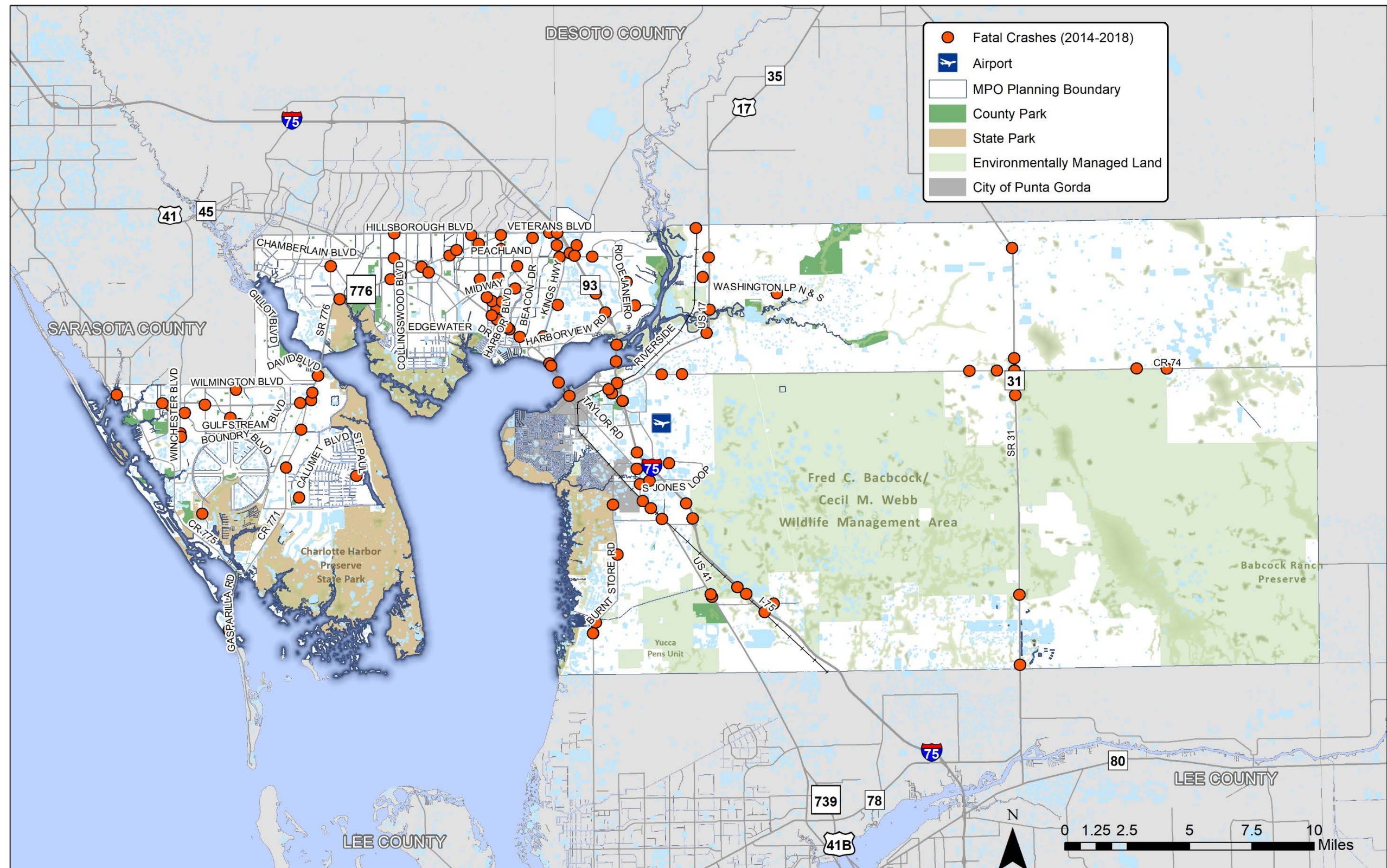


Figure 6-9: Serious Injury Crash Locations in Charlotte County (2014-2018)

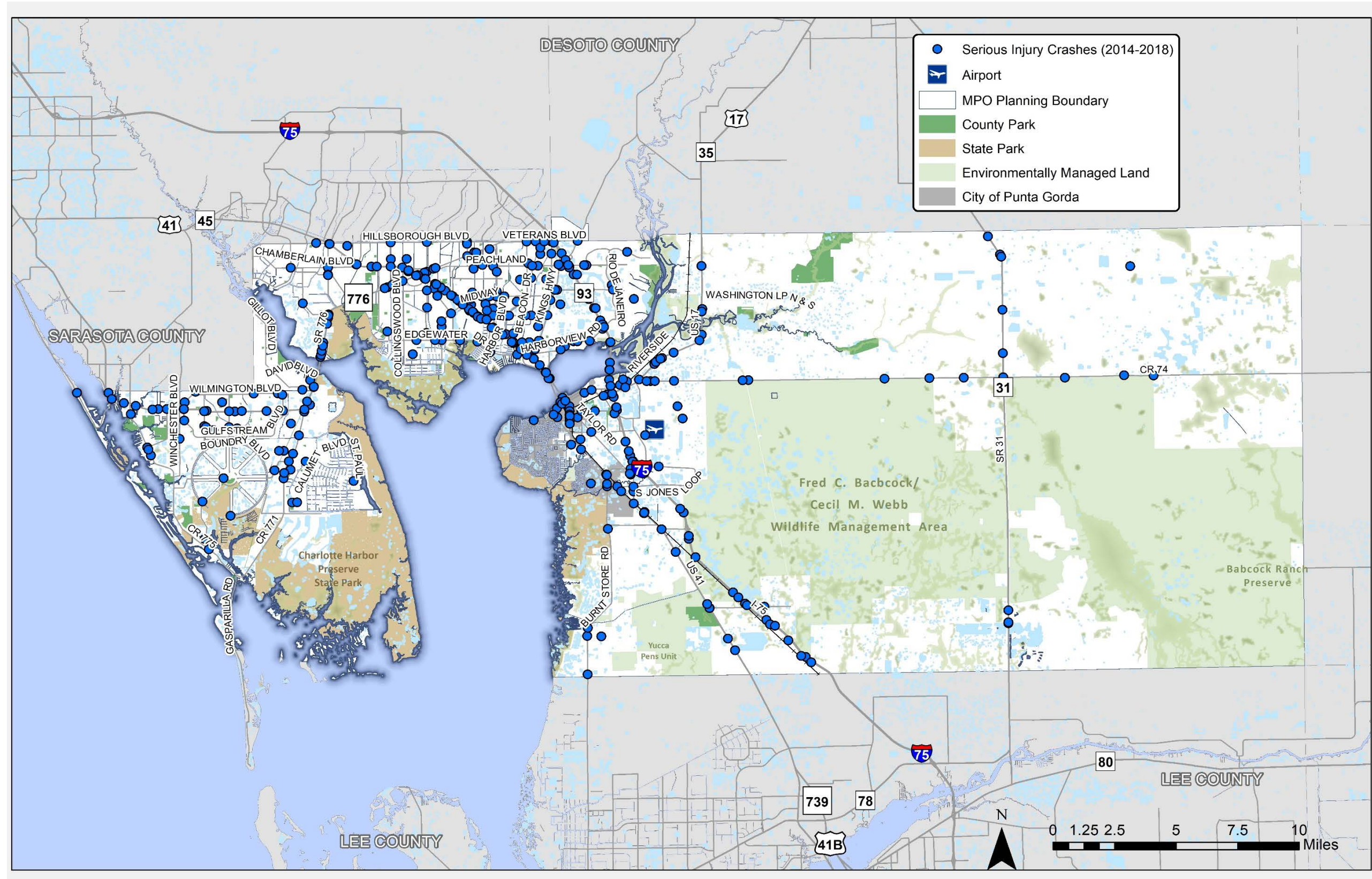
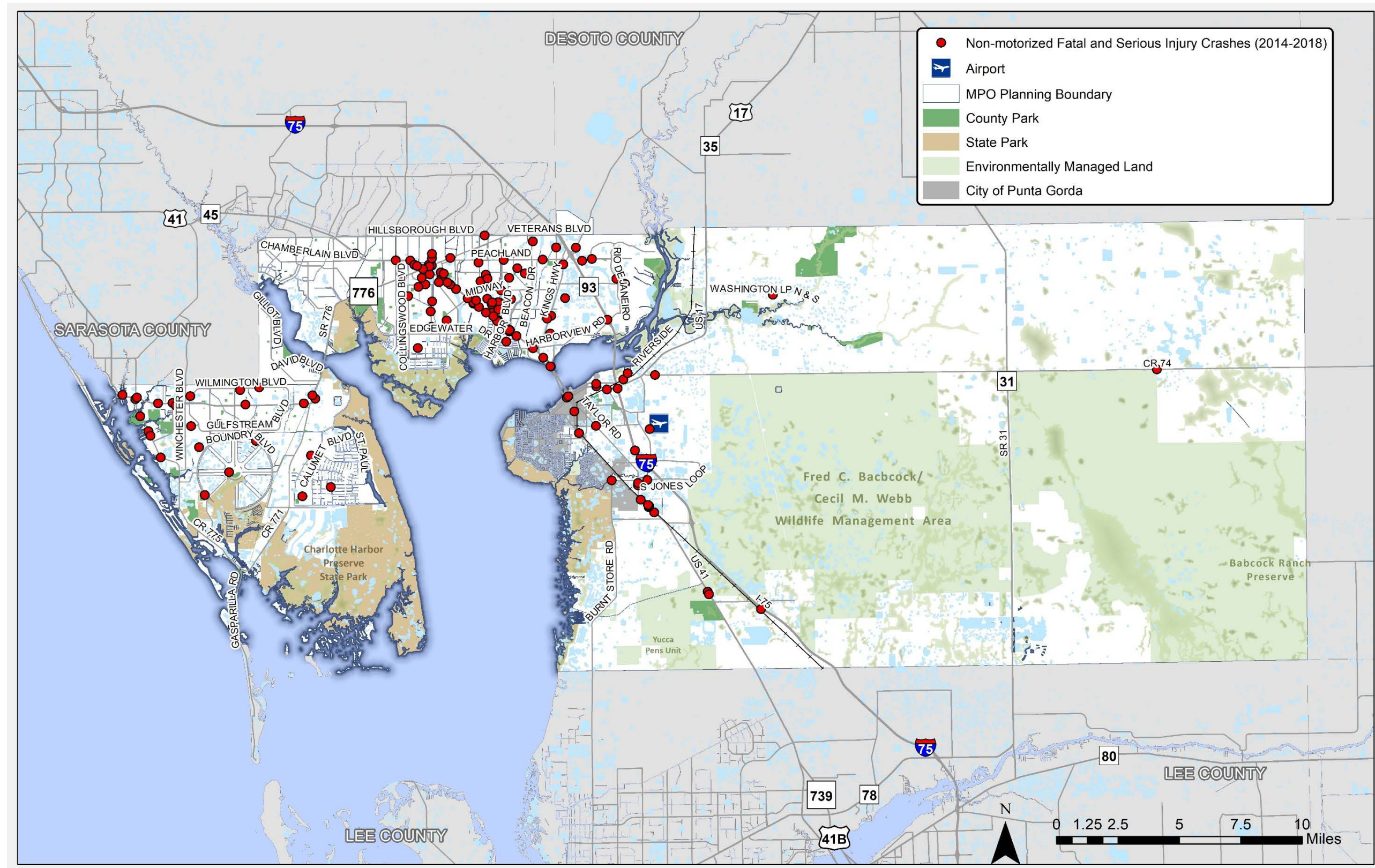


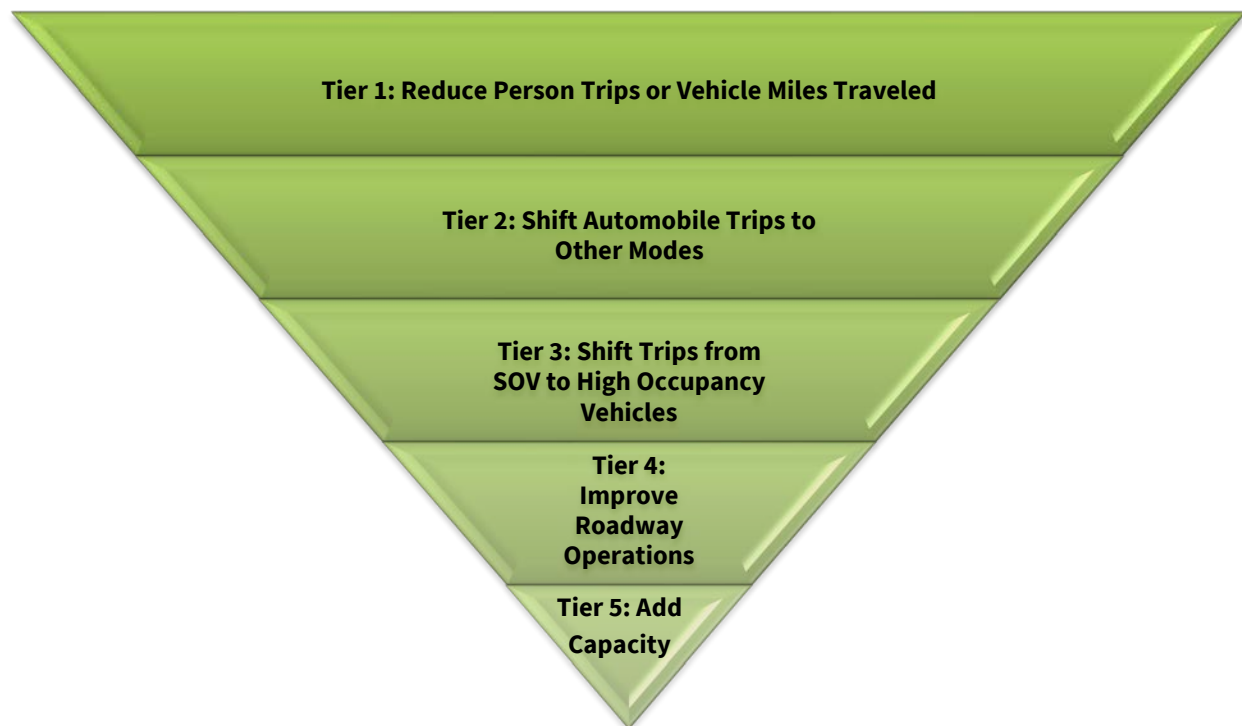
Figure 6-10: Non-Motorized Fatal and Serious Injury Crash Locations in Charlotte County (2014-2018)



6.4 Congestion Reduction Strategies

The CMP uses a toolbox of strategies with multiple tiers to identify the most appropriate and effective projects for addressing congestion. The following approach used by other MPOs and promoted by FHWA is arranged so that the measures at the top take precedence over those at the bottom. The CMP Toolbox of Strategies is presented in **Figure 6-11**.

Figure 6-11: CMP Toolbox of Strategies



The top-down approach promotes the growing sentiment in today's transportation planning arena and follows FHWA's clear direction to consider all available solutions before recommending additional roadway capacity. The CMP Toolbox of Strategies is divided into tiers, strategies, and specific examples.

Tier 1: Strategies to Reduce Person Trips or Vehicle Miles Traveled

- **Transportation Demand Management (TDM) Strategies** – These strategies are used to reduce the use of SOVs, as the overall objective of TDM is to reduce the miles traveled by automobile or to shift automobile travel outside the peak travel hours.
- **Land Use/Growth Management Strategies** – These strategies include policies and regulations that would decrease the total number of auto trips and trip lengths while promoting transit and non-motorized transportation options.

Tier 2: Strategies to Shift Automobile Trips to Other Modes

- Public Transit Strategies – Two types of strategies, capital improvements and operating improvements, are used to enhance the attractiveness of public transit services to shift auto trips to transit. Transit capital improvements generally modernize the transit systems and improve their efficiency; operating improvements make transit more accessible and attractive.
- Non-Motorized Transportation Strategies – Non-motorized strategies include bicycle, pedestrian, and multiuse path facility improvements that encourage non-motorized modes of transportation instead of Single-Occupant Vehicles (SOVs) trips.

Tier 3: Strategies to Shift Trips from Single-Occupant Vehicles (SOVs) to High-Occupancy Vehicles (HOVs)

- Transportation Demand Management Strategies – In addition to the TDM Strategies included in Tier 1, additional strategies are available in Tier 3 that encourage the use of ride-sharing and other forms of HOV implementation.

Tier 4: Strategies to Improve Roadway Operations

- Autonomous, Connected, Electric, and Shared-Use(ACES) – The strategies in ACES use new and emerging technologies to mitigate congestion while improving safety and environmental impacts. Typically, these systems are made up of many components, including sensors, electronic signs, cameras, controls, and communication technologies. ACES strategies are sets of components working together to provide information and allow greater control of the operation of the transportation system.
- Transportation Systems Management (TSM) strategies identify operational improvements to enhance the capacity of the existing system. These strategies typically are used together with ACES technologies to better manage and operate existing transportation facilities.
- Freeway Incident Detection and Management – This strategy addresses primarily non-recurring congestion, which typically includes video monitoring and dispatch systems and may also include roving service patrol vehicles.
- Access Management – This strategy includes adoption of policies to regulate driveways and limit curb cuts and/or policies that require continuity of sidewalk, bicycle, and multiuse path networks.
- Corridor Preservation – This strategy includes implementing, where applicable, land acquisition techniques such as full title purchases of future rights-of-way and purchase of easements to plan proactively in anticipation of future roadway capacity demands.
- Corridor Management – This strategy is applicable primarily in moderate- to high-density areas and includes strategies to manage corridor rights-of-way. The strategies range from land-use regulations to landowner agreements such as subdivision reservations, which are mandatory dedications of portions of subdivided lots that lie in the future right-of-way.

Tier 5: Strategies to Add Capacity

Strategies to add capacity are the costliest and least desirable strategies and should be considered as last-resort methods for reducing and managing congestion. As the strategy of cities trying to “build”

themselves out of congestion has not provided the intended results, capacity-adding strategies should be applied after determining the demand and operational management strategies identified earlier are not feasible or are insufficient in their mitigative impact. The key strategy in Tier 5 is to increase the capacity of congested roadways through additional general-purpose travel lanes.

6.5 Selected Strategies for the LRTP

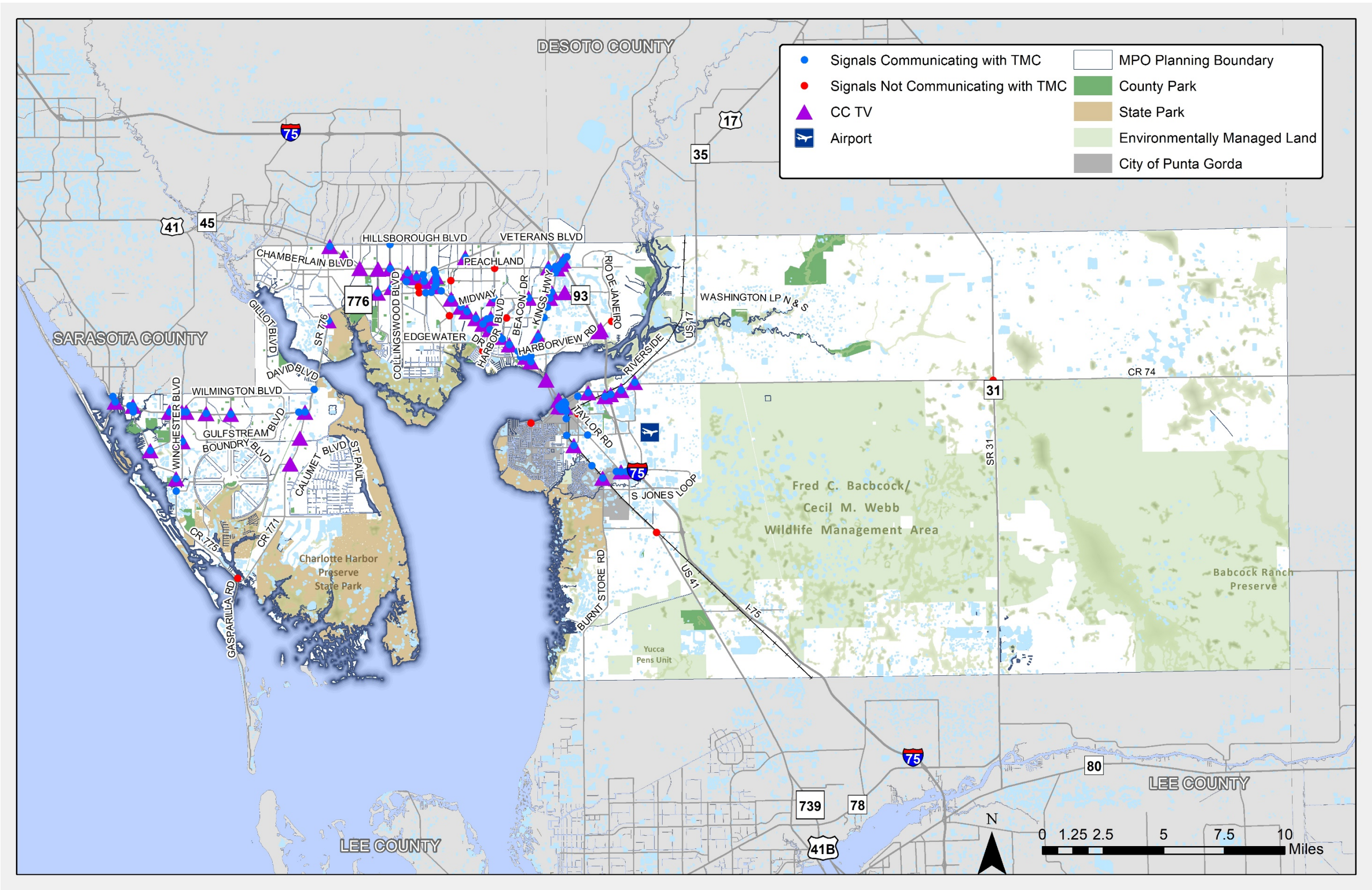
This step involves implementing and managing the defined strategies. The congested corridors can be screened for application of the strategies above. However, New strategies may be added and/or removed based on the prevailing conditions and local decisions.

Managers of the CMP should work closely with the operating agencies that have participated in the CMP. Information developed throughout the process should be applied to establish priorities in the TIP, thereby facilitating the implementation of the CMP. This ensures a linkage between the CMP and funding decisions either through a formal ranking and weighting of strategies and projects, or through other formal or informal approaches.

6.5.1 Traffic Signals and Intelligent Transportation Systems

An essential component to provide for safe and effective operation of a transportation system includes the traffic control devices that impact capacity of the roadway network but can improve safety and efficiency through traffic signal timing and incident management via adjustments made by the Charlotte County Traffic Management Center (TMC) staff. As a study prioritized by the MPO and funded for completion next year, the ITS Master Plan will provide guidance for relevant ITS technologies and discuss project implementation priorities throughout the County. ITS technology projects that should be considered within the ITS Master Plan should provide congestion mitigation and safety improvements. These types of projects include but are not limited to dynamic messaging, advanced traveler information systems, integrated corridor management, transit signal priority, and support for operational strategies and improvements. **Figure 6-12** provides an overview of the 100 traffic signals currently communicating with the TMC, 13 isolated signals that are not connected and the location of 65 Closed Circuit Television (CCTV) cameras used for traffic monitoring.

Figure 6-12: Traffic Signals and ITS



6.5.2 Priority Intersections and Corridors

To improve how traffic operates and the safety of those using the transportation system, strategies for improving the function of roads or reducing travel demand were identified. The MPO has prioritized improvements at intersections and along key corridors consistent with the crash and congestion analysis. **Figure 6-13** shows the specific intersection along SR 776, US 41 and US 17 at SR 31 where the MPO has prioritized funding for intersection improvements.

FDOT has conducted the US 41 Corridor Vision Plan which includes a series of mobility and safety related strategies for the corridor that align with the community's vision. Strategies identified in the study were grouped into categories of Design, Traffic/Speed/Safety, Planning and Project Development, Aesthetics and Landscaping, Transit and Bicycle/Pedestrian Improvements, and Freight. Additional information on the study recommendations is available at the project website (<http://www.swflroads.com/us41charlottevision/>).

SR 776 serves as the only connection in Charlotte County across the Myakka River. The MPO has identified this critical transportation corridor as a priority. Future study and evaluation of this corridor will provide the MPO and FDOT with the specific strategies and locations for future transportation investments.

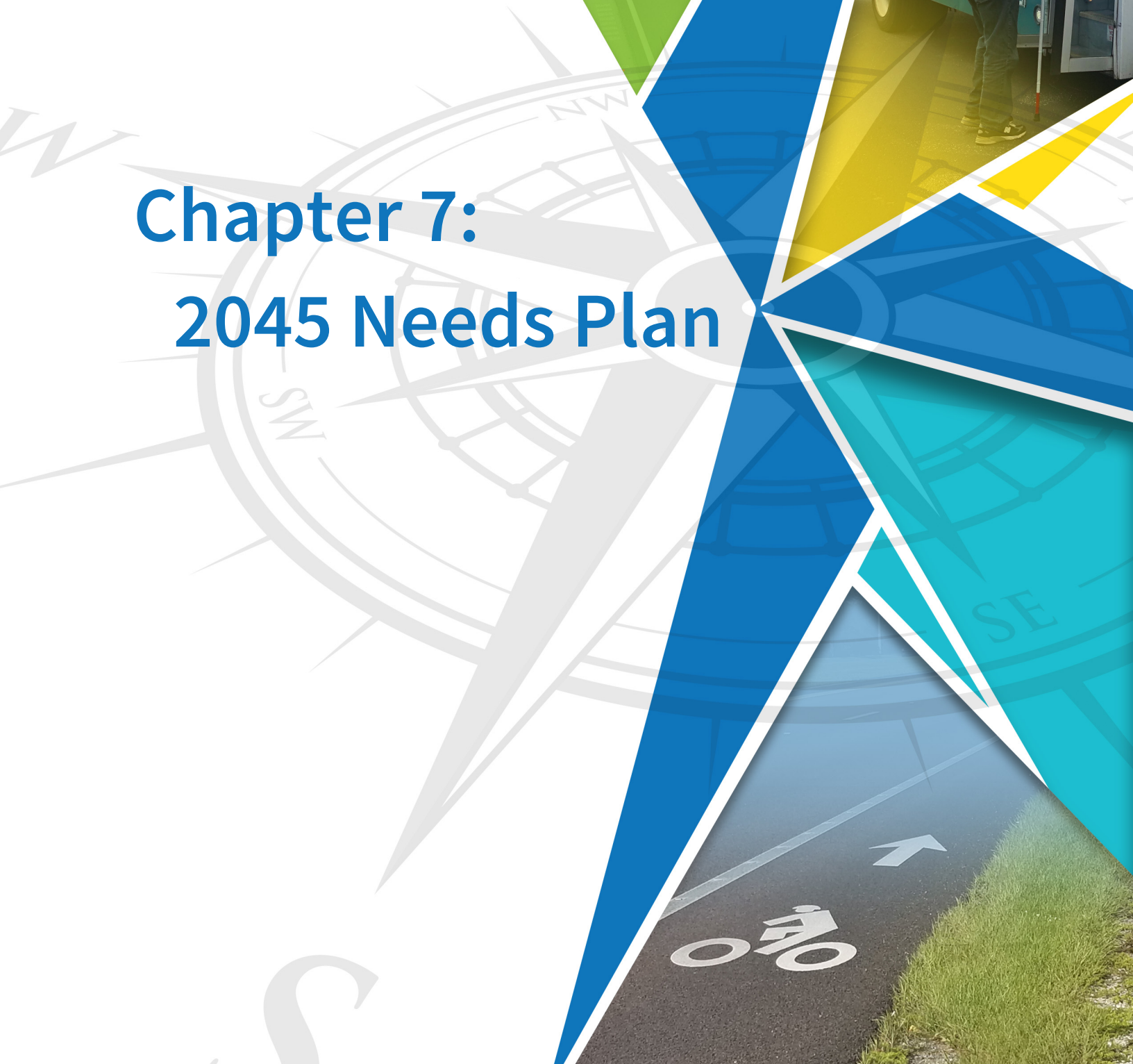
A list of the CMP Projects included in the Cost Feasible Plan are listed below in **Table 6-2**. Additional information on project costs and timing are included in **Chapter 8**.

Table 6-2: Cost Feasible Congestion Management Projects

Facility	From	Project Description
SR 776 Future Corridor Study	From Pine Street/Placida Rd to US 41	Future Corridor Study
Taylor Rd	From Airport Rd to US 41	Complete Streets
Marion Avenue / Olympia Avenue	From US 41 to Marlympia Way	Lane Repurposing - resurface and striping
US 41 Corridor Vision Plan		Corridor & Safety Improvements
SR 31	@ CR 74	Roundabout
SR 776	@ Flamingo Blvd	Intersection - turn lanes
US 41	@ Easy Street	Intersection - turn lanes
US 41	@ Forrest Nelson	Intersection - turn lanes
SR 776	@ Jacobs St	Intersection - turn lanes
US 41	@ Carousel Plaza	Intersection - turn lanes
SR 776	@ Charlotte Sports Park	Intersection - turn lanes
ITS Master Plan Implementation		
SR 776	@ Gulfstream Blvd / Wilmington Blvd	Intersection - turn lanes
SR 776	@ Biscayne Blvd	Intersection - turn lanes
SR 776	@ Cornelius	Intersection - turn lanes
Kings Hwy / Peachland / Veterans		Intersection Modification



Chapter 7: 2045 Needs Plan



7.1 Defining the Needs

The Needs Assessment identified projects to support the ultimate vision of mobility to meet the future transportation demands for the Charlotte County-Punta Gorda MPO planning area, without regard for cost and available funding. An extensive process was conducted to identify projects needed in the future. This included a comprehensive review of projects in the 2040 Long Range Transportation Plan (LRTP); review of the recently completed Charlotte County Transit Development Plan and the Charlotte County Regional Bicycle/Pedestrian Master Plan; working with Charlotte County-Punta Gorda MPO, Charlotte County, DeSoto County, and City of Punta Gorda staff; input from community stakeholders, including the MPO Board; and coordination with the public.

Needed roadway widening projects were then identified based on future projections of where roads are expected to be over capacity through a technical analysis of the transportation network using the FDOT District One Regional Planning Model (D1RPM). Additional details on the development of the transportation needs can be found in **Technical Report 6**.

In current year dollars, the estimated capital cost of the projects in the 2045 Needs Plan exceeds \$3.5 billion and an additional \$4 million annually to fund the continued and expanded transit service operations. With \$1.4 billion in projected revenues, the shortfall for funding the capital transportation needs exceeds \$2 billion. If additional funding becomes available, it is important to have major transportation needs identified so the Cost Feasible Plan can be amended to include additional projects from the Needs Plan as appropriate.



SR 776 provides the only connection between West County and the rest of Charlotte County. Future needs include widening, intersection improvements, transit service and a Shared-use Path

7.2 Roadway Needs

Identification of roadway needs for the 2045 LRTP started with a review of the 2040 LRTP, adopted by the MPO Board in 2015. Through public outreach and review of future traffic volumes and congestion levels an updated list of needs through 2045 was developed. The list of needs was presented to the MPO Board in May 2020 and the draft needs were approved for continued review and development.

Roadway needs through 2045 have been identified based on future travel demand and build upon the Existing plus Committed (E+C) projects through 2024. Included in the LRTP roadway needs are widening projects, roadway extensions, and intersection improvements to address traffic flow and operations. Future roadway corridors and potential interchanges along I-75 were also identified.

The District 1 Regional Planning Model (D1RPM) was utilized for assessing and determining the roadway needs based on the future expected traffic demand. Regional coordination and model alternative analysis were conducted with the Sarasota/Manatee MPO, Lee County MPO and Heartland Regional Transportation Planning Organization (TPO). Coordinating the modeling as a regional process allowed the Charlotte County-Punta Gorda MPO to better understand travel demands that cross county boundaries. The Regional Planning Model uses a traditional four-step process (see **Figure 7-1**) to forecast traffic demand and transportation choice options for the future 2045 conditions.

Figure 7-1: Four-Step Travel Demand Modeling Process

- (1) Trip Generation - How many trips will I make?
- (2) Trip Distribution - where will my trip take me?
- (3) Mode Choice - How will I travel?
- (4) Route Choice - Which roads will I travel on?

7.2.1 Identifying Deficiencies

Prior to developing the list of projects needed to ensure mobility in the future, problem areas were identified to understand where deficiencies are likely to occur in the future. For this effort, the 2045 Needs Assessment analyzed the existing transportation network plus the projects with committed funding through the year 2024 as described in **Chapter 2** and shown in **Figure 7-2**.

The D1RPM model was used to identify congested or deficient transportation conditions on the Existing plus Committed (E+C) network, and future population/employment projections discussed in **Chapter 3**. The results of this analysis indicate deficient roadways without additional transportation investments. **Figure 7-3** illustrates the relationship of the future traffic compared with estimated roadway capacities in terms expressed as the level of service if no additional roadway improvements are made. Roads shown in orange and red are anticipated to be deficient or congestion by 2045.

Figure 7-2: Existing Plus Committed Number of Lanes

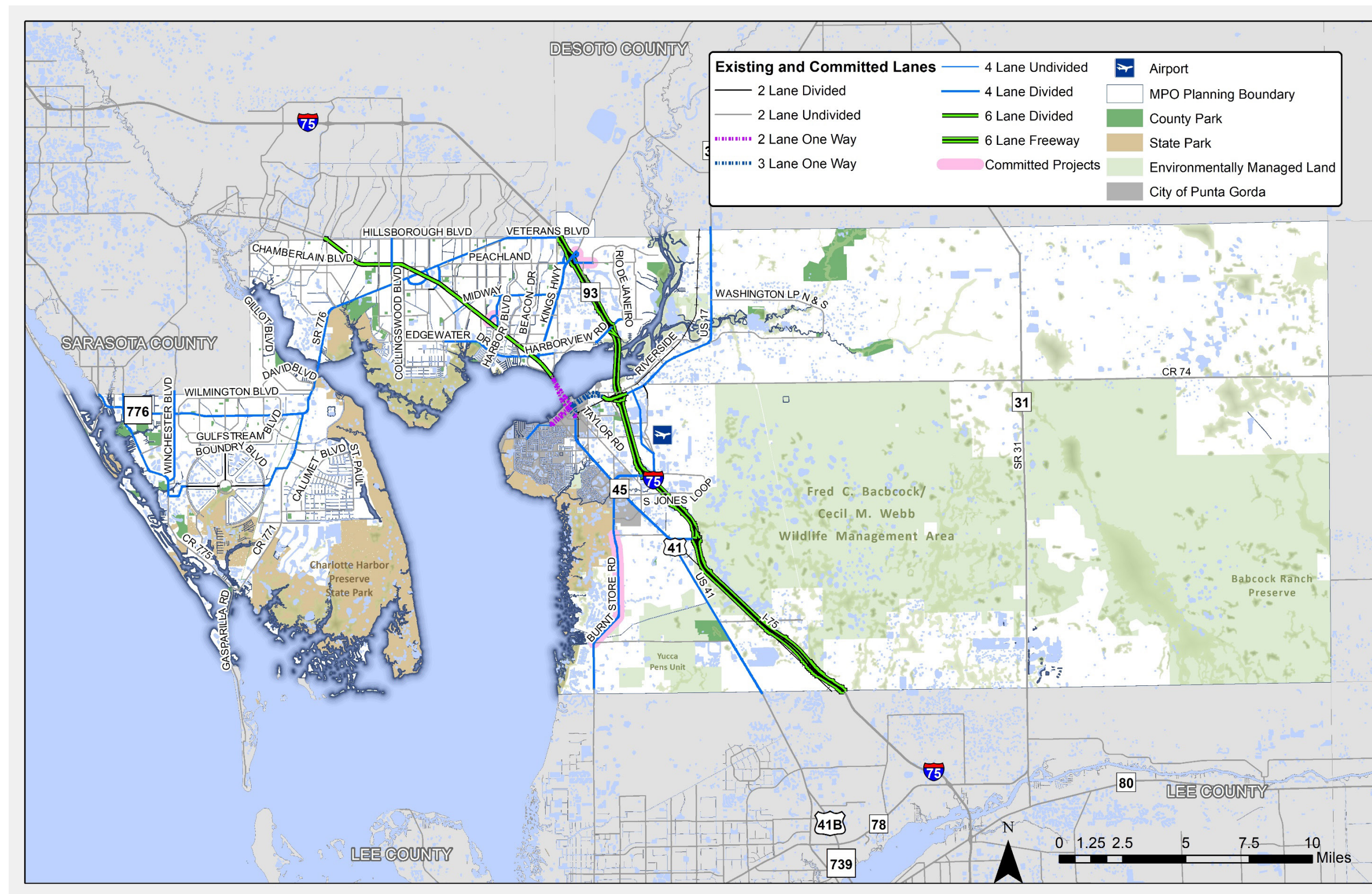
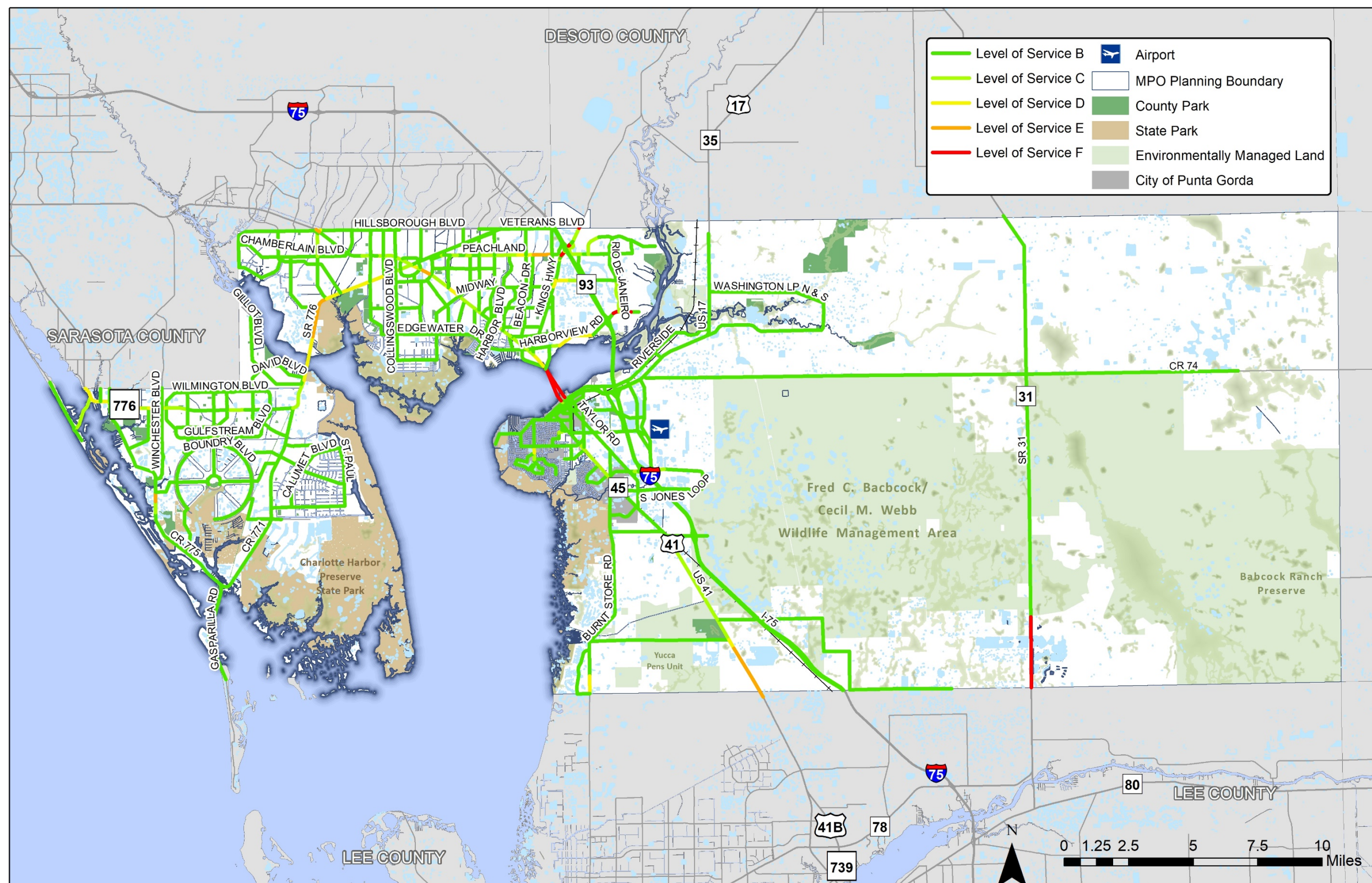


Figure 7-3: Existing Plus Committed Roadway Network Deficiencies



7.2.2 Constrained Roads

Typically, roadway deficiencies are addressed by providing additional roadway capacity. In some cases, roadway widening is constrained due to land use, environmental, right-of-way, or policy constraints. In these cases, other solutions such as improving or widening parallel facilities and intersection improvements can be considered. Most notably, this has occurred within the City of Punta Gorda where historic neighborhoods and the downtown area make roadway widening impractical. Consistent with the City's vision, alternative routes and complete street strategies were considered in developing the 2045 LRTP.

7.2.3 Roadway Projects

The roadway projects identified in the Needs Plan are estimated to cost \$3.8 billion in present day cost (PDC). A listing of the roadway needs is found in **Table 7-1** followed by **Figure 7-4** showing the limits of the projects identified in the needs.

Highlights of the proposed Needs Plan highway improvements are as follows:

- New interchanges on I-75 in South County and in North Port just north of Charlotte County
- Widening US 17 east of I-75 to CR 74
- Corridor and Interchange improvements on I-75
- Extending Burnt Store Road from Taylor Road to Florida Street at US 17
- Widen SR 776 Crestview Drive in West County to Murdock Circle in Mid County
- Safety, Operational and Mobility improvements on US 41

Table 7-1: Roadway Needs List (\$ Millions, 2019 Present Day Cost)

Map ID	Facility	From	To	Existing Lanes	Length (Miles)	Project Description	PD&E / PE Cost	ROW Cost	CST Cost	Committed Funding (2020-2025)	Future Funding Needed (2026-2045)
1	Airport Road	Taylor Rd	Piper Road	2	1.75	Widen 2 to 4 lanes	\$4.10	\$4.71	\$20.50		\$29.31
2	Bermont Rd (CR 74)	US 17	Strasse Blvd	2	2.69	Widen 2 to 4 lanes	\$4.67	\$8.86	\$23.31		\$36.84
3	Bermont Rd (CR 74)	Strasse Blvd	SR 31	2	12.15	Widen 2 to 4 lanes	\$21.06	\$40.03	\$105.31		\$166.40
4	Burnt Store Rd	Zemel Rd	Scham Rd	2	4.17	Widen 2 to 4 lanes	Fully Funded				\$0.00
5	Burnt Store Rd	N Jones Loop	Taylor Rd	2	0.98	Widen 2 to 4 lanes	\$2.30	\$1.32	\$11.48		\$15.10
6	Burnt Store Rd Extension	Taylor Rd	Florida St @ US 17	0	2.12	New 4-lane	\$7.83	\$34.25	\$39.16		\$81.25
7	Edgewater Dr (Phase 3)	Midway Blvd	Collingswood Blvd	2	1.54	Widen 2 to 4 lanes	\$2.20	\$0.00	\$25.00		\$27.20
8	Edgewater Dr (Phase 4)	Collingswood Blvd	Samantha Ave	0	1.30	Roadway realignment and new bridge	\$2.10	\$0.00	\$23.00	\$25.10	\$0.00
9	Edgewater Dr / Flamingo (Phase 5)	Collingswood Blvd	SR 776	2	2.62	Widen 2 to 4 lanes	\$1.00	\$0.00	\$20.00	\$1.00	\$20.00
10	Flamingo Blvd	SR 776	US 41	2	0.97	Widen 2 to 4 lanes	\$2.27	\$3.38	\$11.36		\$17.02
11	CR771	Appleton Blvd	Rotonda Blvd East	2	1.80	Widen 2 to 4 lanes	\$4.22	\$0.00	\$21.09		\$25.30
12	Hillsborough Blvd/Raintree Blvd	Veterans Blvd		0	0.10	New 2-lane connection	\$0.32	\$0.89	\$1.60		\$2.81
13	Henry Street (New Road)	Golf Course Boulevard	Loop Connector	0	3.90	New 2-lane	\$12.49	\$0.00	\$62.46		\$74.95
14	Hillsborough Blvd	Cranberry Blvd	Toledo Blade Blvd	2	2.40	Widen 2 to 4 lanes	\$5.62	\$8.36	\$28.12		\$42.10
14.5	Hillsborough Blvd	Toledo Blade Blvd	Prineville Dr	2	1.45	Widen 2 to 4 lanes	\$3.40	\$5.05	\$16.99		\$25.44
16	I-75	Near Oil Well Road				Future Interchange	\$32.91	\$9.80	\$164.53		\$207.23
17	I-75 (Sarasota County)	@ Raintree Blvd				Future Interchange	\$32.91	\$9.80	\$164.53		\$207.23
18	Kings Hwy	Sandhill Blvd	Desoto County line	2	0.79	Widen 2 to 4 lanes	\$1.85	\$1.38	\$9.25		\$12.48
19	Loveland Blvd	Westchester Blvd	Kings Hwy	2	1.60	Widen 2 to 4 lanes	\$3.75	\$5.58	\$18.74		\$28.07
20a	Loveland Blvd	Midway Blvd	Peachland Blvd	2	1.22	Widen 2 to 4 lanes	\$2.86	\$4.25	\$14.29		\$21.40
20b	Loveland Blvd	Peachland Blvd	Veterans Blvd	2	0.97	Widen 2 to 4 lanes	\$2.27	\$3.38	\$11.36		\$17.02
21	N Jones Loop	Burnt Store Rd	Piper Road	4	3.78	Widen 4 to 6 lanes	\$7.92	\$5.99	\$44.65	\$1.22	\$57.34
22	Peachland Blvd	Cochran Blvd	Harbor Blvd	2	2.50	Widen 2 to 4 lanes	\$5.86	\$8.71	\$29.29		\$43.86
23	Prineville Dr	Paulson Dr	Hillsborough Blvd	2	1.20	Widen 2 to 4 lanes	\$2.81	\$4.18	\$14.06		\$21.05
24	Quesada Ave	Cochran Blvd	Harbor Blvd	2	2.41	Widen 2 to 4 lanes	\$5.65	\$4.20	\$28.23		\$38.08
25	Rampart Blvd	Victoria Estates St	Rio De Janeiro Ave	2	1.80	Widen 2 to 4 lanes	\$4.22	\$3.14	\$21.09		\$28.44
26	San Casa Dr	CR 775	SR 776	2	2.01	Widen 2 to 4 lanes	\$4.71	\$7.00	\$23.55		\$35.26
29	S McCall Road (SR 776)	Crestview Dr	CR 775	4	1.47	Widen 4 to 6 lanes	\$3.47	\$4.19	\$17.37		\$25.03
30	SR 776	CR 775	Spinnaker Blvd	4	3.08	Widen 4 to 6 lanes	\$7.46	\$4.88	\$36.38	\$2.00	\$46.72
30a	SR 776	CR 775	Spinnaker Blvd	4		Add turn lanes at major intersections	\$2.72	\$8.07	\$13.62		\$24.42
	Potential Candidate Intersections: Oriole, Gulfstream, Spinnaker										\$0.00
31	SR 776	Spinnaker Blvd	CR 771 (Gasparilla Rd)	4	4.10	Widen 4 to 6 lanes	\$9.69	\$6.49	\$48.43		\$64.62
31a	SR 776	Spinnaker Blvd	CR 771 (Gasparilla Rd)	4		Add turn lanes at major intersections	\$4.54	\$13.45	\$22.70		\$40.70
	Potential Candidate Intersections: Sunnybrook, Oceanspray, David, Gulfstream, Coliseum										
32	SR 776	CR 771 (Gasparilla Rd)	Flamingo Blvd	4	6.42	Widen 4 to 6 lanes	\$15.17	\$10.17	\$75.84		\$101.18

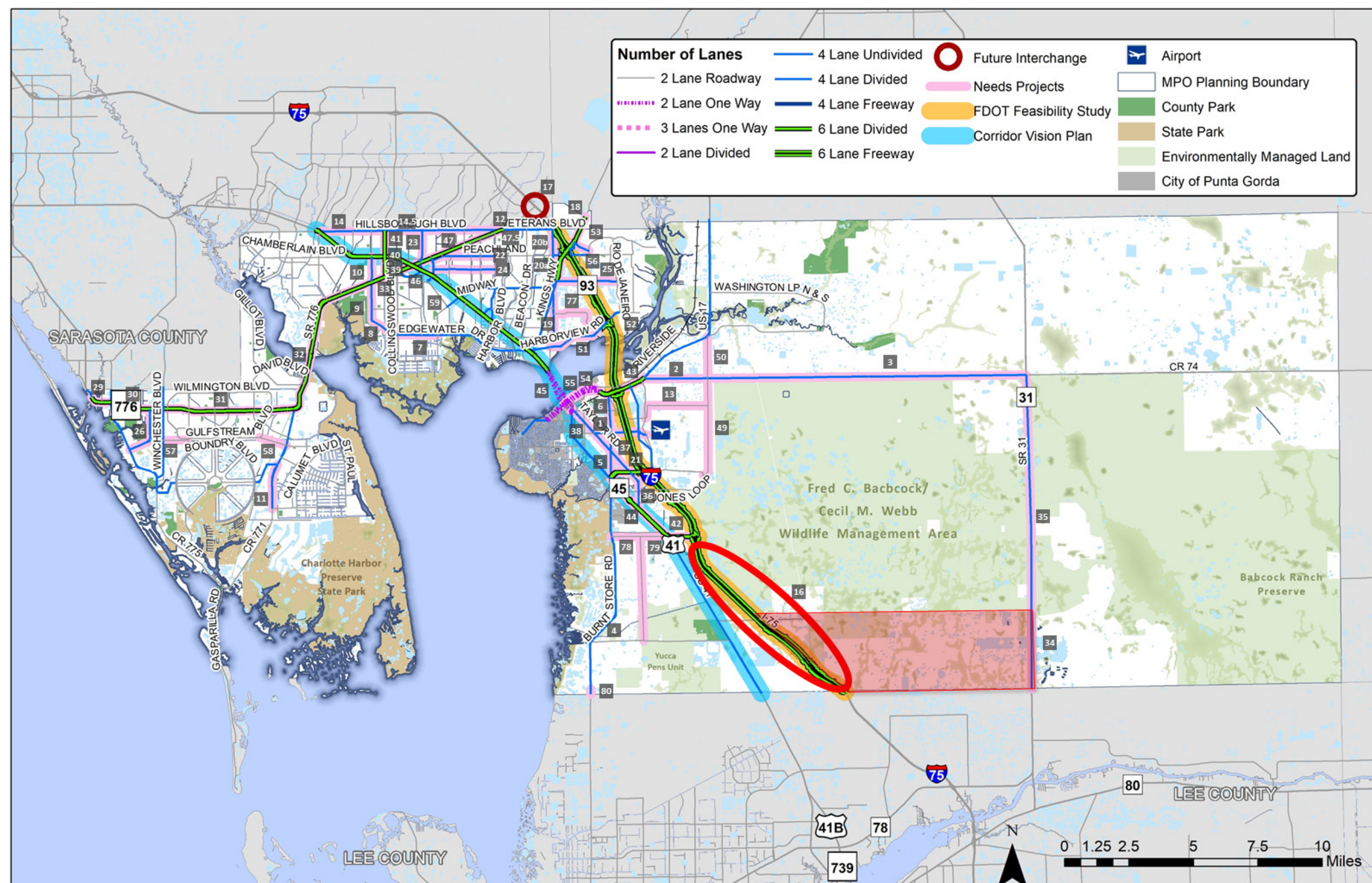
Map ID	Facility	From	To	Existing Lanes	Length (Miles)	Project Description	PD&E / PE Cost	ROW Cost	CST Cost	Committed Funding (2020-2025)	Future Funding Needed (2026-2045)
32a	SR 776	Myakka River Bridge	EB Replacement / Widening	4	0.25	Widen/Replace EB Bridge	\$5.86	\$0.00	\$29.29		\$35.14
32b	SR 776	CR 771 (Gasparilla Rd)	Flamingo Blvd	4		Add turn lanes at major intersections	\$1.82	\$5.38	\$9.08		\$16.28
	Potential Candidate Intersections: Hollis, Biscayne, Jacobs St , Cornelius Blvd, Charlotte Sports Park										
33	SR 776	Flamingo Blvd	Murdock Cir	4	1.26	Widen 4 to 6 lanes	\$3.02	\$0.00	\$15.12		\$18.15
33a	SR 776	Flamingo Blvd	Murdock Cir	4		Add turn lanes at major intersections	\$0.91	\$2.69	\$4.54		\$8.14
	Potential Candidate Intersections: Toledo Blade Blvd, Collingswood Blvd										
34	SR 31	Lee County Line	North of Cook Brown Rd	2	2.78	Widen 2 to 4 lanes	\$3.05	\$10.61	\$42.82		\$56.48
35	SR 31	North of Cook Brown Rd	CR 74	2	9.38	Widen 2 to 4 lanes	\$16.26	\$18.03	\$81.30		\$115.59
36	Taylor Rd	US 41 SB	N. Jones Loop Rd	2	1.62	Widen 2 to 4 lanes	\$3.80	\$5.65	\$18.98		\$28.42
37	Taylor Rd	N Jones Loop Rd	Airport Rd	2	1.98	Widen 2 to 4 lanes	\$4.64	\$6.90	\$23.20		\$34.73
38	Taylor Rd	Airport Rd	US 41	2	1.31	Widen 2 to 4 lanes	\$3.07	\$4.57	\$15.35		\$22.98
39a	Toledo Blade Blvd (CR 39)	SR 776	Whitney Avenue	2	0.53	Widen 2 to 4 lanes	\$0.00	\$0.00	\$6.07		\$6.07
39b	Toledo Blade Blvd (CR 39)	SR 776	Whitney Avenue	4	0.53	Widen 4 to 6 lanes	\$1.25	\$0.00	\$6.26		\$7.51
40	Toledo Blade Blvd (CR 39)	Whitney Avenue	US 41	4	0.77	Widen 4 to 6 lanes	\$1.82	\$0.00	\$9.10		\$10.92
41	Toledo Blade Blvd (CR 39)	US 41	Hillsborough Blvd	4	1.00	Widen 4 to 6 lanes	\$2.36	\$0.00	\$11.81		\$14.18
42	Tuckers Grade Blvd	US 41 SB	I-75	4	2.34	Widen 4 to 6 lanes	\$5.62	\$3.71	\$28.08		\$37.41
43	US 17	Copley Ave	CR 74	4	1.53	Widen 4 to 6 lanes	\$3.05	\$0.00	\$7.75		\$10.80
44	US 41	Notre Dame Blvd	Burnt Store Rd	4	5.81	Widen 4 to 6 lanes	\$13.95	\$0.00	\$69.73		\$83.67
45a	US 41 NB	Bridge	Peace River	4	2.44	Bridge Replacement	\$78.92	\$0.00	\$394.62		\$473.55
45b	US 41 SB	Bridge	Peace River	4	2.44	Bridge Expansion	\$15.64	\$0.00	\$78.22		\$93.86
46	Veterans Blvd	Toledo Blade / Cochran Blvd	Murdock Cir E/ Paulson Dr	4	1.40	Widen 4 to 6 lanes	\$3.36	\$2.66	\$16.80		\$22.82
47	Veterans Blvd	Murdock Cir E/Paulson Dr	Harbor Blvd	4	3.20	Widen 4 to 6 lanes	\$6.26	\$0.00	\$31.31		\$37.57
47.5	Veterans Blvd	Harbor Blvd	Future Hillsborough Blvd Connection	4	0.29	Widen 4 to 6 lanes	\$0.64	\$0.00	\$3.19		\$3.83
49	Grove Boulevard	North Jones Loop Road	CR 74	2	3.84	Widen 2 to 4 lanes	\$9.00	\$0.00	\$44.99		\$53.98
50	Grove Boulevard Extension	CR 74	US 17	0	1.62	New 4-lane	\$5.99	\$0.00	\$29.93		\$35.91
51	Harbor View Road	Melbourne St	I-75	2	2.61	Widen 2 to 4 lanes	\$4.02	\$9.79	\$33.41	\$13.81	\$33.41
52	Harbor View Road	I-75	Rio De Janeiro Avenue	2	0.61	Widen 2 to 4 lanes	\$1.43	\$0.00	\$7.15		\$8.58
53	Sandhill Blvd Bypass	Kings Hwy	Sandhill Blvd	0	1.10	New 2-lane	\$3.52	\$0.00	\$17.62		\$21.14
54 / 55	Marion Avenue / Marion Avenue	US 41	Marlympia Way	3	1.23	Road Diet - resurfacing and striping	\$1.48	\$0.00	\$7.42	\$0.29	\$8.61
56	Sandhill Blvd	Kings Hwy	Deep Creek Blvd	2	1.26	Widen 2 to 4 lanes	\$2.95	\$0.00	\$14.76		\$17.71
57	San Casa Dr / Avenue of the Americas / Fruitland Ave	CR 775	Gulfstream Blvd	0	1.46	New 2-lane	\$4.68	\$6.48	\$23.38		\$34.53
58	San Domingo Blvd	Gulfstream Blvd	CR 771	0	1.10	New 2-lane	\$3.52	\$4.88	\$17.62		\$26.02
59	US 41 Corridor Vision Plan			4/6		Corridor & Safety Improvements		To be determined			\$0.00
60	SR 31	at CR 74		2	0.24	Roundabout	\$0.00	\$0.64	\$0.71	\$0.64	\$0.71
61	SR 776	at Flamingo Blvd		4	0.00	Intersection - turn lanes	\$0.00	\$0.00	\$1.46	\$1.46	\$0.00

Map ID	Facility	From	To	Existing Lanes	Length (Miles)	Project Description	PD&E / PE Cost	ROW Cost	CST Cost	Committed Funding (2020-2025)	Future Funding Needed (2026-2045)
62	US 41	at Easy Street		4	0.00	Intersection - turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
63	US 41	at Forrest Nelson		4	0.00	Intersection - turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
64	SR 776	at Jacobs St		4	0.00	Intersection - turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
65	SR 776	at Carousel Plaza		4	0.00	Intersection - turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
66	SR 776	at Charlotte Sports Park		4	0.00	Intersection - turn lanes	\$0.15	\$0.00	\$1.01	\$0.15	\$1.01
67	I-75	at CR 769/Kings Hwy				Interchange Modifications	\$6.50	\$0.00	\$56.93		\$63.43
68	I-75	at CR 776/Harbor View				Interchange Modifications	\$6.50	\$0.00	\$56.93		\$63.43
69	I-75	at US 17/SR35				Interchange Modifications	\$7.50	\$0.00	\$122.60		\$130.10
70	I-75	at North Jones Loop Rd				Interchange Modifications	\$6.50	\$0.00	\$56.93		\$63.43
71	ITS Master Plan Implementation					Technology and Traffic Signal Improvements		To be determined	\$20.00		\$20.00+
72	SR 776	@ Gulfstream Blvd		4		Intersection – turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
73	SR 776	@ Biscayne Blvd		4		Intersection – turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
74	SR 776	@ Cornelius		4		Intersection – turn lanes	\$0.68	\$0.00	\$4.55		\$5.23
76	I-75	@ Raintree Blvd / Yorkshire				New Interchange	\$32.91	\$32.67	\$164.53		\$230.10
77	Olean Blvd Extension	Loveland Blvd	Harbor View Rd	0	2.37	New 2 lane	\$4.38	\$2.33	\$21.92		\$28.63
78	Green Gulf Blvd Extension	Burnt Store Road	US 41	0/2	2.45	New / Upgraded 2-lane	\$4.53	\$2.41	\$22.66		\$29.60
79	Green Gulf Blvd Extension	Zemel Road	Green Gulf Blvd	0/2	4.00	New / Upgraded 2-lane	\$7.40	\$3.93	\$36.99		\$48.32
80	Burnt Store Road	Vincent Avenue	Wallaby Lane	2	0.23	Widen 2 to 4 lanes	\$0.40	\$0.17	\$1.97		\$2.54
99	Veterans Blvd	Peachland Blvd	Kings Hwy			Intersection Modification	\$5.00	To be determined	To be determined		\$5.00+
Total							\$489.86	\$312.34	\$2,698.15	\$45.67	\$3,454.69

Notes:

- Project Costs shown in current year format based on 2019 project costs
- PD&E/PE are product support phases for Project Development & Environment phase and Preliminary Engineering phase
- ROW is Right-of-Way costs associated with land acquisition
- CST is the Construction cost for completing the identified project
- Existing Funding is included in the MPO's 2020/2021 – 2024/2025 Transportation Improvement Program.

Figure 7-4: Roadway Needs

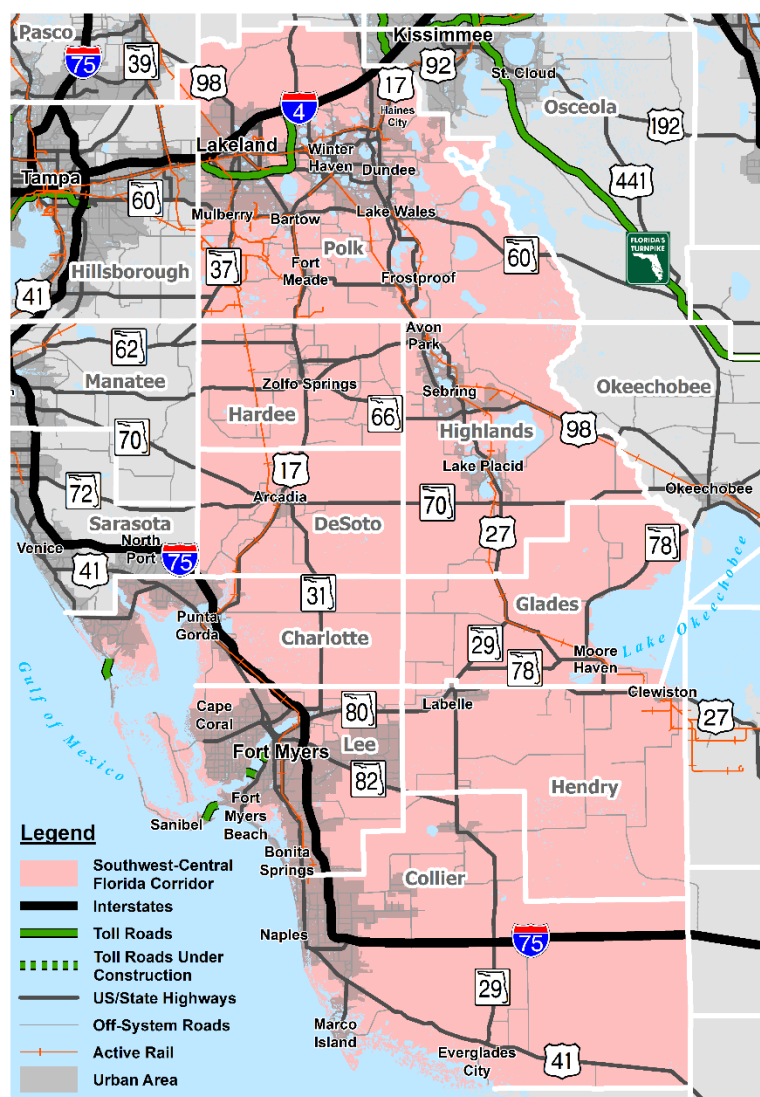


7.2.4 FDOT Multi-use Corridors of Regional Economic Significance

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

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

Figure 7-5: Southwest-Central Florida Corridor



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

Southwest-Central Florida Corridor Study Area

The Southwest-Central Florida Corridor study area spans nine (9) counties, from Collier County to Polk County, as shown in **Figure 7-5**. The Charlotte County-Punta Gorda MPO planning area is part of the Southwest-Central Florida Corridor study area.

L RTP Considerations

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

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

The Charlotte County-Punta Gorda MPO will use travel demand forecasts generated by the Florida Turnpike Statewide Model for M-CORES projects. As such, the Charlotte County-Punta Gorda MPO, will coordinate all M-CORES related analyses with FDOT for consistency purposes.

The proposed project within the Southwest-Central Florida Corridor will be tolled facilities and will be part of the Florida's Turnpike system and the Strategic Intermodal System (SIS). The projects will be included in the LRTP and TIP/STIP in accordance with guidance provided in the FDOT MPO Program Management Handbook. FDOT is working with the Southwest-Central Florida Corridor Task Force to develop purpose and need, guiding principles, and potential paths/courses. The Charlotte County-Punta Gorda MPO is a member of the Southwest-Central Florida Corridor Task Force and is actively engaged in pertinent aspects of planning and corridor analysis through the Task Force activities. The Task Force will submit its evaluation report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by November 15, 2020. As the Program progresses to Project Development and Environment (PD&E), design and construction phases, FDOT will identify projects, prepare cost estimates, and coordinate with the Charlotte County-Punta Gorda MPO to add identified projects into the LRTP and TIP. Subject to the economic and environmental feasibility statement requirements of Section 337.25, F.S., projects may be funded through Turnpike revenue bonds or right-of-way and bridge construction bonds or financing by the Florida Department of Transportation Financing Corporation; by advances from the State Transportation Trust Fund; with funds obtained through the creation of public-private partnerships; or any combination thereof. FDOT also may accept donations of land for use as transportation rights-of-way or to secure or use transportation rights-of-way for such projects in accordance with Section 337.25, F.S. To the maximum extent feasible, construction of the M-CORES projects will begin no later than December 31, 2022, and the corridors will be open to traffic no later than December 31, 2030.

7.3 Transit Needs

The analyses of public input and technical data, together with the baseline conditions assessment and performance reviews conducted as part of the *Charlotte Rides* 10-Year Transit Development Plan (TDP) were used in developing the list of transit services needs by identifying areas that have characteristics shown to be supportive of transit.

Several needs developed for the *Charlotte Rides* 10-Year TDP (June 2019) fall into one of two categories: Service Needs or Infrastructure/Technology/Other.

- **Service Needs:** Service improvements developed for the *Charlotte Rides* TDP 10-year needs plan include enhancing the current public dial-a-ride service with technology-based solutions, adding mobility-on-demand shared ride options, and potential implementation of regularly-scheduled bus service. The potential regularly-scheduled transit service and mobility-on-demand services—concepts currently not available in Charlotte County—include buses running on major transportation corridors with a set schedule operating at a much higher level of service than what is available currently, in combination with an innovative strategy that helps connect residents through different shared mobility options.
- **Infrastructure/Technology/Other Needs:** *Charlotte Rides* TDP 10-year needs include facility improvements, communication and advertising campaigns, and additional strategies to increase exposure of transit services and ridership as listed below:
 - Construction of new Administration and Operations Facility
 - Implement Bus Stop Infrastructure Program
 - Implement Real-Time Bus Locator App
 - Expand Transit Marketing/Awareness Campaign
 - Develop Employee Bus Pass/Subsidy Programs
 - Promoted Transportation Demand Management (TDM) Strategies
 - Establish Route-Level Performance Monitoring Program

The *Charlotte Rides* 10-year TDP implementation plan presented in **Table 7-2** outlines improvements that are included in the 10-year Needs Plan. The table also shows the projected implementation years, as applicable, operating and capital costs associated with the improvements, and type of anticipated funding sources for the Plan. The annual operating cost, in current year dollars, for the needed service enhancements is \$4.27 million. Initial capital costs for purchasing new vehicles and construction of other infrastructure exceeds \$8 million. Future costs of vehicle replacements are included in the Cost Feasible Plan based on implementation years for new service and expected vehicle replacement cycles.

Table 7-2: Transit Needs Projects and Costs

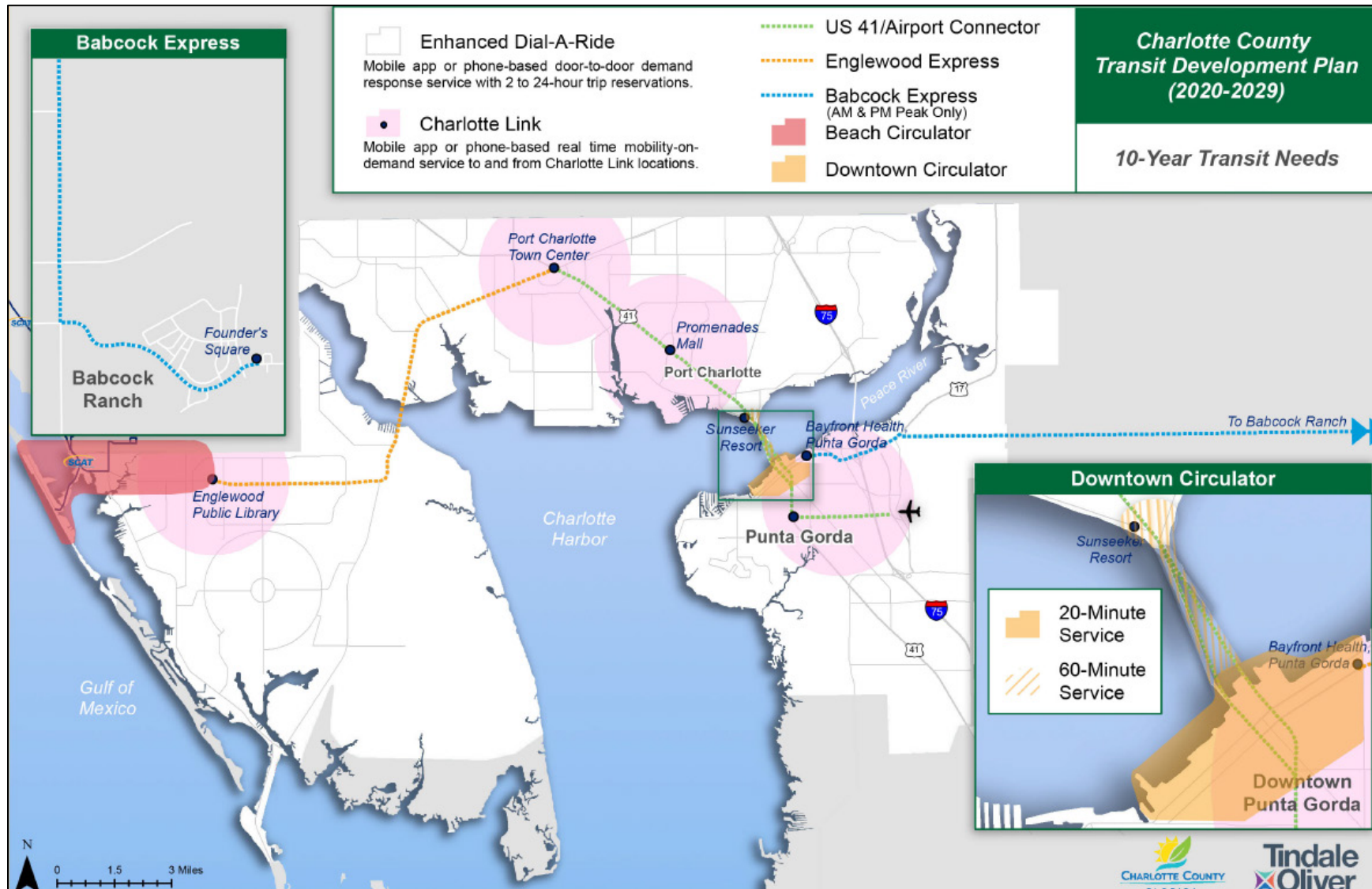
Improvement	Implement. Year	Annual Operating Cost (2019\$)	Capital Costs (2019\$)	Potential Revenue Source
Enhance/Add Mobility On Demand				
Enhanced Dial-A-Ride Service	2022	\$ 2,522,507	\$ 3,718,000	Existing
Charlotte Link Service	2024	\$ 442,080	\$ -	Existing
Add Technology-Based Bus				
Babcock Express	2026	\$ 127,746	\$ 72,000	Existing/ FDOT
US 41/Airport Connector	2028	\$ 447,110	\$ 144,000	Existing/ FDOT
Englewood Express	Unfunded	\$ 230,694	\$ 72,000	n/a
Downtown Circulator	Unfunded	\$ 230,694	\$ 72,000	n/a
Beach Circulator	Unfunded	\$ 269,769	\$ 72,000	n/a
Infrastructure/Technology/Other				
Bus Stop Infrastructure Program - Signs, Benches, Shelters	2020-29	\$ -	\$ 570,000	Existing
Marketing/Awareness Campaign	2020-29	\$ -	\$ 150,000	Existing
Real-Time Bus Locator App & Reservation Technology Upgrades	2020-29	\$ -	\$ 350,000	Existing
New Administration and Operations Facility	2021-22	\$ -	\$ 2,593,000	Federal Grant
Transit Planning Services/2024 TDP Major Update	2024	\$ -	\$ 200,000	Existing
Employee Bus Pass/Subsidy Programs	2020-29	n/a	n/a	n/a
Promote TDM Strategies	2020-29	n/a	n/a	n/a
Service Performance Monitoring Program	2020-29	n/a	n/a	n/a

Notes:

1. No new additional local funding is assumed.
2. Annual revenues from federal, state, and local sources are based on the CCT's 2020 Budget and discussions with CCT staff.
3. Total of \$2.5 million in Federal Section 5339 grants is assumed to fund the new administration and operations facility

It should be noted that the schedule shown in the table does not preclude the opportunity to delay or advance any projects. As priorities change, funding assumptions do not materialize, or more funding becomes available, this project implementation schedule should be adjusted. The Transit Needs and service areas are shown in **Figure 7-6**.

Figure 7-6: Transit Service Needs



7.4 Multi-Use Trails, Sidewalks and Bicycle Facilities

The transportation system in a community has a strong influence on the quality of an individual's life; transportation systems that limit choice can negatively impact one's health by limiting their opportunities for exercise, increase their stress, and decrease air quality. Creating an active transportation network has the potential to lower the negative health impacts of the transportation systems that are dominated by automobile-centric designs, especially for populations that are disproportionately impacted by them. Active transportation is defined by the Center for Disease Control and Prevention (CDC) as "any self-propelled, human-powered mode of transportation, such as walking or bicycling." Strategies for ensuring an active transportation network include the provision of sidewalks, bicycle paths, greenways, complete streets, and transit.

To ensure these active modes are viable forms of transportation, they must be strategically placed and designed with safety in mind. Equal in importance are good design principles that promote walkability. For example, literature suggests that walkable environments (i.e., demonstrating street connectivity, destination accessibility, and presence of active transport infrastructure) are correlated with increased physical activity in both children and adults.¹ Active transportation systems have the potential to maximize the community's benefits in their physical and mental health.

In 2018, the MPO Board adopted the first-ever Charlotte County Regional Bicycle and Pedestrian Master Plan. The overall goal of the recommendations from this study was to create a connected network of walking and cycling facilities. Since adoption of the Master Plan, the MPO, FDOT, Charlotte County and the City of Punta Gorda have made transportation related decisions with this goal in mind. The needs listed in **Table 7-3** and shown in **Figure 7-7** were developed in coordination with a technical Project Steering Committee and through public comments received during the development of the Bicycle and Pedestrian Master Plan.



Existing facilities like the Harbor Walk Trail in Punta Gorda create a scenic and enjoyable experience for recreational activities.

¹ Smith, Melody, et al. "Systematic Literature Review of Built Environment Effects on Physical Activity and Active Transport – an Update and New Findings on Health Equity." *International Journal of Behavioral Nutrition and Physical Activity*. vol 14, no. 1 (2017), doi:10.1186/s12966-017-0613-9.

Table 7-3: Bicycle Pedestrian Master Plan

ID Number	Facility	ID Number	Facility
BP 1	Airport Rd	BP 55	North Jones Loop Rd
BP 2	Appleton Blvd	BP 56	Notre Dame Blvd
BP 3	Atwater St	BP 57	Oceanspray Blvd
BP 4	Bermont Rd (CR 74)	BP 58	Ohara Blvd
BP 5	Birchcrest Blvd	BP 59	Oil Well Rd
BP 6	Biscayne Dr	BP 60	Olean Blvd
BP 7	Boca Grande Causeway	BP 61	Orlando Blvd
BP 8	Boundary Blvd	BP 62	Oxford Dr
BP 9	Broadpoint Dr	BP 63	Parade Circle
BP 10	Burnt Store Rd (segment 1)	BP 64	Pear St/Wintergarden Ave
BP 11	Burnt Store Rd (segment 2)	BP 65	Peachland Blvd
BP 12	Burnt Store Rd Ext.	BP 66	Pine St
BP 13	Calumet Blvd	BP 67	Port Charlotte Blvd
BP 14	Campbell St	BP 68	Prineville St
BP 15	Cape Haze Dr	BP 69	Quesada Avenue
BP 16	Chamberlain Blvd	BP 70	Ramblewood St
BP 17	Chancellor Blvd	BP 71	Rampart Blvd
BP 18	Collingswood Blvd	BP 72	Ravenswood Blvd
BP 19	Como St	BP 73	Regent Rd
BP 20	Cooper St	BP 74	Rio De Janerio Ave
BP 21	Cornelius Blvd	BP 75	Rio Villa Dr
BP 22	Dahlgren Ave Ext.	BP 76	Riverside Dr
BP 23	Deep Creek Blvd	BP 77	Rotonda Blvd East
BP 24	Edgewater Dr	BP 78	Rotonda Blvd South
BP 25	Eisenhower Dr	BP 79	San Casa Dr
BP 26	Elmira Blvd	BP 80	San Domingo Blvd
BP 27	Enterprise Dr/Paulson Dr	BP 81	Sandhill Blvd
BP 28	Flamingo Blvd (segment 1)	BP 82	Sandhill Blvd Bypass (New Road)
BP 29	Flamingo Blvd Ext.	BP 83	S McCall Rd/El Jobean Rd (SR 776)
BP 30	Flamingo Blvd (segment 2)	BP 84	S McCall Rd (SR 776)
BP 31	Florida St	BP 85	Scham Rd
BP 32	Gasparilla Rd (CR 771)	BP 86	Seasons Dr
BP 33	Gillot Blvd	BP 87	Spinnaker Blvd
BP 34	Golf Course Blvd	BP 88	SR 31
BP 35	Green Gulf Blvd	BP 89	St Paul Dr
BP 36	Gulf Blvd	BP 90	Sulstone Dr/Highlands Rd

ID Number	Facility	ID Number	Facility
BP 37	Gulfstream Blvd	BP 91	Sunnybrook Blvd
BP 38	Harbor View Rd	BP 92	Taylor Rd
BP 39	Harbor Blvd Ext.	BP 93	Toledo Blade Blvd
BP 40	Harness Rd	BP 94	Tucker's Grade
BP 41	Henry St	BP 95	US 17
BP 42	Henry St (New Road)	BP 96	US 41 (segment 1)
BP 43	Hillsborough Blvd	BP 97	US 41 (Replace Bridge)
BP 44	Hinton St	BP 98	US 41 (segment 2)
BP 45	Ingram Blvd	BP 99	Veterans Boulevard
BP 46	Jacobs St	BP 100	Washington Loop Rd
BP 47	Jones Loop Rd	BP 101	Wilmington Rd
BP 48	Kings Highway	BP 102	Burnt Store Road (Segment 3)
BP 49	Lavilla Rd	BP 103	Charlotte Harbor CRA
BP 50	Loveland Blvd (segment 1)	BP 104	Grove Boulevard
BP 51	Loveland Blvd (segment 2)	BP 105	Grove Boulevard Extension
BP 52	Marathon Blvd	BP 106	Harbor Blvd
BP 53	Melbourne St	BP 107	Marion Avenue
BP 54	Midway Blvd	BP 108	Olympia Avenue

The MPO 2040 LRTP Needs Plan identified bicycle, pedestrian, and multi-use trail facility projects along roads without existing facilities or that have gaps or missing links. Building on the 2040 LRTP Needs Plan, the Bicycle and Pedestrian Master Plan needs assessment identified a series of gaps and needs within the county. These gaps were used to generate prospective projects and were reviewed by the Project Steering Committee and at public workshops.

Highlights of the proposed multi-use trail, pedestrian, and bicycle needs include the following:

- Expansion of the bicycle facilities, including all roads being improved on the highway needs plan (except I-75). The road improvements would include paved shoulders with the intent to put bicycle facilities in place concurrently
- Expansion of the sidewalk facilities associated with new roadway construction or road improvements constructed. Sidewalks in urbanized area ensures the county residents have access to sidewalk facilities, and it promotes safety and transit usage
- Expansion of the conceptual multi-use trails; trails could be selected as revenues become available.

7.5 Goods Movement

Federal transportation legislation requires MPOs to develop and implement a Freight Movement Plan as part of this LRTP. The purpose of Freight Movement Plan is to meet the needs of Charlotte County and the City of Punta Gorda area by identifying and describing the existing facilities and process for identifying potential improvements that will aid in the movement of freight into and out of the MPO Planning Area.

7.5.1 Airport Facilities

The Punta Gorda Airport is an important transportation and economic asset for Charlotte County and the surrounding region. It provides air service to approximately 40 destinations in the United States and is one of the fastest growing airports in the United States in terms of passengers served. The airport accommodates the operational requirements of approximately 400 general aviation aircraft based at the airfield. In addition to serving aviation uses, the airport is also home to numerous non-aviation businesses that provide jobs, income, and services to residents of Charlotte County and the surrounding area.



The Charlotte County Airport Master Plan was updated in March 2019. The goal of the Master Plan is to provide guidelines for future development and growth that will satisfy the demand for aviation services in a logical and feasible manner. The Plan forecasts growth and aircraft operations to recommend expansions and improvements to the airfield, terminal, aviation, and support facilities to accommodate the growth. Growth in scheduled air service has outpaced the development of adequate facilities to support it so the primary focus areas of the Master Plan includes the airfield, terminal, automobile parking, and rental car facilities. Additionally, the plan references the long term transportation goals of the region through noting the following highway projects listed in the 2040 LRTP as important for increasing access to the airport:

1. Widen I-75 to six lanes in central Charlotte County (Jones Loop Road to US 17) *(Completed)*
2. US 17 (Piper Road to CR 74/Bermont Road): Expand to six lanes
3. Extend Piper Road to US 17 *(Completed)*
4. I-75/Jones Loop Road Interchange: Geometric & Signalization Improvements *(Partial improvements made during I-75 widening).*

7.5.2 Trucking Facilities

Charlotte County is strategically located to serve a major role in goods movement in Southwest Florida. Currently, the highest volume freight carriers are private company trucks, such as for supermarkets and lumber companies, followed by for-hire trucks and air cargo. Commodity transportation is dominated by the Clay/Concrete/Glass category. Several sand and fill mines exist in Charlotte County. Due to the impact of the current economic downturn and its associated impact on

the local housing market, trucking from these mines has been greatly reduced. Locally the food distributor, Cheney Brothers, Inc. (CBI), opened a distribution center next to the Punta Gorda Airport in 2015. As the only CBI distribution center on the West Coast of Florida, distribution of products to restaurants and retail centers are made along the SIS facilities of I-75 and US 17.

In addition to the key SIS facilities being heavily traveled freight routes, local roadways including Piper Road and CR 74 (Bermont Road) provide critical linkages for freight and good traveling through the region. Piper Road, which was recently completed, provides a critical connection to the Punta Gorda Airport from US 17 and I-75. CR 74 connects from US 17 near I-75 to US 27 in Central Florida and provides a direct route for freight and trucks supporting mining operations.

Recognizing the importance of I-75 and US 17 for regional freight travel and the need for truck stops in the region, a study evaluating the market opportunities for a travel center was conducted. A location near I-75 and US 17 interchange was identified as a favorable location for further investigation. This location is also adjacent to the local routes that provide a critical role in connecting regional freight facilities.



Additionally, when the rest area at I-75 and N. Jones Loop Road was closed in 2015, FDOT began evaluating a replacement rest area in Charlotte and southern Sarasota County.

7.5.3 Rail Lines and Terminals



Seminole Gulf Railway has provided freight transportation and logistics to southwest Florida along 118 miles of track since 1987. Seminole Gulf Railway currently operates in Charlotte, Collier, DeSoto, Lee, Manatee, and Sarasota counties and operates various passenger excursion trains.

7.6 Technology

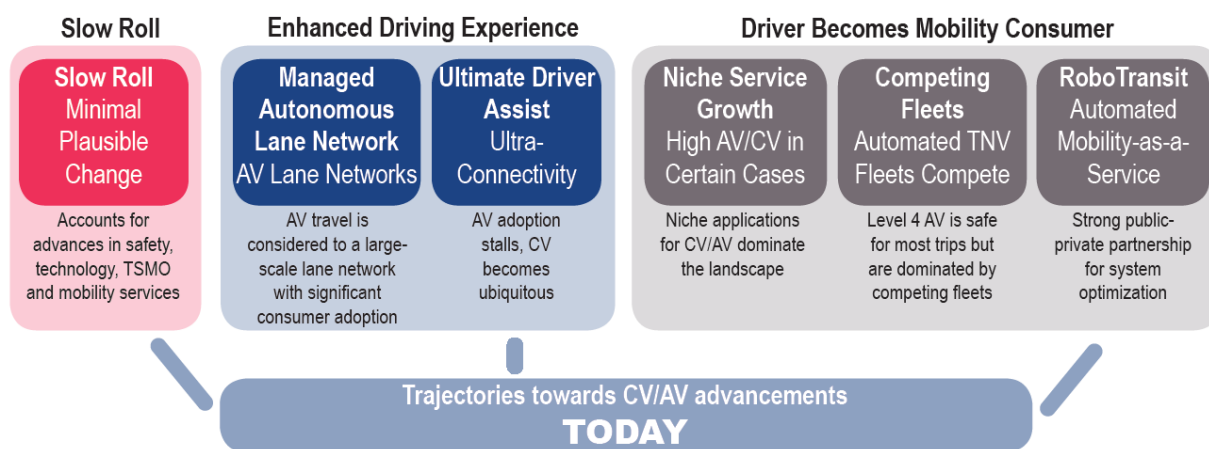
7.6.1 ACES Overview

Incorporating technology considerations in long-range transportation planning is more vital than ever given emerging technologies that have the potential to completely transform prevailing transportation practices. Yet there is great uncertainty, with outcomes depending on a variety of factors such as the types and rate of technology adoption and market penetration. Discussion of emerging transportation technologies in Florida has been categorized as “ACES,” representing:

- Automated - vehicle guiding itself with little or no input; minimal effects are anticipated with lower levels of automation, yet profound effects are possible with the highest levels of automation where the human occupant is removed from the driving process.
- Connected - devices linking vehicles and the transportation infrastructure for improved safety and efficiency.
- Electric – vehicles using one or more electric motors for propulsion.
- Shared-use – vehicles used and not necessarily owned by more than one person or organization.

While these technologies are distinct, communities will likely adopt them to some degree in a combination. As a result, one effort of long-range planning with regards to these technologies is developing locally tailored scenarios. The Federal Highway Administration has developed six scenarios based on a future year of 2035 as starting points for input and local scenarios for the purposes of L RTPs (**Figure 7-8**).

Figure 7-8: FHWA 2035CV/AV Scenarios

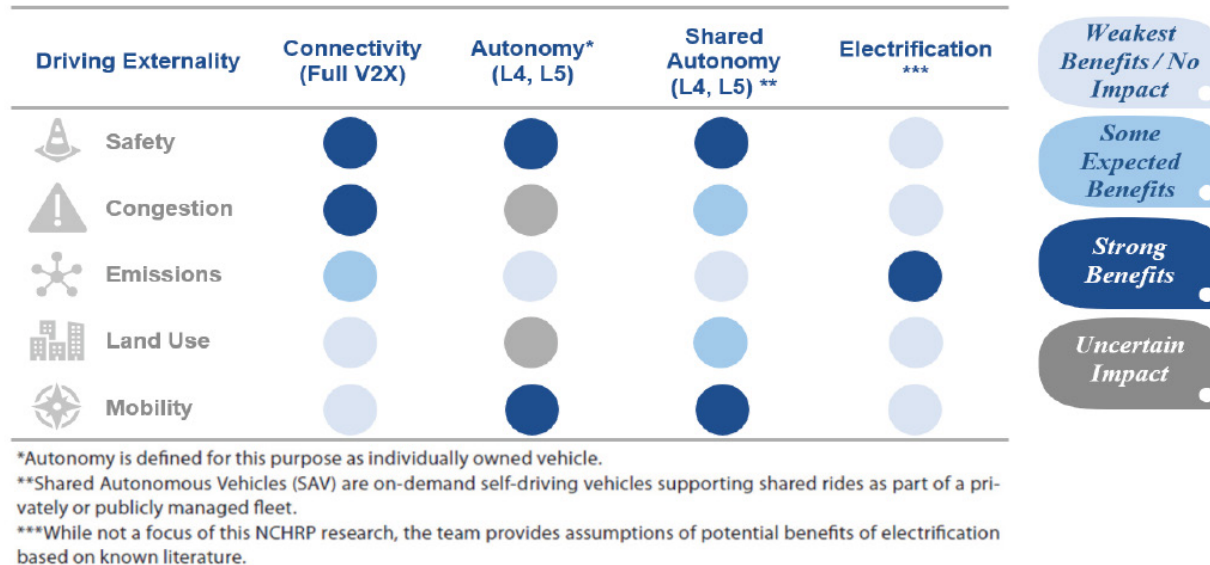


Source: Florida Department of Transportation Office of Policy Planning (September 2018) *Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use Vehicles*, page 3.

There are both gains and negative impacts to consider in the adoption of these different technologies. Figure 7-9 broadly summarizes benefits by driving externalities with a relative comparison among the different technology types. Safety emerges as a key benefit in adopting these technologies, echoed by several tenets of the Institute for Transportation Engineers position paper on CV/AV technology.²

² Institute of Transportation Engineers (December 4, 2018) ITE Statement on Connected and Automated Vehicles.

Figure 7-9: Potential Benefits of ACES Technologies



Source: Florida Department of Transportation Office of Policy Planning (September 2018) *Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use Vehicles*, page 18.

7.6.2 Legislative & Agency Response

States vary in terms of whether they have adopted or are considering legislation regarding autonomous vehicles, and rules vary among states that have passed these laws.³ Federal agencies such as the U.S. Department of Transportation (U.S. DOT) and Congress have taken steps to move towards more standardized guidance and requirements to address this technology in transportation. In 2016, U.S. DOT released non-binding performance guidance on autonomous vehicles.⁴ In 2019, it released *Automated Vehicles 3.0: Preparing for the Future of Transportation*, which includes:

- Principles for guiding the federal approach to shaping policy for automated vehicles.
- Roles in engaging with automation at the federal level; at the state, local, and tribal government levels; and in the private sector.
- Implementation strategies moving forward.

Key principles guiding U.S. DOT's approach include:

- Prioritizing safety
- Remaining technology neutral
- Modernizing regulations
- Encouraging a consistent regulatory and operational environment
- Preparing proactively for automation
- Protecting and enhancing mobility choice freedoms (including the freedom to drive one's vehicle).

³ John Paul MacDuffie, PhD (May 2018) *The Policy Trajectories of Autonomous Vehicles*, University of Pennsylvania Penn Wharton Public Policy Initiative, Issue Brief, Vol. 6, No. 4

⁴ U.S. Department of Transportation (September 2016) *Federal Automated Vehicles Policy*, <https://www.transportation.gov/AV/federal-automated-vehicles-policy-september-2016>

While the document does not explicitly call out a specific MPO role, many initiatives geared towards more localized entities may apply to the efforts of the MPO. These initiatives relate to the following themes:

- Public engagement and education
- Research to understand impacts of automation, remove barriers, and address market failures and public needs
- Identifying data needs and opportunities for data exchange
- Scenario development
- Assessment of roadway readiness and support for piloting/safety testing
- Improving organizational capacity and expertise related to automation.

Initiatives related to other roles will contextualize these efforts, such as the development of policy/regulatory guidance to remove barriers to automation and voluntary standards and safety assessments, including those related to vehicle design.

In addition to the guidelines from U.S. DOT, federal legislation is also under consideration to influence the direction of autonomous vehicle technologies. A recent policy brief by John Paul MacDuffie of the University of Pennsylvania Wharton School summarizes some of the implications of H.R. 3388, or the SELF-DRIVE Act, awaiting a vote in the Senate, as well as policy trajectories of autonomous vehicles. The SELF-DRIVE Act in its latest form would include provisions for:

- A uniform standard for technology and safety
- Prohibiting states from blocking use of automated vehicles without human controls within their borders
- Prohibiting state from setting rules on automated vehicle production and testing standards
- The exemption of self-driving car manufacturers from existing safety standards up to a certain number of cars in the first year
- Requiring self-driving car manufacturers to demonstrate the safety of their vehicles.

While some observers support the safety provisions, others are concerned at the pre-emption of state authority to set safety standards without clear regulation at the federal level to fill the gap.

MacDuffie highlights additional policy considerations summarized below.

- “Geo-fencing” may be particularly relevant to local and regional transportation planning efforts.
- Whether federal guidance may support an approach to increased automation that includes levels where the automated system monitors the driving environment, but the human driver is still “in the loop” to take over driving in certain situations; some argue that having drivers come back into control is too risky, which supports an increase in automation from vehicles where the human driver is predominantly monitoring the driving environment straight to full-blown automation.
- The possibility of enforcing a single standard for performance evaluation (e.g., a “driver’s license” for automated vehicles) and ethical dilemmas.
- How to invest in infrastructure; some argue that “smart” infrastructure is necessary for the success of automated vehicles, while some have moved forward with automated vehicles that are not reliant on direct communication with other cars or upgraded infrastructure.

- The allowance by local jurisdictions for testing and expansion of automated vehicles, in conjunction with meeting local priorities (e.g., expansion of green vehicles); “geo-fencing,” or the ability to limit the activity of automated vehicles to certain geographic areas mapped in detail, is one aspect of this method of increasing testing and expansion of this technology.
- How liability will shift with the emergence of automated vehicles and the need for expanded public and supporting private insurance.



Chapter 8: 2045 Cost Feasible Plan



8.1 Cost Feasible Plan Overview

The Cost Feasible Plan reflects nearly \$1.3 billion (YOE) of implementable projects. Prior to identifying the Cost Feasible Plan, the amount of available funding must be estimated over the next 25 years to pay for the improvements. More than 54 percent of revenues that are anticipated to fund the projects included in this plan are from local sources. The remaining 46 percent are expected from federal and state sources. Nearly 65 percent of available revenues will be spent on highway expansion and congestion management projects. **Table 8-1** shows the Cost Feasible Plan summary.

Table 8-1: Cost Feasible Plan Summary (2021 – 2045)

Mode or Program	Total Cost (YOE)	Percent (YOE)
Roads/Highways	\$559.19 million	43.12%
Road/Highway Maintenance	\$240.13 million	18.52%
Bicycle, Pedestrian, Multi-Use Trails	\$81.12 million	6.25%
Congestion Management	\$281.18 million	21.68%
Transit (Capital)	\$16.44 million	1.27%
Transit (Operations)	\$118.87 million	9.17%
Total*	\$1,296.93 million	100%
Revenue Source	Total Revenues (YOE)	Percent (YOE)
Federal and State Revenues	\$563.82 million	38.54%
SIS	\$86.53 million	5.92%
Local Revenues	\$766.17 million	52.37%
Developer Contributions	\$46.36 million	3.17%
Total*	\$1,462.87 million	100%
Composition of Local Revenues	Total Revenues (YOE)	Percent (YOE)
Impact Fees	\$96.2 million	12.56%
Infrastructure Surtax	\$239.31 million	31.23%
Gas Tax	\$400.22 million	52.24%
Local Transit	\$30.43 million	3.97%
Total*	\$766.17 million	100%

* Totals may not equal due to rounding

8.2 Setting Priorities

Determining the transportation projects and strategies to include in the Route to 2045 Cost Feasible LRTP was based on evaluation of the prioritized needs and availability of transportation revenues. A series of factors were used for evaluating each mode. These prioritization factors were aligned with the goals and performance benefits that projects provide to the public.

8.2.1 Roadway Project Priorities

For the roadway projects, ten criteria were identified and used for prioritizing projects for the 2045 LRTP. These criteria are developed utilizing the previous LRTP updates and were refined to be consistent with current local planning activities and requirements of the Metropolitan Planning Process. Listed below in **Table 8-2** are the criteria used for prioritizing the roadway network and the relationship of each criterion to the Goals of the 2045 LRTP. Additionally, these criteria provide the basis of ranking project priorities for possible inclusion in the MPO's Transportation Improvement Program (TIP) for the next five years.

Table 8-2: Prioritization Criteria and LRTP Goals

Prioritization Criteria	Weight	Goal 1 Efficient Travel	Goal 2 Transportation Choices	Goal 3 Natural Spaces	Goal 4 Vibrant Centers	Goal 5 Safety & Security
Existing and committed volume to capacity ratio	15%	✓				
Community and environmental impact	10%			✓		
Roadway safety	20%	✓				✓
Access to major activity centers	10%				✓	
Multimodal connectivity	20%		✓			✓
Emergency evacuation routes	5%					✓
Hazard mitigation	5%			✓		✓
Local economic development	5%				✓	
Freight access	5%				✓	
Project status	5%	✓				

8.2.2 Transit Project Priorities

A hybrid methodology using qualitative and quantitative criteria was developed to evaluate and prioritize the transit needs. To prioritize and program these service improvements for potential implementation, it is important to weigh the benefits of each service improvement against the others.

The four evaluation categories identified for use in the process to rank the transit service alternatives are described as follows:

- **Community Support** – A key factor of success of any improvement is its acceptance and support by the community it serves and its impacts. Findings from the extensive public outreach effort were reviewed to gauge public interest.
- **Ridership Demand** – Success of any route relies heavily on how productive it is. Three GIS-based technical analyses conducted as part of the demand assessment were reviewed to assess the potential demand from discretionary, traditional, and ridership markets for each improvement.
- **Activity Center Connectivity** – Connectivity to key activity centers/hubs plays a critical role as CCT focuses on enhancing and expanding its services for Charlotte County residents and visitors and meeting the demands of creating a truly multimodal transportation system for their use.
- **Funding Potential** – Funding is often the most restrictive factor and, therefore, is one of the most heavily-weighted criteria, as funding for community transportation is linked primarily to the routes for which funding is applied.

8.2.3 Bicycle and Pedestrian Priorities

The needs assessment process used in the Bicycle/Pedestrian Master Plan identified a series of gaps and needs within the County which were used to generate prospective projects. Prioritization of these projects, grouped into tiers, was developed using criteria which fell into one of four themes.

- **Mobility:** Provide access to places where people live, work, and play by extending and closing gaps in the network.
- **Safety:** Improve safety of high crash locations and where high-volume roads create stressful walking and biking conditions.
- **Land Use/Economic Development Impacts:** Identify the economic impact of historically disadvantaged areas and areas with substantial planned growth of jobs and residents in 2040.
- **Public Opinion:** Integrate public preference from public workshops and online surveys into prioritization.

8.3 Available Funding

The Route to 2045 LRTP includes revenue projections from Federal, State, and Local sources used to develop the 2045 Cost Feasible Plan. Estimates of Federal and State revenues were developed in coordination with FDOT. This revenue forecast includes estimates of available 2045 revenues for certain capacity programs for each MPO. The estimated revenues can be used to fund planned capacity improvements to major elements of the transportation system (e.g., highways, transit). These metropolitan estimates are grouped into 5-year periods and one final 10-year period.

In addition to the estimates provided by FDOT, revenue information was also collected from Charlotte County, Charlotte County Transit, and the City of Punta Gorda to provide forecasts of Federal and other State funds not provided by FDOT. **Table 8-3** presents a summary of the total projected revenues anticipated to be available. These revenues from federal, State, and local sources exceed \$1.4 billion in future “Year-Of-Expenditure (YOE)” format.

Table 8-3: Revenue Projection Summary – Year-of-Expenditure Revenues (\$ millions)

Funding Programs and Sources	2021-2025	2026-2030	2031-2035	2036-2045	Total
Roadways	\$105.52	\$213.63	\$218.03	\$460.32	\$997.50
Strategic Intermodal System	\$0.00	\$0.00	\$31.09	\$55.43	\$86.52
Other Roads Construction & ROW - Capacity	\$48.59	\$59.02	\$63.68	\$132.51	\$303.80
Other Roads Construction & ROW – Product Support	\$10.69	\$12.99	\$14.01	\$29.15	\$66.84
Other Roads Construction & ROW - Federal Portion	\$8.58	\$10.42	\$11.24	\$23.38	\$53.62
TRIP Funds	\$1.32	\$1.97	\$2.19	\$4.49	\$9.97
Fuel Taxes to Local Governments	\$7.22	\$7.48	\$7.64	\$15.53	\$37.87
Local Option Fuel Taxes	\$17.39	\$18.21	\$24.64	\$50.08	\$110.32
Mobility/Impact Fees	\$0.00	\$23.80	\$23.80	\$47.60	\$95.20
Local Government Infrastructure Sales Tax	\$11.73	\$33.38	\$39.74	\$102.15	\$187.00
Developer Contributions	\$0.00	\$46.36	\$0.0	\$0.00	\$46.36
Transit Revenues	\$20.98	\$22.88	\$26.36	\$65.41	\$135.63
State and Federal Funding	\$16.78	\$17.78	\$20.33	\$50.32	\$105.21
Local (County, Farebox, Other)	\$4.20	\$5.10	\$6.03	\$15.09	\$30.42
Bicycle and Pedestrian	\$5.78	\$12.09	\$13.87	\$34.09	\$65.83
Federal Transportation Alternatives	\$2.50	\$2.50	\$2.50	\$5.01	\$12.51
Mobility/Impact Fees (Punta Gorda)	\$0.00	\$0.25	\$0.25	\$0.50	\$1.00
Local Government Infrastructure Sales Tax	\$3.28	\$9.34	\$11.12	\$28.58	\$52.32
Roadway Maintenance	\$45.85	\$47.46	\$48.41	\$98.41	\$240.13
Fuel Taxes to Local Governments	\$10.84	\$11.22	\$11.45	\$23.29	\$56.80
Local Option Fuel Taxes	\$35.01	\$36.24	\$36.96	\$75.12	\$183.33
Revenue Totals	\$178.14	\$296.05	\$306.68	\$658.23	\$1,439.11

Existing revenues are insufficient to address the County’s future mobility needs that result from future growth in population and employment expected by 2045. In 2020, voters in Charlotte County approved the fifth extension of a one-penny Local Government Infrastructure Surtax that was first enacted in 1995.

Additional details on the development of revenue estimates along with the 2045 Revenue Forecast provided by FDOT for the LRTP can be found in **Technical Report 4**.

8.4 Cost Assumptions

Planning-level cost estimates for the LRTP were developed for each mode, including roadway, bicycle, pedestrian, and transit. Using the FDOT District 1 Costing Tool Version 2.0, unit costs for roadway widening and intersection modifications were developed. Estimates for bicycle and pedestrian projects resulted from the *Charlotte County Regional Bicycle and Pedestrian Master Plan* while the transit capital and operating costs were based on the *Charlotte Rides 10-Year TDP*. Additional details on the development of unit costs are included in **Technical Report 4**.

8.4.1 Inflation Factors

Unit Cost estimates are based on the FDOT District 1 Costing Tool and have been listed in FY 2019 dollars. Since the passage of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law in August 2005, MPOs have been required to develop a cost feasible LRTP using inflation rates to reflect the future YOY dollars. Inflation factors are listed in **Table 8-4** by project phase and the corresponding time period that were used to convert project costs from 2019 dollars to the future YOY costs presented later in this chapter.

Table 8-4: Inflation Factors

Time Period	Product Support Factor	Urban and Suburban Right-of-Way Factor	Rural Right-of-Way Factor	Construction Factor	Transit Factor
2024-2025	1.189	1.045	1.045	1.256	1.185
2026-2030	1.250	1.160	1.160	1.341	1.244
2031-2035	1.414	1.378	1.345	1.577	1.404
2036-2045	1.600	1.995	1.684	1.855	1.585

8.4.2 Roadway Costs

Roadway construction unit costs were derived from the standard roadway typical sections and based on a per centerline mile basis as provided by in Version 2.0 of the Costing Tool with Version 3.1 Costing Data. The roadway construction unit costs are summarized in **Table 8-5**. Unit costs are presented as present-day costs (PDC). Cost for intersection and roundabout projects were also developed and are included as a per intersection cost.

Cost estimates for the Project Development and Environmental (PD&E) and Preliminary Engineering (PE) phases were calculated based on a percentage of overall construction cost at five and 15 percent, respectively. In addition to construction, PD&E, and PE costs, right-of-way costs were also considered in the overall project cost estimates. Right-of-way costs were presented as a range from high to low on a per acre basis for each area type (urban, suburban, and rural). These unit costs were also provided by FDOT District One.

8.4.3 Transit Costs

Transit costs were derived from 2019 Transit Development Plan based on the following assumptions.

- Annual operating and capital costs are based on Charlotte County Transit's 2019 TDP Cost Efficient Plan
- An average annual inflation rate of 4% was used for paratransit services operating cost projections
- Vehicle replacements for revenue vehicles were based on vehicle age and useful life benchmarks from CCT's Transit Asset Management (TAM) Plan.
- Based on the average cost of the existing fleet, cutaway paratransit vehicles cost \$116,000. Replacement mini vans are cost \$60,000, and support vehicles cost \$50,000.
- Annual allocation of \$25,000 to ensure funds for mobile app/software maintenance.

- An average annual allocation of \$75,000 is assumed for the bus stop infrastructure program to install bus stop signs and shelters. The program would allow CCT to gradually install bus stop signs and a limited number of bus shelters at suitable locations such as at key activity centers.
- An annual cost of \$15,000 is assumed for expansions of transit marketing/awareness program.

Table 8-5: Roadway Cost Table

Project Type	Project Description	2045 LRTP*
Rural		
New Construction	2-Lane Undivided Roadway with 5' Outside Shoulder Paved	\$5,480,017
New Construction	4-Lane Roadway with 5' Outside Shoulder Paved	\$9,831,135
New Construction	6-Lane Roadway with 5' Outside Shoulder Paved	\$12,529,720
Widening	2-Lane Roadway to 4 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$5,136,157
Widening	4-Lane Roadway to 6 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$5,185,880
Urban		
New Construction	2-Lane Undivided Roadway with 6' Sidewalk, 4' Bike Lane and Curb & Gutter	\$9,490,508
New Construction	3-Lane Undivided Dual-use Roadway with 6' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$8,479,010
New Construction	4-Lane Roadway (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$10,946,781
New Construction	4-Lane Roadway (55mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved	\$12,186,900
New Construction	5-Lane Undivided Dual-use Roadway with 6' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$10,681,902
New Construction	5-Lane Undivided Roadway with 6' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$10,675,985
Widening	2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter (Includes milling and resurfacing)	\$6,942,182
Widening	2-Lane Roadway to 4 Lanes (55mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$7,484,637
Widening	4-Lane Roadway to 6 Lanes (45 mph Design speed) with 5' Sidewalk, 4' Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	\$7,000,443
Widening	4-Lane Roadway to 6 Lanes (50mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane, and Curb & Gutter with 4' Inside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$7,111,900
Interchange	Compressed Diamond Interchange - Mainline over Crossroad	\$54,300,096
Arterial Roundabout	2-Lane Arterial Roundabout	\$1,750,853
Arterial Roundabout	4-Lane Arterial Roundabout	\$2,506,372
Intersection	4-Lane/4-Lane Intersection w/Single Right Turn Lanes	\$2,690,825
Intersection	4-Lane/4-Lane Intersection w/Dual Right Turn Lanes	\$3,092,020
Intersection	6-Lane/4-Lane Intersection w/Single Right Turn Lanes	\$3,363,989
Signalization	Mast Arm Assembly - 2-Lane Roadway Intersecting 2-Lane Roadway	\$392,621
Signalization	Mast Arm Assembly - 4-Lane Roadway Intersecting 4-Lane Roadway	\$374,192
Signalization	Mast Arm Assembly - 6-Lane Roadway Intersecting 6-Lane Roadway	\$516,933

8.5 Roadway Projects

Determining the roadway projects and strategies to include in the Route to 2045 Cost Feasible L RTP was based on an evaluation of the prioritized needs and availability of transportation revenues. Highlights of the projects listed in **Table 8-6** and shown in **Figure 8-1** are listed below based on geographic region of Charlotte County.

West County

- Widening of SR 776 from CR 775 to Spinnaker Blvd to 6-lanes
- Corridor Study of SR 776 to identify future intersection improvements.

Mid County

- Corridor Study of SR 776 to identify future intersection improvements.
- Widening of Edgewater Drive / Flamingo Blvd to 4-lanes from Midway Blvd to US 41
- Widening of Toledo Blade Blvd to 4-lanes from SR 776 to US 41
- Widening of Prineville Drive to 4-lanes from Paulson Drive to Hillsborough Blvd.
- Funding for implementation of US 41 Corridor Vision Plan recommendations.
- New connection between Veterans Blvd and Hillsborough Blvd (coordinated with the Sarasota/Manatee MPO and future I-75 interchange opportunity)
- Widening of Harbor View Rd to 4-lanes from Melbourne St. to I-75
- Study of I-75 interchange improvements

South County

- Complete Streets Project on US 17 from US 41 to I-75
- Roundabout at CR 74 and SR 31 intersection
- Funding for implementation of US 41 Corridor Vision Plan recommendations
- Widening of Taylor Road to 4-lanes from US 41 to Airport Road
- Widening of Old Burnt Store Road to 4-lanes from N. Jones Loop Road to Taylor Road
- Widening of SR 31 to 4/6-lanes from Lee County Line to North of Cook Brown Road
- Land Purchase for N. Jones Loop widening from US 41 to Piper Road
- Study of future Burnt Store Road extension North of Taylor Road to US 17
- Study of future Airport Road widening from Taylor Road to Piper Road
- Study of I-75 interchange improvements

Many of the projects funded in the Cost Feasible Plan are congestion management projects to address safety, intersection operations, and recurring bottlenecks. Primarily located on SR 776 and US 41 the congestion management projects represent more than 20% of the Cost Feasible Plan funding (see **Table 8-1**). In addition to funding improvements on these two critical corridors, funding for implementation of strategies identified in the upcoming Charlotte County ITS Master Plan has also been included.

Table 8-6: Roadway Cost Feasible Projects List (\$ Millions Future Year of Expenditure)

Map ID	Facility	From	To	Existing Lanes	Project Description	LRTP Funding Source	2021 – 2025 (YOE)			2026-2030 (YOE)			2031-2035 (YOE)			2036-2045 (YOE)		
							PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST
1	Airport Road	Taylor Rd	Piper Road	2	Widen 2 to 4 lanes	Local							\$5.80	\$7.43				
4	Burnt Store Rd	Zemel Rd	Scham Rd	2	Widen 2 to 4 lanes	TIP												
5	Burnt Store Rd	N Jones Loop	Taylor Rd	2	Widen 2 to 4 lanes	Local										\$2.75	\$2.45	\$21.30
6	Burnt Store Rd Extension	Taylor Rd	Florida St @ US 17	0	New 4-lane	Local										\$12.53		
7	Edgewater Dr (Phase 3)	Midway Blvd	Collingswood Blvd	2	Widen 2 to 4 lanes	TRIP / Local						\$31.40						
8	Edgewater Dr (Phase 4)	Collingswood Blvd	Samantha Ave	0	Roadway realignment and new bridge	Local	\$2.10		\$23.00									
9	Edgewater Dr / Flamingo (Phase 5)	Collingswood Blvd	SR 776	2	Widen 2 to 4 lanes	Local	\$1.00					\$25.12						
10	Flamingo Blvd	SR 776	US 41	2	Widen 2 to 4 lanes	Local							\$3.21	\$5.33	\$17.92			
12	Hillsborough Blvd / Raintree Blvd	Veterans Blvd		0	New 2-lane	Local							\$0.45	\$1.40	\$2.53			
21	N Jones Loop	Burnt Store Rd	Piper Road	4	Widen 4 to 6 lanes	State	\$1.22						\$4.48				\$5.27	
23	Prineville Dr	Paulson Dr	Hillsborough Blvd	2	Widen 2 to 4 lanes	TRIP / Local										\$9.07	\$15.64	\$52.59
30	SR 776	CR 775	Spinnaker Blvd	4	Widen 4 to 6 lanes	State	\$2.00			\$6.49	\$6.13				\$57.38			
31a	SR 776 Future Corridor Study	Pine Street / Placida Rd	US 41		Future Corridor Study	State				\$6.48	\$20.28		\$2.57				\$9.98	\$67.38
(Funding for up to 8 intersection locations) Potential Candidate Intersections: Sunnybrook Blvd, Oceanspray Blvd, David Blvd, Coliseum Blvd, San Casa Dr, Winchester Blvd, Hollis Ave, Biscayne Dr.)																		
34	SR 31	Lee County Line Cypress Parkway	Cypress Parkway Lake Babcock Dr.	2	Widen 2 to 6 lanes Widen 2 to 4 lanes	Developer				\$2.56	\$7.18	\$28.99						
36	Taylor Rd	US 41	Jones Loop Rd	2	Widen 2 to 4 lanes	Local							\$5.37	\$8.90	\$29.93			
37	Taylor Rd	N Jones Loop Rd	Airport Rd	2	Widen 2 to 4 lanes	Local										\$7.42	\$12.80	\$43.03
38	Taylor Rd	Airport Rd	US 41	2	Complete Streets	Local										\$3.22	\$4.23	\$18.66
39a	Toledo Blade Blvd (CR 39)	SR 776	Whitney Avenue	2	Widen 2 to 4 lanes	Developer						\$7.62						
43	US 17	Copley Ave	CR 74	4	Widen 4 to 6 lanes	SIS							\$1.05			\$2.00		
51	Harbor View Road	Melbourne St	I-75	2	Widen 2 to 4 lanes	Federal / Local	\$4.02	\$9.79				\$31.60						
54 / 55	Marion Avenue / Olympia Avenue	US 41	Marlympia Way	3	Lane Repurposing - resurface and striping	State	\$0.29			\$1.42		\$9.32						
59	US 41 Corridor Vision Plan			4/6	Corridor & Safety Improvements	State				\$5.95		\$6.28						\$18.55
60	SR 31	@ CR 74		2	Roundabout	State		\$0.64				\$0.89						
61	SR 776	@ Flamingo Blvd		4	Intersection - turn lanes	TIP			\$1.46									
62	US 41	@ Easy Street		4	Intersection - turn lanes	State										\$1.09		\$8.44
63	US 41	@ Forrest Nelson		4	Intersection - turn lanes	State										\$1.09		\$8.44
64	SR 776	@ Jacobs St		4	Intersection - turn lanes	State										\$1.09		\$8.44

Map ID	Facility	From	To	Existing Lanes	Project Description	LRTP Funding Source	2021 – 2025 (YOE)			2026-2030 (YOE)			2031-2035 (YOE)			2036-2045 (YOE)		
							PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST	PD&E / PE	ROW	CST
65	US 41	@ Carousel Plaza		4	Intersection - turn lanes	State										\$1.09		\$8.44
66	SR 776	@ Charlotte Sports Park		4	Intersection - turn lanes	State	\$0.15					\$1.27						
67	I-75	at CR 769/Kings Hwy			Interchange Modifications	SIS							\$6.50					
68	I-75	at CR 776/Harbor View			Interchange Modifications	SIS							\$6.50					
69	I-75	at US 17/SR35			Interchange Modifications	SIS							\$7.50					
70	I-75	at North Jones Loop Rd			Interchange Modifications	SIS							\$6.50					
71	ITS Master Plan Implementation					State / Federal / Local						\$3.14	\$7.07		\$3.54			\$16.00
72	SR 776	@ Gulfstream Blvd / Wilmington Blvd		4	Intersection - turn lanes	State				\$0.81		\$5.71						
73	SR 776	@ Biscayne Blvd		4	Intersection - turn lanes	State				\$0.81		\$5.71						
74	SR 776	@ Cornelius		4	Intersection - turn lanes	State							\$0.96	\$7.17	\$7.17			
80	Burnt Store Road	Vincent Avenue	Wallaby Lane	2	Widen 2 to 4 Lanes	Federal							\$0.56	\$0.27	\$3.11			
99	Kings Hwy / Peachland / Veterans				Intersection Modification	Local				\$5.95								
Subtotal:							\$10.78	\$10.43	\$24.46	\$30.47	\$33.59	\$157.05	\$58.52	\$30.5	\$128.58	\$41.35	\$50.37	\$271.27
Total:							\$840.37											

Notes:

- PD&E/PE are product support phases for Project Development & Environment phase and Preliminary Engineering phase
- ROW is Right-of-Way costs associated with land acquisition
- CST is the Construction cost for completing the identified project
- Existing Funding is included in the MPO's 2020/2021 – 2024/2025 Transportation Improvement Program.

8.6 Transit Projects

Expanding on the analysis completed in the Charlotte County 10-Year TDP, the 2045 cost feasible transit projects include increased demand response service and technology solutions for more efficient delivery of transit to the community. Highlights of the projects listed in **Table 8-7** include:



- **Enhanced Dial-A-Ride Service** – Using upgraded technology, enhance the current paratransit services by adding a mobile application that allows for real-time bus tracking.
- **Charlotte Link Service** – Mobility-on-demand service in Charlotte Link zones in Englewood, west Port Charlotte, central Port Charlotte, and Punta Gorda. The service would allow use of a rideshare provider such as Uber, Lyft, taxi, or wheelchair transport. Anyone within a two-mile radius of these locations (Charlotte Link zones) would be eligible, and services would be available every weekday from 6:00am to 8:00pm and on Saturday from 9:00am to 8:00pm.
- **US-41/Airport Connector** – Implement regularly-scheduled transit service with mobile app/live bus tracking technology on US-41 from Port Charlotte Town Center to Punta Gorda Airport. The service will be provided every 60 minutes every weekday from 6:00am to 8:00pm.
- **Babcock Express** – Implement mobile app-based limited service (two trips during morning and afternoon hours) from the Bayfront Health in Punta Gorda to Babcock Ranch’s Founder’s Square every weekday. The service will be within the hours of 6:00am to 8:00pm.
- **Establish New Administration & Operations Facility** – Establish the proposed new Administration and Operations facility, funded fully by federal grants.
- **Implement Bus Stop Infrastructure Program** – To support the growth and implementation of any new transit services, Charlotte County Transit (CCT) should continue the infrastructure program to install bus stops with benches, shelters, bicycle storage facilities, and other infrastructure needed to improve rider experience at bus stops and potentially attract new riders.
- **Implement Real-Time Bus Locator App and Reservation Technology Upgrades** – CCT should work with Route Match software to upgrade its system technologies to include real-time bus tracking app for demand-response service and regularly-scheduled transit.
- **Expand Transit Marketing/Awareness Campaign** – CCT should explore all avenues to expand its marketing program for residents and visitors. This should also include coordinating with the FDOT Commuter Services program to use any avenues/opportunities or piggy-back on its events to increase awareness and promote the benefits of using transit.
- **Develop Employee Bus Pass/Subsidy Programs**
- **Promote Transit Demand Management (TDM) Strategies**

Table 8-7: Cost Feasible Transit Projects (\$ Millions Future Year of Expenditure)

Proposed Improvement	Implement. Year	Capital Cost	Operating Cost	Total Cost
Existing & Enhanced Paratransit Service	2022	\$9.330	\$93.431	\$102.761
Charlotte Link: (Four Mobility On Demand Zones)	2024	\$0	\$12.034	\$12.034
Babcock Express (AM/PM Peak)	2026	\$0.386	\$3.199	\$3.585
US 41/Airport Connector	2028	\$0.386	\$10.199	\$10.584
Replacement Vans	2021-2045	\$0.480	\$0	\$0.480
Replacement Support Vehicles	2021-2045	\$0.200	\$0	\$0.200
New Administration and Operations Facility - Construction	2021	\$2.593	\$0	\$2.593
Mobile App & Reservation Technology	2021-2045	\$0.750	\$0	\$0.750
Bus Stop Infrastructure	2021-2045	\$1.740	\$0	\$1.740
Expand Marketing/Awareness Campaign	2021-2045	\$0.375	\$0	\$0.375
Transit Planning Services/2024 TDP Major Update	2024	\$0.200	\$0	\$0.200
Total		\$16.440	\$118.864	\$135.304

8.7 Bicycle/Pedestrian/Multi-Use Trails Program

Developing an active (walking and cycling) transportation system in Charlotte County is built on completing the existing network of sidewalks, trails, bike lanes, and paths in a manner that recognizes the unique needs of the users and function of transportation facilities.

Highlights of the approach encompassed in the Route to 2045 LRTP include the following:



- All road widening and construction projects in the Cost Feasible LRTP will include appropriate bicycle facilities and sidewalks
- Continued implementation of bicycle and sidewalk safety projects currently prioritized for implementation.
- Use the recently adopted Regional Bicycle/Pedestrian Master Plan when filling gaps in the system or resurfacing/rehabilitation of existing roadways.
- Construct the prioritized projects based on Tiers listed in the Regional Bicycle/Pedestrian Master Plan through annual development of funding decisions during the Transportation Improvement Program update.
- Coordinate with FDOT, County and City staff through the Bicycle / Pedestrian Advisory Committee review of priorities for utilizing the \$60 million allocated in the LRTP through 2045 for bicycle/pedestrian projects

Table 8-8 provides a listing of the cost feasible projects recommended from the Charlotte County Regional Bicycle / Pedestrian Master Plan. Several of these projects can be incorporated with roadway widening and construction projects. The location of these bicycle and pedestrian projects are illustrated in Table 8-8.

Table 8-8: Bicycle/Pedestrian Master Plan Projects

Map ID	On Street	From	To	Project Type	Total Cost (2019 \$)	Total Cost (Future YOE \$)	Project Status
TIER 1 Projects							
1	Notre Dame Blvd	Burnt Store Rd	US 41	Sidewalk or SUP, one side	\$417,391	\$524,243	
2	Port Charlotte Blvd	Edgewater Dr	US 41	SUP, one side	\$209,124	\$262,660	
3	Tucker's Grade	US 41	Wildlife Management Area	Sidewalk, one side and Buffered Bike Lanes	\$1,395,816	\$1,753,145	
6	South County Reg. Park Internal Rd	Carmalita St	Cooper St	Sidewalk, one side and Advisory Shoulder	\$127,662	\$160,343	
8	Harbor View Rd	US 41	Sulstone Dr	SUP, one side	\$783,263	\$983,778	Widening under design from Melbourne to I- 75
9	Edgewater Dr	Collingswood Blvd	Midway Blvd	SUP, one side	\$378,990	\$476,011	Widening priority project for MPO
12	E/W Utility Easement	Education Ave		SUP, one side	\$181,953	\$181,953	\$144,867
13	Airport Rd	FSW to Piper Rd	Riverside Dr	SUP, one side	\$935,495	\$1,174,982	
15	US 41	Tucker's Grade	Burnt Store Rd	SUP, one side	\$775,896	\$974,526	
16	Zemel Rd	Burnt Store Rd	US 41	SUP, one side	\$1,323,443	\$1,662,245	
24	US 41	Lee County Line	Tucker's Grade	SUP, one side	\$1,721,213	\$2,161,844	
41	US 41	Peace River Bridge	Midway Blvd	SUP, one side	\$1,132,642	\$1,422,598	FPN: 438262-1 \$840,001 PE in 2023 \$4,452,174 CST in 2025
45	Taylor Road	Royal Road	Airport Road	Separated Bike Lane, One Way	\$2,103,800	\$2,642,373	FPN: 435105-2 \$664,999 PE in 2024
53	Loveland Blvd	Peachland Blvd	Veterans Blvd	SUP, one side	\$243,081	\$305,310	
Tier 1 Subtotal:					\$11,692,684	\$14,686,011	

Map ID	On Street	From	To	Project Type	Total Cost (2019 \$)	Total Cost (Future YOY \$)	Project Status
TIER 2 Projects							
7	San Casa Dr	Placida Rd	SR 776	Separated Bike Lane, One Way	\$1,069,901	\$1,434,737	
11	Harbor Blvd	Port Charlotte Beach	Midway Blvd	Sidewalk, gap closures and Separated Bike Lane, One Way	\$1,749,997	\$2,346,746	
17	Fruitland Ave/Avenue of the Americas	San Casa Dr	Gulfstream Blvd	Sidewalk, one side	\$266,519	\$357,402	
20	SR 776	Sarasota County Line	Gasparilla Rd	SUP, both sides	\$3,297,817	\$4,422,373	
21	Oil Well Rd	US 41	Granville Rd	Sidewalk	\$568,338	\$762,141	
36	SUN Trail	SR 776	Myakka State Forest	SUP, one side	\$505,805	\$678,285	
37	SUN Trail on SR 776	Gasparilla Rd	US 41	SUP, one side	\$1,866,641	\$2,503,165	
38	SUN Trail on US 41	Midway Blvd	SR 776	SUP, one side	\$539,509	\$723,481	FPN: 440442-1 \$6,090,709 CST in 2024
39	SUN Trail on Burnt Store Rd	Scham Rd	Jones Loop Rd	SUP, one side	\$517,289	\$693,684	
40	SUN Trail on Beach Rd	Gulf Blvd	SR 776	SUP, one side	\$807,584	\$1,082,970	
42	Cape Haze Pioneer Trail	S McCall Road	Boca Grande	SUP, one side	\$164,239	\$220,245	
44	SUN Trail on Placida Rd	Gasparilla Rd	SR 776	SUP, one side	\$2,234,628	\$2,996,636	
47	Rampart Blvd.	Kings Hwy	Rio de Janeiro Ave	Sidewalk, one side and Separated Bike Lane, One Way	\$433,703	\$581,596	
48	Atwater St	Veterans Blvd	Hillsborough Blvd	Sidewalk or SUP, one side	\$98,841	\$132,546	
Tier 2 Subtotal:					\$14,120,811	\$18,936,007	

Map ID	On Street	From	To	Project Type	Total Cost (2019 \$)	Total Cost (Future YOY \$)	Project Status
TIER 3 Projects							
4	Moss Rd	Charlotte Sports Park	North Charlotte Regional Park	Advisory Shoulder	TBD	TBD	
10	Pellam Blvd/Prineville Dr	Edgewater Dr	County Line	SUP, one side	TBD	TBD	
19	Edgewater Dr/Flamingo Blvd Ext.	Collingswood Blvd	County Line	Sidewalk or SUP, and/or Paved Shoulder	TBD	TBD	
50	O'Donnell Blvd	North Charlotte Regional Park		Advisory Shoulder	TBD	TBD	
51	Royal Poinciana	Burnt Store Rd	US 41	SUP, one side	\$1,426,760	\$2,250,000	
5	Gulfstream Blvd	Fruitland Ave	SR 776	Sidewalk, one side and Bike Lane	\$2,125,982	\$3,943,696	
14	Washington Loop Rd	US 17 S	US 17 N	Paved Shoulder	\$4,422,320	\$8,203,403	
18	CR 74/Bermont Rd.	Richards Blvd	SR 31	Paved Shoulder	\$4,955,218	\$9,191,930	
22	Riverside Drive	Marion Ave	US 17	Paved Shoulder	\$3,996,513	\$7,413,532	
23	Babcock Ranch Connection	Granville Rd	SR 31	SUP, one side	\$3,201,980	\$5,939,673	
35	SUN Trail on US 41	N Jones Loop Rd	Peace River Bridge	SUP, one side	\$789,689	\$1,464,873	FPN: 446339-1 \$290,000 PE in 2025
43	SUN Trail on Burnt Store Rd	Lee County Line	Zemel Rd	SUP, one side	\$371,396	\$688,940	
46	Jones Loop Rd	Burnt Store Rd	Piper Rd	Paved Shoulder	\$2,268,520	\$4,208,105	
49	Kings Hwy	Veterans Blvd	Sandhill Blvd	Sidewalk, one side and Separated Bike Lane, One Way	\$160,770	\$298,229	
52	Hillsborough Blvd	Cranberry Blvd	Toledo Blade Blvd	Sidewalk, one side and Separated Bike Lane, One Way	\$153,115	\$284,028	
Tier 3 Subtotal:					\$23,872,263	\$43,886,409	



Map ID	On Street	From	To	Project Type	Total Cost (2019 \$)	Total Cost (Future YOY \$)	Project Status
Additional Projects as funds become available							
25	Cape Haze Pioneer Trail near Rotonda Blvd E.		Enhanced Crosswalk		TBD	TBD	
26	San Casa Drive @ Avenue of the Americas		Full Traffic Signal		\$257,597	\$257,597	
27	SR 776 @ Fairgrounds / Charlotte Sports Park		Crossing Enhancements/Traffic Signal		\$1,100,000	\$1,100,000	FPN: 446393-1 \$151,000 PE in 2025
28	US 41 @ Harbor Blvd		Enhanced Crosswalk		TBD	TBD	
29	US 41 @ Murdock Circle E		Median Safety Islands and at intersection		TBD	TBD	
30	US 41 @ Harbor View Rd/Edgewater Dr		North to South Crossing across US 41, Median Safety Islands		TBD	TBD	
31	Veterans Blvd @ Murdock Circle E		Median Safety Islands and at intersection		TBD	\$2,250,000	
32	US 41 @ Burnt Store Road		Median Safety Islands and at intersection.		TBD	TBD	
33	US 41 @ Carmalita St		Full Traffic Signal		TBD	TBD	
34	US 41 @ Tuckers Grade		Median safety islands and at intersection		TBD	TBD	
Additional Projects Subtotal:					\$1,357,597	\$3,607,597	
Bicycle/Pedestrian Master Plan Total:					\$51,043,355	\$81,116,024	



Chapter 9: Plan Performance



9.1 Introduction

Through requirements in the most recent transportation funding bills, Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act), the US government is transitioning to a performance-based program that includes establishing national performance goals for Federal-aid highway programs and incorporating performance goals, measures, and targets into the process of identifying needed improvements and project selection at the MPO level. Performance measures are being implemented to improve the investment efficiency of Federal transportation funds, refocus investments on national transportation goals, increase the accountability and transparency of the Federal-aid highway program, and improve decision-making through performance-based planning and programming.

This chapter addresses two categories of performance measures used in the 2045 LRTP to assess its performance—federally-required performance measures and regional performance measures identified by the MPO. The MPO will annually monitor and document the federally-required performance measures in the Transportation System Performance Report included in the Transportation Improvement Program (TIP).

9.2 Federal Performance Measures & System Performance Report

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

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

In accordance with the Planning Rule, the Charlotte County-Punta Gorda MPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its Long-Range Transportation Plan (LRTP). The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports.

There are several milestones related to the required content of the System Performance Report:

- In any LRTP adopted on or after May 27, 2018, the System Performance Report must reflect Highway Safety (PM1) measures;

- In any LRTP adopted on or after October 1, 2018, the System Performance Report must reflect Transit Asset Management measures;
- In any LRTP adopted on or after May 20, 2019, the System Performance Report must reflect Pavement and Bridge Condition (PM2) and System Performance (PM3) measures; and
- In any LRTP adopted on or after July 20, 2021, the System Performance Report must reflect Transit Safety measures.

The Charlotte County-Punta Gorda MPO 2020-2045 Long-Range Transportation Plan was adopted on October 5, 2020. Per the Planning Rule, the System Performance Report for the Charlotte County-Punta Gorda MPO is included as **Appendix B** for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management, and Transit Safety targets

9.3 Regional Performance Measures

Regional performance measures developed for the 2045 LRTP were used to compare today's conditions with the 2045 Cost Feasible Plan and, where available, the 2040 Cost Feasible Plan. The regional performance measures are related to each of the goals for the 2045 LRTP (**Figure 9-1**). In addition to the regional performance measures, the federally-required performance measures are also included. **Table 9-1** through **Table 9-5** present the performance measures for each goal of the 2045 LRTP.

Figure 9-1: 2045 LRTP Goals



Data for many of these measures are not currently available for reporting or tracking and have been indicated as “N/A” in the tables.

A series of travel demand measures are calculated as part of the Regional Travel Demand Model Analysis. The regional modeling was coordinated with other MPO's/TPO's using the District Regional Planning Model (D1RPM). Testing of transportation and land use alternatives during the long-range planning process resulted in the final Cost Feasible Plan. Performance results from this iterative testing of alternatives are included in supplemental documentation prepared by FDOT District One.

Table 9-1: Summary of Goal 1 Performance Measures

Performance Measure	Existing	2040 L RTP	2045 L RTP
Roadway Lane Miles	1,574	1,421	1,627
Total Vehicle Miles Traveled (VMT) per capita	50	27	36
Total Vehicle Hours Traveled (VHT) per capita	N/A	140,626	136,966
Percent VMT at a V/C Ratio > 1.0	3%	10%	7%
Percent of person-miles on the Interstate system that are reliable*	N/A	N/A	N/A
Percent of person-miles on the non-Interstate NHS that are reliable *	N/A	N/A	N/A
Rate of serious injuries per 100 million VMT*	5	N/A	N/A
Number of non-motorized fatalities and serious injuries*	20.6	N/A	N/A

* Federally required transportation performance measure

Table 9-2: Summary of Goal 2 Performance Measures

Performance Measure	Existing	2040 L RTP	2045 L RTP
Transit Miles of Service	0	N/A	36
Daily Transit Ridership	344	1,160	N/A
People within ¼ mile of Transit	N/A	79,277	43,564
Jobs within ¼ mile of Transit	N/A	27,963	34,807
Transit Dependent within ¼ mile of Transit	N/A	3,199	N/A
Miles of Bicycle Facilities	133	466**	181
Miles of Sidewalks	216	**	342
Cost Feasible Projects that facilitate the tourist economy in Charlotte County	N/A	N/A	29

** The 2040 L RTP included a combined measure for bicycle and pedestrian facilities

Table 9-3: Summary of Goal 3 Performance Measures

Performance Measure	Existing	2040 L RTP	2045 L RTP
Number of roadway centerline miles designated as scenic corridors	34	N/A	34
Consistency of growth projections with Comprehensive Plan growth strategy	Yes	N/A	Yes
Policy commitment of L RTP to evaluate and mitigate environmental impacts	Yes	N/A	Yes
Centerline miles of roadways identified as complete streets	N/A	N/A	4

Table 9-4: Summary of Goal 4 Performance Measures

Performance Measure	Existing	2040 L RTP	2045 L RTP
% of roadway congested centerline miles providing access to major activity centers	1.6%	N/A	10.9%
Freight travel time reliability*	N/A	N/A	N/A

* Federally required transportation performance measure

Table 9-5: Summary of Goal 5 Performance Measures

Performance Measure	Existing	2040 L RTP	2045 L RTP
Funding set aside for short-term congestion and mobility management strategies	N/A	\$25.7	\$281 million
Percent of emergency evacuation route roadway centerline miles that are congested	2.4%	N/A	10.7%
Number of fatalities*	24	N/A	N/A
Rate of fatalities per 100 million VMT*	1.041	N/A	N/A
Number of serious injuries*	113	N/A	N/A
Rate of serious injuries per 100 million VMT*	5	N/A	N/A
Number of non-motorized fatalities and serious injuries*	20.6	N/A	N/A

* Federally required transportation performance measure



Chapter 10: Plan Implementation



10.1 Key Highlights

The following are some of the key outcomes resulting from the 2045 LRTP development and analysis.

- The population in Charlotte County is projected to increase from 165,550 in 2015 to more than 260,000 in 2045, an increase of more than 57%.
- Employment is also expected to more than double over the same time period. While service sector jobs will experience the largest amount of growth, jobs in the office and professional services sector are expected to grow at the highest rate.
- More than 800 citizens participated in the development of the Route to 2045 LRTP through stakeholder interviews, workshop groups, virtual forums, MPO committee and Board meetings, surveys, and an interactive web map.
- The 2045 LRTP reflects a \$1.3 billion (in year-of-expenditure dollars) transportation program from 2021 to 2045. When compared to the total cost of the 2040 Long Range Transportation Plan (adopted in 2015), the 2045 Plan represents an increase of 45%, primarily due to increased revenues from locally generated transportation revenues.
- An estimated \$766 million of the \$1.3 billion in revenues comes from local funding sources.
- Nearly all of the transit needs identified for Charlotte County are funded in the Cost Feasible Plan. Two exceptions include (1) Express Service between the Englewood Library and the Port Charlotte Town Center, and (2) a Beach Circulator providing service between Englewood Beach and the Englewood Library.

10.2 Key Actions

The 2045 LRTP identifies the transportation investments that are possible for Charlotte County in support of the vision and Goals that have been adopted. Over the next five years, the MPO and its planning partners will work together to implement and advance the projects listed in the LRTP. Successful implementation will rely on the support and partnership of the City of Punta Gorda, Charlotte County, the Charlotte County Airport Authority, FDOT District 1, neighboring MPO's and the public.

In addition to prioritizing funding for specific priority projects for construction, key implementation actions for advancing the vision of the 2045 LRTP include the following activities:

- **Financial Feasibility:** With impacts to current transportation revenues resulting from the COVID-19 pandemic, the MPO in partnership with FDOT should continue to monitor decreased revenue projections and the impact that has on project delivery.
- **SR 776 corridor Study:** Coordinate with FDOT on developing a corridor study and priority locations for multi-modal transportation improvements to address the needs of the public.
- **Growth in South County and future interchange potential:** Continued analysis and review of transportation needs through coordination with the Lee County MPO regarding feasible options for providing regional connections.

- **North Port interchange:** Coordination with FDOT and the Sarasota/Manatee MPO on the timing and potential for a new connection between Charlotte and Sarasota counties and the potential for a new I-75 interchange.
- **ATMS Master Plan:** With the master plan funded for study in the next fiscal year, the MPO should prioritize the \$30 million in future funding for construction in the upcoming Transportation Improvement Program to reduce delays in implementation.
- **US 41 Corridor Vision Plan:** The LRTP has set aside \$30 million in future funding for implementation of strategies identified through this vision plan. The MPO and FDOT should partner to identify priority locations for improvements.
- **Future Comprehensive Plan Updates and Population Projections:** The MPO in partnership with Charlotte County should continue the independent analysis of population growth previously conducted by Western Michigan University to better understand impacts of Babcock Ranch on historic trends. Based on the neighborhood constraints in and around Punta Gorda, the MPO should work with City staff to identify constrained roadways for the next LRTP update.
- **M-CORES:** As plans are finalized for the Southwest-Central Florida Connector, the MPO should focus on the priority connecting east-to-west with I-75 along CR 74. As a heavily traveled freight route, future demand and needs for CR 74 could be significantly different as the M-CORES program continues to be developed.
- **Technology:** As transportation technology continues to advance, the MPO should continue to become informed on the potential benefits of Connected and Autonomous Vehicles. Understanding the types of technology improvements will aid the MPO in directing funding for priority projects.

10.3 LRTP Amendment Process

In addition to the five-year update cycle for revising the assumptions and cost feasibility of the LRTP, the MPO has the ability to process amendments to the 2045 LRTP. Consistent with the Federal Regulations (23 CFR 450.104), guidance provided by FDOT and the MPO's Public Participation Plan, there are two ways in which the LRTP can be updated.

- An **administrative modification** is a minor revision to the LRTP that includes minor changes to project/project phase costs, minor changes to funding sources of previously included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, or a redemonstration of fiscal constraint
- An **amendment** means a revision to the LRTP that involves a major change to a project including:
 - the addition or deletion of a project
 - a major change in project cost, project phase initiation dates
 - a major change in design concept or design scope
- Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a redemonstration of fiscal constraint.



Appendix A. Florida Department of Transportation LRTP Review Checklist

FDOT LRTP Review Checklist

Section A- Federal Requirements		Where and How Addressed
23 C.F.R. Part 450 – Planning Assistance and Standards		
A-1	<p>Does the plan cover a 20-year horizon from the date of adoption?</p> <p>Please see the “Administrative Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(a)</p>	<p>The Cost Feasible Plan’s horizon year in 2045 (Chapter 8). Chapter 1: Introduction highlights the planning horizon for the Plan.</p>
A-2	<p>Does the plan address the planning factors described in 23 C.F.R. 450.306(b)?</p> <p>Please see the “Fiscal Constraint” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>Please see the “New Requirements” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>Risk and Resiliency</p> <p>Does the plan improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation?</p> <p>Travel and Tourism</p> <p>Does that plan enhance travel and tourism?</p> <p>Please see the “Proactive Improvements” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(a)</p>	<p>The planning factors (incl. new requirements) are reflected in the adopted Goals and Objectives, as well as the performance measures and prioritization criteria. See Chapter 2 (Tables 2-1 to 2-4), Chapter 8, and Chapter 9. The plan integrates travel and tourism into the Plan’s goals (Chap 2) and the criteria used to prioritize LRTP project (Section 8.2). Risk and resiliency are addressed in Chapter 5 (Section 5.1 & 5.2). Additionally, new requirements are addressed in Chapter 7 (Section 7.5 & 7.6), and Chapter 4 (Phase I).</p> <p>Project phasing, funding, and timeframe are addressed in Chapter 8: Cost Feasible Plan (Table 8-3 to 8-6).</p>
A-3	<p>Does the plan include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand?</p> <p>Please see the “Technical Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(b)</p>	<p>Chapter 8 shows roadway, transit, and bicycle & pedestrian projects organized by specific time increments beginning in 2021 through 2045 (Table 8-6, 8-7, 8-8). The following chapters also address long-range and short-range strategies/actions:</p> <ul style="list-style-type: none"> - Chapter 5 (Section 5.1 & 5.2) - Chapter 6 (Section 6.4) - Chapter 7 (Section 7.4, 7.5 & 7.6)
A-4	<p>Was the requirement to update the plan at least every five years met?</p> <p>Please see the “Administrative Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(c)</p>	<p>Yes – The 2040 LRTP was adopted on October 5, 2015 and the 2045 LRTP was adopted on October 5, 2020.</p>

A-5	<p>Did the MPO coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP)?</p> <p>23 C.F.R. 450.324(d)</p>	<p>N/A Charlotte County-Punta Gorda MPO is in an Air Quality Attainment Area and is not required to develop transportation control measures in a State Implemented Plan.</p>
A-6	<p>Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity?</p> <p>Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(e)</p>	<p>The 2045 LRTP was developed using the new FDOT District One Regional Planning Model which included the most recent population, employment, land use, economic, and travel/traffic estimates. See Chapter 3, Chapter 4 (Section 4.3), Chapter 6, and Chapter 7 (Section 7.2 to 7.6).</p>
A-7	<p>Does the plan include the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan?</p> <p>Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(1)</p>	<p>Transportation modeling which used projected transportation demand of persons and goods aided in identifying needs, which helped to develop the Cost Feasible Plan. See Chapter 7 and Chapter 3. Projected persons and goods movement were also considered in the performance measures described in Chapter 2 (Section 2.5), prioritization of improvements as described in Chapter 8 (Section 8.2) and Chapter 9 (Plan Performance).</p>
A-8	<p>Does the plan include existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan?</p> <p>23 C.F.R. 450.324(f)(2)</p>	<p>The LRTP emphasizes existing and proposed projects on Strategic Intermodal System facilities such as I-75, US 17, US 41, and FDOT Multi-use Corridors of Regional Economic Significance (M-CORES). See Chapter 7 and Section 2.6 Table 2-5.</p>
A-9	<p>Does the plan include a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with §450.306(d)?</p> <p>Please see the "New Requirements" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(3)</p>	<p>Performance measures and performance targets (incl. new requirements) are described in Chapter 2 (Tables 2-4), Chapter 9, and Appendix B (System Performance Report).</p>

A-10	<p>Does the plan include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in §450.306(d), including progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data?</p> <p>Please see the “New Requirements” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(4)(i)</p>	<p>Yes, in Appendix B (System Performance Report).</p>
A-11	<p>Did the MPO integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program including:</p> <ul style="list-style-type: none"> (i) The State asset management plan for the NHS, as defined in 23 U.S.C. 119(e) and the Transit Asset Management Plan, as discussed in 49 U.S.C. 5326; (ii) Applicable portions of the HSIP, including the SHSP, as specified in 23 U.S.C. 148; (iii) The Public Transportation Agency Safety Plan in 49 U.S.C. 5329(d); (iv) Other safety and security planning and review processes, plans, and programs, as appropriate; (v) The Congestion Mitigation and Air Quality Improvement Program performance plan in 23 U.S.C. 149(l), as applicable; (vi) Appropriate (metropolitan) portions of the State Freight Plan (MAP-21 section 1118); (vii) The congestion management process, as defined in 23 CFR 450.322, if applicable; and (viii) Other State transportation plans and transportation processes required as part of a performance-based program. <p>Please see the “New Requirements” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.306 (d)(4)</p>	<p>The MPO integrated federal, state, and local transportation goals, objectives, performance measures, and targets. See Chapter 2 (Section 2.1 to 2.5, Tables 2-1, 2-2, 2-3, and 2-4), Chapter 8 (Section 8.2), Chapter 9, and Appendix B. Additionally, see Chapters 6 and 7 (Section 7.5 & 7.6) for freight, transit, safety, and congestion management.</p>

A-12	<p>Does the plan include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods?</p> <p>Please see the “Technical Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(5)</p>	<p>Operational and management strategies are addressed in Chapter 6 (Congestion Management).</p>
A-13	<p>Does the plan include consideration of the results of the congestion management process in TMAs, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide?</p> <p>Please see the “Technical Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(6)</p>	<p>Charlotte County-Punta Gorda MPO is not designated as an Air Quality non-attainment area. Congestion management strategies are addressed in Chapter 6 and resulting projects are listed in the Chapter 8 Cost Feasible Plan.</p>
A-14	<p>Does the plan include assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters?</p> <p>23 C.F.R. 450.324(f)(7)</p>	<p>Chapter 2 (Sections 2.2 & 2.6) and the project prioritization criteria (Table 8-2) describe regional priorities and goals, including system preservation. Chapter 6 (Section 6.4) identifies strategies to better manage and operate existing transportation facilities. The transportation needs outlined in Chapter 7 emphasize preserving the existing system. Chapter 8 addresses the existing infrastructure with maintenance funds.</p>
A-15	<p>Does the plan include transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a)?</p> <p>23 C.F.R. 450.324(f)(8)</p>	<p>Transportation and transit enhancement projects are identified in Chapter 8 (Sections 8.6 & 8.7). Chapter 6 includes transit related congestion reduction strategies; see Section 6.4. Chapter 4 (Section 4.3 incl. Stakeholder Interviews) documents the type of transit and transportation enhancements that are important to the public and stakeholders.</p>
A-16	<p>Does the plan describe all proposed improvements in sufficient detail to develop cost estimates?</p> <p>Please see the “Fiscal Constraint” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(9)</p>	<p>See Chapter 8 (Cost Feasible Plan) for project costs and revenues.</p>

A-17	<p>Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan?</p> <p>Please see the “Technical Topics” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(10)</p>	<p>Environmentally sensitive lands were taken into consideration in this Plan and are described in Chapter 5. Potential environmental mitigation activities are also identified in Chapter 5 (Section 5.1 and 5.2 and Table 5-1).</p>
A-18	<p>Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented?</p> <p>Please see the “Fiscal Constraint” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(11)</p>	<p>See Chapter 8 (Cost Feasible Plan) and Chapter 10 (Plan Implementation).</p>
A-19	<p>Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation?</p> <p>23 C.F.R. 450.324(f)(11)(i)</p>	<p>See Chapter 8 (Cost Feasible Plan) system-level estimates of costs and revenue sources.</p>
A-20	<p>Did the MPO, public transportation operator(s), and State cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a)?</p> <p>Please see the “Proactive Improvements” section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(f)(11)(ii)</p>	<p>Yes, see Chapter 8 (Cost Feasible Plan) for available revenue projections from federal, state, local, and private sources. See Chapter 10 for Implementation.</p>
A-21	<p>Does the financial plan include recommendations on additional financing strategies to fund projects and programs included in the plan, and, in the case of new funding sources, identify strategies for ensuring their availability?</p> <p>23 C.F.R. 450.324(f)(11)(iii)</p>	<p>See Chapter 8 (Cost Feasible Plan) on financing strategies and project and program funding.</p>
A-22	<p>Does the plan's revenue and cost estimates use inflation rates that reflect year of expenditure dollars, based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s)?</p> <p>23 C.F.R. 450.324(f)(11)(iv)</p>	<p>See Chapter 8 (Cost Feasible Plan) for revenue and cost estimates. See Table 8-4 for Inflation Factors.</p>

A-23	<p>Does the financial plan address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP?</p> <p>23 C.F.R. 450.324(f)(11)(vi)</p>	<p>N/A Charlotte County-Punta Gorda MPO is not designated as an Air Quality non-attainment area.</p>
A-24	<p>Does the plan include pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C.17(g)?</p> <p>23 C.F.R. 450.324(f)(12)</p>	<p>Chapters 7 and 8 Bicycle and Pedestrian sections identify and provide for bicycle and pedestrian facilities. In addition, road capacity projects take a complete streets approach where possible by including bicycle and pedestrian facilities with each project.</p>
A-25	<p>Does the plan integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP, the Public Transportation Agency Safety Plan, or an Interim Agency Safety Plan?</p> <p>Please see the "Technical Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(h)</p>	<p>The safety measures are reflected in the adopted Goals and Objectives (Section 2.2), performance measures (Section 2.5 and Chapter 9) and prioritization criteria (Section 8.2).</p> <p>Additionally, see Chapter 6 (Section 6.3, 6.4, 6.5) for discussion of HSIP goals, strategies, and countermeasures selected for the 2045 LRTP.</p>
A-26	<p>Does the plan identify the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan?</p> <p>23 C.F.R. 450.324(g)(1)</p>	<p>Transportation modeling was used to identify needs, which helped to develop the Cost Feasible Plan. See Chapter 7 and Chapter 3. Projected persons and goods movement were also considered in the performance measures described in Chapter 2 (Section 2.5), prioritization of improvements as described in Chapter 8 (Section 8.2) and Chapter 9 (Plan Performance).</p>
A-27	<p>Did the MPO provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a)?</p> <p>23 C.F.R. 450.324(j)</p>	<p>All interested parties and those discussed in Chapter 4 and Technical Report 2 (Public Participation Plan) were coordinated with and provided reasonable opportunity to comment. A Public Participation Plan was created at the beginning of the update. Public comments were encouraged throughout the development of the plan. Public meetings were held at various times at multiple locations throughout the county to allow more opportunities for the public to attend. Public participation was also encouraged through videos, virtual workshops, and online interactive activities such as surveys and interactive maps. Chapter 4 describes the public comment period, public participation plan, and how information regarding the LRTP was communicated.</p>

A-28	<p>Did the MPO publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web?</p> <p>Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>Please see the "Administrative Topics" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.324(k), 23 C.F.R. 450.316(a)(1)(iv)</p>	<p>The approved plan was made available for review electronically on the project website and at locations around the MPO's region. Chapter 4 describes the public comment period, public participation plan, and how information regarding the LRTP was communicated.</p>
A-29	<p>Did the MPO provide adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan?</p> <p>Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R 450.316(a)(1)(i)</p>	<p>Public notice of public participation activities are described in Chapter 4 and Technical Report 2 (Public Participation Plan). Public participation activities provided reasonable opportunity and time to comment. Chapter 4 describes the public comment period, public participation plan, and how information regarding the LRTP was communicated.</p>
A-30	<p>In developing the plan, did the MPO seek out and consider the needs of those traditionally underserved by existing transportation systems such as low-income and minority households?</p> <p>Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R 450.316(a)(1)(vii)</p>	<p>An analysis of Charlotte County demographic data was completed to identify areas with higher concentrations of environmental justice populations, see Technical Report 5 (Sociocultural and Environmental Justice). Additionally, analysis of the projects included in the LRTP was conducted to ensure that the cost feasible projects do not disproportionately or adversely impact human health or the environment in these identified areas (see Section 5, Technical Report 5).</p> <p>Environmental Justice and the needs of traditionally underserved populations were considered in the performance measures and public participation efforts. See Chapter 5 (Section 5.3) regarding the Environmental Justice analysis and Chapter 4 for how the needs of environmental justice and traditionally underserved population were considered in the public participation activities.</p>

A-31	<p>Has the MPO demonstrated explicit consideration of and response to public input received during development of the plan? If significant written and oral comments were received on the draft plan, is a summary, analysis, and report on the disposition of the comments part of the final plan?</p> <p>Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.316(a)(1)(vi) & 23 C.F.R. 450.316(a)(2)</p>	<p>Technical Report 2 (Public Participation Summary) includes all comments received during the public events, surveys, interactive activities, meetings, and public comment period. Chapter 4 describes the public comment period, public participation activities, and how information regarding the LRTP was communicated.</p>
A-32	<p>Did the MPO provide an additional opportunity for public comment if the final plan differs significantly from the version that was made available for public comment and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts?</p> <p>Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R 450.316(a)(1)(viii)</p>	<p>The final plan did not differ significantly from the version that was made available for public comment and did not raise new material issues.</p>
A-33	<p>Did the MPO consult with agencies and officials responsible for other planning activities within the MPO planning area that are affected by transportation, or coordinate its planning process (to the maximum extent practicable) with such planning activities?</p> <p>Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance.</p> <p>23 C.F.R. 450.316(b)</p>	<p>Yes, the MPO consulted with agencies and officials responsible for other planning activities within the MPO planning areas as described in Chapter 4 (see Stakeholder Interviews and Board and Committee meetings). Chapter 2 and Technical Report 1 also highlight the consistency between the LRTP goals and relevant land use and transportation plans within Charlotte County-Punta Gorda MPO's jurisdiction.</p>
A-34	<p>If the MPO planning area includes Indian Tribal lands, did the MPO appropriately involve the Indian Tribal government(s) in the development of the plan?</p> <p>23 C.F.R 450.316(c)</p>	<p>N/A – There are no designated tribal lands located within the boundaries of the MPO's Planning Area.</p>
A-35	<p>If the MPO planning area includes Federal public lands, did the MPO appropriately involve Federal land management agencies in the development of the plan?</p> <p>23 C.F.R 450.316(d)</p>	<p>The MPO area does not include any Federal public land.</p>



A-36	<p>In urbanized areas that are served by more than one MPO, is there written agreement among the MPOs, the State, and public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent plans across the planning area boundaries, particularly in cases in which a proposed transportation investment extends across those boundaries?</p> <p>23 C.F.R. 450.314(e)</p>	<p>The MPO has joint planning responsibilities with the Sarasota/Manatee MPO to the North and Lee County MPO to the South. Joint meetings of the MPO Boards are held annually for coordination of transportation planning and funding.</p>
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Section B- State Requirements		Where and How Addressed
Florida Statutes: Title XXVI – Public Transportation, Chapter 339, Section 175		
B-1	Are the prevailing principles in s. 334.046(1), F.S. – preserving the existing transportation infrastructure, enhancing Florida’s economic competitiveness, and improving travel choices to ensure mobility – reflected in the plan? ss.339.175(1), (5) and (7), F.S.	The principles are reflected in the adopted Goals and Objectives, as well as the performance measures and prioritization criteria. See Chapter 2 (Section 2.3 Tables 2-1), Chapter 7 (Section 7.4 & 7.5), Chapter 8 (Section 8.2), and Chapter 9.
B-2	Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities? ss.339.175(1) and (7)(a), F.S.	The LRTP emphasizes existing and proposed projects on Strategic Intermodal System facilities such as I-75, US 17, US 41, and FDOT Multi-use Corridors of Regional Economic Significance (M-CORES). See Chapter 7 and Section 2.6 Table 2-5 and Chapter 8.
B-3	Is the plan consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies of the approved comprehensive plans for local governments in the MPO’s metropolitan planning area? ss.339.175(5) and (7), F.S.	Chapter 2 (Section 2.4) and Technical Report 1 highlight the consistency between the LRTP goals and relevant land use and transportation plans within Charlotte County-Punta Gorda MPO’s jurisdiction.
B-4	Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions? ss.339.175(1) and (7) F.S.	Yes, see Chapter 2 (section 2.5), Chapter 6 (Section 6.4 & 6.5) and Chapter 7.
B-5	Were the goals and objectives identified in the Florida Transportation Plan considered? s.339.175(7)(a), F.S.	The FTP principles are reflected in the adopted Goals and Objectives, as well as the performance measures and prioritization criteria. See Chapter 2 (Section 2.1 and 2.3 Tables 2-1)
B-6	Does the plan assess capital investment and other measures necessary to: 1) ensure the preservation of the existing metropolitan transportation system, including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities; and 2) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods? s.339.175(7)(c), F.S.	Chapter 2 (Sections 2.2 & 2.6) and the project prioritization criteria (Table 8-2) describe regional priorities and goals, including system preservation. Chapter 6 (Section 6.4) identifies strategies to better manage and operate existing transportation facilities and relieve vehicular congestion. The transportation needs outlined in Chapter 7 emphasize preserving the existing system and maximizing the mobility of people and goods. Chapter 8 addresses the existing infrastructure with maintenance funds.

Section B- State Requirements		Where and How Addressed
B-7	<p>Does the plan indicate, as appropriate, proposed transportation enhancement activities, including, but not limited to, pedestrian and bicycle facilities, scenic easements, landscaping, historic preservation, mitigation of water pollution due to highway runoff, and control of outdoor advertising?</p> <p>s.339.175(7)(d), F.S.</p>	<p>Chapter 6 (Section 6.5.2) identifies priority corridors which include aesthetics and landscaping, transit and bicycle/pedestrian improvements. Environmental mitigation and water pollution are addressed in Chapter 5. Chapters 7 and 8 Bicycle and Pedestrian sections identify and provide for bicycle and pedestrian facilities. In addition, road capacity projects take a complete streets approach where possible by including bicycle and pedestrian facilities with each project.</p>
B-8	<p>Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present?</p> <p>s.339.175(13) F.S.</p>	<p>Yes.</p>



Appendix B. Performance Measures and System Performance Report

Charlotte County-Punta Gorda Metropolitan Planning Organization Long-Range Transportation Plan System Performance Report

**Office of Policy Planning
Florida Department of Transportation**

August 2019

1 - Purpose

This document provides language that Florida's metropolitan planning organizations (MPO) may incorporate in Long-Range Transportation Plan (LRTP) System Performance Reports to meet the federal transportation performance management rules. Updates or amendments to the LRTP must incorporate a System Performance Report that addresses these measures and related information no later than:

- May 27, 2018 for Highway Safety measures (PM1);
- October 1, 2018 for Transit Asset Management measures;
- May 20, 2019 for Pavement and Bridge Condition measures (PM2);
- May 20, 2019 for System Performance measures (PM3); and
- July 20, 2021 for Transit Safety measures. (Due to the emergency declaration resulting from the COVID-19 pandemic, FTA issued a Notice of enforcement discretion which delayed the initial deadline of July 20, 2020 for one-year)

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

The document is organized as follows:

- Section 2 provides a brief background on transportation performance management;
- Section 3 covers the Highway Safety measures (PM1);
- Section 4 covers the Pavement and Bridge Condition measures (PM2);
- Section 5 covers System Performance measures (PM3);
- Section 6 covers Transit Asset Management (TAM) measures; and
- Section 7 covers Transit Safety measures.

2 - Background

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

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

In accordance with the Planning Rule, the Charlotte County-Punta Gorda MPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its Long-Range Transportation Plan (LRTP). The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports. For MPOs that elect to develop multiple scenarios, the System Performance Report also must include an analysis of how the preferred scenario has improved the performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified targets.²

There are several milestones related to the required content of the System Performance Report:

- In any LRTP adopted on or after May 27, 2018, the System Performance Report must reflect Highway Safety (PM1) measures;
- In any LRTP adopted on or after October 1, 2018, the System Performance Report must reflect Transit Asset Management measures;
- In any LRTP adopted on or after May 20, 2019, the System Performance Report must reflect Pavement and Bridge Condition (PM2) and System Performance (PM3) measures; and
- In any LRTP adopted on or after July 20, 2021, the System Performance Report must reflect Transit Safety measures.

The Charlotte County-Punta Gorda MPO 2020-2045 Long-Range Transportation Plan was adopted on October 5, 2020. Per the Planning Rule, the System Performance Report for the Charlotte County-

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

² Guidance from FHWA/FTA for completing the preferred scenario analysis is expected in the future. As of August 2019, no guidance has been issued.

Punta Gorda MPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management, and Transit Safety targets.

3 - Highway Safety Measures (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures ³ to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

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

The Florida Department of Transportation (FDOT) publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2018 and are based on a five-year rolling average (2011-2015). For the 2018 HSIP annual report, FDOT established statewide HSIP interim safety performance measures and FDOT's 2019 safety targets, which set the target at "0" for each performance measure to reflect the Department's vision of zero deaths.

The Charlotte County-Punta Gorda MPO adopted/approved safety performance targets on October 28, 2019. **Table B-3.1** indicates the areas in which the MPO is expressly supporting the statewide target developed by FDOT, as well as those areas in which the MPO has adopted a target specific to the MPO planning area.

Table B-3.1 Highway Safety (PM1) Targets

Performance Target	MPO agrees to plan and program projects so that they contribute toward the accomplishment of the FDOT safety target of zero	MPO has adopted a target specific to the MPO Planning Area
Number of fatalities	✓	
Rate of fatalities per 100 million vehicle miles traveled (VMT)	✓	
Number of serious injuries	✓	
Rate of serious injuries per 100 million vehicle miles traveled (VMT)	✓	
Number of non-motorized fatalities and non-motorized serious injuries.	✓	

³ 23 CFR Part 490, Subpart B

Statewide system conditions for each safety performance measure are included in **Table B-3.2**, along with system conditions in the Charlotte County-Punta Gorda MPO metropolitan planning area. System conditions reflect baseline performance, which for this first system performance report is the same as the current reporting period (2011-2015). The latest safety conditions will be updated annually on a rolling 5-year window and reflected within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

Table B-3.2 Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average 2012-2016)	Calendar Year 2019 Florida Performance Targets
Number of Fatalities	2,533	0
Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	1.287	0
Number of Serious Injuries	20,552	0
Rate of Serious Injuries per 100 Million VMT	10.452	0
Number of Non-Motorized Fatalities and Non- Motorized Serious Injuries	3,173	0

Trend and Baseline Conditions

To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2013-2017) of crash data and Vehicle Miles Traveled (VMT) were utilized. **Table B-3.3** presents the Baseline Safety Performance Measures for Charlotte County-Punta Gorda MPO. Trend data is also presented which covers the previous four reporting periods.

Table B-3.3 Baseline and Trend Crash Data for Charlotte County-Punta Gorda MPO

Performance Measures	2009-2013	2010-2014	2011-2015	2012-2016	2013-2017
Number of Fatalities	22.8	21.0	21.4	22.4	24.2
Rate of Fatalities per 100 VMT	1.048	0.964	0.969	0.990	1.041
Number of Serious Injuries	164.2	149.2	134.6	126.8	113.0
Rate of Serious Injuries per 100 Million VMT	7.555	6.864	6.128	5.668	4.898
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	24.2	23	21.4	20.4	20.6

Coordination with Statewide Safety Plans and Processes

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

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

requires the consideration of safety when preparing a proposed project's purpose and need, and defines several factors related to safety, including crash modification factor and safety performance factor, as part of the analysis of alternatives. MPOs and local governments consider safety data analysis when determining project priorities.

L RTP Safety Priorities

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

The L RTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The MPO has developed a project selection process that includes an assessment of crash hot spots based on frequency of crashes as well as addressing crash locations which resulted in serious injuries or fatalities that were identified as part of the Congestion Management Process.

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

Additionally, the MPO has coordinated with FDOT on the US 41 Corridor Vision Plan in setting aside funding for implementation of study recommendations. US 41 has routinely experienced the highest level of traffic crashes in Charlotte County. Addressing bicycle and pedestrian safety has also been a focus of the MPO for developing the Route to 2045 L RTP. Adoption of the Countywide Bicycle/Pedestrian Master Plan has identified more than 165 miles of proposed multimodal transportation facilities.

4 - Pavement and Bridge Condition Measures (PM2)

Pavement and Bridge Condition Performance Measures and Targets Overview

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

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

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

- International Roughness Index (IRI) - an indicator of roughness; applicable to all asphalt and concrete pavements;
- Cracking percent - percentage of the pavement surface exhibiting cracking; applicable to all asphalt and concrete pavements;
- Rutting - extent of surface depressions; applicable to asphalt pavements;
- Faulting - vertical misalignment of pavement joints; applicable to certain types of concrete pavements; and
- Present Serviceability Rating (PSR) - a quality rating applicable only to certain lower speed roads.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Pavement condition is assessed for each 0.1 mile section of the through travel lanes of mainline highways on the Interstate or the non-Interstate NHS using these metrics and thresholds. A pavement section is rated as good if all three metric ratings are good, and poor if two or more metric ratings are poor. Sections that are not good or poor are considered fair.

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

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

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

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

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

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

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

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

Pavement and Bridge Condition Baseline Performance and Established Targets

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

Table B-4.1 presents baseline performance for each PM2 measure for the State and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the State.

Table B-4.1. Pavement and Bridge Condition (PM2) Performance and Targets

Performance Measures	Statewide Performance (2017 Baseline)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)	MPO Performance (2017 Baseline)
Percent of Interstate pavements in good condition	67.5%	n/a	60%	70.6%
Percent of Interstate pavements in poor condition	0.0%	n/a	5%	0.0%
Percent of non-Interstate NHS pavements in good condition	44.0%	40%	40%	47.1%
Percent of non-Interstate NHS pavements in poor condition	0.5%	5%	5%	1.1%
Percent of NHS bridges (by deck area) in good condition	67.7%	50%	50%	72%
Percent of NHS bridges (by deck area) in poor condition	1.2%	10%	10%	1%

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

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

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

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

The Charlotte County-Punta Gorda MPO agreed to support FDOT's pavement and bridge condition performance targets on July 30, 2018. By adopting FDOT's targets, the Charlotte County-Punta Gorda MPO agrees to plan and program projects that help FDOT achieve these targets.

Several resurfacing projects are underway or programmed in the MPO's Transportation Improvement Program for maintaining and improving pavement conditions in Charlotte County. The eastbound SR 776 bridge of the Myakka River, built in 1959, has been a topic of concern for the MPO Board. In Coordination with FDOT, review of the bridge condition has determined that a replacement is not eminent. The MPO will continue to coordinate with FDOT regarding the appropriate timing for needed repairs or replacement of this bridge. As the only connection in Charlotte County across the Myakka River, this connection is a critical piece of the regional transportation network.

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

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

The Route to 2045 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements.

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

5 - System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program Measures (PM3)

System Performance/Freight/CMAQ Performance Measures and Targets Overview

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

National Highway Performance Program (NHPP)

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

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

4. Annual hours of peak hour excessive delay per capita (PHED);
5. Percent of non-single occupant vehicle travel (Non-SOV); and
6. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NO_x, VOC, CO, PM₁₀, and PM_{2.5}) for CMAQ funded projects.

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

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

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

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

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

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

- Two-year and four-year statewide targets for percent of person-miles on the Interstate system that are reliable;
- Four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable⁴; and
- Two-year and four-year targets for truck travel time reliability

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

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

PM3 Baseline Performance and Established Targets

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

Table B-5.1 presents baseline performance for each PM3 measure for the state and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state.

⁴ Beginning with the second performance period covering January 1, 2022 to December 31, 2025, two year targets will be required in addition to four-year targets for the percent of person-miles on the non-Interstate NHS that are reliable measure.

Table B-5.1 System Performance and Freight (PM3) - Performance and Targets

Performance Measures	Statewide Performance (2017 Baseline)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)	MPO Performance (2017 Baseline)
Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR)	82.2%	75.0%	70.0%	N/A
Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR)	84.0%	n/a	50.0%	N/A
Truck travel time reliability index (TTTR)	1.43%	1.75	2.00%	N/A

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

The Charlotte County-Punta Gorda MPO agreed to support FDOT's PM3 targets on July 30, 2018. By adopting FDOT's targets, the Charlotte County-Punta Gorda MPO agrees to plan and program projects that help FDOT achieve these targets.

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

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



identifies funding sources. Truck reliability is specifically called forth in this plan, both as a need as well as a goal.

The Route to 2045 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements.

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

6 - Transit Asset Management Measures

Transit Asset Performance

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

Table B-6.1 below identifies performance measures outlined in the final rule for transit asset management.

Table B-6.1 FTA TAM Performance Measures

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

For equipment and rolling stock classes, useful life benchmark (ULB) is defined as the expected lifecycle of a capital asset, or the acceptable period of use in service, for a particular transit provider’s operating environment. ULB considers a provider’s unique operating environment such as geography and service frequency and is not the same as an asset’s useful life.

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

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

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

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

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

As a Tier II provider, Charlotte County Transit provides demand response service to Charlotte County residents and does not participate in the FDOT group TAM plan.

On October 29, 2018, the Charlotte County-Punta Gorda MPO agreed to support Charlotte County Transit's transit asset management targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

For the purposes of complying with applicable federal regulations, Charlotte county Transit developed a TAM plan which includes the following required elements:

1. An inventory of the number and type of capital assets that includes all capital assets owed by the agency except "non-service vehicle" equipment with an acquisition value under \$50,000.
2. A condition assessment of inventoried assets in a level of detail sufficient to:
 - a. Monitor and predict the performance of the assets
 - b. Inform the investment prioritization
3. A description of analytical processes or decision-support tools that allows CCT to estimate capital investment needs over time and develop an investment prioritization.
4. A project-based prioritization of investments developed in accordance with CFR 49 Section 625.33.

The Transit Asset Management targets set by Charlotte County Transit and adopted by the Charlotte County-Punta Gorda MPO are summarized in **Table B-6.2**.

Table B-6.2 Charlotte County-Punta Gorda MPO Transit Asset Management Targets

Asset Category - Performance Measure	Asset Class	FY 2017 Asset Condition	FY2021 Target	FY2025 Target
Revenue Vehicles				
Age - % of revenue vehicles within a particular asset class that have met or exceeded their ULB	Bus	X	11%%	4%
	Mini-Bus	X	0%	0%
	Van	X	40%	0%
Equipment				
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their ULB	Bus Lift	X	50%	65%
	Data Equipment	X	0%	60%
Facilities				
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Parking Lot	n/a	22%%	30%
	Bus Wash	n/a	6%	9%

These targets for the MPO planning area reflect the targets established by Charlotte County Transit through their Transit Asset Management Plan.

7 - Transit Safety Performance

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

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

Rail operators subject to the rule, and operators of large bus systems (more than 100 vehicles in peak revenue service), must draft and implement their own PTASP. For small operators (defined as those operating 100 or fewer vehicles in peak revenue service) subject to the rule, states must draft and certify PTASPs on their behalf, unless a small provider opts to draft and certify its own safety plan and notifies the State that they will do so. FTA allows the state and small providers within the state to decide whether the state will develop a single statewide PTASP for all small providers, or whether it will draft and certify multiple individualized safety plans for each provider. FTA recommends as best practice that the state develop individualized PTASPs for each small provider. If a state drafts a single statewide PTASP, the state must ensure that the plan clearly identifies the specific safety information for each provider, including the safety performance targets. Regardless of whether the state or small transit provider drafts and certifies a safety plan, each transit provider is required to implement its own safety plan.

The PTASP rule was published on July 19, 2018 with an effective date of July 19, 2019. Transit operators subject to the rule must have a PTASP and safety targets in place by July 20, 2020. MPOs must then establish transit safety targets no later than 180 days after the transit operators establishes its targets. Due to the emergency declaration resulting from the COVID-19 pandemic, FTA issued a Notice of enforcement discretion which delayed the initial deadline of July 20, 2020 for one-year.

Transit Safety Performance Measures

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

1. Total number of reportable fatalities.
2. Rate of reportable fatalities per total vehicle revenue miles by mode.
3. Total number of reportable injuries.
4. Rate of reportable injuries per total vehicle revenue miles by mode.

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

Transit Provider Coordination with States and MPOs

Key considerations for MPOs and transit agencies:

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

Transit Safety Targets in the Charlotte County-Punta Gorda MPO Area

On October 5, 2020, the Charlotte County-Punta Gorda MPO agreed to support Charlotte County Transit's transit safety targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

The Charlotte County Transit established the transit safety targets identified in **Table B-7.1** on August 27, 2020. The transit safety targets are based on review of the previous 4 years of Charlotte County Transit's safety performance data from 2016 to 2019. The table summarizes the targets for 2021 and the available data for existing safety performance for the most recent year.

Table B-7.1 Charlotte County Transit Safety Performance Targets

Performance Measure	Baseline Performance (2019)	2021 Target
Total number of reportable fatalities	0	0
Rate of reportable fatalities per total vehicle revenue miles by mode	0	0
Total number of reportable injuries	0	7
Rate of reportable injuries per total vehicle revenue miles by mode	0	0.2
Total number of reportable safety events	Not Available	9
Rate of reportable safety events per total vehicle revenue miles by mode	Not Available	0.3
Mean distance between major mechanical failures by mode	18,002	19,768

Charlotte County-Punta Gorda MPO Programmatic Support to Transit Safety Performance Targets

The LRTP systems performance report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with performance recorded in previous reports. The FTA transit safety performance measures are new.

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