

CHARLOTTE

TRANSPORTATION PLAN



Charlotte County-Punta Gorda Metropolitan Planning Organization Long Range Transportation Plan Adopted October 2015





Charlotte County-Punta Gorda MPO Board

Charlotte County

Commissioner Christopher G. Constance
(Chair)

Commissioner Stephen R. Deutsch (Vice-Chair)

Commissioner Ken Doherty

City of Punta Gorda

Mayor Carolyn Freeland (at time of adoption)

Charlotte County Airport

Commissioner James W. Herston

Florida Department of Transportation (Advisory Member)

District One Secretary, Billy Hattaway

Charlotte County-Punta Gorda MPO

Staff

Bob Herrington, MPO Executive Director

Laks Gurram, Project Manager

Gary Harrell, Principal Planner

Gene Klara, Planner

Bekie Leslie, Administrative Services
Coordinator

Wendy Scott, Transit Planner

LRTP Subcommittee

Technical Advisory Committee Representatives

Mitchell Austin, City of Punta Gorda

Matt Trepal, Charlotte County Community
Development

Venkat Vattikuti, Charlotte County Public Works

Citizens Advisory Committee Representative

John Burrage, CAC Vice-Chair, South County
Representative

Bicycle/Pedestrian Advisory Committee Representative

Stephen Carter, Bicycle/Pedestrian Advisory
Committee Chair

Charlotte County-Punta Gorda Metropolitan Planning Organization

East Port Environmental Campus
25550 Harbor View Road, Suite 4
Port Charlotte, FL 33980-2503

Tel: (941) 883-3535

Fax: (941) 883-3534

Email: office@ccmpo.com

Website: www.ccmpo.com



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2040 Transportation Plan

Charlotte County-Punta Gorda MPO

Acronyms

AADT	Annual Average Daily Traffic	LRE	Long Range Estimating
ATMS	Advanced Traffic Management System	LRTP	Long Range Transportation Plan
BEBR	Bureau of Economic and Business Research	MAP-21	Moving Ahead for Progress in the 21st Century Act
CAC	Citizens Advisory Committee	MPO	Metropolitan Planning Organization
CC-PG MPO	Charlotte County-Punta Gorda Metropolitan Planning Organization	NHS	National Highway System
CEMP	Comprehensive Emergency Management Plan	O&M	Operations and Maintenance
CIP	Capital Improvement Program	OHS	Office of Homeland Security
CMP	Congestion Management Process	PBSSP	Pedestrian and Bicycle Strategic Safety Plan
COOP	Continuity of Operations Plan	PD&E	Project Development and Environment
CRA	Community Redevelopment Area	PDC	Present Day Costs
CTD	Commission for the Transportation Disadvantaged	PE	Preliminary Engineering
DEP	Department of Environmental Protection	PIP	Public Involvement Plan
DHS	Department of Homeland Security	PPP	Public Participation Plan
DRI	Development of Regional Impact	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
E+C	Existing Plus Committed	SCAT	Sarasota County Area Transit
ETDM	Efficient Transportation Decision Making	SHSP	Strategic Highway Safety Plan
FAST Act	Fixing America's Surface Transportation Act	SIS	Strategic Intermodal System
FDOT	Florida Department of Transportation	TA	Transportation Alternatives
FEMA	Federal Emergency Management Agency	TAC	Technical Advisory Committee
FHWA	Federal Highway Administration	TDM	Transportation Demand Management
FTA	Federal Transit Administration	TDP	Transit Development Plan
FTP	Florida Transportation Plan	TIP	Transportation Improvement Program
GIS	Geographic Information Systems	TRIP	Transportation Regional Incentive Program
HSP	Highway Safety Plan	TSA	Transportation Security Administration
ISTEA	Intermodal Surface Transportation Efficiency Act	TSM	Transportation Systems Management
ITS	Intelligent Transportation Systems	USDOT	United States Department of Transportation
LMS	Local Mitigation Strategy	VMT	Vehicle Miles Traveled
LOGT	Local Option Gas Taxes	WMD	Water Management District
LOS	Level of Service	YOE	Year of Expenditure

CHAPTER 1

INTRODUCTION

CHAPTER 1: Introduction

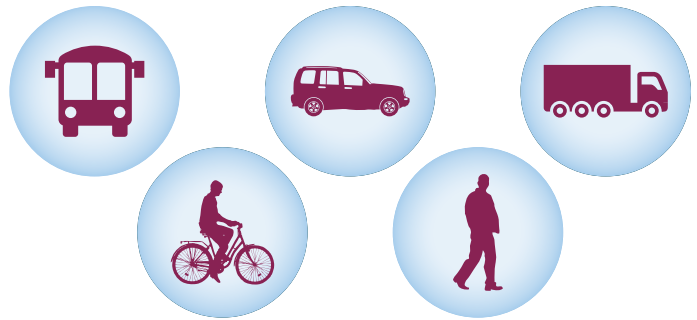
About the MPO

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 policy-making 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). Transparency through public access to participate in the planning process and electronic publication of plans is now required by federal law.

The Charlotte County-Punta Gorda (CC-PG) 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.

Overview of the Plan

MPOs are required by the Federal Highway Administration (FHWA) to complete a Long Range Transportation Plan (LRTP) to identify strategies to ensure current and future mobility needs. The analysis used to develop the plan is based on population and employment projections and the expected travel patterns and amount of travel for the next 25 years to the year 2040. The plan is updated every five years to refine the long-term strategy for the transportation system based on changes in transportation needs and future outlook for the county.



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 highest performing projects are the focus.

Background

The key aspect of the CC-PG 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, including development of the LRTP.

The 2040 LRTP updates the previous 2035 LRTP adopted in 2010. The Plan identifies cost feasible highway, freight,

When discussing the transportation planning area of the Charlotte County-Punta Gorda MPO throughout the LRTP documentation, the area is typically referenced as Charlotte County but includes the southwestern portion of DeSoto County located within the planning area boundary as well (see Figure 1-1).

transit, bicycle, and pedestrian projects through the year 2040. The improvements identified in this Plan will address future mobility needs and will enhance safety and security within the planning area boundary. **Figure 1-1** shows the CC-PG MPO's Planning Area.

2040 Plan Highlights

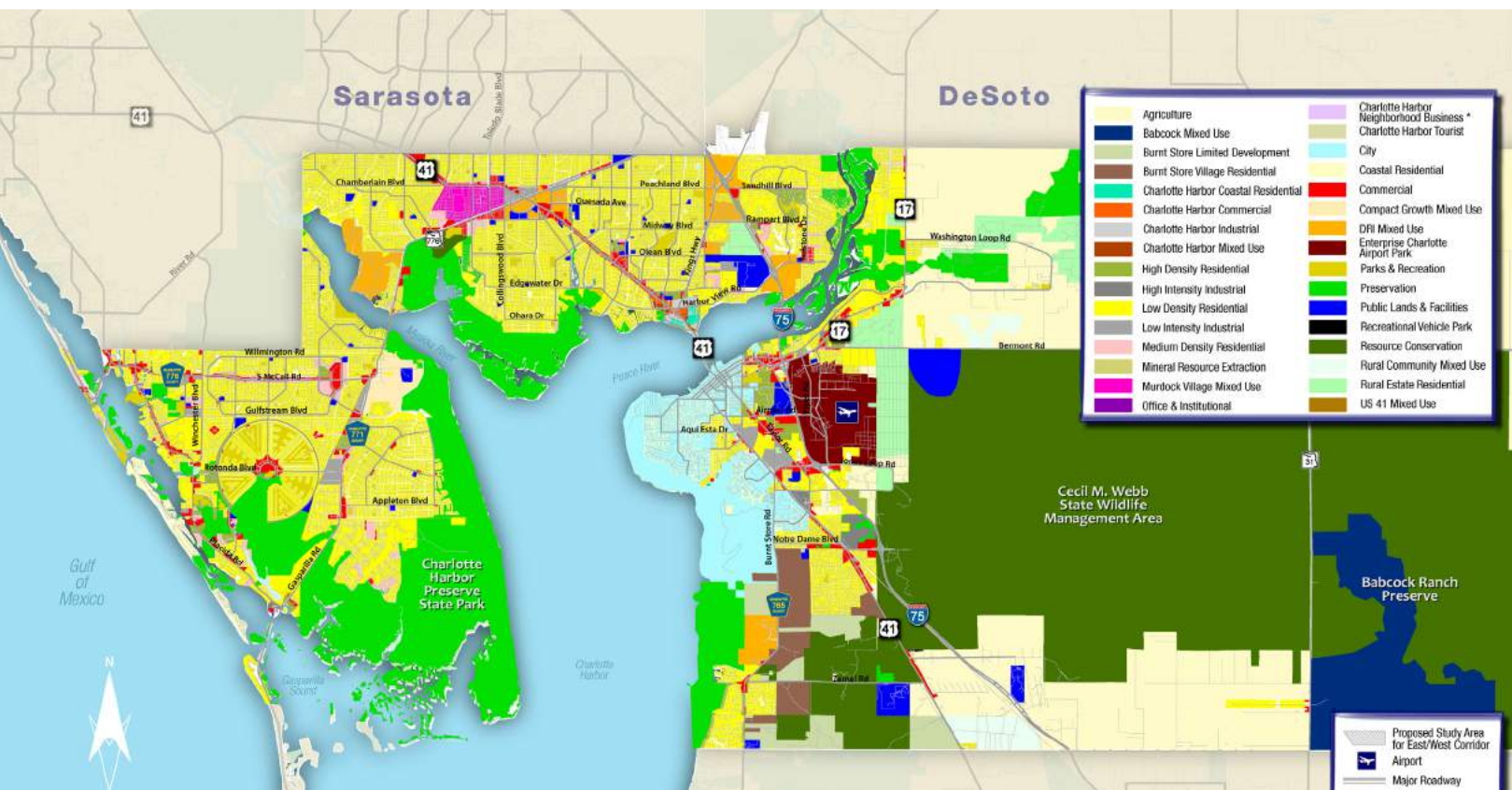
The LRTP sets forth a vision to address the transportation system needs through cost feasible improvements in Charlotte County over the next 25 years. The multimodal plan documented in this report outlines highways; public transportation (transit); and bicycle, pedestrian, and multi-use trail facilities.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

This 2040 LRTP represents a significant effort to address the long-term transportation needs of Charlotte County, Punta Gorda, and the southwest corner of DeSoto County.

Key highlights of this plan include:

- Focusing on other modes besides the personal automobile; this includes a significant investment in bicycle and pedestrian facilities in conjunction with road widening projects, multi-use trails facilities, and implementation of Fixed Route and Flex Route public transportation
- Improving safety and protecting community investment without widening roads
- Focusing on congestion management strategies along portions of US 41 and SR 776 so that congestion and safety are addressed through alternative measures other than widening roads
- Focusing on community character in the City of Punta Gorda by redesigning the two main corridors (Marion and Olympia Avenues) to be multimodal focused instead of automobile focused

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



- Addressing preservation of the transportation system through increased funding for road maintenance, beyond what is required by the Moving Ahead for Progress in the 21st Century Act (MAP-21) federal guidelines
- Continuing to build on regional connections by widening the final segment of Burnt Store Road connecting to Lee County, widening Kings Highway north of I-75 connecting to DeSoto County, and completing the widening of I-75 through central Charlotte County; the portion of US 41 in north Charlotte County connecting to Sarasota County is currently being widened

About this Document

The 2040 LRTP is organized into 11 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 Goals and Objectives of the Plan

This chapter presents the MPO's policy-related goals and objectives adopted by the MPO Board to guide the development process, and the measures of effectiveness that were used to determine if the objectives were achieved.

Chapter 3 Developing the Plan

This chapter presents the approach and planning assumptions used in the plan, including the anticipated population and employment growth.

Chapter 4 Public Involvement

This chapter outlines the public engagement process taken throughout the update of the 2040 LRTP.

Chapter 5 Costs and Revenues

This chapter describes the assumptions and anticipated funding amounts for the next 25 years from federal, state, and local sources. Cost assumptions for the improvement projects are also included.

Chapter 6 Defining the 2040 Needs Plan

This chapter outlines the Needs Plan for all modes from 2021-2040. 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 2020. The Needs Plan includes the roads (highway), public transportation (transit), and bicycle and pedestrian improvements identified as needed without financial constraints applied.

Chapter 7 Defining the 2040 Cost Feasible Plan

This chapter outlines the evaluation criteria and approach used by the CC-PG MPO to prioritize the Needs Plan projects and create a fiscally-constrained Cost Feasible Plan.

Chapter 8 Congestion Management

This chapter outlines the Congestion Management Process to improve traffic operations and safety through operational improvements or strategies that reduce travel demand.

Chapter 9 Other Transportation Program Elements

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 Efficient Transportation Decision Making (ETDM), and advancing technologies.

Chapter 10 Performance Evaluation

This chapter describes the performance of the 2040 Cost Feasible transportation network compared to the E+C Network.

Chapter 11 Plan Implementation

This chapter documents issues and activities the MPO may consider addressing in future planning efforts.

CHAPTER 2

Goals and Objectives of the Plan

CHAPTER 2: Goals and Objectives of the Plan

The foundation of the LRTP process began with developing the goals and objectives to guide the decisions and define how the county expects to grow and travel throughout implementation of the plan. The goals and objectives from the 2035 LRTP served as the basis for the 2040 Plan. However, they were refined to better address the changing needs of the community and to comply with the federal requirements, including MAP-21, and the Florida Transportation Plan (FTP). The goals also align with the local comprehensive plans.

On December 4, 2015, President Barack Obama signed the Fixing America's Surface Transportation (FAST) Act into law. This new federal transportation funding legislation took effect October 1, 2015. However, due to the timing of the law, this LRTP follows the provisions set forth in MAP-21 as described here.

Moving Ahead for Progress in the 21st Century Planning Factors

MAP-21 is the current federal transportation bill signed in July 2012. To comply with MAP-21, the goals and objectives set forth in the 2040 LRTP must address the following eight metropolitan planning factors:

1. Support the economic vitality of the United States, the States, Metropolitan areas, and non-metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency
2. Increase the safety of the transportation system for motorized and non-motorized users
3. Increase the security of the transportation system for motorized and non-motorized users
4. Increase accessibility and mobility of people and freight
5. 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. Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight
7. Promote efficient system management and operation
8. Emphasize the preservation of the existing transportation system

Florida Transportation Plan Goals

The 2040 LRTP is required by state statute to be consistent with the goals and objectives of the FTP. The goals of the 2060 FTP include:

- Invest in transportation systems to support a prosperous, globally competitive economy
- Make transportation decisions to support and enhance livable communities
- Make transportation decisions to promote responsible environmental stewardship
- Provide a safe and secure transportation system for all users
- Maintain and operate Florida's transportation system proactively
- Improve mobility and connectivity for people and freight

Charlotte County Comprehensive Plan

Smart Charlotte 2050, the county's current Comprehensive Plan, defines the following goals within the Transportation Element:

- **Effective Multimodal Transportation System:** Develop and provide a safe, efficient, environmentally sensitive, and integrated multimodal transportation system for the movement of people and goods in Charlotte County

- **Facilities Planning:** Plan a system with various facilities to achieve a safe, efficient, environmentally sensitive, and integrated multimodal transportation system for the movement of people and goods in Charlotte County
- **Public Transit System:** Achieve a high quality, low-cost public transit service that is safe, convenient and efficient for the transit-dependent residents of the County, as well as to improve the quality of life with an option to choose as one of the modes of transportation
- **Goods Movement and Services:** Ensure efficient and effective goods movement within the County using all modes by developing a well-connected intermodal transportation system
- **Infrastructure Management System:** Maintain management systems to ensure the safe operation of roadway, pavement, bridges, congestion, public transit, and inter-modal systems

City of Punta Gorda Comprehensive Plan

The City of Punta Gorda's Comprehensive Plan defines the following goals within the Transportation Element:

- The City of Punta Gorda will closely coordinate Transportation, Future Land Use Plans and Land Development in order to support a safe, convenient, energy efficient multi-modal transportation system
- The long-term end toward which the City's transportation programs and activities are directed is the provision of a safe, convenient, energy efficient multi-modal transportation system
- The City of Punta Gorda will integrate and coordinate its transportation plans and activities into the planning processes of the State of Florida, the Southwest Florida Regional Planning Council (RPC), the Metropolitan Planning Organization, and Charlotte County

Charlotte County-Punta Gorda MPO 2040 LRTP Goals and Objectives

Using the previous LRTP, federal, state, and local guidance described above, the 2040 LRTP goals and objectives were developed. It was important to the MPO Board that the goals be sound, succinct, and easy to read and

understand. Table 2-1 on the following page presents the 2040 LRTP goals and objectives adopted by the MPO Board on February 12, 2015 at the start of the plan development process.

VISION

The Charlotte County-Punta Gorda MPO will provide a transportation system that is affordable and efficient, supports multimodal choices that are safe and secure for all users, and enhances the quality of life for the county's residents.

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

Promote vibrant centers and the local economy

GOAL 5

Enhance safety and security for everyone

Table 2-1: 2040 LRTP Goals and Objectives and MAP-21 Planning Factors

		MAP-21 Planning Factors							
		Economic Vitality	Safety	Security	Accessibility/ Mobility	Quality of Life/ Environment	Connectivity between Modes	Efficient System Management	Preservation of the System
Goal 1: Ensure efficient travel for all modes of transportation									
1.1	Preserve the quality and integrity of the existing transportation system	✓	✓	✓	✓	✓		✓	✓
1.2	Promote use of Intelligent Transportation Systems (ITS) technologies to increase efficiency		✓	✓	✓	✓		✓	✓
1.3	Promote the reduction of vehicle miles traveled (VMT)		✓		✓	✓	✓	✓	✓
1.4	Maintain a minimum adopted level of service (LOS) D for arterials and collector roads	✓	✓	✓	✓	✓		✓	
1.5	Manage and maintain access to major roads and facilities	✓			✓	✓		✓	✓
1.6	Make transportation investments that improve travel time reliability for the transportation system	✓			✓	✓		✓	
Goal 2: Expand transportation choices for everyone									
2.1	Provide interconnected Complete Street network that accommodates all users, including bicyclists and pedestrians	✓	✓	✓	✓	✓	✓		
2.2	Implement the recommendations outlined in local Comprehensive Plans supporting a local and regionally connected bicycle, pedestrian, and greenway trail system	✓	✓		✓	✓	✓	✓	
2.3	Enhance connectivity to essential services for elderly populations, persons with disabilities, and the transportation disadvantaged		✓	✓	✓	✓	✓		
2.4	Enhance the transit system to meet the community's needs	✓	✓	✓	✓	✓	✓	✓	
2.5	Ensure that transit facilities are compliant with the American with Disabilities Act (ADA) and build transit stops that include seating, shelter, signage, trees/ landscaping, sidewalks, and bicycle storage, as feasible	✓	✓	✓	✓	✓	✓	✓	
2.6	Repurpose or preserve railroad corridors for multimodal uses other than automobile travel	✓			✓	✓	✓		✓

Table 2-1: 2040 LRTP Goals and Objectives and MAP-21 Planning Factors (cont.)

	MAP-21 Planning Factors							
	Economic Vitality	Safety	Security	Accessibility/ Mobility	Quality of Life/ Environment	Connectivity between Modes	Efficient System Management	Preservation of the System
Goal 3: Preserve natural spaces while promoting a healthy community								
3.1 Coordinate transportation and land use planning	✓			✓	✓		✓	✓
3.2 Implement transportation investments that support disadvantaged communities		✓		✓	✓			
3.3 Promote transportation investments that protect the existing natural resources, such as parks, preserves, and waterways	✓				✓			
3.4 Promote alternative means of transportation, such as fixed route transit and bicycle and pedestrian pathways, to improve air quality and reduce dependence on fossil fuels	✓	✓		✓	✓	✓	✓	
3.5 Limit new transportation projects to crossing the least environmentally sensitive lands	✓				✓		✓	
3.6 Consider aesthetic design elements in transportation improvements		✓	✓		✓			
Goal 4: Promote vibrant centers and the local economy								
4.1 Consider all existing and potential federal, state, private, and local revenue sources to develop a financially feasible multimodal transportation plan	✓			✓	✓	✓	✓	✓
4.2 Prioritize transportation projects that serve existing and future economic and activity centers that are proven to provide the greatest return on investment	✓			✓		✓	✓	✓
4.3 Encourage access to and from the Charlotte County Airport to other modes of transportation	✓	✓	✓	✓	✓	✓	✓	✓
4.4 Support the adopted levels of service standards of local and state governments	✓	✓			✓		✓	
4.5 Ensure that local/regional freight corridors are maintained to accommodate heavy vehicles and ample capacity for efficient freight movement	✓	✓	✓	✓		✓	✓	
4.6 Limit heavy freight vehicles to freight corridors	✓	✓	✓	✓		✓	✓	

Table 2-1: 2040 LRTP Goals and Objectives and MAP-21 Planning Factors (cont.)

		MAP-21 Planning Factors							
		Economic Vitality	Safety	Security	Accessibility/ Mobility	Quality of Life/ Environment	Connectivity between Modes	Efficient System Management	Preservation of the System
Goal 5: Enhance safety and security for everyone									
5.1	Invest in transportation improvements that reduce the rate, frequency, and severity of crashes	✓	✓	✓	✓	✓		✓	
5.2	Ensure system meets adopted safety and security standards		✓	✓	✓	✓		✓	✓
5.3	Maintain sufficient capacities and mitigate hazard impacts on key evacuation routes in preparation of hurricanes and other storm events	✓	✓	✓	✓			✓	✓
5.4	Utilize the MPO's Congestion Management Plan to improve safety through reliability and predictability on the transportation system	✓	✓	✓	✓			✓	
5.5	Encourage state and local governments to retrofit existing roads with bicycle and pedestrian facilities during the repairing and repaving process	✓	✓			✓	✓	✓	✓
5.6	Encourage state and local governments to include bicycle and pedestrian safety elements in their road design and construction	✓	✓			✓	✓	✓	

Project Prioritization

The established goals and objectives were used to create the project prioritization evaluation criteria used in addition to cost and revenue information to rank projects for inclusion in the Cost Feasible Plan.

Table 2-2 shows each prioritization criteria category with its weight and relevance to MAP-21. Results of the prioritization process is provided in **Chapter 10**. The following describes the evaluation criteria categories for the 2040 Plan.

Table 2-2: 2040 LRTP Project Prioritization Evaluation Criteria

Project Prioritization Evaluation Criteria	Weight	MAP-21 Planning Factors							
		Economic Vitality	Safety	Security	Accessibility/ Mobility	Quality of Life/ Environment	Connectivity between Modes	Efficient System Management	Preservation of the System
Existing volume to capacity ratio	15%	✓	✓		✓	✓	✓	✓	
Future volume to capacity ratio	10%	✓	✓		✓	✓	✓	✓	
Fatal flaw (significant environmental/ community impact)	10%					✓		✓	
Addresses FDOT's "Strategic Highway Safety Plan" emphasis areas	10%		✓	✓	✓	✓			
Roadway significance and access to major activity centers	10%		✓						
Provides bicycle, pedestrian, or public transportation improvement	8%	✓	✓		✓	✓	✓	✓	
Emergency Evacuation Route	8%		✓	✓				✓	
Public support for transportation improvement	5%	✓	✓	✓	✓	✓	✓	✓	✓
Project commitment	5%	✓						✓	
System preservation/maintenance of assets in place	5%	✓	✓			✓		✓	✓
Social-cultural effects/environmental justice	4%		✓		✓	✓	✓	✓	
ITS surveillance	3%		✓	✓	✓			✓	
Intermodal connectivity	3%	✓			✓		✓		
Hazard mitigation effectiveness	2%		✓	✓					
Truck Route	2%	✓			✓		✓		

Existing volume to capacity ratio

Score based on the number of vehicles (volume) that use the road today, compared to the number of cars the road can efficiently move or process (capacity).

Criterion Description	Score
Volume to capacity ratio < 0.90	1
Volume to capacity ratio 0.90 to 1.00	3
Volume to capacity ratio 1.00 to 1.20	6
Volume to capacity ratio > 1.20	10

Future volume to capacity ratio

Score based on the volume projected to use the road in 2040, compared to the capacity in the configuration it will be in 2040 (includes any projects to increase capacity).

Criterion Description	Score
Volume to capacity ratio < 0.90	1
Volume to capacity ratio 0.90 to 1.00	3
Volume to capacity ratio 1.00 to 1.20	6
Volume to capacity ratio > 1.20	10

Fatal flaw (significant environmental/community impact)

Score based on the project's anticipated impact to the environment or the community. If a project is expected to have significant impacts, the score is 0.

Criterion Description	Score
Significant adverse impact to the environment or capacity	1
Absence of significant adverse impact to the environment or capacity	10

Addresses FDOT's "Strategic Highway Safety Plan" emphasis areas

Score based on a project's location, specifically regarding whether or not the project is on a roadway with a high emphasis area crash rate.

Criterion Description	Score
Improvement on roadway w/out high emphasis area crash rate	0
Improvement on roadway with high emphasis area crash rate for one emphasis area	5
Improvement on roadway with high emphasis area crash rate for two or more emphasis areas	10

Roadway significance and access to major activity centers

Score based on a project's connection to an activity center. Providing a connection to an activity center within the county receives a high score, while connecting to activity centers outside of the county earns the highest score.

Criterion Description	Score
No direct connectivity between major centers of development in the county	0
Direct connectivity between major centers of development in the county	7
Direct connectivity between major centers of development in and outside the county	10

Provides bicycle, pedestrian, or public transportation improvement

Score based on whether the project provides improvements for bicycle, pedestrian, or transit use.

Criterion Description	Score
No bicycle or pedestrian improvement	0
Either bicycle or pedestrian improvement	5
Both bicycle and pedestrian improvement	7
Transit and pedestrian improvements	10

Emergency Evacuation Route

Score based on whether a project is on an evacuation route, and what classification the roadway is. Roads that process a higher number of people and are designated as evacuation routes receive higher points.

Criterion Description	Score
Not an evacuation route	0
Designated collector evacuation route	4
Designated arterial evacuation route	7
Designated interstate evacuation route	10

Public support for transportation improvement

Score based on support at Consensus Building Workshop.

Criterion Description	Score
Little or no public support at Workshop	0
Moderate public support at Workshop	5
Significant public support at Workshop	10

Project commitment

Score given to projects that have funding commitment in the Capital Improvement Plan (CIP) and/or TIP. The further along in the planning/design process, the higher the points.

Criterion Description	Score
Not programmed in CIP or TIP	0
PD&E, design and engineering, and/or route study programmed in CIP or TIP	5
Right-of-way acquisition and/or construction programmed in CIP or TIP	10

System preservation/maintenance of assets in place

Scores given to projects on roads needing to be resurfaced.

Criterion Description	Score
Project is not on a road identified as needing to be resurfaced in next 25 years	0
Project is on a roadway identified as needing to be resurfaced in next 15 years	5
Project is on a roadway identified as needing to be resurfaced in next 10 years	7
Project is on a roadway identified as needing to be resurfaced in next 5 years	10

Social/cultural effects/environmental justice

Score based on potential impact to an environmental justice area. Adding more lanes in an environmental justice area reduces the score for the road.

Criterion Description	Score
Exceeds 6 lanes in environmental justice area	0
Exceeds 4 lanes in environmental justice area	5
Does not impact environmental justice area	10

ITS surveillance

Score based on projects that implement Intelligent Transportation Systems (ITS) and whether or not the projects are on the Strategic Highway Network.

<u>Criterion Description</u>	<u>Score</u>
No ITS surveillance	0
ITS on non State Highway Network road	5
ITS on State Highway Network road	10

Intermodal connectivity

Score based on a project's ability to connect between modes (road, bicycle, pedestrian, transit), and higher scores given if more modes are connected.

<u>Criterion Description</u>	<u>Score</u>
Not designated as intermodal access route or transit corridor	0
Designated as an intermodal access route	5
Designated as a transit corridor	7
Designated as both an intermodal access route and transit corridor	10

Hazard mitigation effectiveness

Higher score for projects that provide an alternative route to roads identified as vulnerable that lack capacity. Lower scores given to projects that mitigate the present hazards through design elements.

<u>Criterion Description</u>	<u>Score</u>
Improvement to a road that is not vulnerable	0
Improvement to a road vulnerable to Cat 3 Hurricanes	3
Improvement to a road vulnerable to 100 yr flood events	5
Improvements to a road vulnerable to sea level rise	10

Truck Route

Score based on whether a project includes a facility designated as a truck route.

<u>Criterion Description</u>	<u>Score</u>
Non-truck route	0
Truck route	10

CHAPTER 3

Developing the Plan

CHAPTER 3: Developing the Plan

The LRTP was developed using a step-by-step process, as shown in **Figure 3-1**, beginning with defining the assumptions for the Plan to guide what is needed for transportation and mobility for the MPO's planning area through the year 2040. This includes identifying the goals and objectives of the Plan and estimating the population and employment anticipated by 2040.

Based on the population and employment forecasts, the transportation improvements needed to provide suitable mobility for residents and visitors throughout the county were identified. Due to the limited funding available, select projects were prioritized for having the highest impact to mobility within the constraints of the funding available.

Throughout the update, workshops were conducted to include the public and other transportation stakeholders in development of the plan. Further information on public involvement activities are summarized in **Chapter 4**.

The study team worked with the LRTP Subcommittee made up of select MPO advisory committee members, as well as MPO Staff to further ensure the plan development process reflects the needs and desires of the community and for technical guidance regarding coordination with Charlotte County and City of Punta Gorda plans and projects. The LRTP Subcommittee meetings were held September 16, 2014, December 18, 2014, March 25, 2015, and June 22, 2015.

Figure 3-1: Plan Development Process



Federal Requirements

As signed into law on July 6, 2012, MAP-21, a two-year surface transportation bill, replaced the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). MAP-21 emphasizes increased safety, infrastructure, system reliability, movement of people and freight, economic vitality, environment, and reduced project delivery delays for the metropolitan planning process.

The planning strategies provided in the law include:

- Support economic vitality of the metropolitan area to enable global competitiveness, productivity and efficiency
- Increase safety of the transportation system for motorized and non-motorized users
- Increase security of the transportation system for motorized and non-motorized users
- Increase accessibility and mobility of people and freight
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements

On December 4, 2015, President Barack Obama signed the FAST Act into law. This new federal transportation funding legislation took affect October 1, 2015. However, due to the timing of the law, this LRTP follows the provisions set forth in MAP-21 as described here.

and State and local planned growth and economic development patterns

- Enhance integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize preservation of the existing transportation system

To ensure the 2040 LRTP complies with federal regulations, the Plan must address the requirements outlined in MAP-21, as described in **Table 3-1**. **Table 3-2** outlines how the 2040 LRTP adheres to other Federal Regulations. **Table 3-3** describes how the 2040 LRTP adheres to the expectations of FHWA and the Federal Transit Administration (FTA).

Table 3-1: 2040 LRTP Compliance with MAP-21

Requirements in United States Code (MAP-21)		Where and How Addressed
A-1	Is the plan performance-driven and outcome-based, including to support national goals for the Federal-aid highway program (23 U.S.C. 150) and general purposes for public transportation systems (49 U.S.C. 5301)? 23 U.S.C 134(c)(1)&(h)(2)(A), 49 U.S.C. 5303(c)(1) &(h)(2)(A)	The plan performance is assessed through the use of performance measures that demonstrate how the LRTP performs over time from the base year through the 2040 Needs. Individual projects are measured for performance based on evaluation criteria. See Chapter 2 (Goals and Objectives; Evaluation Criteria) and Chapter 10 (Performance Evaluation).
A-2	Does the plan provide for the development and integrated management and operation of a transportation system and facilities (including accessible pedestrian and bicycle facilities) that will function as an intermodal transportation system for the MPO's metropolitan planning area and as an integral part of an intermodal transportation system for the State and the nation? 23 U.S.C 134(c)(2), 49 U.S.C. 5303(c)(2)	Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan) Transit and Bicycle and Pedestrian elements and Chapter 8 (Congestion Management) provide for an integrated intermodal system. In addition, road capacity projects take a complete streets approach where possible by including bicycle and pedestrian facilities with each project. Chapter 9 (Other Transportation Program Elements) includes Goods Movement.

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

Requirements in United States Code (MAP-21)		Where and How Addressed
A-3	Did the process for developing the plan consider all modes of transportation and is it a continuing, cooperative, and comprehensive process? 23 U.S.C. 134(c)(3), 49 U.S.C. 5303(c)(3)	Chapters 6 through 9 address all modes. Chapter 3 (Developing the Plan) describes the plan development process.
A-4	Did the MPO coordinate its plan with the plans of other MPOs for the same metropolitan (urbanized) area, including any transportation improvements/projects located within the boundaries of more than one MPO metropolitan planning area? 23 U.S.C. 134 (g)(1)&(2), 49 U.S.C. 5303(g)(1)&(2)	The MPO participated in the ongoing regional coordination process with the surrounding counties through FDOT District One Model coordination as well as the Coordinated Urban Transportation Studies process. See Chapter 3 (Developing the Plan).
A-5	Were other related planning activities within the metropolitan area considered in developing the plan (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements)? 23 U.S.C. 134(g)(3), 49 U.S.C., 5303(g)(3)	The 2040 LRTP integrated the Transit Development Plan, local land use and development plans, and economic development issues related to freight. See Chapters 3 (Developing the Plan) and 5 (Costs and Revenues).
A-6	Were the eight planning factors considered as they relate to a 20-year forecast period? 23 U.S.C. 134(h)(1)&(i)(2)(A)(ii), 49 U.S.C. 5303(h)(1)&(i)(2)(A)(ii)	The 8 planning factors are reflected in the adopted Goals & Objectives, as well as the prioritization criteria. See Chapter 2 (Goals and Objectives of the Plan).
A-7	Was the requirement to update the plan at least every five years met? 23 U.S.C. 134(i)(1)(B)(ii), 49 U.S.C. 5303(i)(1)(B)(ii)	The Plan was adopted on October 5, 2015.
A-8	Does the plan identify transportation facilities (including major roadways, transit, multimodal and intermodal facilities, non-motorized 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? 23 U.S.C. 134 (i)(2)(A)(i), 49 U.S.C. 5303(i)(2)(A)(i)	Multimodal options are addressed in Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan). In addition, the project prioritization process described in Chapters 2 (Goals and Objectives) and 10 (Performance Evaluation) emphasized regional roadways such as the Strategic Intermodal System (to move goods and people).
A-9	Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry them out, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan? Was this discussion developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies? 23 U.S.C. 134(i)(2)(D), 49 U.S.C. 5303(i)(2)(D)	Environmental mitigation activities and coordination are addressed in Chapter 9 (Other Transportation Program Elements).

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

Requirements in United States Code (MAP-21)		Where and How Addressed
A-10	<p>Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented, indicates public and private resources reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs?</p> <p>Does the financial plan include any additional projects for illustrative purposes?</p> <p>Did the MPO, the transit operator(s), and the State cooperatively develop estimates of funds that will be available to support plan implementation?</p> <p>23 U.S.C. 134 (i)(2)(E), 49 U.S.C. 5303(i)(2)(E)</p>	Available revenue projections from federal, state, local, and private sources is addressed in Chapter 5 (Costs and Revenues).
A-11	<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>23 U.S.C. 134 (i)(2)(F), 49 U.S.C. 5303(i)(2)(F)</p>	Operational and management strategies are addressed in Chapter 8 (Congestion Management).
A-12	<p>Does the plan include capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs?</p> <p>23 U.S.C. 134 (i)(2)(G), 49 U.S.C. 5303(i)(2)(G)</p>	Chapter 5 (Costs and Revenues) emphasizes preserving the existing system. Chapter 7 (Defining the 2040 Cost Feasible Plan) addresses the existing infrastructure with increased maintenance funds. Chapter 3 (Developing the Plan) describes the regional priorities and the measures of effectiveness, including system preservation.
A-13	<p>Does the plan include proposed transportation and transit enhancement activities?</p> <p>23 U.S.C. 134 (i)(2)(H), 49 U.S.C. 5303(i)(2)(H)</p>	Complete Streets are encouraged in the design of roadway capacity projects and identified in Chapter 7 (Defining the 2040 Cost Feasible Plan). The Congestion Management Process also includes enhancement strategies; see Chapter 8 (Congestion Management). Chapter 4 (Public Involvement) documents the type of enhancements that are important to the public and stakeholders.
A-14	<p>In developing the plan, did the MPO consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation?</p> <p>23 U.S.C. 134(i)(5), 49 U.S.C. 5303(i)(5)</p>	The MPO consulted with appropriate agencies, as described in Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement).

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

Requirements in United States Code (MAP-21)		Where and How Addressed
A-15	<p>Were citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian and bicycle facilities, representatives of the disabled, and other interested parties provided with a reasonable opportunity to comment on the plan?</p> <p>Was a participation plan developed in consultation with all interested parties? Did this plan provide that all interested parties have reasonable opportunities to comment on the contents of the plan?</p> <p>Did the MPO hold any public meetings at convenient and accessible locations and times, employ visualization techniques, and make public information available in electronically accessible formats and means?</p> <p>23 U.S.C. 134(i)(6), 49 U.S.C. 5303(i)(6)</p>	<p>All interested parties and those discussed in Chapter 4 (Public Involvement) and Appendix B were coordinated with and provided reasonable opportunity to comment. A Public Involvement Plan was created at the beginning of the update. Public comments were encouraged throughout the development of the plan. Public meetings were held during the day and in the evenings, and at multiple locations throughout the county to allow more opportunities for the public to attend. Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information regarding the LRTP was communicated.</p>
A-16	<p>Was the approved plan published or otherwise made readily available for public review including, to the maximum extent practicable, in electronically accessible formats and means?</p> <p>23 U.S.C. 134 (i)(7), 49 U.S.C. 5303(i)(7)</p>	<p>The approved plan was made available for review electronically and at locations around the county. Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information on the LRTP was communicated.</p>

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations

Requirements in Federal Regulations		Where and How Addressed
B-1	<p>Does the plan cover a 20-year horizon from the date of adoption?</p> <p>23 C.F.R. 450.322(a)</p>	<p>The Cost Feasible Plan's horizon year is 2040.</p>
B-2	<p>Does the plan include both long-range and short-range strategies/actions?</p> <p>23 C.F.R. 450.322(b)</p>	<p>Chapter 7 (Cost Feasible) shows projects organized by five-year increments beginning in 2019 through 2040.</p>
B-3	<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>23 C.F.R. 450.322(e)</p>	<p>The plan was developed using the new FDOT District One Regional Planning Model which included the most recent population, employment, land use, and travel/traffic estimates. See Chapter 3 (Developing the Plan).</p>
B-4	<p>Does the plan identify the projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan?</p> <p>23 C.F.R. 450.322(f)(1)</p>	<p>Transportation modeling was used to identify needs, which helped to develop the Cost Feasible Plan. See Chapter 3 (Developing the Plan). Goods movement was also considered in the prioritization of improvements as described in Chapter 9 (Other Transportation Program Elements) and Chapter 10 (Performance Evaluation).</p>

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations (cont.)

Requirements in Federal Regulations		Where and How Addressed
B-5	<p>Are the results of the congestion management process considered in the plan and how?</p> <p>23 C.F.R. 450.322(f)(4), see also 23 U.S.C. 134(k)(3)(A), 49 U.S.C. 5303(k)(3)(A)</p>	<p>A congestion management process was used to identify priority projects that are funded in the committed 5 year improvements. Chapter 7 (Defining the 2040 Cost Feasible Plan) identifies the top two congested corridors and the top 10 intersections with the highest number of crashes and Chapter 8 (Congestion Management) describes the congestion management process and how the crash analysis was conducted.</p>
B-6	<p>Does the plan describe proposed improvements in sufficient detail to develop cost estimates?</p> <p>23 C.F.R. 450.322(f)(6)</p>	<p>The improvements are described and summarized in the costing tool database provided by FDOT. See Chapters 5 (Costs and Revenues) and 7 (Defining the 2040 Cost Feasible Plan).</p>
B-7	<p>Does the plan identify pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g) and transportation and transit enhancement activities as appropriate?</p> <p>23 C.F.R. 450.322(f)(8)&(9)</p>	<p>Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan) Transit and Bicycle and Pedestrian elements 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>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. 450.322(f)(10)(i)</p>	<p>System level estimates and revenues are discussed in Chapter 5 (Costs and Revenues).</p>
B-9	<p>Are the plan's revenues and project costs reflected in year of expenditure dollars?</p> <p>23 C.F.R. 450.322(f)(10)(iv)</p>	<p>The revenues and costs are reflected in year of expenditure dollars. See Chapter 5 (Costs and Revenues), Chapter 6 (Defining the 2040 Needs Plan), and Chapter 7 (Defining the 2040 Cost Feasible Plan).</p>
B-10	<p>Was the plan developed in consultation, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation?</p> <p>Did the consultation involve, as appropriate, a comparison of transportation plans with State conservation plans or maps, or a comparison of transportation plans to inventories of natural or historic resources?</p> <p>23 C.F.R. 450.322(g)</p>	<p>All interested parties and those listed here were coordinated with and provided reasonable opportunity to comment. See Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement). Ongoing coordination with listed agencies is achieved through the ETDM process.</p>

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations (cont.)

Requirements in Federal Regulations		Where and How Addressed
B-11	Does the plan include a safety element consistent with the State's Strategic Highway Safety Plan, and (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security? 23 C.F.R. 450.322(h)	Safety and security, including hazard mitigation, are described in Chapter 9 (Other Transportation Program Elements).
B-12	Did the MPO use its participation plan developed under 23 C.F.R. 450.316(a) to provide a reasonable opportunity for interested parties to comment on the plan? 23 C.F.R. 450.322(i)	Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information regarding the LRTP was communicated.
B-13	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? 23 C.F.R. 450.316(a)(1)(vii)	An Environmental Justice was completed using Charlotte County data. Environmental Justice was a primary topic during the Round Two Community Workshops. See Chapter 9 (Other Transportation Program Elements) regarding the Environmental Justice analysis and Chapter 4 (Public Involvement) regarding responses to the Environmental Justice activity at the workshops.
B-14	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? 23 C.F.R. 450.316(a)(1)(vi)&(2)	Chapter 4 (Public Involvement) includes all comments received during the public events and meetings, as well as the public comment period; responses are provided where appropriate.
B-15	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? 23 C.F.R. 450.316(a)(1)(viii)	There were no significant changes between the draft plan and the final plan document.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations

Requirements in Federal Regulations		Where and How Addressed
D-1	Were the requirements for inclusion of projects in the MPO's transportation improvement program (TIP) considered when developing the LRTP?	The projects in the Transportation Improvement Program were considered in the phasing and funding of the Cost Feasible plan. See Chapter 7 (Defining the 2040 Cost Feasible Plan).

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations		Where and How Addressed
D-2	<p>Projects in the LRTP: Does the plan include:</p> <ul style="list-style-type: none"> Projected transportation demand in the planning area, Existing (E+C) and proposed transportation facilities that function as an integrated system, Operational and management strategies, Consideration of results of the Congestion Management Plan, Strategies to preserve existing and projected future transportation infrastructure, Pedestrian and bicycle facilities, and Transportation and transit enhancement activities? <p>Are projects that meet the definition of regionally significant in 23 CRF 450.104 included in the Cost Feasible LRTP?</p>	<p>Chapter 3 (Developing the Plan) describes projected demand and the E+C Network. Chapter 4 (Public Involvement) documents the type of enhancements that are important to the public and stakeholders. Bicycle and pedestrian projects are outlined as needs in Chapter 6 (Defining the 2040 Needs Plan) and funded projects in Chapter 7 (Defining the 2040 Cost Feasible Plan). Chapter 7 (Defining the 2040 Cost Feasible Plan) describes the O&M strategies and system preservation, Complete Streets encouraged in the design of roadway capacity projects, and regionally significant projects. Chapter 8 (Congestion Management) describes the Congestion Management Process and results and includes enhancement strategies. Chapters 2 (Goals and Objectives of the Plan) and 10 (Performance Evaluation) describe the project prioritization.</p>
D-3	<p>Grouped Projects in the LRTP: If non-regionally significant projects have been grouped in the LRTP, are the groups specific enough to determine consistency between the LRTP and the TIP? Are the grouped projects similar in function, work type, and/or geographic area?</p>	<p>Chapter 7 (Defining the 2040 Cost Feasible Plan) groups all Congestion Management projects without regard for timeframe; however identifies specific projects to implement as appropriate.</p>
D-4	<p>Fiscal Constraint/Operations and Maintenance: Does the LRTP provide system level cost estimates for O&M activities using each of the five-year cost bands or as a total estimate for the entire timeframe of the LRTP? Are O&M cost estimates included for state- and locally maintained facilities covered in the LRTP? Is the general source of funding for O&M activities identified? Is there a clear separation of costs for O&M activities and for capital investment projects?</p>	<p>O&M revenues and cost estimates are identified in Chapters 5 (Costs and Revenues) and 7 (Defining the 2040 Cost Feasible Plan).</p>
D-5	<p>Fiscal Constraint/Total Project Costs: For each capacity expansion and regionally significant project, are all phases described in sufficient detail to estimate and provide an estimated total project cost and explain how the project is expected to be implemented? For any projects that will go beyond the horizon year, does the LRTP explain what and when phases/work will be performed beyond the horizon year with costs estimated using year of expenditure methodologies?</p>	<p>Chapter 7 (Defining the 2040 Cost Feasible Plan) uses the FDOT District One costing tool and shows costs in five-year increments and by phase.</p>
D-6	<p>Fiscal Constraint/Cost Feasible Plan: Has an estimate of the cost and source of funding for each phase been provided for projects included in the CFP? (Phases are PD&E and Design or Preliminary Engineering, ROW, and Construction.) If boxed funds are utilized, are individual projects that will utilize them listed or described in bulk in the LRTP?</p>	<p>Chapter 7 (Defining the 2040 Cost Feasible Plan) uses the FDOT costing tool and shows costs in five-year increments and by phase; it also includes funding source. Congestion Management boxed funds can be applied through the menu of strategies, and project locations identified.</p>

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations		Where and How Addressed
D-7	Fiscal Constraint/New Revenue Sources: If any new revenue source is assumed as part of the CFP, is it clearly explained? Also, is the following covered: why the new revenue source is considered to be reasonably available, when it will be available, what actions would need to be taken for it to be available, and what would happen if it does not become available?	No new revenue sources are assumed.
D-8	Fiscal Constraint/Federal Revenue Sources: Are projects within the first 10 years planned to be implemented with federal funds notated or flagged? Beyond the first 10 years, is project funding clearly labeled as a combined Federal/State source in the CFP?	Project funding sources are indicated in Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-9	Full Time Span of the LRTP: As a planning document, does the LRTP show all the projects and project funding for the entire period covered by the LRTP (base year to horizon year)?	The 2040 LRTP includes projects from 2019 to 2040. See Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-10	Environmental Mitigation: For highway projects, does the LRTP include a discussion of types of potential environmental mitigation activities and opportunities at a system-wide level developed in consultation with Federal, State and tribal wildlife, land management, and regulatory agencies (beyond project-specific ETDM screenings)? Does the MPO maintain documentation of the consultation with the relevant agencies? Was there a need to state transit environmental benefits, such as reduction in single occupant vehicle trips and vehicle miles traveled, reduction in greenhouse gases, pedestrian and bicycle linkages and transit oriented/compact development, within the broad parameters in the LRTP? Are phases for transit capital projects listed in the LRTP?	Environmentally sensitive lands were taken in to consideration in this Plan and are described in Chapter 9 (Other Transportation Program Elements). The MPO may choose to enter projects into ETDM as the projects progress through the planning and implementation process. Transit environmental benefits were not discussed exclusively, but are included in the performance evaluation of the Cost Feasible Network as shown in Chapter 10 (Performance Evaluation). Transit capital project phases are shown in Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-11	LRTP Documentation/Final Board Approval: Was a substantial amount of the LRTP analysis and documentation completed at the time of MPO board adoption? Will all final documentation/ documents be posted online and available through the MPO office no later than 90 days after plan adoption?	The Board adopted the 2040 LRTP on October 5, 2015 after a substantial discussion and close of the public hearing. All final documentation will be posted online within 90 days after plan adoption.
D-12	Documented LRTP Modification Procedures: Does the MPO have procedures that document how modifications to the adopted LRTP are to be addressed? These procedures can be included as part of the LRTP, the public participation plan, or provided elsewhere as appropriate.	The MPO procedures that document the LRTP modification process are identified in the MPO's Public Participation Plan.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations		Where and How Addressed
Transit Projects and Studies		
D-13	Major Transit Capital Projects: In order to plan for a transit “New Start” in the LRTP, the MPO must assume it will be successful in competing for discretionary FTA New Starts program dollars. Grantees may be proposing use of a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan or other loan to help bridge the gap in capital financing for a New Start. With regard to planning of a major capital facility other than a New Start, the MPO must assume that FTA program funds such as “State of Good Repair” and “Bus and Bus Facilities” will be awarded to the transit system based on formula.	No New Starts projects are included in this plan.
D-14	Transit Facility: Transit facilities eligible for FTA 5307, 5309, 5337, and 5339 funds or FLEX funds from FHWA should be contained within the TIP and the STIP and be consistent with the LRTP. For example, consistent with the LRTP might mean a general statement, paragraph, line item or section on the specific facilities and their general location if known. Inclusion might also mention feasibility studies, preliminary engineering, appraisals, final design, property acquisition and relocation and NEPA documents, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds may require an LRTP amendment to show such funds in the constrained LRTP.	The plan does not anticipate flexing funds.
D-15	Transit Service Including Fixed Route Bus, Deviated Route, Para-transit, Enhanced or Express Bus: Specific new transit service proposed by a transit grantee for a new area or corridor should, at a minimum, be consistent with the LRTP. For example, that might mean a general statement, paragraph, line item or section on the specific service improvements to be undertaken (and the general location if known). Inclusion might also mention feasibility studies, operational plans, strategic plans, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds may require an LRTP amendment to show such funds.	Chapter 6 (Defining the 2040 Needs Plan) and Chapter 7 (Defining the 2040 Cost Feasible Plan) identify the future transit needs and projects via project lists and maps.
D-16	Transit Service Including BRT, LRT, HRT, CRT, Streetcar Through New Starts/Small Starts Program: Specific new fixed guideway transit service proposed by a transit grantee to serve a new area or corridor as part of the FTA New Starts/Small Starts or Core Capacity Program should, at a minimum, be consistent with the LRTP. As such service may be a large capital expenditure, the project, termini, and cost would need to be specified in the constrained LRTP. Inclusion might also mention feasibility studies, NEPA studies, preliminary engineering and final design, right of way acquisition, operational plans, modeling improvements, strategic plans, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds would require an LRTP amendment to show such funds in the constrained LRTP.	Not applicable.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations	Where and How Addressed
Emerging Issues – Not Current Required/New Requirements May Have Short Timeframe for Compliance	
<p>Safety and Transit Asset Management: MAP-21 includes significant additions to safety planning and transit asset management on the part of transit grantees and the States.</p>	<p>Transportation safety and security are discussed in Chapter 9 (Other Transportation Program Elements).</p>
<p>Performance Measurement: MPOs are encouraged to consider ways to incorporate performance measures/metrics for systemwide operation as well as more localized measures/metrics in their LRTPs. Measures to assess the plan's effectiveness in increasing transportation system performance will be needed. State and MPO target setting will follow establishment of performance measures under MAP-21 by USDOT.</p> <p>Related but not yet codified provisions in MAP-21:</p> <p>Each MPO shall establish performance targets that address the performance measures described in 23 U.S.C. 150(c), where applicable, to use in tracking progress towards attainment of critical outcomes for the region of the MPO. [23 U.S.C. 134(h)(2)(B)(i)(I), 49 U.S.C. 5303(h)(2)(B)(i)(I)]</p> <p>Selection of performance targets by an MPO shall be coordinated with the State to ensure consistency, to the maximum extent practicable. [23 U.S.C. 134(h)(2)(B)(i)(II), 49 U.S.C. 5303(h)(2)(B)(i)(II)] Selection of performance targets by an MPO shall be coordinated, to the maximum extent practicable, with providers of public transportation to ensure consistency with 49 U.S.C. 5326(c) and 5329(d). [23 U.S.C. 134(h)(2)(B)(ii), 49 U.S.C. 5303(h)(2)(B)(ii)]</p> <p>Each MPO shall establish performance targets under 23 U.S.C. 134(h)(2)(B) and 49 U.S.C. 5303(h)(2)(B) not later than 180 days after the date on which the State or provider of public transportation establishes performance targets. [23 U.S.C. 134(h)(2)(C), 49 U.S.C. 5303(h)(2)(C)]</p> <p>An MPO shall 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 plans developed by providers of public transportation, required as part of a performance-based program. [23 U.S.C. 134(h)(2)(D), 49 U.S.C. 5303(h)(2)(D)]</p> <p>In the transportation plan for the MPO's metropolitan planning area, describe the performance measures and performance targets used in assessing the performance of the transportation system and include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets. [23 U.S.C. 134 (i)(2)(B)&(C), 49 U.S.C. 5303(i)(2)(B)&(C)]</p>	<p>The Plan considers performance standards of level of service on the roadway network, as outlined by the local governments. No performance targets have been established at the time of this plan's adoption. Chapter 2 (Goals and Objectives), Chapter 7 (Cost Feasible), and Chapter 10 (Performance Evaluation) all describe performance measures, the evaluation criteria, individual project performance, as well as system-wide performance.</p>

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations	Where and How Addressed
Freight: Careful consideration should be given on how to address the eight planning factors (see Table 3-1 , Question A-6). Special emphasis should be given to the freight factor as it is anticipated to play a more prominent role in future planning requirements.	The eight planning factors are outlined in Chapter 2 (Goals and Objectives of the Plan).
Sustainable Transportation and Context Sensitive Solutions: MPOs are encouraged to identify and suggest contextual solutions for appropriate transportation corridors and promote livability.	Stakeholder workshops, as described in Chapter 4 (Public Involvement), discussed sustainable transportation and context sensitive solutions.
Proactive Improvements – Not Currently Required/Positive Strides in Long Range Planning	
Linking Planning and NEPA: MPOs should strongly consider including purpose and need statements for regionally significant projects in their LRTP cost feasible plans.	Noted.
Climate Change: MPOs may wish to consider climate change and strategies which minimize impacts to the transportation system. State legislation encourages MPOs to consider strategies that integrate transportation and land use planning in their LRTPs to provide for sustainable development and reduce greenhouse gas emissions, as well as include energy considerations in all state, regional, and local planning	Chapter 9 (Other Transportation Program Elements) includes information on Hazard Mitigation and other impacts of climate change.
Scenario Planning: If an MPO elects to do scenario planning as part of development of its LRTP, it is encouraged to consider a number of factors including potential regional investment strategies, assumed distribution of population and employment, a scenario that maintains baseline conditions for identified performance measures, revenue constrained scenarios, and estimated costs and potential revenue available to support each scenario. Related but not yet codified provisions in MAP-21: An MPO may voluntarily elect to develop and evaluate multiple scenarios for consideration as part of development of its transportation plan. [23 U.S.C. 134(i)(4), 49 U.S.C. 5303(i)(4)] For an MPO that voluntarily elects to develop multiple scenarios, its system performance report and subsequent updates are to include an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets. [23 U.S.C. 134(i)(2)(C)(ii), 49 U.S.C. 5303(i)(2)(C)(ii)]	Noted.

State Requirements

The FDOT Office of Policy Planning’s MPO Program Management Handbook provides guidance on state and federal legislation, how MPOs are formed and how membership is apportioned, how transportation planning boundaries are designated, and requirements for cooperation between FDOT and the MPOs. The CC-PG MPO 2040 LRTP was developed consistent with the guidance in this handbook.

Additional state requirements for public involvement mandate that citizens, agencies, and other interested parties be given opportunity to comment during development of the MPO’s plans, including the LRTP; and that all governmental proceedings are open to the public and adequately noticed, referred to as Sunshine Law. All public engagement during the 2040 LRTP update was conducted in accordance with this statute. **Table 3-4** describes how the 2040 LRTP adheres to state requirements. **Table 3-5** describes how the 2040 LRTP adheres to the MPOAC Financial Guidelines.

Table 3-4: 2040 LRTP Compliance with State Requirements

State Statutory Requirements Not Otherwise Addressed in Federal Code or Regulation		Where and How Addressed
C-1	Are the prevailing principles in ss. 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? Subsection 339.175(1), (5)&(7), F.S.	Chapter 2 (Goals and Objectives of the Plan) describes the goals including travel choices, mobility, improving the economy, and preservation of the system; this chapter also describes the measures of effectiveness, including system preservation. Chapter 5 (Costs and Revenues) emphasizes preserving the existing system through funding.
C-2	Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities? Subsection 339.175(1)&(7)(a), F.S.	There is major emphasis placed on Strategic Intermodal System facilities such as I-75 and US 17, and other state roadways including US 41 and SR 776. See Chapter 7 (Defining the 2040 Cost Feasible Plan).
C-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? Subsection 339.175(5)&(7), F.S.	Chapter 2 (Goals and Objectives of the Plan) describes relevance to local government comprehensive plans.
C-4	Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions? Subsection 339.175(1) & (7) F.S.	The plan uses the adopted growth plans of local governments which emphasize urban infill and mixed use development. See Chapter 3 (Developing the Plan) for the Population and Employment projections.
C-5	Were the goals and objectives identified in the Florida Transportation Plan considered? Subsection 339.175(7)(a), F.S.	The goals and objectives in the FTP were considered. See Chapter 2 (Goals and Objectives of the Plan).

Table 3-4: 2040 LRTP Compliance with State Requirements (cont.)

State Statutory Requirements Not Otherwise Addressed in Federal Code or Regulation		Where and How Addressed
C-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? Subsection 339.175(7)(c), F.S.	Chapter 7 (Defining the 2040 Cost Feasible Plan) outlines investments in Congestion Management projects and road and highway maintenance. Chapter 8 (Congestion Management) describes the Congestion Management Process in greater detail, and Chapter 9 (Other Transportation Program Elements) describes other pertinent transportation program elements.
C-7	Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present? Subsection 339.175(13) F.S.	The CC-PG MPO adopted the LRTP by roll call vote on October 5, 2015.

Table 3-5: 2040 LRTP Compliance with MPOAC Financial Guidelines

MPOAC Financial Guidelines for MPO 2040 LRTPs (January 2013)		Where and How Addressed
Guidelines for Defining and Reporting Needs		
E-1	Does the plan include a cost estimate of needs in base year dollars and report estimated needs by mode? Does the needs estimate include all costs associated with all modes?	See Chapters 5 (Costs and Revenues), 6 (Defining the 2040 Needs Plan), and 7 (Defining the 2040 Cost Feasible Plan) for the cost estimates.
E-2	Does the plan include only transportation projects that are necessary to meet identified future transportation demand or advance the goals, objectives, and policies of the MPO, the region, and the State?	The plan is intended to be realistic and addresses the future needs.
E-3	Does the plan exclude projects that are extremely unlikely to be implemented and unnecessarily inflate the estimated transportation needs in the metropolitan area?	The evaluation criteria ensured that projects with fatal flaws were not carried forward. See Chapters 2 (Goals and Objectives of the Plan) and 10 (Performance Evaluation).
E-4	Does the plan include an estimate of unfunded project costs in base year dollars?	Chapter 6 (Defining the 2040 Needs Plan) includes the estimate of unfunded projects. Chapter 7 (Defining the 2040 Cost Feasible Plan) lists the unfunded needs projects.
E-5	Is reasonably available revenue reported in year of expenditure (YOE) dollars?	Chapter 5 (Costs and Revenue) discusses the revenues reported in YOE dollars.
E-6	Is an estimate of the cost of all projects and all phases, regardless of mode, included in the cost feasible plan?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes all project costs.
E-7	Are the costs of operating and maintaining the existing and future transportation system clearly stated in the cost feasible plan?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes operational and maintenance costs.
E-8	Did the MPO include full financial information for all years covered by the LRTP, including information from its transportation improvement program?	Chapter 5 (Costs and Revenue) discusses all financial assumptions for the Plan.

Table 3-5: 2040 LRTP Compliance with MPOAC Financial Guidelines (cont.)

MPOAC Financial Guidelines for MPO 2040 LRTPs (January 2013)		Where and How Addressed
Guidelines for Defining and Reporting Needs		
E-9	Did the MPO use State FY 2013/2014 as the base year and State FY 2039/2040 as the horizon year for its plan (for financial reporting purposes)?	The base year for the plan is FY 2014. The horizon year for the Plan is 2040.
E-10	Has the MPO presented revenue estimates and project costs using five-year periods to the year 2030 and a 10- year period for the remaining years of the plan (2031- 2040)?	Chapter 5 (Costs and Revenue) discusses all financial assumptions for the Plan. Project costs are broken down by periods.
E-11	Has the MPO included FDOT's revenue estimates for operating and maintaining the State Highway System at the district level in its plan documentation?	Revenue estimates were provided by FDOT as discussed in Chapter 5 (Costs and Revenue).
E-12	Does the plan adjust project cost estimates expressed in Present Day Cost dollars to YOE using FDOT inflation factors? If alternative inflation factors were used, has an explanation of assumptions used to develop them been provided?	Chapter 5 (Costs and Revenue) includes the inflation factors used to calculate costs and revenues.
E-13	Does the plan incorporate 2040 SIS Cost Feasible Plan projects as provided by FDOT?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes projects in the 2040 SIS Cost Feasible Plan.

Key Planning Tools and Assumptions

Planning Tools

The FDOT District One Regional Planning Model was used to forecast the travel patterns and identify roads that are expected to be deficient in 2040 with and without the proposed projects in place. Geographic Information Systems (GIS) was used to create maps displaying the results in a format fit for general understanding.



Downtown Punta Gorda

Transportation and Land Use

The 2040 LRTP update included an analysis of existing land uses, build out densities and intensities, and developable vacant land by land use plan code to develop the socioeconomic dataset used to forecast travel patterns in the future. Additionally, this analysis considered the impact of approved Developments of Regional Impact (DRIs) and other major developments, as well as future population and employment projections provided by Charlotte County.

Transportation Networks

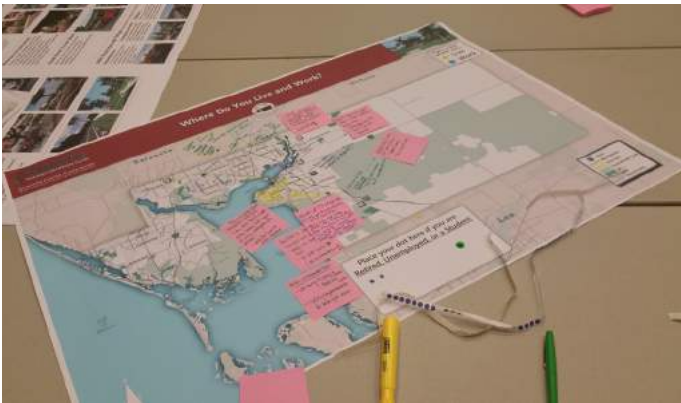
Development of the 2040 Cost Feasible Plan Network reflects various iterations and refinements of the network alternatives and the final adopted 2040 Cost Feasible Plan Network. While a Needs Plan alternative was not tested, the following alternatives were developed and evaluated using the Regional Planning Model:

- Base Year (2010) Network
- E+C (2020) Network
- Five 2040 Cost Feasible Plan Network Alternatives
- Adopted 2040 Cost Feasible Plan Network

Projects included in each model run and the resulting deficient roads are included in **Appendix C**. More information about the Needs Plan and Cost Feasible Plan is provided in **Chapters 6** and **7**, respectively.

Public Involvement

The future networks were developed cooperatively with guidance from the LRTP Subcommittee, TAC, CAC, and MPO Board. In addition, several community workshops, consensus building workshops, and stakeholder interviews were held to obtain input from citizens of Charlotte County throughout the plan development process. The public participation process is summarized in **Chapter 4**.



Public Comments from Round One Community Workshops

Costs and Revenues

Significant efforts were devoted to the development of standard and reasonable assumptions for the projections of costs and revenues. FDOT provided the 2015 Long Range Estimating (LRE) Costing Tool to calculate the roadway costs for right-of-way, design, construction, and unique costs through calculations based on length, total lane miles, added lane miles, or percent of another cost (such as percent of construction cost).

The Costing Tool also accommodates alternative costing methods such as the use of manual costs. Costs were prepared for the following elements of the LRTP:

- Highways
- Public transportation
- Bicycle and pedestrian facilities
- Multi-use trail facilities
- ITS
- Intersection improvements
- Transportation Demand Management (TDM)
- Advance right-of-way acquisition

More information on unit cost assumptions and non roadway costs is provided in **Chapter 5**.

Revenues were developed through a collaborative effort between Charlotte County, the City of Punta Gorda, and FDOT District One. Revenues are discussed in **Chapter 5**.

Population and Employment Growth

One element that drives the need for regular updates to the LRTP is the change and shift in demographic and socioeconomic trends. This refers to the number of residents and employees in the county, where they will live and work, and their social and economic factors that affect how and when they travel.

Historic Development Patterns

Charlotte County is approximately 700 square miles in size with one municipality, Punta Gorda. The City is located on US 41 on the eastern shore of Charlotte Harbor and was originally a stop for the first passenger train of the Florida Southern Railroad. In the 1890s, Punta Gorda became a key port for the shipment of cattle to Cuba. The first bridge across the Peace River was built in 1921, allowing the Florida land boom of the 1920's to reach Charlotte County.

2040 Transportation Plan

Charlotte County-Punta Gorda MPO

Two significant natural disasters helped to shape the city. The first was a fire in 1905 that destroyed the city's downtown. The second was Hurricane Charley in 2004, which caused vast amounts of damage to the county. Fortunately, the City of Punta Gorda had a strong revitalization plan in place that transformed the city with restorations and new buildings and amenities, all built to hurricane resistant building codes.

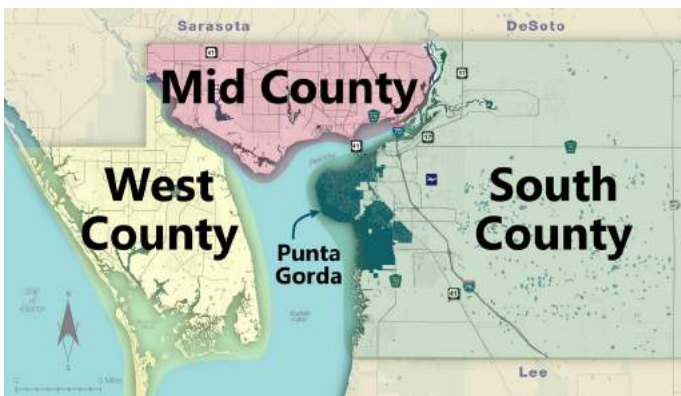


US 41 Bridge over Charlotte Harbor

Growth Trends

The county is naturally split into three areas: West County, Mid County, and South County, as shown in Figure 3-2. West County includes the Cape Haze Peninsula and lies west of the Myakka River. Mid County consists of Murdock Village/Port Charlotte, and lies between the Myakka River and Peace River. South County includes Punta Gorda and the portion of the county east and south of the Peace River.

Figure 3-2: Charlotte County Areas



Punta Gorda is currently the only municipality in the county. Most new non-residential development is concentrated along the US 41 corridor or near the airport. Murdock Village is located at the crossroads of SR 776 and US 41 and has the potential to become another major destination within the county.

Future Land Use and Transportation Coordination

The future land use, as defined by the Charlotte County Comprehensive Plan is a primary tool used to determine where growth will occur in the future. Each future land use category has maximum allowable residential densities and non-residential intensities associated to ensure natural resource preservation while optimizing social infrastructure enhancements, including transportation.

The future land use plan was used in the development of the socioeconomic data as follows:

- Determination of maximum allowable units to be added to an area
- Identification of physical constraints imposed by coastal zones and coastal hazard areas
- Guidance of new growth towards existing urban areas that can accommodate growth and to vacant lands in the vicinity of urban areas

The adopted Future Land Use Map used to develop the socioeconomic data projections for this LRTP is shown in Figure 3-3.

Population and Employment Forecasts

Past trends and future outlook are used to determine the expected impact to the transportation system through 2040 based on the anticipated shift in demographics. Development of the socioeconomic data guiding the 2040 LRTP involved the following steps:

1. Developing countywide control (grand) totals for population, employment, school enrollment, and

hotels/motel based on projections calculated by the University of Florida's Bureau of Economic and Business Research (BEBR)

2. Allocating approved development to the appropriate areas using the County's database and GIS software
3. Calculating vacant developable land in the CC-PG MPO planning area
4. Allocating growth to the appropriate zones or areas around the county using GIS

Most of Charlotte County's population growth is expected to occur in existing or redeveloped neighborhoods, such as Murdock Village in Mid County or within the City of Punta Gorda. The exception to this is the planned Babcock Ranch community in southeast Charlotte County. By 2040, this new community is expected to house more than 26,000 people and support more than 2,300 workers when it is completely built and settled.

Table 3-6 on the following page summarizes the forecasted future population and employment within the designated planning area. The current and future land uses, population, and employment, in addition to planned development, represent the basis for this forecast. The allocation of growth to different areas was based on modeling efforts, public involvement, and consultation with Charlotte County and City of Punta Gorda staff.

Future population and employment projections show a decrease as compared to the 2035 LRTP due to the change in growth patterns in the last decade. The 2035 LRTP forecasted population was expected to be more than 260,000. The revised growth rate for the 2040 LRTP forecasts the population to be 207,000 in 2040. While growth is still expected, the rate of growth is lower.

The socioeconomic data forecast results are illustrated in Figures 3-4 through 3-9. Appendix A describes methodology for developing the socioeconomic data.

Figure 3-3: Charlotte County Future Land Use

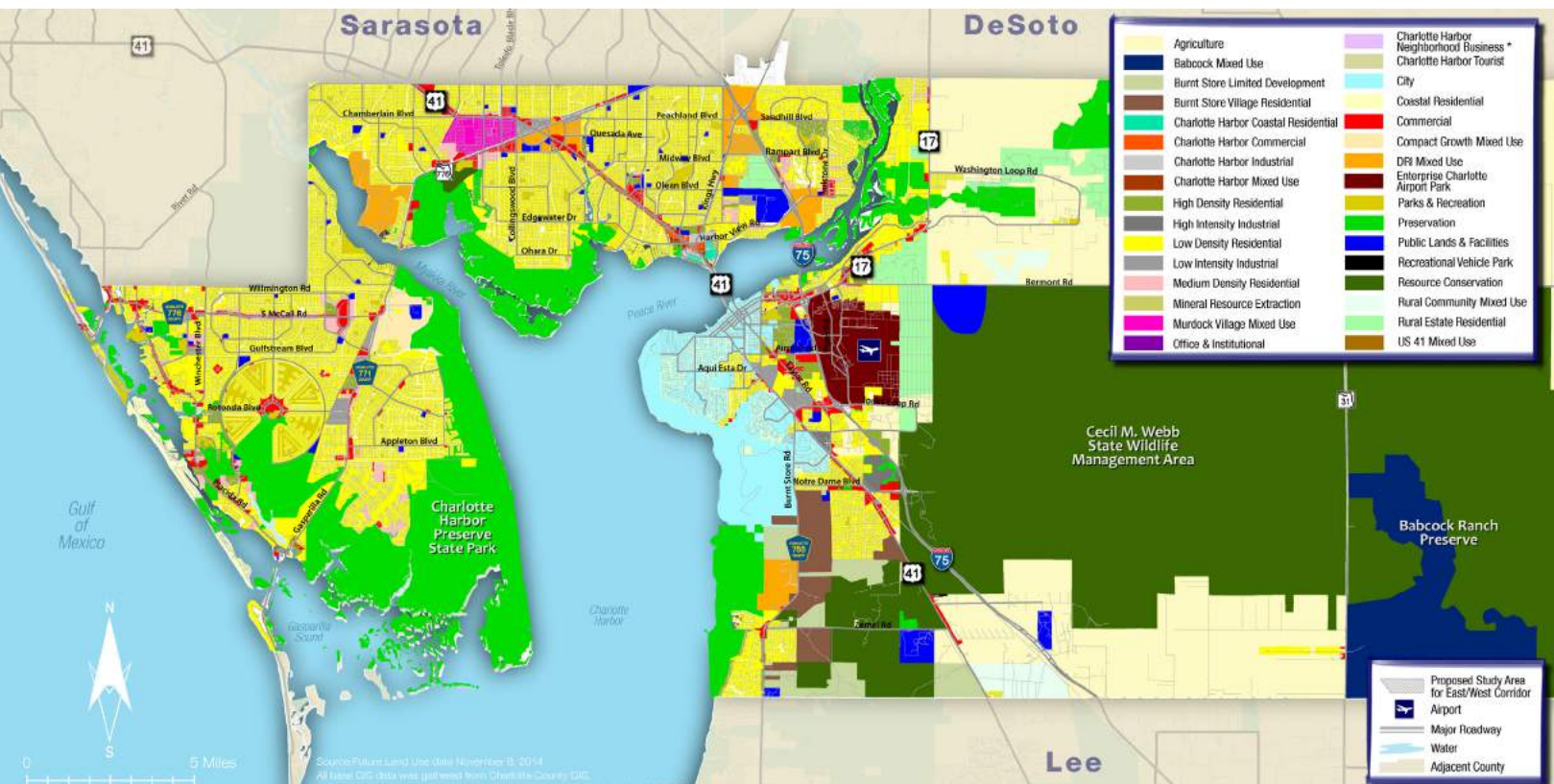


Table 3-6: Population and Employment for Charlotte County

Year	Total Population	Dwelling Units	Total Employment	Industrial	Commercial	Service
2010	156,600	96,841	64,797	7,594	17,598	39,605
2035*	261,578		109,234			
2040	207,214	125,683	84,387	10,110	20,814	53,463
Growth 2010-2040	50,614	28,842	19,590	2,516	3,216	13,858
% Growth 2010-2040	32%	30%	30%	33%	18%	35%

* Projections from 2035 LRTP
Source: Bureau of Economic and Business Research (BEBR), Medium Projection (2040 forecasts)

Figure 3-4: Charlotte County 2010 Population

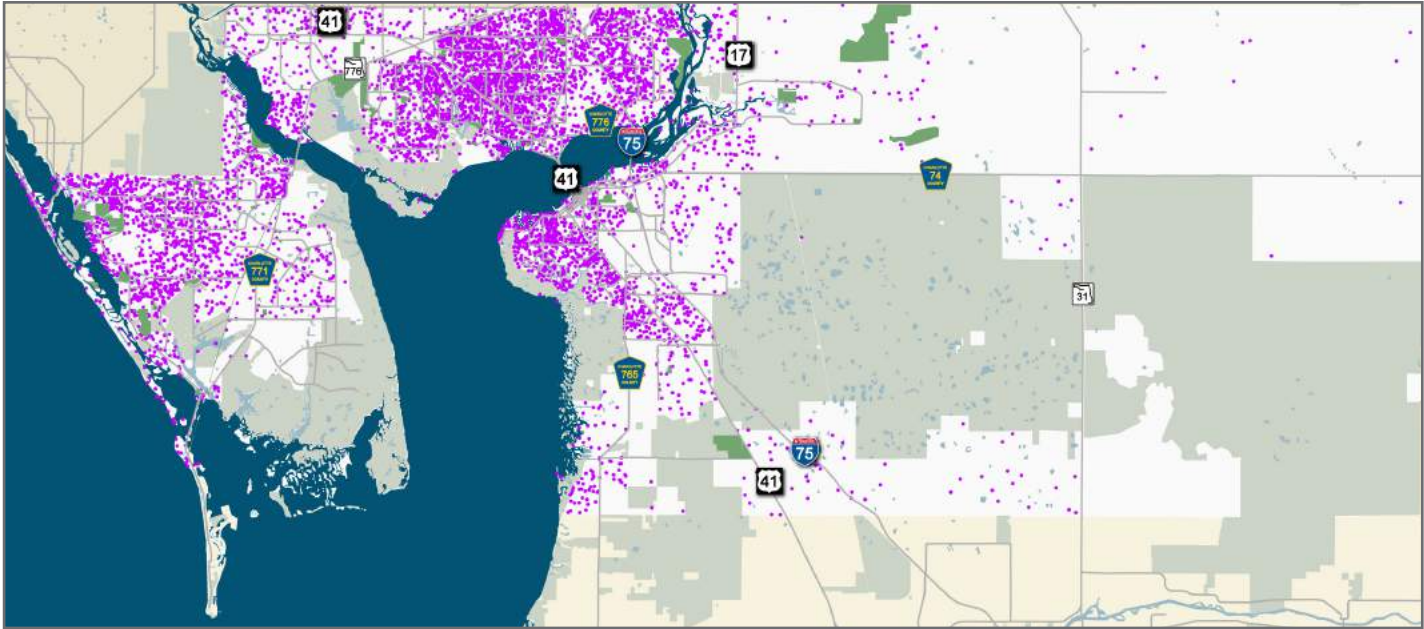


Figure 3-5: Charlotte County 2040 Population

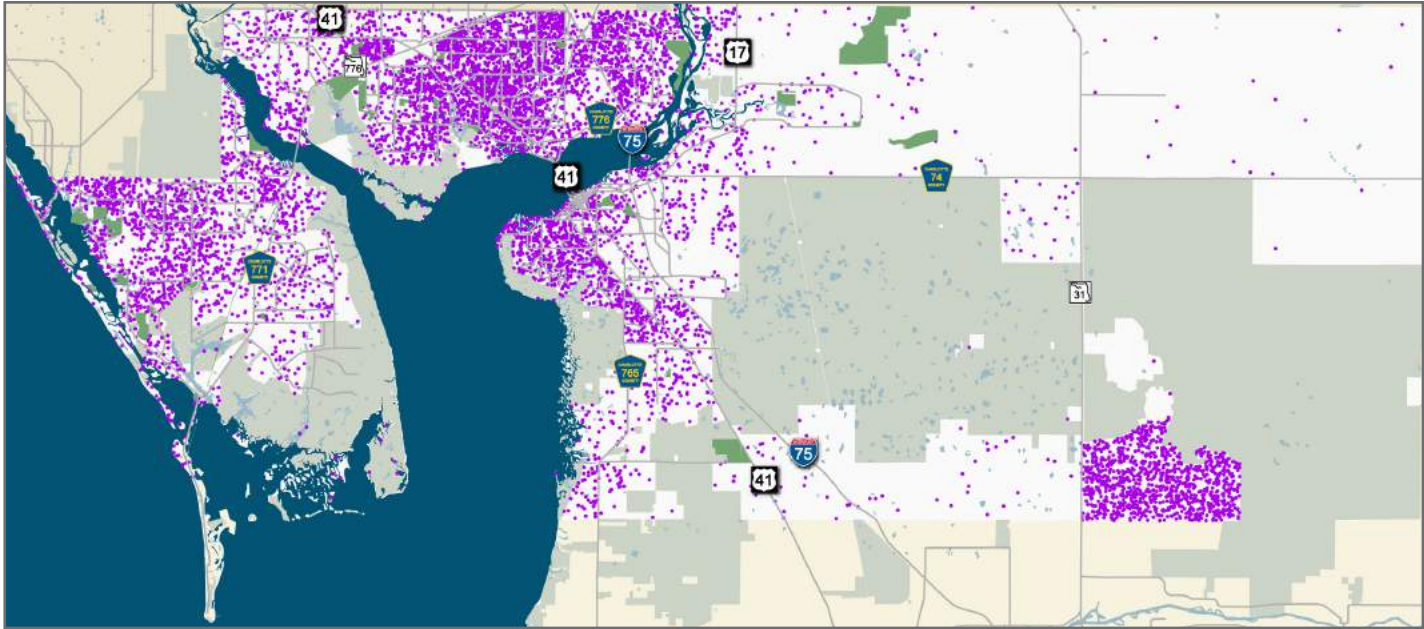
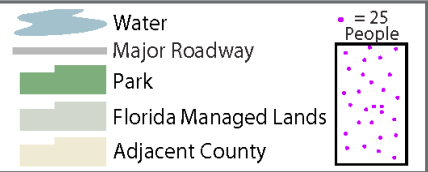
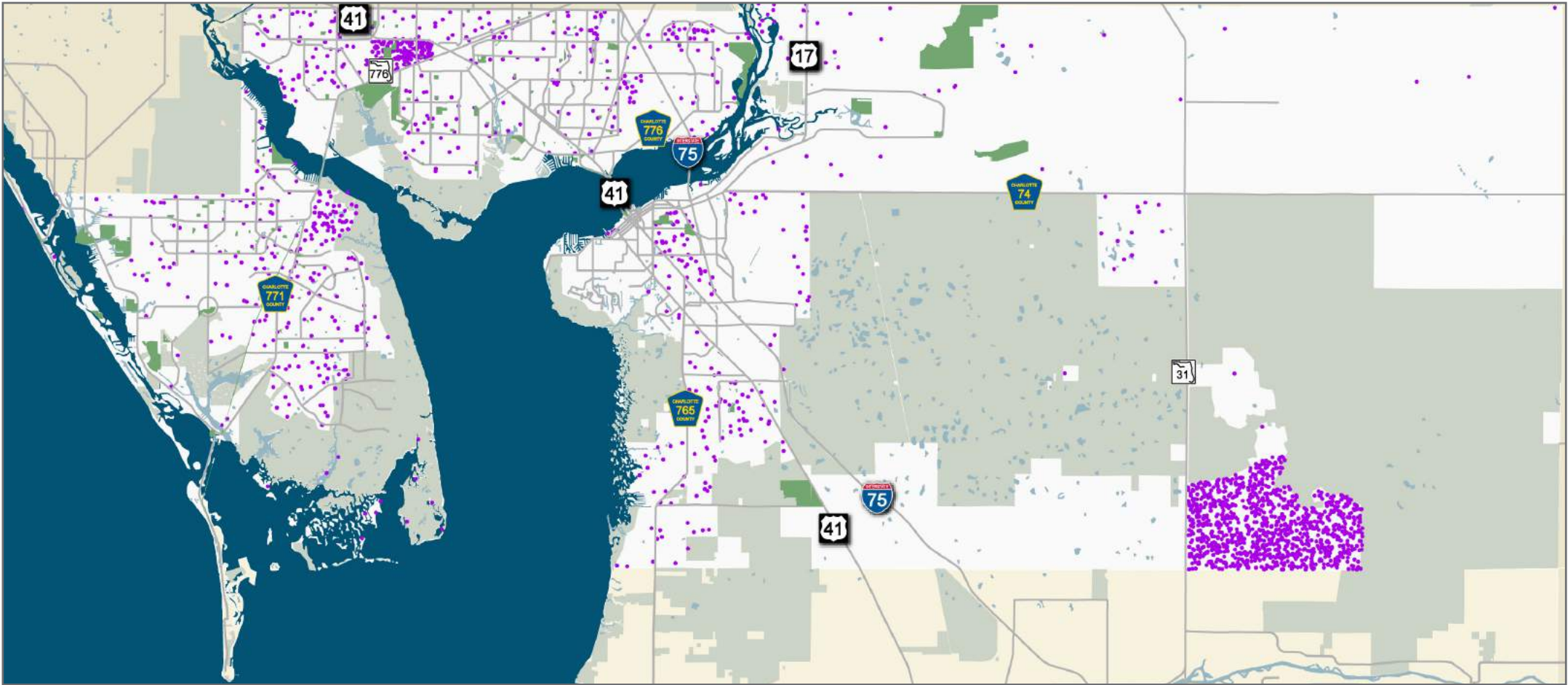


Figure 3-6: Charlotte County Change in Population (2010-2040)



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Figure 3-7: Charlotte County 2010 Employment

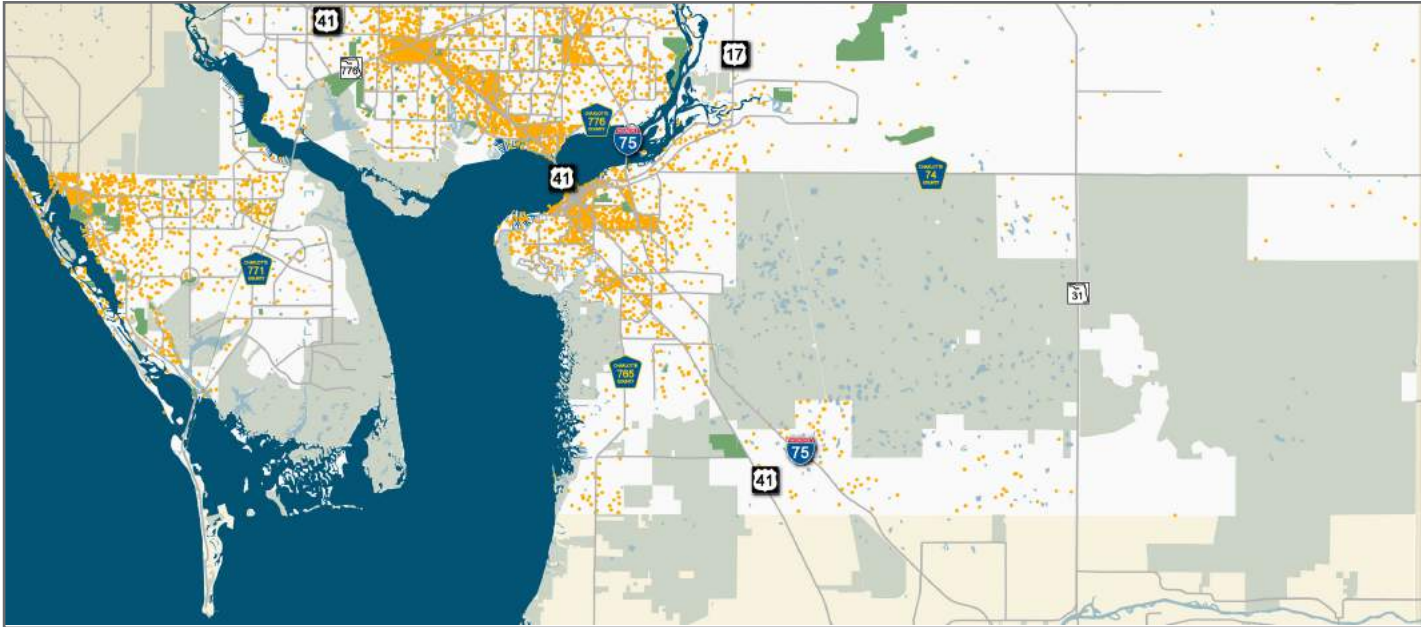


Figure 3-8: Charlotte County 2040 Employment

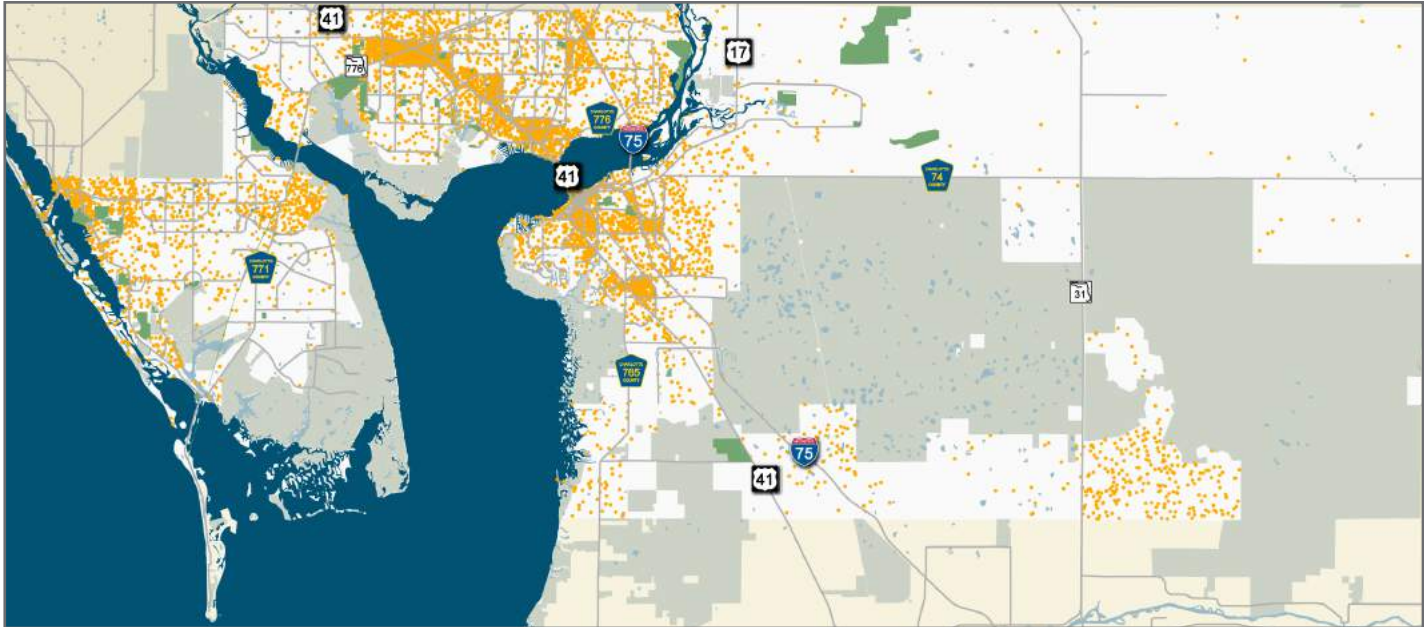
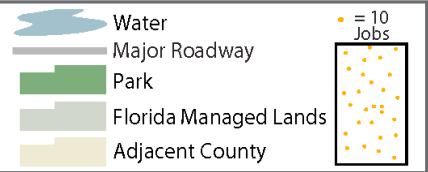
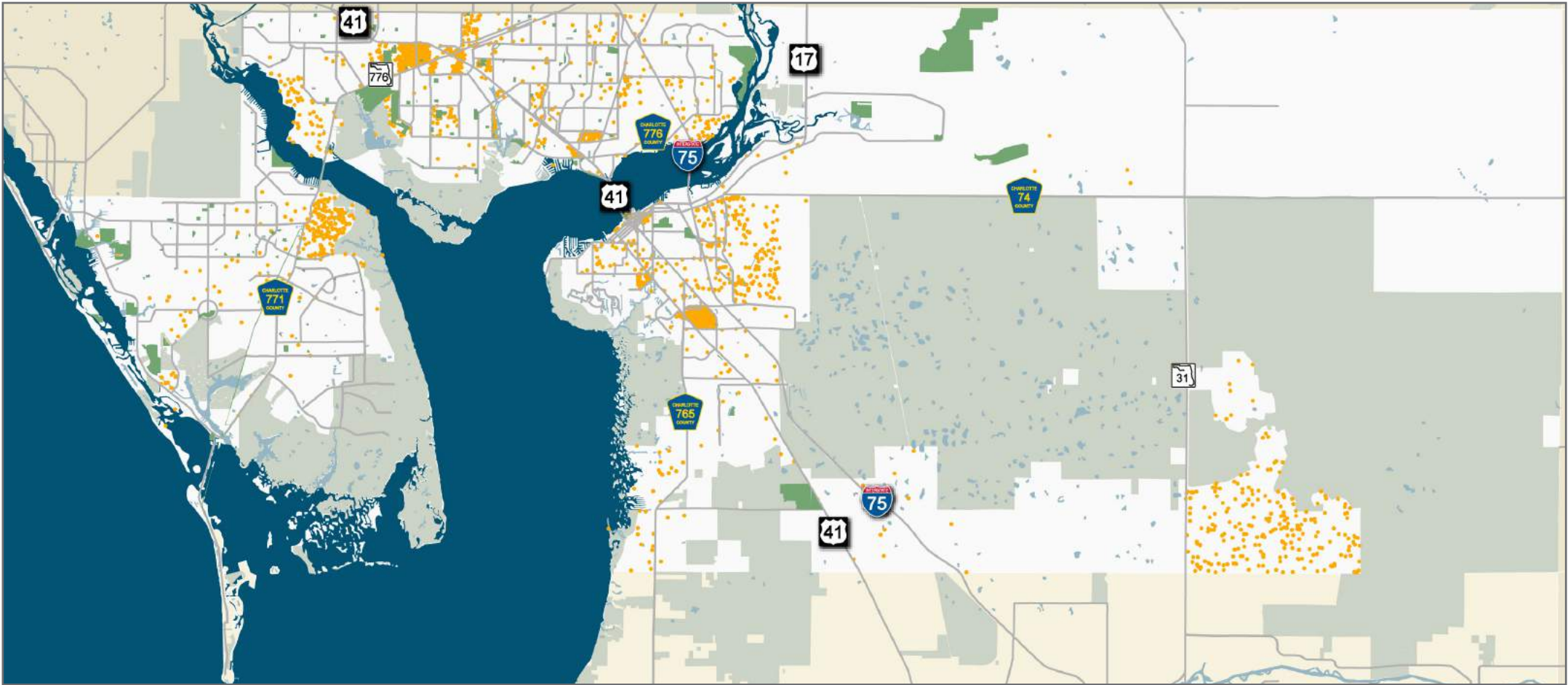


Figure 3-9: Charlotte County Change in Employment (2010-2040)



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CHAPTER 4

Public Involvement

CHAPTER 4: Public Involvement

Public involvement is a crucial part in the building of a credible and trusting relationship between transportation agencies and the community they serve. Effective involvement is accomplished through partnering, outreach, active listening, and real two-way communication. Groups directly affected by transportation decisions may be the most difficult segments of the population to reach. Many citizens, such as members of minority groups, people with low incomes, and transit-dependent individuals, are unaware, unable, or for other reasons, do not take advantage of opportunities to provide comments or suggestions to the planning process on a regular basis. The MPO attempts to reach these citizens and stimulate participatory interest at the grassroots level.

To ensure all interested citizens had access to planning process, the MPO provided public notice and allowed for public comment at key decision points. This included outreach efforts for obtaining active public involvement early in the planning and document preparation process.

At the onset of the LRTP update, a Public Involvement Plan (PIP) was developed to ensure that federal requirements for public participation were met during the development of the 2040 LRTP, consistent with the MPO's adopted Public Participation Plan (PPP), and to provide a resource for the public as the update occurred. The PIP is provided in **Appendix B**.

Federal Regulations

The CC-PG MPO, in accordance with MAP-21, is committed to a complete and ongoing public involvement program as part of all plans and programs developed by the MPO. MAP-21 requires that public outreach include all interested parties with reasonable opportunity to comment, including citizens, affected agencies, representatives of public

transit employees, freight shippers, providers of freight transit, private transportation providers, representatives of public transportation users, and representatives of pedestrian, bicycle, and disabled facility users. Methods of participation include public meetings, visualization techniques, and web resources.

Federal law requires that the public involvement process be proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement. The MPO followed 23 CFR 450.316 principles for public involvement in the LRTP development process, including:

- Provide at least a 30-day public comment period and advertise at least once in a local newspaper detailing Public Hearings, meetings, or participation opportunities including opportunities to comment and express opinions on the LRTP; the MPO's website will post all opportunities for public comment
- For LRTP amendments, the MPO will strive to meet the 30-day public comment period; however, the MPO can envision exceptions to this comment period for these amendments as meeting schedules, funding timetables, agency guidance, and contractor scheduling may be such that project delays could result in meeting notice guidelines



Round One Community Workshop

- Hold Public Hearings on proposed adoption of the LRTP
- Conduct a roll call vote of the MPO Board on the proposed adoption of the LRTP, including any amendments to the LRTP
- Provide timely notice and reasonable access to information pertaining to development of the LRTP
- To the extent possible, employ visualization techniques to describe the LRTP
- Make public participation, related technical information and meeting notices available through electronically accessible means and formats including the World Wide Web and electronic mail
- Hold public meetings at convenient and accessible locations and times
- Seek out and consider the needs of those traditionally underserved by the existing transportation system, such as low income and minority households
- Include public participation activities that ensure equality among all citizens; the MPO is committed to this concept of Environmental Justice and will ensure that the full and fair participation by all potentially affected communities in the transportation decision-making process, including public participation consistent with Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990
- Demonstrate explicit consideration and response to public input received during development of the LRTP
- Include a summary of significant comments received on the draft LRTP as part of the final document
- Coordinate with the local and statewide transportation planning public participation and consultation process

Communication Tools

The following tools and strategies were used to reach out to the public and provide a forum for open discussion and opportunities to comment.

Stakeholder Interviews

In November 2014, prior to initiating the technical work of the 2040 LRTP update, the study team met with key stakeholders to get more in-depth background regarding what is happening around the county and what changes are expected over the next 25 years. Ten stakeholders were identified, including the MPO Board members, Charlotte County and City of Punta Gorda staff, and the Director of Tourism for the Charlotte Harbor Visitors and Convention Bureau. During one interview, an additional stakeholder was identified. **Table 4-1** lists the stakeholders.

Prior to the meetings and to help guide the discussion, the stakeholders were provided a list of 14 questions and the Needs Plan and Cost Feasible Plan chapters from the 2035 LRTP update. Meetings were conversational and informal. Several road, transit, and bicycle/pedestrian projects were identified by the stakeholders and included for consideration during development of the Needs Plan and Cost Feasible Plan. Stakeholders also provided input regarding sea level rise, prioritizing projects, funding, and challenges and opportunities. The summary of the meetings is provided in **Appendix B**.

The CC-PG MPO complies with the provisions of Title VI of the Civil Rights Act of 1964, which states “No person in the United States shall, on grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” It is also the policy of the CC-PG MPO to comply with all requirements of the Americans with Disabilities Act.

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Table 4-1: Stakeholder Interview List

Stakeholder Name	Agency or Organization and Position	Location of Meeting	Date of Meeting and Notes
Gordon Berger	Charlotte County Director of Budget & <i>Administrative Services</i>	Charlotte County Government Building	November 21, 2014 <i>Added to list by Charlotte County Administrator</i>
Christopher G. Constance	County Commissioner <i>MPO Board Chair</i>	Charlotte County Government Building	November 3, 2014
Stephen R. Deutsch	County Commissioner	Charlotte County Government Building	November 3 & 19, 2014 <i>Follow-up meeting due to time constraints during initial meeting</i>
Ken Doherty	County Commissioner	Charlotte County Government Building	November 3, 2014
Carolyn Freeland	City of Punta Gorda <i>Mayor</i>	City of Punta Gorda Office	November 3, 2014
James Herston	Charlotte County Airport <i>District 5 Representative</i>	Herston Engineering Services	November 21, 2014
Howard Kunik	City of Punta Gorda <i>City Manager</i>	City of Punta Gorda Office	November 14, 2014
Tom Patton	Charlotte County Economic Development <i>Director</i>	Charlotte County Economic Development Office	November 14, 2014
Gary P. Quill	Charlotte County Airport <i>Executive Director</i>	Charlotte County Airport Office	November 7, 2014 <i>James Parish (Assistant Executive Director) also participated</i>
Ray Sandrock	Charlotte County <i>County Administrator</i>	Charlotte County Government Building	November 7, 2014
Lorah Steiner	Charlotte Harbor Visitors and Convention Bureau <i>Director of Tourism</i>	Charlotte County Government Building	November 3, 2014

Informational Handout

At the start of the update, an informational handout was created to be available at all MPO and related meetings and at the MPO office. It included information about the LRTP update, such definition and purpose of a LRTP, update schedule, opportunities for providing comments, and highlights about Charlotte County. The informational handout is provided in Appendix B.



Informational Handout

Mailing List

The MPO maintained and updated the master mailing list database as a key component to the MPO's public involvement process. Information documented in the mailing list includes mailing addresses, email addresses, phone numbers, and fax numbers. Attendees at all MPO-sponsored meetings may be added (at their discretion) to the database to help target and identify various interest groups and individuals. Fact sheets, newsletters, surveys, and other information about the project were e-distributed through the mailing list. The mailing list includes:

- Interagency professionals
- Elected and appointed officials

- MPO Board and Committee members
- Civic organizations, homeowners associations, and business groups
- Groups representing underserved populations
- Transportation and/or other relevant agencies
- Members of the community who want to receive project updates

Surveys

A survey was developed and utilized to obtain the public's opinion about current and future transportation needs and the best way to prioritize public funds for future transportation improvements. Surveys also captured demographic information about respondents. The survey was used during the Consensus Building Workshops and Community Workshops, and was available online through a link on the MPO's website to the interactive survey tool.

During the formal public comment period of the Draft 2040 LRTP, a survey form was created and provided along with the hard copy of the document at the display locations. The form asked to "Please provide your comments on the CC-PG MPO's DRAFT 2040 Long Range Transportation Plan" with space to provide a comment or comments. The same question was provided on the website through the interactive survey tool.

Press Releases and Advertisements

Press releases were sent to all media outlets in the county with meeting and workshop announcements. All MPO-generated meeting notices and announcements related to development of the LRTP described the meeting purpose, sponsor, time, place, and answer the questions of "who, what, when, where, and how". Notices were displayed in public places including the Murdock Administration Center, all County Public Libraries, and the Cultural Center of Charlotte County. The MPO website was also used to promote meeting notices and announcements.

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The MPO prepared flyers and press releases announcing community workshops and other public engagement events. The flyers were placed at community billboard sites, government offices, libraries, non-profit and citizen assistance establishments and other high foot traffic locations throughout the county. Press releases were prepared and sent to the Charlotte Sun and the North Port, Englewood, and Charlotte editions of the Herald Tribune announcing public events and opportunities for the media to report on Plan progress, events, and goals.

Advertisements and flyers used during the 2040 LRTP update are provided in **Appendix B**.

Website

The project webpage included study deliverables, schedule, workshop and event announcements, survey and comment form, and the Draft LRTP Executive Summary for public comment. The MPO utilized its “MPO Latest News” website scroll with LRTP updates as well as schedule and dates for community workshops and other public involvement opportunities. Visitors to the MPO website could comment and provide ideas and suggestions throughout development of the LRTP.

Public Outreach Meetings

The 2040 LRTP update included a public involvement effort with the primary purpose to have a meaningful dialogue with the public regarding the needs and desires of the community. The public and stakeholders were involved throughout the process at a total of 24 meetings. The public was involved during the Needs Plan development to discuss population and employment forecasts and needed transportation improvements for all modes. During the Cost Feasible Plan development, the public was asked to weigh in on the projects identified in the Needs Plan to assist in prioritizing the projects.

The public was welcome at all public meetings and workshops conducted during the update. **Table 4-2** lists all CC-PG MPO public meetings during the update.

Table 4-2: 2040 LRTP Meetings

Consensus Building Workshops	
February 25, 2015	
May 12, 2015	
Community Workshops	
March 4, 2015	
March 5, 2015	
March 17, 2015	
May 19, 2015 (combined with Environmental Justice Workshop)	
May 20, 2015 (combined with Environmental Justice Workshop)	
May 21, 2015 (combined with Environmental Justice Workshop)	
MPO Board	
December 15, 2014	
February 12, 2015	
May 4, 2015	
August 24, 2015	
October 5, 2015 (Public Hearing and Plan Adoption)	
Technical Advisory Committee	
December 10, 2014	July 30, 2015
January 14, 2015	September 16, 2015
April 8, 2015	
Citizens Advisory Committee	
December 10, 2014	July 30, 2015
January 14, 2015	September 16, 2015
April 8, 2015	
Bicycle/Pedestrian Advisory Committee	
March 19, 2014	
June 18, 2015	
Peace River Engineering Society	
June 9, 2015	

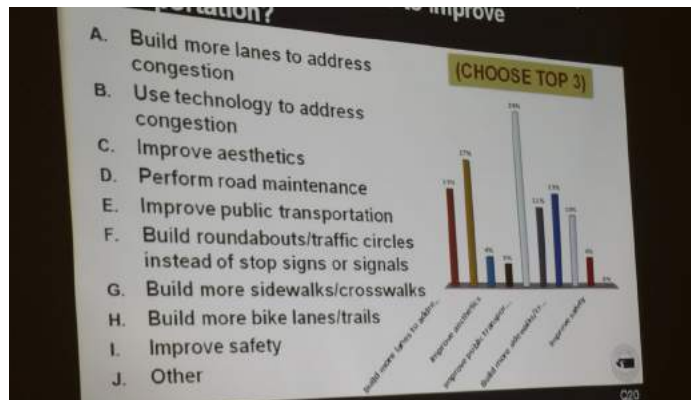
Consensus Building Workshops

The MPO conducted one Consensus Building Workshop during development of the Needs Plan and one during development of the Cost Feasible Plan. Approximately 30 stakeholders were identified and invited by MPO staff to participate in the Consensus Building Workshops and the public was welcome to attend as well. Invitees represent many different perspectives and disciplines. Agendas, surveys, and exercises were prepared and distributed for these meetings. **Appendix B** includes the full summaries of the Consensus Building Workshops with the stakeholders.

Round One Consensus Building Workshop

The first Consensus Building Workshop was held in the early afternoon on February 25, 2015. Participants were invited by MPO staff to attend. A total of 28 people attended the meeting, representing public, private, and non-profit organizations. The project team facilitated the workshop and encouraged attendees to speak up as needed to make the conversation and activity interactive. The meeting consisted of a presentation by the consultant team and MPO staff, and a voting exercise for the attendees. The following outlines the voting activity. The full summary is available in **Appendix B**.

General questions asked where people live and work, how many years they've lived in Charlotte County, who they represent, and what they want more for Charlotte County's future. Participants were then asked how they distribute funding to the different transportation modes in the plan if it were up to them. Questions were also asked regarding how to prioritize projects and timing. Finally, a series of questions covered transportation needs, specifically, which modes to invest more in and what strategies to focus funding on (such as implementing transit, incorporating technology into the system, adding bike lanes and trails, etc.).



Round One Consensus Building Workshop

During the final questions, participants were asked which roads in each area of the county needed improvements, and what types of improvements are needed. The information gathered during this meeting partially influenced the Needs Plan project list.

Key points made during the meeting include:

- Desires for Charlotte County's future
 - Plenty of options to get around
 - Thriving workplace and economy
- Best solutions to improve mobility
 - Improve public transportation
 - Use technology to address congestion
 - Build more lanes to address congestion
 - Build more sidewalks and crosswalks
- How to invest in roads
 - Use technology to make traffic flow better
 - Add lanes where highest needs for capacity
 - Make regional connections to south and north equally

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- Top roads to invest in West County:
 - Gasparilla Road
 - Placida Road
 - SR 776/S McCall Road
- Top roads to invest in Mid County:
 - Harbor View Road
 - Peachland Boulevard
 - US 41
- Top roads to invest in South County:
 - Taylor Road
 - Burnt Store Road
 - Airport Road
 - Jones Loop Road
- How to invest in bicycle/pedestrian facilities
 - Fill in the gaps where infrastructure exists
 - Make safer where high number of crashes
 - Focus on neighborhood streets
- How to invest in transit
 - Implement Fixed Route transit on US 41 with community circulators (full implementation of the Transit Development Plan [TDP])
 - Connect to Punta Gorda airport

Round Two Consensus Building Workshop

The meeting was held in the early afternoon on May 12, 2015. Participants were invited by MPO staff to attend. A total of 24 people attended the meeting, representing public, private, and non-profit organizations. The project team encouraged attendees to speak up as needed, and make the conversation and activities interactive. The meeting consisted of a presentation by the project team and MPO staff and activities for the participants.

The project team structured the meeting around the presentation, breaking at specific spots to conduct the activities. The presentation began with a background on the LRTP update process, including why the update is needed, update schedule, goals and objectives, population



Round Two Consensus Building Workshop

and employment projections for 2040, the Cost Feasible Plan, the steps to get there, how it is determined, and why it is needed. The following outlines the activities. The full summary is available in **Appendix B**.

Participants were asked to help identify activity centers using maps placed around the room. The larger group was split into four smaller groups to discuss and identify activity centers on the maps. **Table 4-3** on the following page lists the activity centers and the tier identified during the meeting.

The second activity asked “How should projects be funded in the 2040 Plan?” Participants were given \$100 fake money and asked to allocate their money into four different pots. The results are provided in **Table 4-4**.

The third activity included prioritizing projects by mode. **Table 4-5** on the following page outlines the highest priorities for each mode.

Table 4-4: Activity Results - How to Fund Projects

Mode	Percentage Allocated
Transit	31.3%
Auto and Freight	38.8%
Bicycle and Pedestrian	13.9%
Congestion Management	16.0%
Total	100%

Table 4-3: Activity Results - Activity Centers

Name of Activity Center	Tier
Downtown Punta Gorda	1
Murdock Village	1
Port Charlotte Town Center/County Administration	1
Punta Gorda Airport	1
Cattle Dock 771/776 Area	2
Charlotte Harbor (Bayshore Live Oak)	2
Charlotte Sports Park	2
Cultural Center of Charlotte County	2
Englewood Beach	2
Fisherman's Village	2
Florida Tracks and Trails	2
McCall/Rotonda	2
Merchants Crossing	2
Park Side Festival Grounds	2
Peachland Promenade (Sandhill Area, Kings@I-75, future neighborhood growth)	2
Placida	2
Port Charlotte Beach Park	2
Boca Grande and Placida	3
Botanical Garden	3
Burnt Store Road	3
Colonial Promenades Shopping Center	3
Florida South Western State College	3
Muscle Car City	3
North Charlotte (Fuccilloville)	3
Oyster Creek Park	3
Ponce de Leon Park	3
WalMart Distribution	3

Table 4-5: Activity Results - Prioritizing Projects

Road Projects
High Priority
Burnt Store Road (Zemel Road to Scham Road)
Harbor View Road (Melbourne Street to east of I-75)
Taylor Road (Airport Road to US 41)
Airport Road (US 41 to Piper Road)
Henry Street (Golf Course Boulevard to Grove Blvd)
Toledo Blade Boulevard (SR 776 to Hillsborough Boulevard)
Medium Priority
Peachland Boulevard (Harbor Boulevard to Cochran Boulevard)
SR 776/S McCall Road (Crestview Drive to Wilmington Boulevard)—NO COMMUNITY SUPPORT
Low Priority
Placida Road (SR 776 to San Casa Drive)
Bicycle and Pedestrian Projects
US 41
Cochran Boulevard
Harbor Boulevard
Taylor Road
Olympia Avenue/Marion Avenue
Harbor View Road
Transit Projects
Fixed Route: Punta Gorda to North Port
Flex Route: Punta Gorda
Fixed Route: Port Charlotte to Englewood (Beach Hopper)
Flex Route: Englewood
Fixed Route: Lake Suzy, Punta Gorda, Punta Gorda Airport
Flex Route: Port Charlotte West
Flex Route: Port Charlotte East

Community Workshops

Community Workshops were held in sets of three around the county to allow residents and visitors to attend the most convenient meeting(s). During both the Needs Assessment Phase and Cost Feasible Phase, one meeting was held (during each phase) in each of the three areas of the county: West County, Mid County, and South County. The content at each set of three meetings was the same.

The Community Workshops were open to the public as well as all stakeholders identified and/or involved in the development of the LRTP. The MPO and Consultant made a significant effort to engage the traditionally underserved and underrepresented residents in the county to ensure the plan reflects the needs and desires of all demographics of the community. Agendas, surveys, and exercise(s) for these workshops were developed and distributed at the meetings and made available on the website.

At all workshops the MPO utilized its internal Evaluation/Comment Form to measure public involvement effectiveness and collect community demographic information. **Appendix B** includes the full summaries of the public workshops, including all displays provided.

Round One Community Workshop

The first round of Community Workshops was held in the later afternoon through early evenings on the three dates in March 2015 to kick-off the update with the public and discuss the Needs Assessment phase of the study. **Table 4-6** presents the logistics of the meetings.

The room was set up to flow from the registration table to the information boards, activity boards and map, and presentation seating. Each meeting was set up slightly different due to the size and shape of the rooms. The presentation was given 15 minutes into each workshop. Before and after the presentation, attendees were invited to view the informational boards, participate in the activity, speak with staff, and respond to the survey.

The following outlines the responses received from the participants regarding the workshop activities. The full summary is available in **Appendix B**.

What solutions do you want?

Attendees were each given 5 dots and asked to place them on a board to show their preferred solutions to improve mobility in Charlotte County. Responses are provided in **Table 4-7** on the following page.

Table 4-6: Community Workshops, Round One

	West County	Mid County	South County
Date and Time	Wednesday, March 4, 2015 3:00-6:00 pm	Thursday, March 5, 2015 4:00-7:00 pm	Tuesday, March 17, 2015 3:00-6:00 pm
Location	Englewood Charlotte Public Library 3450 North Access Road Englewood	Cultural Center of Charlotte Co. 2280 Aaron Street Port Charlotte	Charlotte Harbor Event and Conference Center 75 Taylor Street, Punta Gorda
Attendees	16	6	13

Table 4-7: Activity Results - Solutions

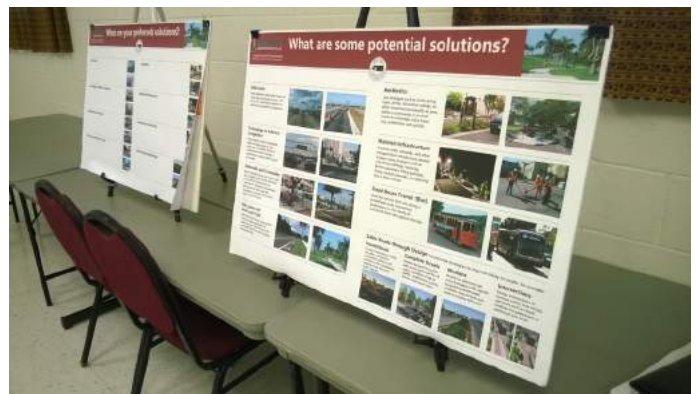
Solution	West	Mid	South	Total
Fixed Route Transit (Bus)	4	7	21	32
Bike Lanes and Multi-use Trails	5	4	9	18
Maintain Infrastructure	8	3	4	15
Safer Roads through Design	8	0	7	15
Sidewalks and Crosswalks	4	5	5	14
Aesthetics	5	2	4	11
Technology to Address Congestion	6	1	1	8
Add Lanes	4	1	1	6

Where do you want to see improvements?

Attendees were then asked to draw on a map showing where they want to see improvements. Table 4-8 on the following page provides the summary of responses received.

Other solutions provided by participants included:

- Synchronize traffic lights on SR 776/S McCall Road
- Improve aesthetics on Forrest Nelson Boulevard and Orlando Boulevard
- Ridesharing system based on internet contact
- Preserve railroad right of way for future rail service (Lee County to Sarasota County) or rails to trails



Round One Community Workshops

Table 4-8: Activity Results - Prioritizing Projects

Road Projects			
Burnt Store Rd		Midway Blvd	Taylor Rd
CR 74/Bermont Rd		San Casa Dr	US 41
Hillsborough Blvd		SR 31	
Loveland Blvd		SR 776/S McCall Rd	
Intersections and Interchanges		Crosswalks	
Winchester Blvd @ SR 776/S McCall Rd (add turn lanes)		Edgewater Dr @ Pellam Blvd	Rotonda West (various intersections)
SR 776 @ Charlotte Sports Park (add turn lanes)		Forrest Nelson Blvd (various intersections)	Sunset Road @ Spinnaker Boulevard (realign)
I-75 @ Kings Highway (improve interchange)			
I-75 @ Raintree Blvd (new Sarasota County interchange)		Kings Hwy @ Veterans	US 41 @ Burnt Store Rd, Carmalita St, Wyvern Hotel
Bicycle and Pedestrian Projects			
Airport Rd	Harbor Blvd	Peachland Blvd	US 17
Aqui Esta Dr	Harbor View Rd	Pellam Blvd	US 41
Burnt Store Rd	Hillsborough Blvd	Piper Rd	Washington Loop Rd
Cape Haze Dr	Jones Loop Rd	Placida Rd	Winchester Blvd
Cochran Blvd	Loveland Blvd	Rotonda West	South of Taylor Rd/Punta Gorda
Forrest Nelson Blvd	Midway Blvd	San Casa Dr	Access to Ponce de Leon Park
Gasparilla Rd	Olympia Ave/Marion Ave	SR 776/S McCall Rd	Access to Babcock Webb WMA
Gulfstream Blvd	Orlando Blvd	Taylor Rd	
Transit Projects			
Circulator service in Parkside, Punta Gorda, Murdock Circle			
Fixed Route bus along US 41 connecting Sarasota to Punta Gorda			
Fixed Route bus along SR 776/S McCall Road connecting Port Charlotte to Englewood/Englewood Community Hospital/north into Sarasota County			
Fixed Route bus Connecting to Punta Gorda Airport			
Express Bus/BRT with stations in North Port, Murdock Circle, Parkside, and Punta Gorda			

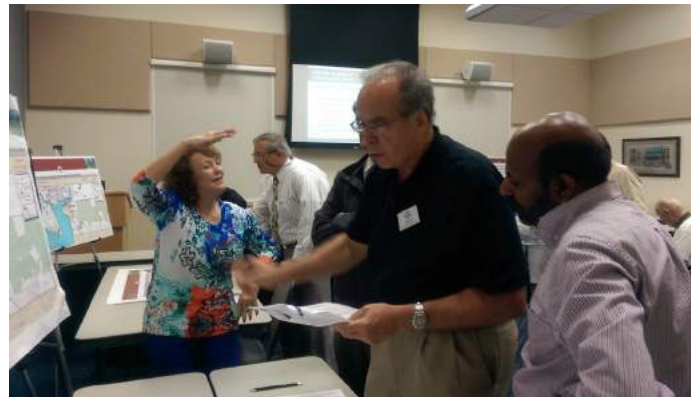
Round Two Community Workshop

The second round of Community Workshops was held in early evenings on three dates in May 2015. The room was set up to flow from the registration table to the information boards, activity boards, and presentation seating. Each meeting was set up slightly different due to the size and shape of the rooms. Table 4-9 presents the logistics of the meetings.

The presentation was given 15 minutes into each workshop. Before and after the presentation, attendees were invited to view the informational boards, participate in the activity, speak with staff, and fill out the questionnaire. Participants were asked to provide their comments regarding the following activities. Activity results and responses are described below. The full summary and questionnaire responses are available in Appendix B.

Table 4-9: Community Workshops, Round Two

	West County	South County	Mid County
Date and Time	Tuesday, May 19, 2015 4:00-6:00 pm	Wednesday, May 20, 2015 4:00-6:00 pm	Thursday, May 21, 2015 4:00-6:00 pm
Location	Englewood Charlotte Public Library 3450 North Access Road Englewood	Charlotte Harbor Event and Conference Center 75 Taylor Street, Punta Gorda	Cultural Center of Charlotte Co. 2280 Aaron Street Port Charlotte
Attendees	4	20	11



Round Two Community Workshops

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What are your priorities?

Attendees were asked to look at the maps and using the handout provided, to select their top priority projects for the

following modes: roads (capacity), bicycle & pedestrian, and transit. All responses are included in **Appendix B**. **Table 4-10** shows the top project responses.

Table 4-10: Activity Results - Priorities

Road Projects			Votes
Burnt Store Road from Zemel Road to Scham Road (2 lanes to 4 lanes)			9
Taylor Road from Jones Loop to Airport Road (2 lanes to 4 lanes)			9
Taylor Road from Airport Road to US 41 (2 lanes to 4 lanes)			9
Airport Road from US 41 to Piper Road (2 lanes to 4 lanes)			7
Edgewater Drive from Jowett Street to Midway Boulevard (2 lanes to 4 lanes)			7
Burnt Store Road Extension from Taylor Road to US 17 (new 4-lane road)			6
Flamingo Boulevard from Edgewater Drive to SR 776 (2 lanes to 4 lanes)			6
Taylor Road from US 41 to Jones Loop Road (2 lanes to 4 lanes)			6
Burnt Store Road from Jones Loop Road to Taylor Road (2 lanes to 4 lanes)			5
Loveland Boulevard from Kings Highway to Veterans Boulevard (2 lanes to 4 lanes)			5
Peachland Boulevard from Cochran Boulevard to Harbor Boulevard (2 lanes to 4 lanes)			5
Bicycle and Pedestrian Projects			Votes
Edgewater Drive	11	US 41 (Segment 2)	6
Midway Boulevard	10	Gasparilla Road (CR 771)	5
Harbor View Road	9	Olean Boulevard	5
Kings Highway	8	Peachland Boulevard	5
Airport Road	7	Taylor Road	5
Harbor Boulevard Extension	7	US 17	5
US 41 (Segment 1)	6		
Rank	Transit Projects		
1	Route connecting downtown Punta Gorda to North Port		
2	Route connecting Lake Suzy, downtown Punta Gorda, and Punta Gorda Airport		
3	Beach hopper connecting Port Charlotte and Englewood		

Attendees were also asked if they would add any projects. The only additional project suggested was a route between downtown Punta Gorda and North Ft. Myers connecting at Pine Island Road.

How much would you invest?

Attendees were asked how much they would invest in each mode: roads (capacity), bicycle & pedestrian, transit, and Congestion Management. Each attendee was given \$100 and asked to split the money up into the four modes.

Table 4-11 provides the responses to this activity.

Table 4-11: Activity Results - How to Fund Projects

Mode	West County	South County	Mid County	Average (order)
Transit	42%	29%	38%	36% (1)
Auto and Freight	31%	22%	30%	28% (2)
Bicycle and Pedestrian	12%	36%	17%	22% (3)
Congestion Management	15%	13%	15%	14% (4)
Total	100%	100%	100%	100%

Environmental Justice

At the second round of Community Workshops, participants were asked to provide comments regarding Environmental Justice. Materials were displayed regarding what Environmental Justice is, and why it is important.

Attendees were asked to review the identified Environmental Justice areas and answer the following:

- Do you live in one of the areas identified as a potential impact area?
- Do you own or have access to a car?
- Do the proposed projects serve the traditionally underserved areas?
- If not, what additional projects should be considered?

- Do any of the proposed projects adversely impact the traditionally underserved areas?
- If so, which project(s)?

In total, 13 attendees answered the Environmental Justice questions. Of them, four marked that they live in an identified Environmental Justice area, and 12 of the respondents own or have access to a car. When asked if any additional projects should be considered, the following were identified:

- Additional projects in the Gulf Cove and South Gulf Cove area
- Transit alternatives for those who cannot afford cars

When asked if any of the projects adversely impact the traditionally underserved, no projects were identified.

Board and Committee Presentations

The MPO CAC and TAC were briefed at regular meetings throughout the development of the LRTP and asked to provide review and comment. Committee members were asked to help distribute the survey, collect constituent needs and opinions on LRTP goals, and attend scheduled public participation events when possible. A meeting schedule was created to outline when presentations would be made at Board and Committee meetings to easily identify major milestones regarding the LRTP update. Presentations were made to the MPO Committees and Board during major milestones of the 2040 LRTP.

Public Hearing

The public comment period was opened at the August 24, 2015, Board meeting and closed at the public hearing held during the regularly scheduled October 5, 2015, MPO Board meeting. The public comment period was a total of 43 days. This allowed ample time for the public to provide comments on the Plan. The MPO Board adopted the 2040 LRTP at the October 5, 2015 Board meeting.

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Draft documents were available at the following locations around the county for review by the public:

- County Center
- CC-PG MPO Office
- City of Punta Gorda Office
- Libraries
 - Englewood Charlotte Public Library
 - Mid-County Regional Library
 - Port Charlotte Public Library
- Cultural Center of Charlotte County

Comments Received

One public comment was received during the public comment period (recorded verbatim):

“On behalf of AARP Chapter 80 and TEAM Parkside’s Our Community for Lifetime Committee, we support the LRTP that includes dial-a-ride AND a fixed route system throughout the county. We especially appreciate that two critical issues are covered: the ability to start a fixed route at minimal additional cost and a FLEX system that gets riders to the stops.

We further commend you for bringing together transit stakeholders in a thorough and very well done Consensus Building Workshop. We strongly support the decision of 76% of the stakeholders that a fixed route be started “Yesterday, ASAP.”

Our thanks to this MPO for initiating the plan and to the planners whose research covered the broadest spectrum of Charlotte County’s transportation needs. Acceptance now opens the door for transit interaction with our neighboring counties, can alleviate our increasing traffic, can help provide jobs and job training for our robust economy and with the migration here of aging boomers can give older persons a reason and ability to limit their driving and take the bus.”

TAC comments received (with responses provided) during the public comment period include:

- On Developer Funded Road Projects map, show the potential new interchanges as a “swath” and not dots.
 - This change was made as requested.
- Coordinate with the Sarasota/Manatee MPO regarding how many lanes Toledo Blade Boulevard will be in the 2040 Plan (Needs Plan and Cost Feasible Plan).
- This coordination was made. The Sarasota/Manatee MPO’s 2040 LRTP does not include a project to widen Toledo Blade Boulevard at this time, but may be included in the next update. The Charlotte County project is slated for planning and construction in 2026-2030; further planning for Toledo Blade should occur in coordination with the Sarasota/Manatee MPO.

CAC comments received (with responses provided) during the public comment period include:

- Ensure bicycle and pedestrian projects (especially US 41) are included in the Plan. The Plan should reflect desire for improved bicycle and pedestrian facilities.
 - A multi-use trail is planned for US 41, along with filling of sidewalk gaps. This plan focused heavily on bicycle and pedestrian improvements, ensuring that bicycle and pedestrian facilities were incorporated into all appropriate roadway widening projects.
- Members expressed concern regarding the need for more capacity on US 41 over the Peace River, which is not included in the Cost Feasible Plan.
 - Widening US 41 over the Peace River is not Cost Feasible; however, further study should be considered regarding alternative routes over the River.

CHAPTER 5

Costs and Revenues

CHAPTER 5: Costs and Revenues

Unit Cost Assumptions

Planning-level cost estimates for the 2040 LRTP were developed for each mode, including roadway, bicycle, pedestrian, and transit using the 2015 LRE Costing Tool provided by FDOT District One. The cost assumptions and resulting cost estimates were used in the development of the 2040 LRTP Needs Plan and Cost Feasible Plan.

Roadway

Roadway construction unit costs were derived from the standard roadway typical sections and utilized on a per centerline mile basis as provided by FDOT District One. The roadway construction unit costs are summarized in **Table 5-1**. Unit costs are presented as present day costs (PDC). Cost estimates for the Project Development and Environmental (PD&E) and Preliminary Engineering (PE)

Table 5-1: Roadway Construction Unit Costs

Area Type	Project Type	Project Description	Unit Cost	Unit of Measure
Rural	New Construction	2-Lane Undivided Roadway with 5' Outside Shoulder Paved	\$4,660,101	per Centerline Mile
Rural	New Construction	4-Lane Roadway with 5' Outside Shoulder Paved	\$7,200,898	per Centerline Mile
Rural	New Construction	6-Lane Roadway with 5' Outside Shoulder Paved	\$9,069,427	per Centerline Mile
Rural	Widening	2-Lane Roadway to 4 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$4,974,074	per Centerline Mile
Rural	Widening	4-Lane Roadway to 6 Lanes with 5' Outside Shoulder Paved (Includes milling and resurfacing of existing pavement)	\$5,456,689	per Centerline Mile
Urban	New Construction	2-Lane Undivided Roadway with 6' Sidewalk, 4' Bike Lane and Curb & Gutter	\$6,278,054	per Centerline Mile
Urban	New Construction	4-Lane Roadway (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$8,793,913	per Centerline Mile
Urban	New Construction	4-Lane Roadway (55mph Design Speed) with 5' Sidewalk, 6.5' Bike Lane , and Curb & Gutter with 4' Inside Shoulder Paved	\$10,155,379	per Centerline Mile
Urban	Widening	2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	\$5,936,228	per Centerline Mile
Urban	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)	\$6,392,739	per Centerline Mile
Urban	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)	\$6,539,832	per Centerline Mile
Urban	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)	\$6,985,687	per Centerline Mile
Urban	Interchange	Compressed Diamond Interchange - Mainline over Crossroad	\$44,768,983	per Interchange

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. Table 5-2 summarizes the range of right-of-way unit costs used for the development of the 2040 LRTP.

Transit

Transit unit costs were derived from the 2015 LRE Costing Tool provided by the FDOT District One as well as the FY 2015-2024 Charlotte County TDP “Charlotte Rides”. The transit unit costs are summarized in Table 5-3.

Bicycle and Pedestrian

Bicycle and pedestrian unit costs were derived from the 2015 LRE Costing Tool provided by the FDOT District One. The unit costs are summarized in Table 5-4.

Table 5-2: Right-of-Way Unit Costs

Area Type	High	Medium	Low
Urban	\$1,960,200	\$1,306,800	\$653,400
Suburban	\$522,720	\$479,160	\$435,600
Rural	\$217,800	\$141,570	\$65,340

Table 5-3: Transit Unit Costs

Mode	Project Type	Project Description	Unit Cost	Unit of Measure
Bus	Station/Facility	At Grade Bus Station	\$2,500,000	per Station
Bus	Station/Facility	Local Bus Stops - Shelters & Amenities	\$30,000	per Facility
Park & Ride	Station/Facility	Park & Ride - At Grade	\$2,500,000	per Facility
Bus	Fleet Purchase	Small Cutaway Bus w/Wheelchair Lift	\$60,000	per Bus
Bus	Fleet Purchase	31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	per Bus
Bus	O&M	Existing Bus Route	\$58	per Revenue Hour
Bus	O&M	New Bus Route	\$62	per Revenue Hour

Table 5-4: Bicycle and Pedestrian Construction Unit Costs

Area Type	Project Type	Project Description	Unit Cost	Unit of Measure
Urban	Bicycle and Pedestrian Facilities	Shared Use Path (10' Width)	\$280,733	per Mile

Inflation Factors

All project cost estimates in the 2040 LRTP were provided in PDC and year-of-expenditure (YOE) dollars using inflation factors provided by FDOT District One. The inflation factors used in this analysis are shown in Table 5-5. All revenues discussed here are presented as PDC.

Table 5-5: Inflation Factors

Area Type	Per Year Inflation Factors		
	2014-2018	2019-2023	2023-2040
Urban	3.00%	3.00%	5.00%
Suburban	3.00%	3.00%	5.00%
Rural	3.00%	3.00%	3.00%

Revenue Projections

This section presents the CC-PG MPO's forecast of reasonably available funding from traditional Federal, State, and local revenue sources to support transportation investments through 2040. Included in this section are descriptions of sources of revenue for funding transportation improvements. It also describes the methodology used to forecast future revenue and provides future revenue estimates from each source. **Appendix D** includes the Revenue Projection Technical Memorandum.

Federal and State – Highway Funding

Highway program funding includes revenues dedicated to the expansion or improvement of highways. Federal and state funds are available from a number of different programs that serve to fund improvements for roadways.



The following describe the highway programs, how the funds can be used, and estimated funds available to Charlotte County over the course of the planning window. The estimated total funding available from federal and state sources for highway projects between FY 2021-2040 is \$737 million.

SIS Highways Construction and Right-of-Way

Funds from this program can be used for construction, improvements, and right-of-way acquisitions on Strategic Intermodal System (SIS) highways (i.e., interstates, toll roads, and facilities designed to serve interstate and regional commerce, including SIS connectors). Total SIS Highways Construction and right-of-way funds available to Charlotte County FY 2021-2040 are expected to be approximately \$76.5 million.

Other Arterials Construction and Right-of-Way

This funding program provides funds for construction, improvements, and associated right-of-way on State Highway System roadways not designated as part of the SIS. This program also includes funding for the Economic Development Program, the County Incentive Grant Program, the Small County Road Assistance Program, and the Small County Outreach Program. Total program funding expected to be available for Charlotte County FY 2021-2040 is approximately \$246 million.

Districtwide Highway Operations and Maintenance Funds

Funds from this program support activities that maintain or improve conditions on highways once constructed. The funds can be used for routine maintenance of facilities, traffic engineering analyses to find solutions to traffic problems with no major structural alterations, administration and collection of tolls on bonded road projects, and enforcement of laws and FDOT rules regulating weight, size, safety, and registration requirements of commercial vehicles. Total program funding available to Charlotte County FY 2021-2040, is expected to be approximately \$414.6 million.

Figure 5-1 illustrates FDOT's funding estimates of approximately \$737 million from federal and state programs for the SIS, Other Arterials (including PE funds), and State Highway System operations and maintenance (O&M) over the 2021-2040 period.

Metropolitan and Regional Programs

A number of funding programs are managed at the MPO level. Funding from Metropolitan and Regional funding programs available to Charlotte County is estimated at \$6.45 million over 20 years (2021-2040). Figure 5-2 illustrates funding from these programs as estimated in FDOT's 2040 Revenue Forecast for Charlotte County.

Transportation Alternatives Funds

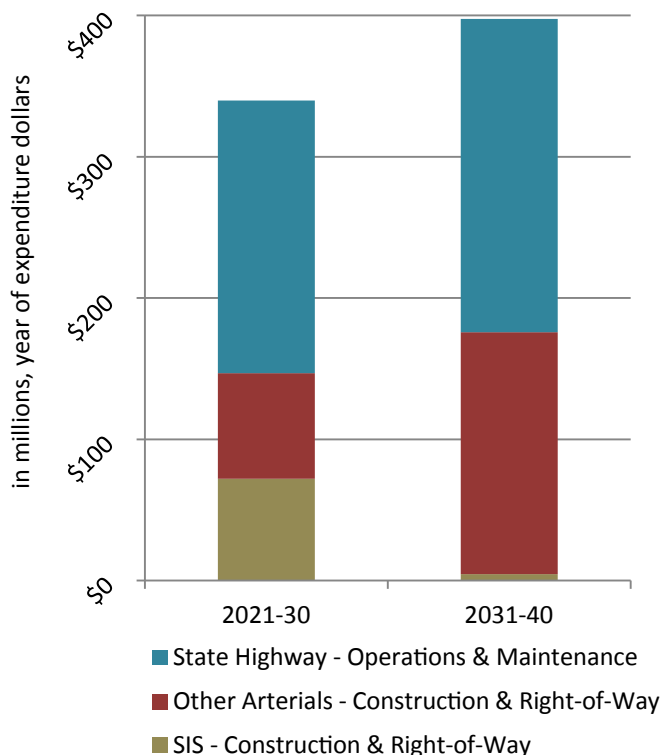
Funds from Transportation Alternatives (TA) program are used to assist MPOs in the development of their plans.

The TA program is broken up into three parts: TALU, which is dedicated to areas that have a population greater than 200,000; TALL, for areas with a population between 5,000 and less than 200,000; and TALT, which can be used anywhere in the state. The resulting program funding amounts estimated to be available from TALL are \$0.7 million between FY 2021-2040. TALT funds are estimated to be \$4.2 million.

Transportation Regional Incentive Program Funds

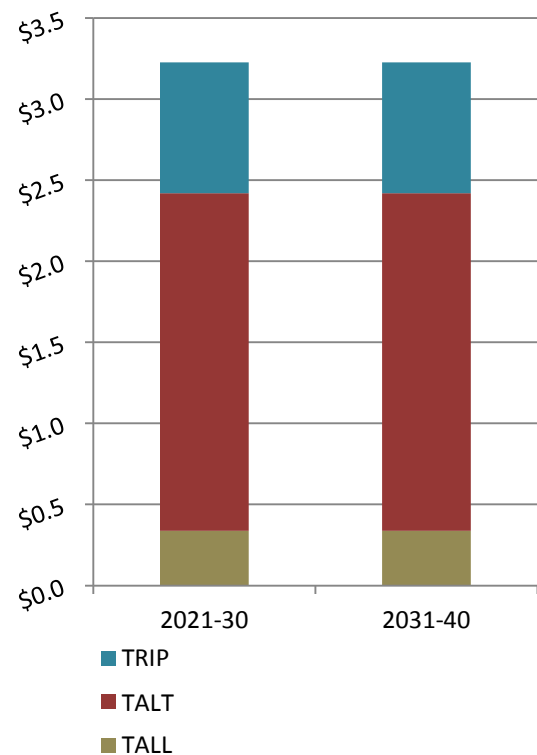
After funds are allocated to the Small County Outreach Program and the New Starts Program, 25 percent of the remaining revenues from the Documentary Stamps Tax are allocated annually to Transportation Regional Incentive Program (TRIP) for regional transportation projects. Total funding from the TRIP program for Charlotte County is approximately \$1.6 million between FY 2021-2040.

Figure 5-1: Federal and State Highway Funding (FY 2021-2040)



Source: FDOT Revenue Estimates for Charlotte County, 2021-2040

Figure 5-2: Metropolitan and Regional Programs (FY 2021-2040)



Source: FDOT Revenue Estimates for Charlotte County, 2021-2040

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Transit – Federal and State Programs

Transit funding includes funding from FTA and other Federal funds and state operating and capital grants (excluding FTA Major Capital Investment Funding and State New Starts Programs). Transit funding is estimated to be \$106.8 million over 20 years (2021-2040); this includes FDOT State Transit Funds (\$75.3 million) and FTA Formula Funds (\$31.5 million).

FDOT and State Transit

FDOT and the Commission for the Transportation Disadvantaged (CTD) provide technical and operating/capital assistance to transit, paratransit, and ridesharing systems. For Charlotte County this includes funding allocations to Charlotte County Dial-A-Ride and Sunshine Ride services. FY 2021-2040, the program funding available to Charlotte County is estimated to be \$75.3 million.

FTA Formula Funds

Federal Formula funds for transit are granted to urbanized areas to fund public transportation capital, planning, job access, and reverse commuting projects, as well as operating and maintenance expenses. Between FY 2021-2040, total program funding available to Charlotte County from FTA Formula Funds is estimated to be \$31.5 million.

State Collected Fuel Taxes for Local Governments

The Constitutional, County, and Municipal Fuel taxes are imposed by the state and distributed to the local municipalities. Revenues from these sources are estimated



to be \$80.4 million over the FY 2021-2040 period. Fifteen percent (\$12 million) of this will be set aside to fund the resurfacing and maintenance projects within the county.

Local and Local Option Funding Sources

Local jurisdictions have the power to levy certain taxes. Included in these categories of taxes are sales taxes and fuel excise taxes. These local revenue sources are summarized below.

Local Option Gas Taxes

County governments in Florida are authorized to levy up to 12 cents per gallon of fuel through three local option gas taxes (LOGT) for transportation needs: the Ninth-Cent Gas Tax (1 cent per gallon of gasoline and diesel), the First LOGT (up to 6 cents per gallon of gasoline and diesel), and the Second LOGT (up to 5 cents per gallon of gasoline). Charlotte County has adopted all three taxes and imposes them at their maximum rate. Revenues from all three local option fuel taxes are forecast at \$256.8 million over 20 years (2021-2040).

Local Government Infrastructure Sales Tax

Florida law currently authorizes eight separate local discretionary sales surtaxes, known as local option sales taxes, as potential revenue sources for county governments. Charlotte County currently levies the maximum 1 percent of the Local Government Infrastructure Surtax allowed. Over 20 years (FY2021-2040), the Surtax is forecast to generate \$90.9 million for local transportation projects.



Impact Fees

Impact fees in Charlotte County require developers to pay the county, municipality, special districts, and school districts for the cost of additional infrastructure resulting from new development. Revenues from transportation impact fees collected by Charlotte County and the City of Punta Gorda are forecast at \$20.5 million over the FY 2021-2040 period.

Transit Funding

The following are estimates of future locally sourced revenues that support capital improvements and operating needs of transit in Charlotte County. The county operates two transit services in the county: Dial-A-Ride and Sunshine Ride.

Dial-A-Ride

The Dial-A-Ride program is a curb-to-curb bus service available to the general public for a small fee. The system is funded through a mix of federal and state grants (described in a previous section), passenger fares, local contributions (from ad valorem taxes and general fund transfers), and other local sources such as ad revenue. Over a 20-year period (FY 2021-2040), total revenues from these sources are estimated to be \$18.4 million.

Sunshine Ride

The Sunshine Ride program is a door-to-door transportation service for those unable to provide or purchase their own transportation due to disability, age, income, or rural residents. Funding for the Sunshine Ride transit service



comes from grants awarded by the Federal government and the state (described in a previous section), various local government sources (such as Ad Valorem taxes and general fund transfers), and farebox collections. Over a 20-year period, total revenues from these sources are estimated to be \$15.6 million.

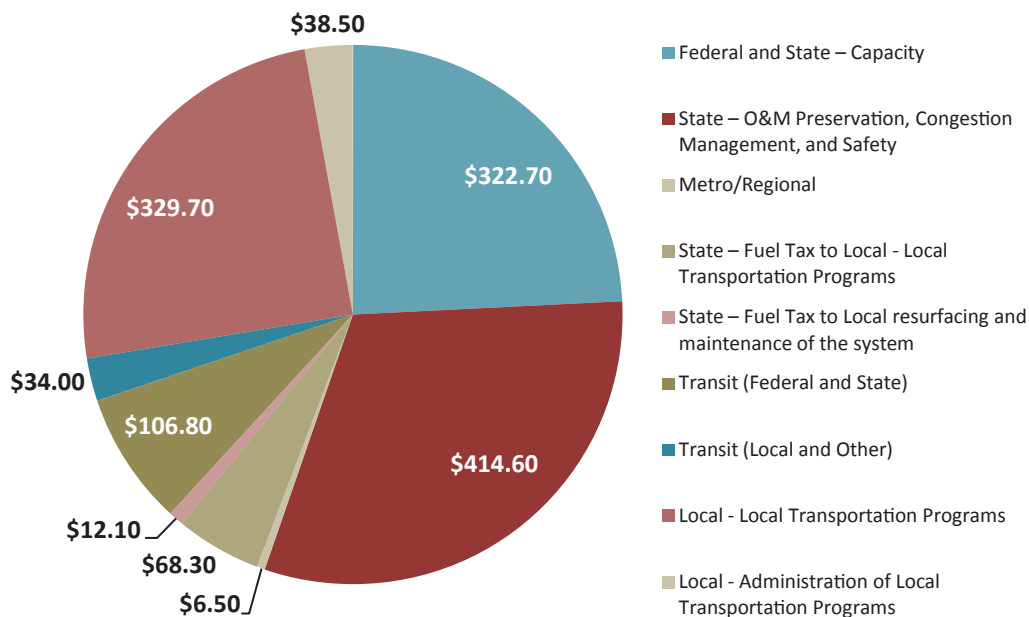
Summary of Available Funding

Table 5-6 summarizes total transportation-related revenues anticipated to be available 2021 through 2040. According to these estimates, approximately \$1.3 billion is expected to be available for transportation needs between FY 2021 and FY 2040. **Figure 5-3** shows the breakdown of revenues between 2021 and 2040.

Table 5-6: Total Transportation-related Revenues for Charlotte County (FY 2021-2040)

Funding Categories	FY 2021-2025	FY 2026-2030	FY 2031-2040	FY 2021-2040
Federal and State - Capacity	\$110.4	\$36.4	\$175.9	\$322.7
State - O&M Preservation, Congestion Management, and Safety	\$92.1	\$100.9	\$221.7	\$414.6
Metro/Regional	\$1.6	\$1.6	\$3.2	\$6.5
State - Fuel Tax to Local Transportation Programs	\$15.2	\$16.4	\$36.7	\$68.3
State - Fuel Tax to Local Resurfacing and Maintenance	\$2.7	\$2.9	\$6.5	\$12.1
Transit (Federal and State)	\$23.9	\$25.8	\$57.0	\$106.8
Transit (Local and Other)	\$6.8	\$7.8	\$19.4	\$34.0
Local - Local Transportation Programs	\$70.2	\$77.6	\$181.9	\$329.7
Local - Administration of Local Transportation Programs	\$8.6	\$9.3	\$20.7	\$38.5
Total	\$331.5	\$278.6	\$723.0	\$1,333.1

Figure 5-3: Charlotte County Transportation Revenues Breakdown (FY 2021-2040)



CHAPTER 6

Defining the 2040 Needs Plan

CHAPTER 6: Defining the 2040 Needs Plan

The Needs Assessment identified projects to support the ultimate vision of mobility to meet the demand for the MPO's planning area for the year 2040, without regard for cost and available funding. Specifically, this assessment focused on the major transportation facilities, including roadways, bicycle and pedestrian facilities, and public transit services. Improvements were identified to resolve the deficiencies through the year 2040.

To identify projects for the 2040 Needs Assessment, an extensive process was conducted to identify projects that are needed in the future. First, the needs identified in previous plans, including the 2035 LRTP and current TDP, were utilized as a base. Project needs were then identified based on where roads are expected to be over capacity through a technical analysis of the transportation network using the FDOT District One Regional Planning Model.

A collaborative effort was used to identify additional improvements for roads, transit, and bicycle and pedestrian facilities to support specific agency projects or policies. Coordination efforts included meetings with local agencies and jurisdictions, including Charlotte County and City of Punta Gorda, as well as DeSoto County; working with stakeholders, including the MPO Board; and working with the public. Projects received through this process were included in the list of needs.

The public involvement process during the Needs Assessment is described in Chapter 4. Appendix E includes the Needs Plan project lists.

Identifying Deficiencies

Prior to developing the list of projects needed to ensure mobility in the future, the problem areas must be identified to understand where deficiencies are likely to occur in the future. For this effort, the 2040 Needs Assessment

analyzed the E+C Network in Charlotte County. The E+C Network is defined as all existing facilities and services plus all capacity improvements committed to be funded for construction by the end of fiscal year 2019. This represents the transportation supply in Charlotte County if no improvements are made beyond what is currently committed in the current Five Year Work Program.

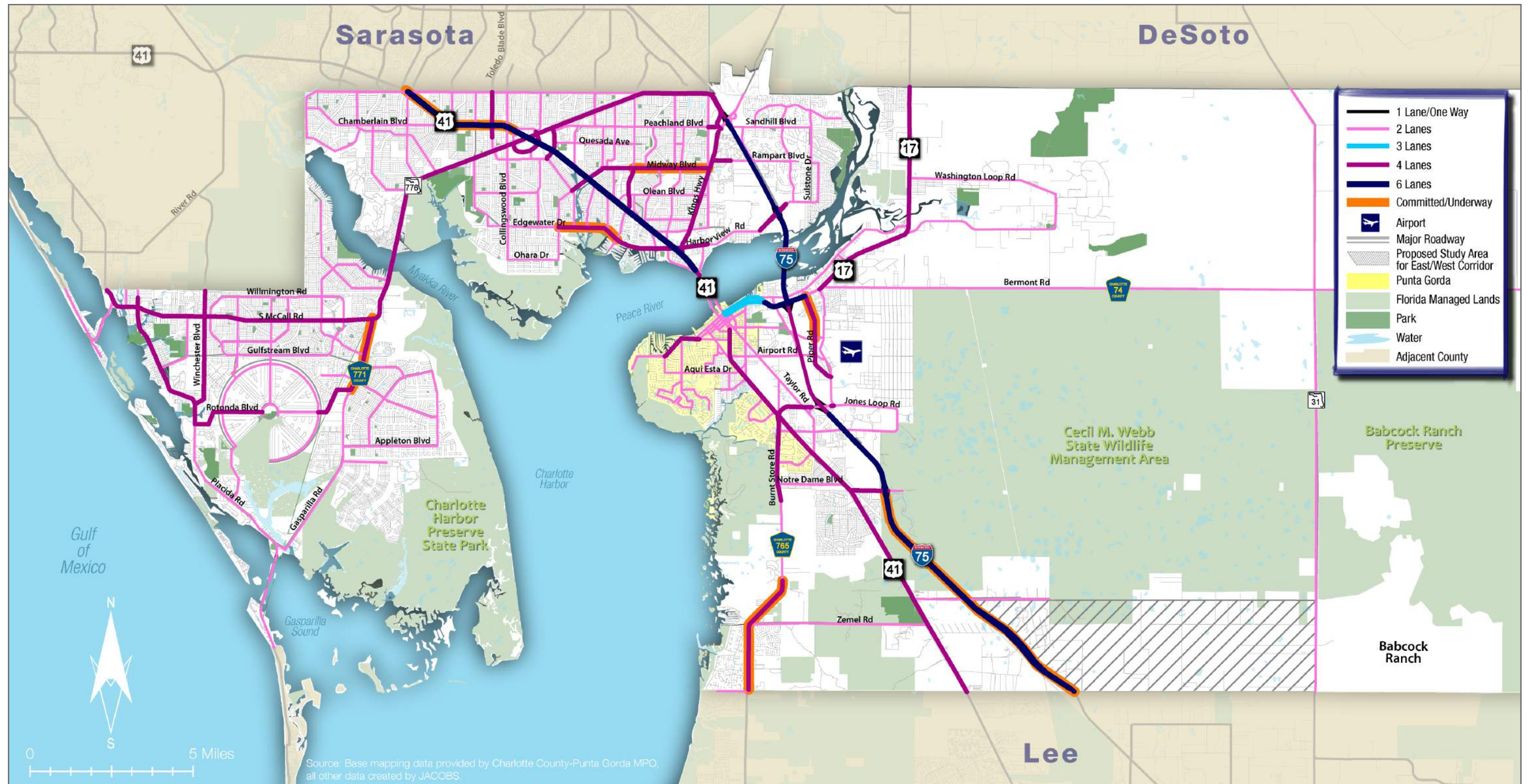
Subsequently, the transportation network supply is compared to the demand forecasted by the expected residents and workers to predict how they will travel in the future. The forecasted demand on the transportation system was based on trip estimates associated with future growth in population and employment using the FDOT District One Regional Planning Model. The outcome was an inventory of transportation facilities where the projected volumes exceed the available capacity, or are over capacity, thereby creating a transportation need.

Figure 6-1 shows the existing major road network with committed highway improvements for 2015-2019. Figure 6-2 shows the level of service for the major roads in 2040 with no additional improvements made; the roads in red are anticipated to be deficient in 2040.



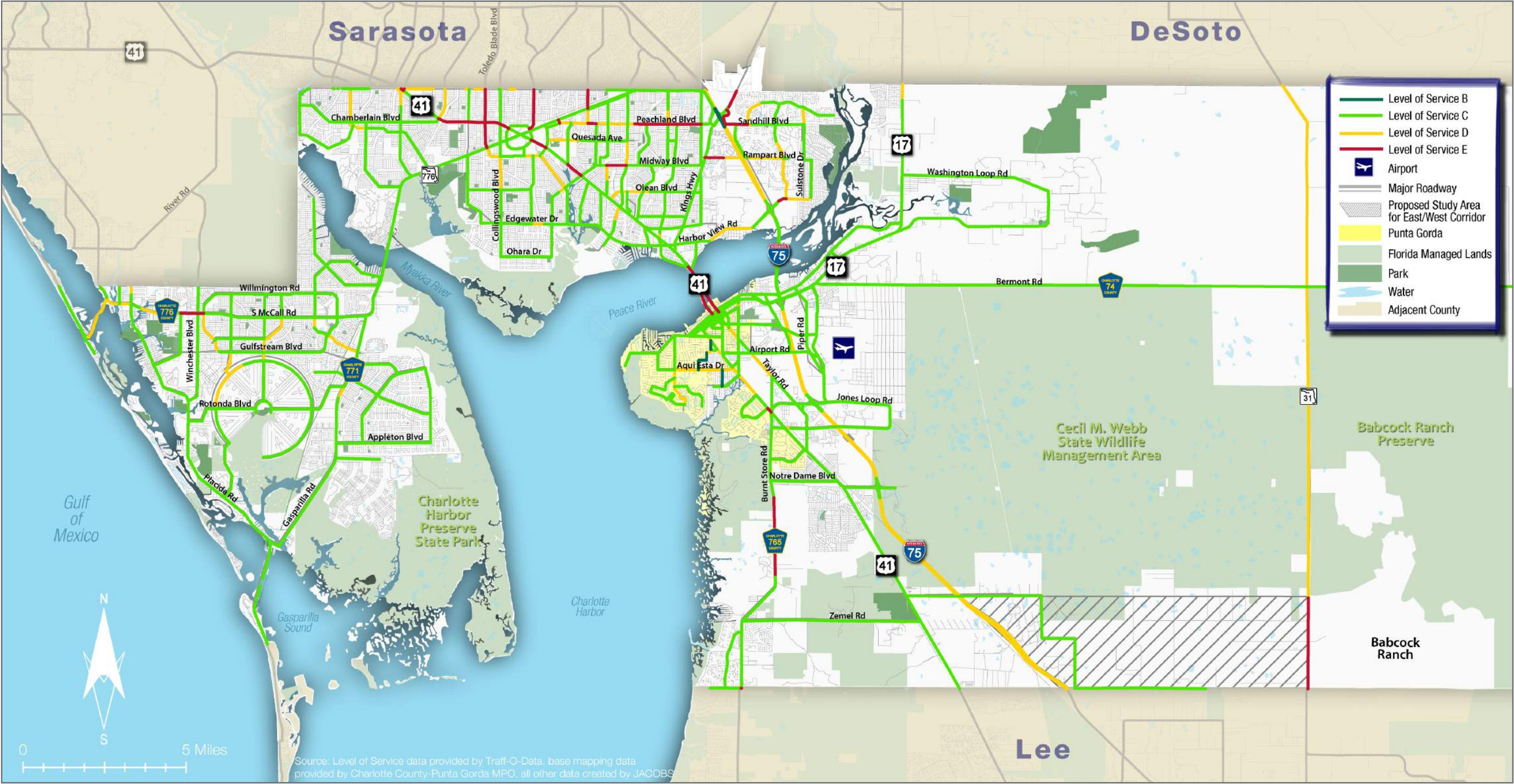
US 41 in Punta Gorda

Figure 6-1: Existing + Committed Road Network



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Figure 6-2: Level of Service in 2040 with Existing + Committed Road Network



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Constrained Roads

Typically, roadway deficiencies can be addressed by providing additional roadway capacity. However, in some cases, identified deficiencies could not be addressed through capacity improvements because a roadway was designated as constrained because it is unable to be widened due to available right-of-way or policies in place. When the traffic levels forecasted on a constrained roadway exceed capacity, other solutions such as improving parallel facilities were considered.

Road/Highway Projects

The Needs Plan consists of \$1.6 billion (PDC) or \$3.1 billion (YOE) in roadway expansion and mobility improvements. Approximately \$496.1 million (PDC) or \$758.9 million (YOE) of the roadway projects are included in the Cost Feasible Plan, leaving \$1.1 billion (PDC) or \$2.4 billion (YOE) unfunded. **Table 6-1** presents the total cost of road project needs funded in the Cost Feasible Plan as well as the unfunded needs. **Figure 6-3** maps the Needs Plan road projects. The corresponding numbers for the projects are provided in the road project list in **Appendix E**.

Table 6-1: Highway Needs Costs (2019-2040)

	(in millions)	
	Present Day Costs	Year of Expenditure Costs
Needs Plan	\$1,569.2	\$3,106.1
Cost Feasible Plan	\$496.1	\$758.9
Unfunded Needs	\$1,073.0	\$2,347.1

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

- Widen I-75 to six lanes in central Charlotte County
- New interchange at Oil Well Road or Cook Brown Road
- Widen US 41 bridge over Peace River to six lanes



Veterans Boulevard at Kings Highway

- Extend Burnt Store Road from Taylor Road to Florida Street
- Widen SR 776 to six lanes from Crestview Drive in West County to Murdock Circle in Mid County
- Widen Airport Road to four lanes from US 41 to Piper Road

Transit Projects

Charlotte County currently operates Dial-A-Ride transit service, but does not operate fixed or flexible transit routes. The transit projects included in the Needs Assessment were identified using the current TDP (adopted in 2014) as a base. The following outlines the process taken during development of the TDP. A demand and mobility needs assessment was conducted as part of the TDP using the following three assessment techniques:

• Discretionary Market Assessment

The discretionary market was analyzed to assess demand for transit services for the next 10 years. The discretionary market and traditional market are the two predominant rider markets for bus service. The assessment uses population and employment densities to identify the areas that are supportive of various levels of transit investments.

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Charlotte County-Punta Gorda MPO

- **Traditional Market Assessment**

The traditional transit market assessment includes an evaluation of population segments that historically have had a higher propensity to use transit and are dependent on public transit for their transportation needs.

- **Dial-A-Ride Demand Analysis**

An analysis was conducted to evaluate the origin and destinations of existing Dial-A-Ride users in Charlotte County. This assessment was conducted to identify activity centers and clusters of riders that may be conducive to supporting other forms of transit services in an efficient manner. The resulting analysis was summarized to assist in identifying potential demand and need for services.

When combined with the baseline conditions assessment, performance reviews, and public involvement feedback and the review of relevant plans and studies, the demand assessment yields the building blocks for evaluating the transit needs for the next 10 years.

A set of potential transit improvements was developed and evaluated as a key part of the TDP planning process. The alternatives represent the transit needs without consideration of funding constraints. After the identified service improvements were prioritized using an evaluation process, the prioritized list of potential improvements was used to develop the implementation and financial plans.

As Charlotte County continues to grow, and if demand for transit follows that same growth, the prioritized transit needs will assist Charlotte County in selecting and implementing service as funding becomes available.

One of the strategies for serving Charlotte County is Flex Route transit to maintain transit services to most of the areas currently served by Dial-A-Ride as well as to establish a feeder service for the previously-mentioned



Fixed Route transit services. Flex Route service would be provided in areas where demand exists but Fixed Route transit is not proposed, including most of the areas currently served by Dial-A-Ride service. Flex Route service is a hybrid service that combines the predictability of Fixed Route bus service with the flexibility of demand response service. This service generally operates in suburban areas where the street and pedestrian networks are not conducive to Fixed Route bus service.

The Needs Plan includes four fixed transit routes with hourly service, four flexible service zones, and continued Dial-A-Ride service. The total cost of the Needs Plan transit operations and maintenance is projected to be \$49.7 million (YOE) and capital is projected to be \$76.9 million (YOE). The following projects were included:

- **Route A: North Port – Punta Gorda Connector**

Bus route serving the US 41 corridor, connecting North Port in Sarasota and the Port Charlotte area; proposed as a local service with frequent stops, the route would serve two key transfer points, including the areas near Port Charlotte Town Center in Murdock and Promenades Mall in the Parkside Community Redevelopment Area (CRA) on US 41; in North Port, the route would connect with SCAT Routes 9, 20, and 29, connecting the entire SCAT route network to riders from and to Charlotte County

Figure 6-3: Needs Plan Road Projects

Project numbers listed in Appendix E



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- **Route B: Englewood Beach Hopper**

Connects Englewood Beach to Port Charlotte in addition to providing service to Englewood Community Hospital (located to the north in Sarasota County), the Murdock area, and the Parkside CRA area

- **Route C: Lake Suzy – Punta Gorda Connector**

Connects Punta Gorda and Punta Gorda Airport to the central and east Port Charlotte while also serving the area just south of Lake Suzy in DeSoto County; route would connect with Flex Route service; route would start in the area near WalMart on Kings Highway and connect to Bayfront Hospital area in Punta Gorda; route would provide service within Punta Gorda, alternating between the west and east sides of US 41 (serving both the Punta Gorda Public Library and the Punta Gorda Airport sides of US 41 on alternating trip.); route would connect with the Englewood Beach Hopper and the North Port–Punta Gorda Connector at the potential transfer location at Promenades Mall at Parkside

- **Route D: North Port – Fort Myers Connector**

Regional express bus service from North Port in Sarasota County to Merchants Crossing Plaza just north of Pine Island Road in North Fort Myers, connecting with Sarasota County Area Transit (SCAT) and Lee County Transit (LeeTran) in Sarasota and Lee County, respectively

- **Flex Zone 1 – Englewood**

- **Flex Zone 2 – Port Charlotte West**

- **Flex Zone 3 – Port Charlotte East**

- **Flex Zone 4 – Punta Gorda**

Additional proposed capital and infrastructure costs would include signs, shelters, and transfer facilities to accommodate the new routes in Charlotte County. **Figure 6-4** shows the Needs Plan transit projects.

Bicycle, Pedestrian, and Multi-Use Trail Facility Projects

The Needs Plan bicycle, pedestrian, and multi-use trail facility projects were identified for roads that do not have existing facilities, or have gaps or missing links in the facilities currently provided. **Figure 6-5** shows the Needs Plan bicycle, pedestrian, and multi-use trail projects. The corresponding numbers for the projects are provided in the bicycle, pedestrian, and multi-use trail facility project list in **Appendix E**.

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

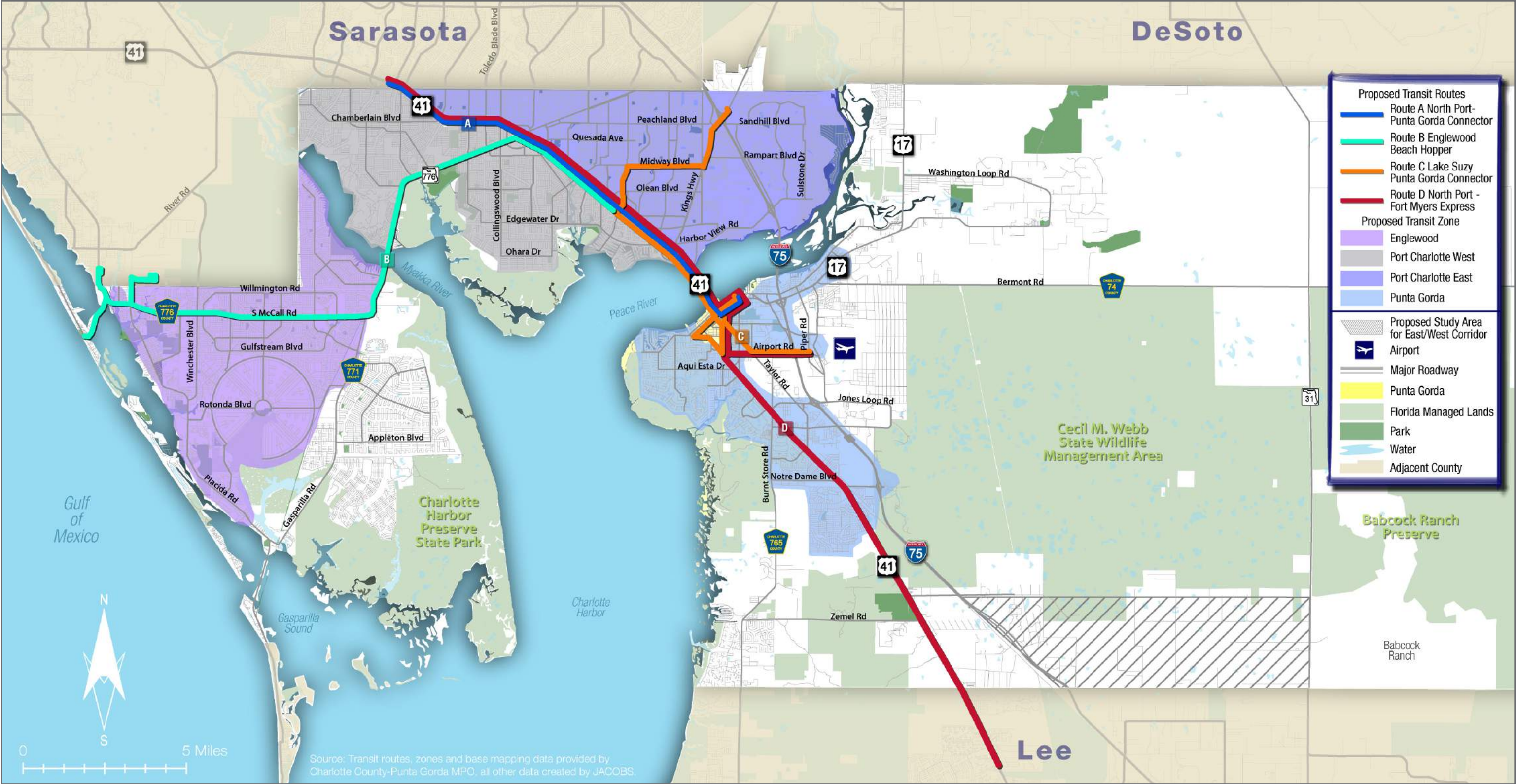
- Expansion of the bicycle network, including all roads being improved on the highway needs plan (except I-75), as road improvements would include paved shoulders with the intent to put bicycle facilities in place concurrently
- Expansion of the sidewalk network associated with new roadway construction or road improvements constructed; building sidewalks in the urbanized area ensures that more 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.



Downtown Punta Gorda

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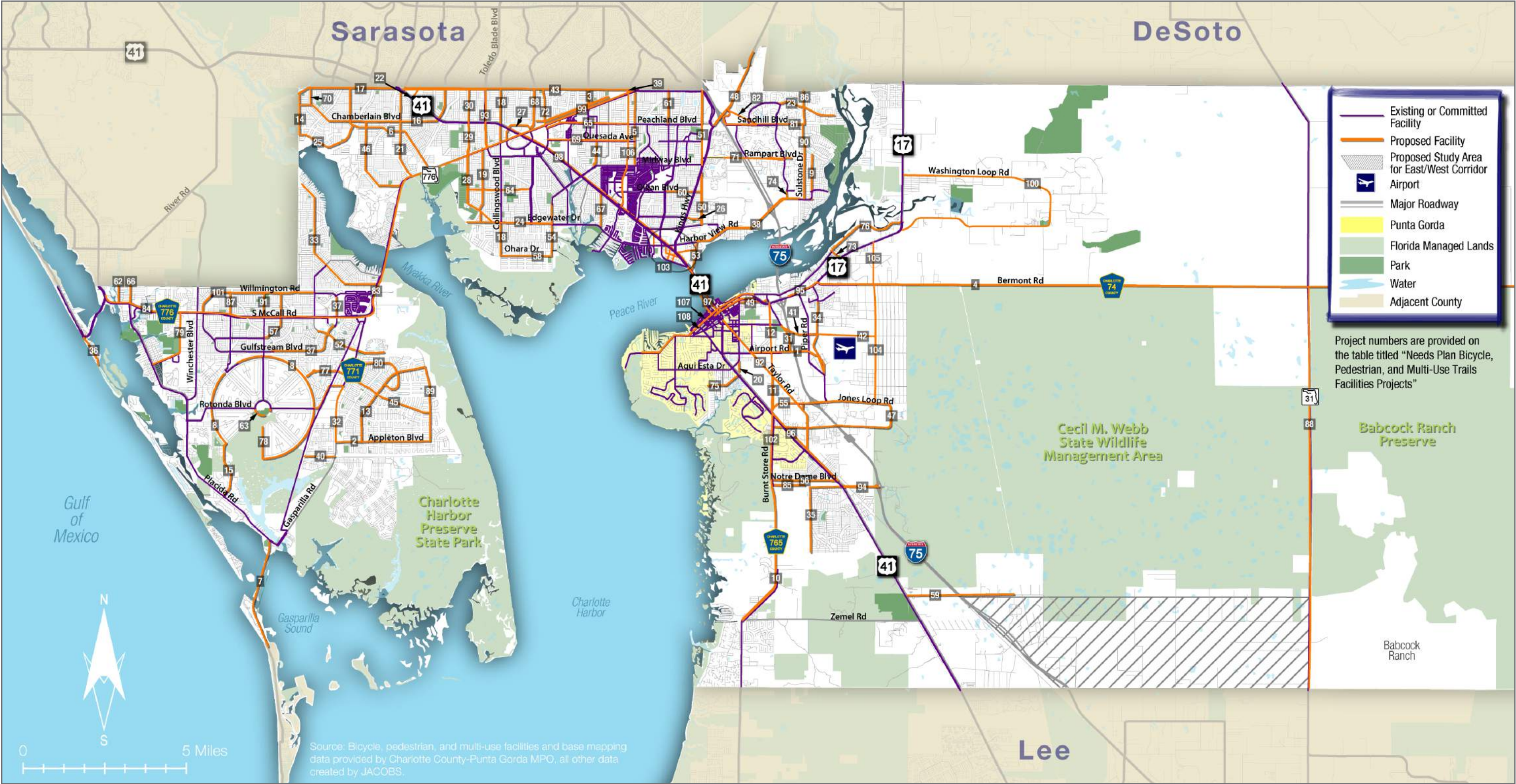
Figure 6-4: Needs Plan Transit Projects



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Figure 6-5: Needs Plan Bicycle, Pedestrian, and Multi-Use Trail Facilities

Project numbers listed in Appendix E



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CHAPTER 7

Defining the 2040 Cost Feasible Plan

CHAPTER 7: Defining the 2040 Cost Feasible Plan

The Cost Feasible Plan reflects approximately \$889.7 million (YOE) of implementable projects. Improvements funded in the work program between 2015 and 2019 are considered committed.

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. Nearly 45 percent of revenues that are anticipated to fund the projects included

in this plan are from local sources, while 55 percent are expected from federal and state sources. Nearly 84 percent of available revenues will be spent on highway expansion projects, and nearly six percent will be spent on maintaining what is in place already. Transit accounts for approximately five percent of the Cost Feasible Plan, and non-motorized modes and congestion management each account for approximately three percent. Table 7-1 shows the Cost Feasible Plan summary.

Table 7-1: Cost Feasible Plan Summary (2019-2040)

Mode or Program	Total Cost (YOE)	Percent (YOE)
Roads/Highways	\$758.9 M	83.9%
Road/Highway Maintenance	\$50.6 M	5.7%
Bicycle, Pedestrian, Multi-Use Trails ¹	\$22.4 M	2.5%
Congestion Management	\$25.7 M	2.9%
Transit (Capital)	\$7.3 M	0.8%
Transit (Operations)	\$37.5 M	4.2%
Total	\$889.7 M	100%
Revenue Source	Total Revenues (YOE)	Percent (YOE)
Federal and State Revenues ^{2,3}	\$439.8 M	47.2%
SIS/FIHS	\$76.5 M	8.2%
Local Revenues	\$415.3 M	44.6%
Total	\$931.6 M	100%
Composition of Local Revenues	Total Revenues (YOE)	Percent (YOE)
Impact Fees	\$20.5 M	4.9%
Infrastructure Surtax	\$90.9 M	21.9%
Gas Tax ³	\$256.8 M	61.8%
Local Transit	\$47.1 M	11.3%
Total	\$415.3 M	100%

¹ Arterial road projects include bicycle/pedestrian facilities; costs associated with road projects are not included in this total

² Does not include \$414.63 million for State Highway System O&M

³ Includes 15% set aside for resurfacing/maintenance projects (\$12.05 mil from state fuel taxes; \$38.53 mil from local fuel taxes)

If funding or revenues become available that were not initially anticipated, projects that were not included in the Cost Feasible Plan may be implemented. **Appendix F** includes additional information regarding the Cost Feasible Plan projects.

Road/Highway Projects

The Cost Feasible Plan includes \$496.1 million (PDC) or \$758.9 million (YOE) in highway expansion projects. Highlights of the proposed Cost Feasible highway projects include:

- Widen Burnt Store Road to four lanes between Zemel Road and Scham Road
- Widen I-75 to six lanes in central Charlotte County
- Widen SR 776 to six lanes from Wilmington Road to Murdock Circle
- Widen and realign Flamingo Road to four lanes
- Widen Harbor View Road to four lanes from Melbourne Street to I-75 to improve the connection from I-75 to Port Charlotte and Punta Gorda
- Widen Kings Highway to six lanes north of I-75 to DeSoto County
- Redesign Marion/Olympia Avenues in Punta Gorda to be a Complete Street with two travel lanes, bicycle lanes, and wider sidewalks



Kings Highway at Veterans Boulevard

Figure 7-1 shows the Cost Feasible highway projects for 2019-2030, **Figure 7-2** shows the Cost Feasible highway projects for 2031-2040, and **Figure 7-3** shows all Cost Feasible highway projects for 2019-2040. **Table 7-2** includes the Cost Feasible Projects through 2040. **Figure 7-4** and **Table 7-3** includes the Developer Funded Roads.

Unfunded Needs

The 2040 LRTP includes \$1.07 billion (PDC) or \$2.35 billion (YOE) in unfunded road needs. **Table 7-4** includes the unfunded road projects.

Transit Projects

The Cost Feasible Plan includes \$7.3 million (YOE) for transit capital (including vehicles and station amenities) and \$44.7 million (YOE) for operations and maintenance. This includes continued operations of the Dial-A-Ride service already in place, and provides for implementing Fixed Route transit service throughout the county. Projects were identified in the TDP completed in 2014 with frequencies of 120 minutes. **Figure 7-5** shows the Cost Feasible transit projects. **Tables 7-5** through **7-7** lists the Cost Feasible Transit Projects and Unfunded Transit Projects.



Downtown Punta Gorda

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Charlotte County-Punta Gorda MPO

Bicycle, Pedestrian, and Multi-Use Trail Facility Projects

The Cost Feasible Plan includes \$14.6 million (PDC) or \$22.4 million (YOE) for bicycle, pedestrian, and multi-use trail facility projects. This total cost includes only projects identified separately from road projects, as those improvements are included in the total cost for highway projects.

Projects included in the Cost Feasible Plan will be prioritized on an annual basis. **Figure 7-6** shows the Cost Feasible bicycle, pedestrian, and multi-use trail facility projects. **Table 7-8** lists the Cost Feasible bicycle and pedestrian projects.

Intelligent Transportation System/ Congestion Management Process Projects

The Cost Feasible Plan includes \$16.5 million (PDC) or \$25.7 million (YOE) for implementing congestion management strategies on the top two corridors and top 10 intersections with the highest number of crashes. Specific projects for each corridor or intersection will be prioritized and selected through the Congestion Management Process (CMP) to be identified for funding in the TIP.

Also included in congestion management is the Charlotte County Advanced Traffic Management System (ATMS)/ ITS Implementation, a countywide effort to prepare an ITS Master Plan and design and implement improvements to the traffic signal system throughout the county. **Figure 7-7** shows the two corridors and 10 intersections prioritized for congestion management strategies. **Chapter 8** describes the CMP in greater detail. **Table 7-9** lists the potential Cost Feasible CMP projects.



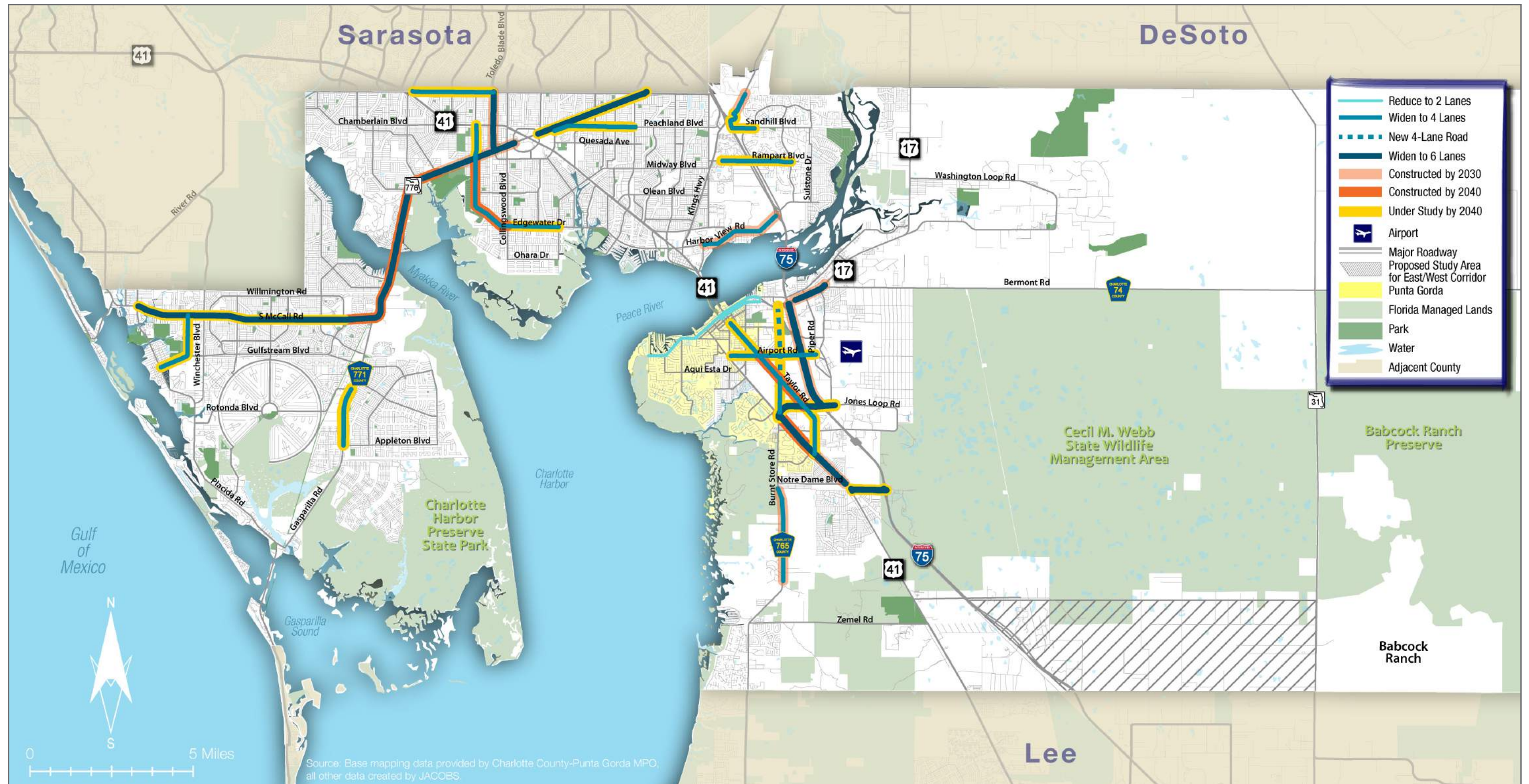
Examples of Congestion Management Strategies

Figure 7-1: Cost Feasible Plan Road Projects (2019-2030)



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Figure 7-2: Cost Feasible Plan Road Projects (2031-2040)



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Figure 7-3: Cost Feasible Plan Road Projects (2019-2040)



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Table 7-2: Cost Feasible Plan Road Projects

Costs presented in millions

Facility	From	To	# of Existing Lanes	Project Length (Miles)	Jurisdiction	Area Type	Project Description	Revenue Source	Cost (PDC)	2019-2020 (YOE)				2021-2025 (YOE)				2026-2030 (YOE)				2031-2040 (YOE)			
										PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST
Burnt Store Road	North of Zemel Road	Scham Road	2U	4.17	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$41.77								\$53.05								
Airport Road	US 41	Piper Road	2U	2.62	County	Urban	Roadway - Widening (2L to 4L)	County, Local	\$12.30													\$2.05	\$6.15		
Burnt Store Road	North Jones Loop	Taylor Road	2U	0.998	County	Urban	Roadway - Widening (2L to 4L)	TRIP, County	\$13.34													\$0.78	\$2.34		
Burnt Store Road Ext.	Taylor Road	Florida Street	00	2.116	County	Urban	Roadway - New Construction (4L)	County	\$6.28													\$2.45			
Toledo Blade (CR 39)	US 41 (W)	Hillsborough Boulevard	4D	0.995	County	Urban	Roadway - Widening (4L to 6L)	County, Developer	\$15.54	\$0.64									\$2.27	\$3.95	\$16.47				
Toledo Blade (CR 39)	SR 776	Whitney Avenue	2U	0.521	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$6.26	\$0.30									\$1.08		\$7.83				
Toledo Blade (CR 39)	SR 776	Whitney Avenue	4U	0.521	County	Urban	Roadway - Widening (4L to 6L)	County, Developer	\$6.58											\$1.38	\$8.62				
Toledo Blade (CR 39)	Whitney Avenue	US 41 (W)	4D	0.249	County	Urban	Roadway - Widening (4L to 6L)	County, Developer	\$3.89	\$0.16									\$0.57	\$0.99	\$4.12				
CR 771	Appleton Boulevard	Rotonda Boulevard East	2U	1.75	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$3.51													\$1.37	\$4.10		
Edgewater Drive	Jowett Street	Collingswood Blvd	2U	0.239	County	Urban	Roadway - Widening (2L to 4L)	County	\$4.91													\$0.20	\$0.60	\$3.87	\$4.92
Edgewater Drive	Collingswood Blvd	Pellam Blvd	2U	0.929	County	Urban	Roadway - Widening (2L to 4L)	County	\$2.16													\$0.73	\$2.18	\$0.63	
Edgewater Drive	Pellam Boulevard	Midway Blvd	2U	0.614	County	Urban	Roadway - Widening (2L to 4L)	County	\$1.42													\$0.48	\$1.44	\$0.41	
Flamingo Boulevard (Realignment)	Edgewater Drive	Como Street	0	0.557	County	Urban	Roadway - New Construction (4L)	County	\$10.21											\$3.24					\$15.79
Flamingo Boulevard	Como Street	Wintergarden Avenue	2U	0.832	County	Urban	Roadway - Widening (2L to 4L)	County	\$8.33																\$15.92
Flamingo Boulevard	Wintergarden Avenue	SR 776	2U	1.041	County	Urban	Roadway - Widening (2L to 4L)	County	\$14.06															\$7.73	\$19.92
Flamingo Boulevard	SR 776	US 41	2U	0.98	County	Urban	Roadway - Widening (2L to 4L)	County	\$1.96													\$0.77	\$2.30		
Harbor View Road	Melbourne Street	Date Street	2U	1.12	County	Urban	Roadway - Widening (2L to 4L)	County, Developer, OA	\$14.77			\$4.17					\$14.25								
Harbor View Road	Date Street	Purdy Drive	2U	0.666	County	Urban	Roadway - Widening (2L to 4L)	County, Developer, OA	\$8.78			\$2.48					\$8.47								
Harbor View Road	Purdy Drive	I-75	2U	0.8209	County	Urban	Roadway - Widening (2L to 4L)	County, Developer, OA	\$10.82			\$3.06									\$12.33				
Hillsborough Boulevard	South Cranberry Boulevard	Toledo Blade Boulevard	2U	2.45	County	Urban	Roadway - Widening (2L to 4L)	County	\$4.91													\$1.92	\$5.75		
I-75	North Jones Loop	US 17	4D	3.3	State	Urban	Interstate - Widening (4L to 6L)	SIS	\$56.00						\$0.17		\$71.12								
North Jones Loop Road	Burnt Store Road	Piper Road	4D	1.8	County	Urban	Roadway - Widening (4L to 6L)	County	\$5.83						\$3.63					\$4.76					
Kings Highway	North of Sandhill Boulevard	Desoto County Line	2U	0.5	County	Urban	Roadway - Widening (2L to 4L)	County	\$5.01				\$5.71												
West Marion Avenue	Hibiscus Drive	Bal Harbor Boulevard	4D	0.926	County	Urban	Road Diet (4L to 2L)	Local	\$0.51					\$0.10	\$0.29						\$2.37				
West Marion Avenue	Bal Harbor Boulevard	West Henry Street	4U	0.425	County	Urban	Road Diet (4L to 2L)	Local	\$0.24					\$0.04	\$0.14						\$1.09				
East Marion Avenue	US 41	Marlympia Way	30	1.422	County	Urban	Road Diet (3L to 2L)	Local	\$0.79					\$0.15	\$0.44						\$3.64				
East Olympia Avenue	US 41	Marlympia Way	30	1.32	County	Urban	Road Diet (3L to 2L)	Local	\$2.70					\$0.14	\$0.41						\$3.38				
Peachland Boulevard	Cochran Boulevard	Harbor Boulevard	2U	2.47	County	Urban	Roadway - Widening (2L to 4L)	County	\$4.95													\$1.93	\$5.79		
Rampart Boulevard	West of I-75	Rio De Janeiro Avenue	2U	1.75	County	Urban	Roadway - Widening (2L to 4L)	County	\$3.51													\$1.37	\$4.10		

Table 7-2: Cost Feasible Plan Road Projects (cont.)

Costs presented in millions

Facility	From	To	# of Existing Lanes	Project Length (Miles)	Juris-diction	Area Type	Project Description	Revenue Source	Cost (PDC)	2019-2020 (YOE)				2021-2025 (YOE)				2026-2030 (YOE)				2031-2040 (YOE)					
										PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST		
San Casa Drive	Placida Road	SR 776	2U	2.08	County	Urban	Roadway - Widening (2L to 4L)	County	\$4.17													\$1.63	\$4.88				
Sandhill Boulevard	Kings Highway	Deep Creek Boulevard	2U	1.25	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$2.20									\$0.76					\$2.58				
SR 776	Crestview Drive	CR 775	4D	0.836	State	Urban	Roadway - Widening (4L to 6L)	OA	\$0.46													\$0.72	\$2.16				
SR 776	CR 775	San Casa Drive	4D	1.557	State	Urban	Roadway - Widening (4L to 6L)	OA	\$0.86													\$1.34	\$4.02				
SR 776	San Casa Drive	Oriole Boulevard	4D	0.194	State	Urban	Roadway - Widening (4L to 6L)	OA	\$0.11													\$0.17	\$0.50				
SR 776	Oriole Boulevard	Winchester Boulevard	4D	0.303	State	Urban	Roadway - Widening (4L to 6L)	OA	\$0.17													\$0.26	\$0.78				
SR 776	Winchester Boulevard	Wilmington Boulevard	4D	0.184	State	Urban	Roadway - Widening (4L to 6L)	OA	\$0.10													\$0.16	\$0.48				
SR 776	Wilmington Boulevard	Gulfstream Boulevard	4D	4.07	State	Urban	Roadway - Widening (4L to 6L)	OA	\$2.40													\$3.74					
SR 776	Gulfstream Boulevard	Myakka River Bridge	4D	2.48	State	Urban	Roadway - Widening (4L to 6L)	OA	\$35.08													\$2.28	\$6.85		\$55.84		
SR 776	Bridge over Myakka River		4D	0.25	State	Urban	Bridge - Widening (4L to 6L)	OA	\$18.71									\$1.08					\$3.65		\$29.78		
SR 776	Myakka River Bridge	Biscayne Drive	4D	2.97	State	Urban	Roadway - Widening (4L to 6L)	OA	\$39.33									\$2.26					\$7.67		\$62.60		
SR 776	Biscayne Drive	Murdock Circle	4D	2.5	State	Urban	Roadway - Widening (4L to 6L)	OA	\$33.11					\$1.68	\$5.04						\$41.38						
Taylor Road	US 41 (Southern Terminus)	Jones Loop Road	2U	1.54	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$0.77													\$1.20					
Taylor Road	Jones Loop Road	Airport Road	2U	2.03	County	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$31.48					\$1.24					\$4.21					\$15.07	\$38.84		
Taylor Road	Airport Road	US 41 (Northern Terminus)	2U	1.3	Punta Gorda	Urban	Roadway - Widening (2L to 4L)	County, Developer	\$0.65													\$1.02					
Tucker's Grade	US 41	I-75	4D	1.066	County	Urban	Roadway - Widening (4L to 6L)	County	\$2.35													\$0.92	\$2.75				
US 17	Copley Avenue	Regent Road	4D	0.309	State	Urban	Roadway - Widening (4L to 6L)	TRIP, OA	\$4.37					\$0.22					\$0.75		\$5.46						
US 17	Regent Road	Golf Course Boulevard	4D	0.48	State	Urban	Roadway - Widening (4L to 6L)	TRIP, OA	\$6.79					\$0.34					\$1.17		\$8.49						
US 17	Golf Course Boulevard	CR 74	4D	0.193	State	Urban	Roadway - Widening (4L to 6L)	TRIP, OA	\$2.73					\$0.14					\$0.47		\$3.41						
US 41	Notre Dame Boulevard	Taylor Road	4D	1.305	State	Urban	Roadway - Widening (4L to 6L)	OA	\$18.46					\$0.94					\$3.18		\$23.08						
US 41	Taylor Road	Burnt Store Road	4D	1.59	State	Urban	Roadway - Widening (4L to 6L)	OA	\$18.46					\$0.94					\$3.18						\$29.38		
Veterans Boulevard	Murdock Circle East	Cochran Boulevard	4D	0.489	County	Urban	Roadway - Widening (4L to 6L)	County	\$0.29													\$0.45					
Veterans Boulevard	Cochran Boulevard	Atwater Street	4D	1.377	County	Urban	Roadway - Widening (4L to 6L)	County	\$0.81													\$1.27					
Veterans Boulevard	Atwater Street	Yorkshire Street	4D	0.658	County	Urban	Roadway - Widening (4L to 6L)	County	\$0.39													\$0.61					
Veterans Boulevard	Yorkshire Street	Hillsborough Boulevard	4D	0.967	County	Urban	Roadway - Widening (4L to 6L)	County	\$0.57													\$0.89					
Project Phases								Revenue Sources		Total	\$496.17	\$16.53				\$162.95				\$176.98				\$402.48			
PD&E: Project Development and Environment								ROW: Right of way Acquisition		OA: Obligation Authority		Notes Costs presented in millions in Present Day Costs (PDC) and Year of Expenditure (YOE)															
PE: Project Engineering and Design								CST: Project Construction		SIS: Strategic Intermodal System																	
										TRIP: Transportation Regional Incentive Program																	

Figure 7-4: Cost Feasible Plan Developer Funded Road Projects



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Table 7-3: Cost Feasible Plan Developer Funded Road Projects

Costs presented in millions

Facility	From	To	# of Existing Lanes	Project Length (Miles)	Juris-diction	Area Type	Project Type	Cost (PDC)			
								PD&E	PE	ROW	CST
CR 74	US 17	Strasse Boulevard	2U	2.673	County	Urban	Roadway - Widening (2L to 4L)	\$1.34	\$4.02	\$13.34	\$26.78
CR 74	Strasse Boulevard	SR 31	2U	12.17	County	Rural	Roadway - Widening (2L to 4L)	\$5.11	\$15.32	\$26.73	\$102.15
SR 31	Lee County Line	North of Cook Brown Road	2U	2.1	County	Rural	Roadway - Widening (2L to 4L)	\$0.88	\$2.64	\$4.04	\$17.63
SR 31	North of Cook Brown Road	CR 74	2U	9.97	County	Rural	Roadway - Widening (2L to 4L)	\$4.18	\$12.55	\$19.16	\$83.69
I-75	at Cook Brown Road or Oil Well Road				State	Urban	Interchange	\$3.78	\$11.33	\$9.80	\$75.55
Dahlgren Avenue Ext.	US 41	Hillsborough Boulevard	0	0.3	County	Urban	Roadway - New Construction (2L)	\$0.16	\$0.48	\$2.66	\$3.18
							Total	\$446.50			

Project Phases

PD&E: Project Development and Environment

PE: Project Engineering and Design

ROW: Right-of-way Acquisition

CST: Project Construction

Note

Costs presented in millions in Present Day Costs (PDC)

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Table 7-4: Unfunded Needs Roads Projects

Costs presented in millions

Facility	From	To	# of Existing Lanes	Project Length (Miles)	Jurisdiction	Area Type	Project Description	Revenue Source	Costs, in millions (PDC)				Cost, in millions (YOE)
									PD&E	PE	ROW	CST	Unfunded Needs
Airport Road	US 41	Piper Road	2U	2.62	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$7.06	\$26.25	\$76.11
Burnt Store Road	North Jones Loop	Taylor Road	2U	0.998	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$1.34	\$10.00	\$25.84
Burnt Store Road Extension	Taylor Road	Florida Street	00	2.116	County	Urban	Roadway - New Construction (6L)	Multiple	Funded	\$4.71	\$34.19	\$31.40	\$160.12
Burnt Store Road Extension*	Taylor Road	Florida Street	4D	2.116	County	Urban	Roadway - Widening (4L to 6L)	Multiple	\$1.17	\$3.50	\$10.06	\$23.35	\$85.23
Burnt Store Road	Scham Road	US 41	4D	2.44	County	Urban	Roadway - Widening (4L to 6L)	Multiple	\$1.35	\$4.04	\$5.80	\$26.93	\$84.70
Burnt Store Road	North Jones Loop	Taylor Road	4D	1.74	County	Urban	Roadway - Widening (4L to 6L)	Multiple	\$0.96	\$2.88	\$4.13	\$19.20	\$60.40
Burnt Store Road	Zemel Road	Scham Road	4D	4.5	County	Urban	Roadway - Widening (4L to 6L)	Multiple	\$2.48	\$7.45	\$10.69	\$49.66	\$156.20
CR 771	Appleton Boulevard	Rotonda Boulevard East	2U	1.75	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$0	\$17.53	\$39.79
Edgewater Drive	Collingswood Boulevard	Pellam Boulevard	2U	0.929	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	Funded	\$9.31	\$21.12
Edgewater Drive	Pellam Boulevard	Midway Boulevard	2U	0.614	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	Funded	\$6.15	\$13.96
Flamingo Boulevard	SR 776	US 41	2U	0.98	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$3.42	\$9.82	\$30.29
Grove Boulevard	North Jones Loop	CR 74	2U	3.592	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$1.80	\$5.40	\$12.52	\$35.98	\$124.34
Grove Boulevard Extension	CR 74	US 17	0	1.293	County	Urban	Roadway - New Construction	Multiple	\$1.96	\$2.88	\$20.89	\$19.19	\$99.62
Harbor Boulevard Extension	Veterans Boulevard	Hillsborough Boulevard	0	0.1	County	Urban	Roadway - New Construction (2L)	Multiple	\$0.05	\$0.16	\$0.89	\$1.06	\$4.88
Harbor View Road	East of I-75	Rio De Janeiro Avenue	2U	0.474	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$0.24	\$0.71	\$1.50	\$4.75	\$16.06
Henry Street	Golf Course Boulevard	Grove Boulevard	0	2.452	City of Punta Gorda	Urban	Roadway - New Construction (2L)	Multiple	\$1.30	\$3.90	\$10.88	\$25.98	\$35.11
Hillsborough Boulevard	South Cranberry Boulevard	Toledo Blade Boulevard	2U	2.45	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$8.54	\$24.54	\$75.72
I-75	at Yorkshire Street		N/A	N/A	State	Urban	Interchange	Multiple	\$3.78	\$11.33	\$9.80	\$75.55	\$222.47
Loveland Boulevard	Westchester Boulevard	Kings Highway	2U	1.46	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$0.73	\$2.19	\$5.09	\$14.63	\$50.54
Loveland Boulevard	Kings Highway	Veterans Boulevard	2U	2.3	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$1.15	\$3.46	\$8.02	\$23.04	\$79.62
North Jones Loop	Burnt Store Road	Piper Road	4D	1.8	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	Funded	Funded	\$19.86	\$45.09
Peachland Boulevard	Harbor Boulevard	Cochran Boulevard	2U	2.47	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$8.61	\$24.74	\$76.34
Prineville Street	Paulson Drive	Sarasota County Line	2U	1.25	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$0.63	\$1.88	\$4.36	\$12.52	\$43.24

* PD&E Study funded for new 4-lane road; widening to 6 lanes is considered a separate project

Table 7-4: Unfunded Needs Roads Projects (cont.)

Costs presented in millions

Facility	From	To	# of Existing Lanes	Project Length (Miles)	Jurisdiction	Area Type	Project Description	Revenue Source	Costs, in millions (PDC)				Cost, in millions (YOE)
									PD&E	PE	ROW	CST	Unfunded Needs
Rampart Boulevard	West of I-75	Rio De Janeiro Avenue	2U	1.75	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$3.05	\$17.53	\$46.94
Quesada Avenue	Cochran Boulevard	Harbor Boulevard	2U	2.42	County	Urban	Roadway - Widening (2L to 4L)	Multiple	\$1.21	\$3.64	\$8.43	\$24.24	\$83.78
San Casa Drive	Placida Road	SR 776	2U	2.08	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$7.25	\$20.84	\$64.28
Sandhill Boulevard	Kings Highway	Deep Creek Boulevard	2U	1.25	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	Funded	\$0	\$11.02	\$25.01
SR 776	Crestview Drive	CR 775	4D	0.836	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$1.38	\$2.38	\$9.23	\$29.09
SR 776	CR 775	San Casa Drive	4D	1.557	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$2.58	\$2.47	\$17.18	\$49.56
SR 776	San Casa Drive	Oriole Boulevard	4D	0.194	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$0.32	\$0.31	\$2.14	\$6.18
SR 776	Oriole Boulevard	Winchester Boulevard	4D	0.303	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$0.50	\$0.48	\$3.34	\$9.65
SR 776	Winchester Boulevard	Wilmington Boulevard	4D	0.184	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$0.30	\$0	\$2.03	\$5.17
SR 776	Wilmington Boulevard	Gulfstream Boulevard	4D	4.07	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$7.20	\$0	\$47.98	\$122.25
Taylor Road	US 41 (southern terminus)	Jones Loop Road	2U	1.54	County	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	\$2.31	\$5.37	\$15.43	\$51.88
Taylor Road	Airport Road	US 41 (northern terminus)	2U	1.3	Punta Gorda	Urban	Roadway - Widening (2L to 4L)	Multiple	Funded	\$1.95	\$4.53	\$13.02	\$43.80
Tucker's Grade	US 41	I-75	4D	1.066	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	Funded	\$0	\$11.76	\$26.71
US 41	Peace River Bridge (Capacity Expansion)		4D	1.47	State	Urban	Roadway - Widening (4L to 6L)	Multiple	\$0.81	\$2.43	\$0	\$16.22	\$42.84
Veterans Boulevard	Murdock Circle East	Cochran Boulevard	4D	0.489	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$0.86	\$0.93	\$5.76	\$16.87
Veterans Boulevard	Cochran Boulevard	Atwater Street	4D	1.377	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$2.43	\$2.62	\$16.23	\$47.50
Veterans Boulevard	Atwater Street	Yorkshire Street	4D	0.658	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$1.16	\$0	\$7.76	\$19.76
Veterans Boulevard	Yorkshire Street	Hillsborough Boulevard	4D	0.967	County	Urban	Roadway - Widening (4L to 6L)	Multiple	Funded	\$1.71	\$0	\$11.40	\$29.05
								Total	\$1,073.02				\$2,347.11

Project Phases

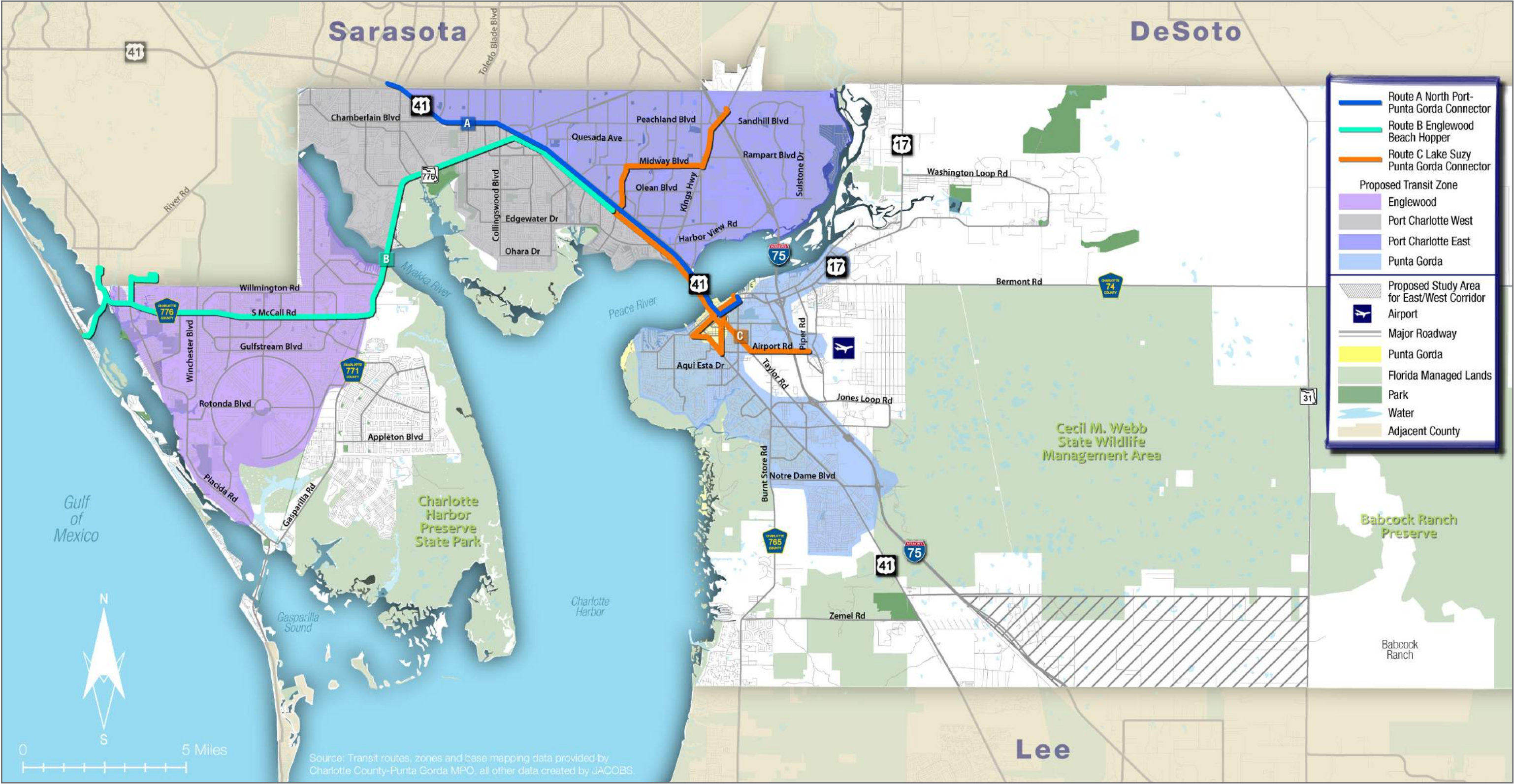
PD&E: Project Development and Environment
PE: Project Engineering and Design

ROW: Right-of-way Acquisition
CST: Project Construction

Note

Costs presented in millions in Present Day Costs (PDC) and Year of Expenditure (YOE)

Figure 7-5: Cost Feasible Plan Transit Projects



Source: Transit routes, zones and base mapping data provided by Charlotte County-Punta Gorda MPO. all other data created by JACOBS.

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Table 7-5: Cost Feasible Plan Transit Projects - Cost Feasible and Unfunded Transit Operations and Maintenance

Route	Route Description	Jurisdiction	Mode	Service Type	Headways	Hours of Operation	Cost per Revenue Hour	Total Annual Revenue Hours	Funded?	Revenue Source	Annual Project Cost, in millions (PDC)	Cost, in millions (YOE)				Cost, in millions (YOE)	
												2019-2020	2021-2025	2026-2030	2031-2040	Total Unfunded Need	
Route A	North Port - Punta Gorda Connector	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Route B	Englewood Beach Hopper	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	5100	Y	Multiple Sources	\$0.31				\$2.43		
Route C	Lake Suzy - Punta Gorda Connector	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Flex Zone 1	Englewood	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Flex Zone 2	Port Charlotte West	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Flex Zone 3	Port Charlotte East	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Flex Zone 4	Punta Gorda	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	3060	Y	Multiple Sources	\$0.19				\$1.46		
Dial-A-Ride Weekday	Existing Dial-A-Ride Service	County	Bus	Existing Bus Route		6am to 6pm	\$58	30276	Y	Multiple Sources	\$1.74	\$2.02	\$10.59	\$11.96			
Dial-A-Ride Weekend	Existing Dial-A-Ride Service	County	Bus	Existing Bus Route		9am to 6pm (weekends)	\$58	3936	Y	Multiple Sources	\$0.23				\$1.75		
												Total	\$2.02	\$10.59	\$11.96	\$12.92	
Unfunded Needs																	
Route A	North Port - Punta Gorda Connector	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Route B	Englewood Beach Hopper	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	10200	N	Multiple Sources	\$0.63	Not Funded	Not Funded	Not Funded	Not Funded	\$4.86	
Route C	Lake Suzy - Punta Gorda Connector	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Route D	North Port - Fort Myers Express	County	Bus	New Bus Route	120 Minutes	6am to 6pm	\$62	2186	N	Multiple Sources	\$0.14	Not Funded	Not Funded	Not Funded	Not Funded	\$1.05	
Flex Zone 1	Englewood	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Flex Zone 2	Port Charlotte West	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Flex Zone 3	Port Charlotte East	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Flex Zone 4	Punta Gorda	County	Bus	New Bus Route	60 Minutes	6am to 6pm	\$62	6120	N	Multiple Sources	\$0.38	Not Funded	Not Funded	Not Funded	Not Funded	\$2.91	
Project Phases												Total					\$23.38

Project Phases

PD&E: Project Development and Environment

PE: Project Engineering and Design

ROW: Right-of-way Acquisition

CST: Project Construction

Note

Costs presented in Year of Expenditure (YOE)

Table 7-6: Cost Feasible Plan Transit Projects - Cost Feasible and Unfunded Transit Fleet

Vehicle Type	Unit Cost	Number of Units	Total Project Cost, in millions (PDC)	Revenue Source	Cost, in millions (YOE)				Cost, in millions (YOE)
					2019-2020	2021-2025	2026-2030	2031-2040	Unfunded Needs
Small Cutaway Bus w/Wheelchair Lift	\$60,000	1	\$0.06	Section 5307	\$0.07				
31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	2	\$0.36	Section 5307	\$0.42				
31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	4	\$0.72	Section 5307		\$0.87			
Small Cutaway Bus w/Wheelchair Lift	\$60,000	6	\$0.36	Section 5307		\$0.44			
Small Cutaway Bus w/Wheelchair Lift	\$60,000	7	\$0.42	Section 5307			\$0.58		
Small Cutaway Bus w/Wheelchair Lift	\$60,000	3	\$0.18	Section 5307			\$0.25		
Small Cutaway Bus w/Wheelchair Lift	\$60,000	5	\$0.3	Section 5307			\$0.41		
31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	6	\$1.08	Section 5307				\$1.67	
Small Cutaway Bus w/Wheelchair Lift	\$60,000	3	\$0.18	Section 5307				\$0.28	
Small Cutaway Bus w/Wheelchair Lift	\$60,000	3	\$0.18	Section 5307				\$0.28	
Small Cutaway Bus w/Wheelchair Lift	\$60,000	6	\$0.36	Section 5307				\$0.56	
Small Cutaway Bus w/Wheelchair Lift	\$60,000	5	\$0.3	Section 5307				\$0.46	
31' and 34' Medium Duty 26,500 - 34,000 GVW	\$180,000	8	\$1.44	Section 5307					\$2.64
Total					\$0.49	\$1.31	\$1.23	\$3.25	\$2.64

Table 7-7: Cost Feasible Plan Transit Projects - Cost Feasible and Unfunded Transit Infrastructure Projects

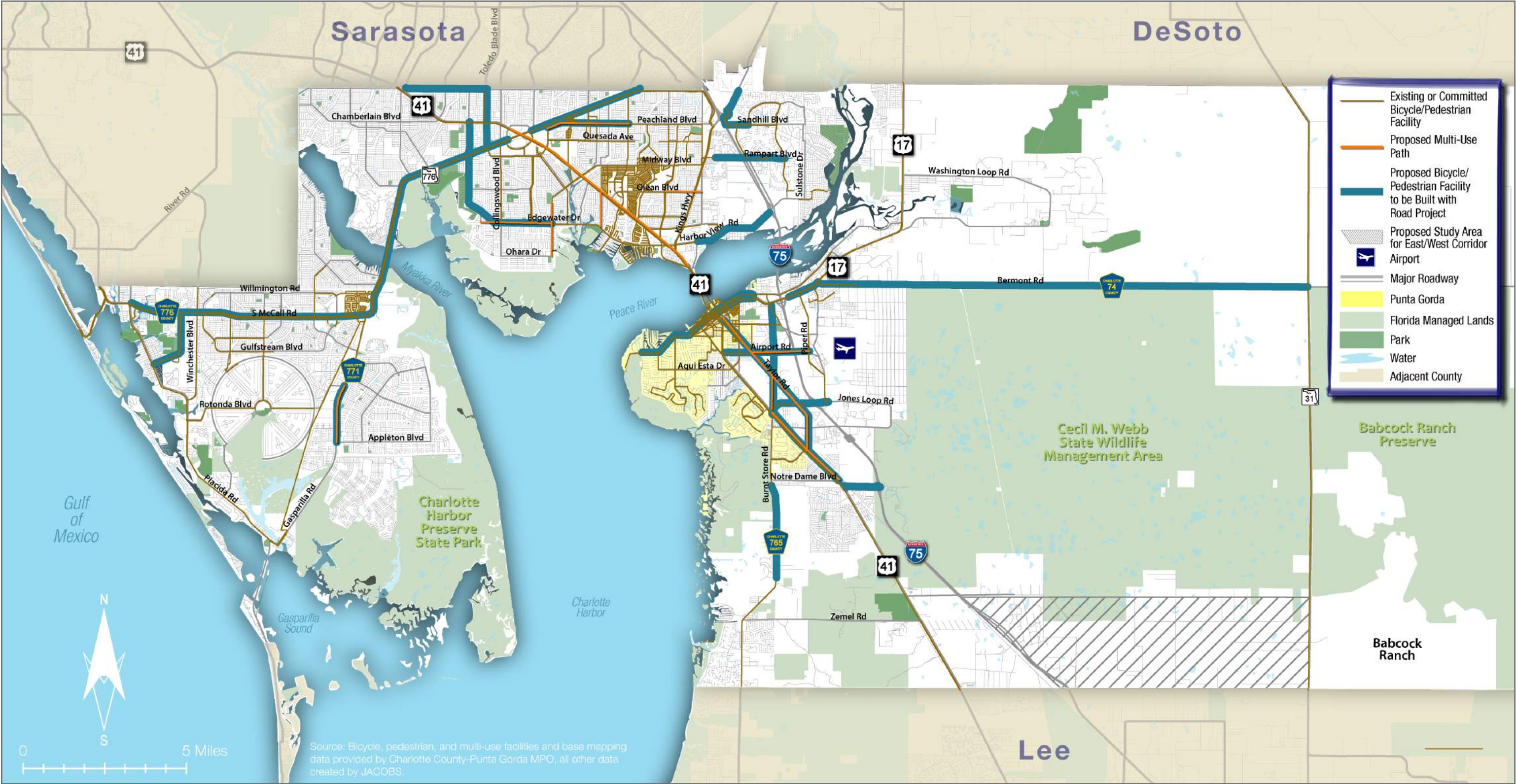
Costs presented in millions

Facility	Project Type	Project Description	Unit Cost	Number of Units	Total Project Cost, in millions (PDC)	Revenue Source	2019-2020 (YOE)				2021-2025 (YOE)				2026-2030 (YOE)				2031-2040 (YOE)				Cost (YOE)
							PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	Unfunded Needs
Bus Shelters & Amenities	Station/Facility	Local Bus Stops - Shelters & Amenities	\$300,000	10	\$0.30	Section 5307																\$0.97	
Murdock Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
Parkside Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
I-75 & Kings Highway Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
Englewood Library Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
West Englewood Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
New Medical Area (Punta Gorda) Park & Ride	Station/Facility	Park & Ride - At Grade		1	\$4.22	Multiple																	\$11.17
Total																			\$0.97				\$67.02

Project Phases
PD&E: Project Development and Environment
PE: Project Engineering and Design
ROW: Right-of-way Acquisition
CST: Project Construction

Note Costs presented in Year of Expenditure (YOE)

Figure 7-6: Cost Feasible Plan Bicycle, Pedestrian, and Multi-Use Trail Facilities



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Table 7-8: Cost Feasible Plan Bicycle, Pedestrian, and Multi-Use Trail Facilities

Costs presented in millions

Facility	From	To	Project Length (Miles)	Jurisdiction	Area Type	Project Type	Project Description	Revenue Source	2019-2020 (YOE)				2021-2025 (YOE)				2026-2030 (YOE)				2031-2040 (YOE)			
									PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST
Airport Road	Taylor Road	Piper Road	1.7	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.05	\$0.15		\$1.05								
CR 771 (Gasparilla Road)	Rotonda Boulevard E	Appleton Boulevard	1.8	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.05	\$0.15		\$1.06								
Edgewater Drive	Flamingo Boulevard	Midway Boulevard	2.2	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.06	\$0.19		\$1.30								
Midway Blvd	Ohara Drive	Victoria Avenue	1.6	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.05	\$0.14		\$0.96								
Olean Blvd	Beacon Drive	Loveland Boulevard	1.1	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources													\$0.04	\$0.12		\$0.99
Peachland Blvd	Cochran Boulevard	Harbor Boulevard	2.5	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources													\$0.09	\$0.27		\$2.23
Taylor Road	US 41 (South End)	N. Jones Loop Road	1.6	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources													\$0.06	\$0.17		\$1.41
Taylor Road*	N Jones Loop Road	Airport Road	2.0	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources													\$0.08	\$0.23		\$1.84
Taylor Road	Airport Road	US 41 (North End)	1.3	County	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources													\$0.05	\$0.15		\$1.19
US 41	Notre Dame Boulevard	Burnt Store Road	2.9	State	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.08					\$0.28		\$2.06				
East Side of US 41	Peace River Bridge	Enterprise Drive	7.0	State	Urban	Bicycle/Pedestrian Facilities	Shared Use Path (10')	Multiple Sources					\$0.20					\$0.69		\$4.99				
Total													\$5.48				\$8.02				\$8.91			

Project Phases
PD&E: Project Development and Environment
PE: Project Engineering and Design
ROW: Right-of-way Acquisition
CST: Project Construction

- Notes**
- 1. Costs presented in millions in Year of Expenditure (YOE)
 - 2. It is assumed that cost feasible projects will include bicycle and pedestrian improvements when they are constructed, as appropriate
 - 3. The multi-use trails projects listed in this table may be constructed before, after, or as a component of road construction projects
 - 4. Further detail regarding funded/unfunded biyccle and pedestrian projects should be determined through development of the county's Bicycle and Pedestrian Master Plan

*Project coincides with Cost Feasible roadway project

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Figure 7-7: Cost Feasible Plan Congestion Management Projects



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Table 7-9: Cost Feasible Plan Congestion Management Projects

Costs presented in millions

Project	Project Type	Facilities	Cost, in millions (YOE)			
			2019-2020	2021-2025	2026-2030	2031-2040
Charlotte County Advanced Traffic Management System ITS	Charlotte County Advanced Traffic Management System (ATMS) ITS implementation	Countywide	Committed	\$3.18		
Congestion Management Projects	Corridor Improvements	US 41 SR 776		\$5.08	\$6.00	\$11.46
	Intersection Improvements	1. US 41 and Cochran Boulevard 2. US 41 and Midway Boulevard 3. US 41 and Olean Boulevard 4. US 41 and Conway Boulevard 5. US 41 and W Olympia Avenue 6. US 41 and Toledo Blade Boulevard 7. US 41 and Harbor Boulevard 8. US 41 and Easy Street 9. US 41 and Port Charlotte Boulevard 10. US 41 and Murdock Circle				
		Total				

Notes
Costs presented in millions in Year of Expenditure (YOE)

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CHAPTER 8

Congestion Management

CHAPTER 8: Congestion Management

The 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 and enhanced connection to the planning and environmental review process.

Public Involvement

CMP strategies were presented during public involvement activities to provide citizen groups information on congestion monitoring activities currently in place in Charlotte County and planned improvements to mitigate congestion. The public involvement process included various activities to inform the public and gather input and is integrated with the 2040 LRTP public involvement activities conducted throughout the LRTP process. Public involvement is discussed in **Chapter 4**.

Causes of Congestion

Congestion management begins by understanding the problem. There are six major causes of congestion:

Bottlenecks are points where the roadway narrows or regular traffic demands (typically at traffic signals) cause traffic to back up. This is the largest source of congestion and typically causes a road to carry more vehicles than it was designed for.

Traffic incidents can include crashes, stalled vehicles, or debris on the road. Incidents cause about one quarter of congestion problems. A focus of the CC-PG MPO CMP is reducing crashes that cause congestion and expediting incident response to clear incidents where ITS surveillance is in place.

Work zones occur when new roads are built and where maintenance activities, such as filling potholes and repaving, are underway. The amount of congestion from these actions can be reduced by various strategies.

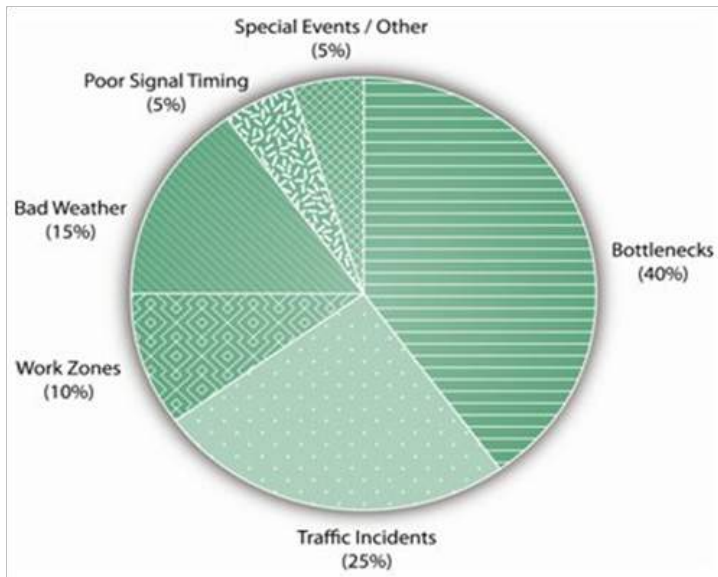
Bad weather cannot be controlled. Travelers can be notified of the potential for increased congestion, and signal systems can adapt to improve safety.

Poor traffic signal timing is the faulty operation of traffic signals or green/red lights where the time allocation for a road does not match the volume on that road. Poor signal timing is a source of congestion on major and minor streets.

Special events cause “spikes” in traffic volumes and changes in traffic patterns. These irregularities either cause or increase delay on days, times, or locations where there usually is none.

Figure 8-1 shows the results of a national study presented by FHWA on the sources of congestion. Bottlenecks are the largest cause of congestion nationally, followed by traffic incidents and bad weather. These national data are widely used in CMP updates because there are few comprehensive local studies on the causes of congestion.

Figure 8-1: Causes of Road Congestion Nationally



Source: USDOT, *Advancing Metropolitan Planning for Operations: An Objectives-Driven, Performance-Based Approach – A Guidebook*; February, 2010

The data suggest that local causes are likely to be similar, with bottlenecks and traffic incidents typically being the top two causes of congestion.

Federal Requirements

The CMP as required by MAP-21 builds upon the Congestion Management Systems first introduced in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Fundamental aspects of MAP-21 were extended through the new transportation bill (FAST) effective October 1, 2015. However, due to the timing of the FAST Act, MAP-21 requirements were used during analysis of the CMP.

MAP-21 provides updated policy and programmatic framework for investments to guide the growth and development of the country's transportation infrastructure. MAP-21 creates a streamlined, performance-based, multimodal program to address the needs of the national transportation system as outlined in national goals.

National Goals

A key feature of MAP-21 is the establishment of a performance- and outcome-based program. The objective is for states to invest resources in projects that collectively will make progress toward the achievement of the following national goals:

- **Safety** to achieve a significant reduction in traffic fatalities and serious injuries
- **Infrastructure condition** to keep the highway infrastructure in good repair
- **Congestion reduction** to achieve a significant reduction in congestion on the National Highway System (NHS)
- **System reliability** to improve the efficiency of the surface transportation system
- **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
- **Environmental sustainability** to enhance the performance of the transportation system while protecting the natural environment
- **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.

Eight Step Process

Developing a CMP typically follows an eight-step objectives-driven, performance-based approach to focus on managing congestion. 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 8-2 summarizes framework for the CMP process as described in the FHWA's Congestion Management Process: A Guidebook.

Figure 8-2: Federal Eight-Step Congestion Management Process



Step 1 – Develop Congestion Management Objectives

The first step in developing a CMP is to identify objectives that focus on congestion management, typically derived from the vision and goals of the LRTP. These objectives include performance criteria and are defined in terms that enable stakeholders to focus on specific aspects of congestion. For example, objectives for commute trips may be different from objectives for other travel purposes.

Alternatively, objectives may be established only for peak period travel as opposed to off-peak. Objectives may also be developed for freight movement and may be focused on activity areas or corridors where the movement of goods is particularly important, such as a port, terminal, or freight corridor.

The following objectives for the CMP were developed from the adopted LRTP goals and objectives to maintain consistency with regional goals and plans:

1. Reduce vehicle miles of travel per capita
2. Increase the viability and usage of non-automobile modes of travel
3. Improve and increase transit as a viable transportation alternative
4. Improve roadway operations to reduce congestion

It is recommended that these objectives be re-evaluated every three to five years.

Step 2 – Identify the Area of Application

The CMP is applied to a specific geographic area and network of surface transportation facilities. Often an area of application may align with the same geographic area as the regional ITS architecture. This alignment would allow system inventories and network descriptions to link together. The geographic area of application for this CMP update is the MPO planning area boundary, as shown in Figure 8-3.

Step 3 – Define the System/Network of Interest

Whatever the area of application used, the CMP defines the system characteristics and transportation network under consideration. The CMP should be multimodal, and freight and/or rail transportation assets are also included as conditions warrant. The CMP considers particular corridors or activity centers, based on safety needs, as discussed below.

The CC-PG MPO CMP is applied to the roadway network, with some consideration given to freight, bicycling, and pedestrian facilities, as well as travel patterns. A CMP would typically also include the transit network, but there is no Fixed Route transit in Charlotte County.

Step 4 – Develop Performance Measures

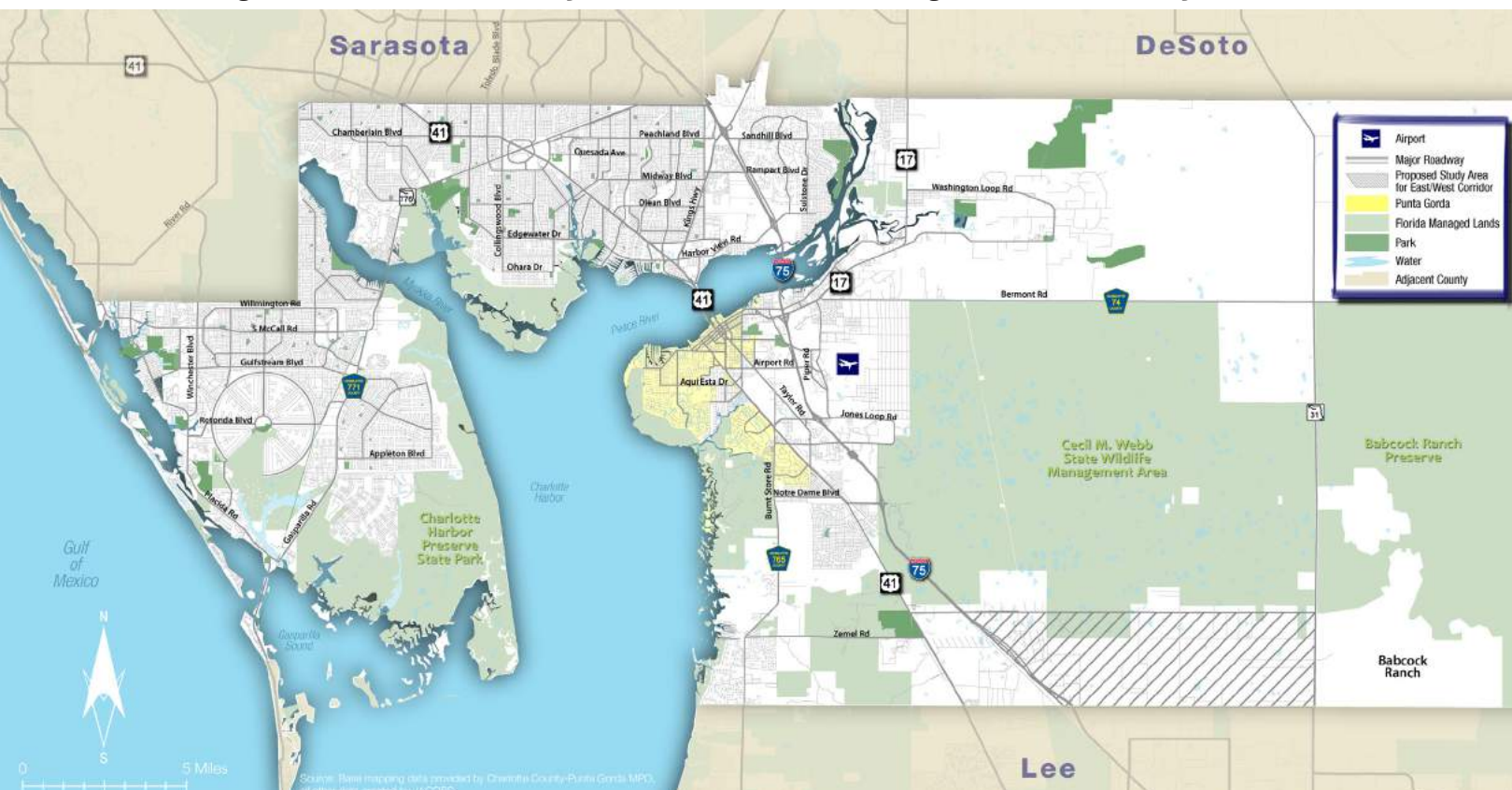
As with the objectives-driven, performance-based approach, performance measures created for the CMP should be derived from goals (Step 1) and reflect the impact of congestion on travelers and on economic activity, such as the number of accidents or lost time due to congestion. Measures should be flexible in their application and may change over time. Measures were developed to include multimodal consideration. For example, measures related to highway congestion should be accompanied by those for goods movement and non-motorized modes. Finally, ideal performance measures allow system performance to be tracked over time.

Performance measures and, where applicable and available, the associated data are presented below by category: roadways, goods movement, bike/pedestrian facilities, transportation demand management, and safety.

Roadways

Charlotte County roadway performance was analyzed. As a result, it is estimated that in 2018, 7,021,490 total Vehicle Miles will be traveled in Charlotte County. Of those, 723,462, or about 10 percent, are below the adopted Level of Service (LOS). **Figure 8-4** shows the percent of miles of roadways in the county by the typical LOS. LOS is a way to measure the actual vehicles attempting to use the road compared to the capacity for which the road was designed. A road that is operating at capacity are designated LOS E, and those that are operating over capacity and with significant delays are designated LOS F.

Figure 8-3: Charlotte County-Punta Gorda MPO Planning Area and Roadway Network



The percentages were determined by modeling the E+C Roadway Network, which includes the existing network with the projects committed to be funded by 2019. All of Charlotte County roads are operating at capacity, although nearly one quarter of the roadways are considered congested (LOS D and E).

Another roadway measurement analyzes how many miles people are driving on roadways by LOS type. As **Figure 8-5** shows, more than half of countywide vehicle miles traveled (VMT) are on congested roadways (LOS D and E). Nearly half (46 percent) are on completely stable roadways with unimpeded travel speeds (LOS C).

Goods Movement

The percent of truck travel on congested roadways is monitored to determine the roadway performance for goods movement. More specifically, the total travel or VMT on truck routes is reported, which is calculated by multiplying the Average Annual Daily Traffic (AADT) by the segment length or miles for segments that are truck routes. In 2040, if no improvements are made, more than 500,000 miles each day are traveled by trucks on congested truck routes, as shown in **Figure 8-6**.

Monitoring the number of crashes involving heavy vehicles is recommended, as these crashes can often create the most disruption to the transportation network, especially on the interstate, and result in more injuries and fatalities.

Bicycle/Pedestrian Facilities

The performance measures monitored for bicycling and pedestrian travel include existing pedestrian and bicycling facilities as well as existing,

planned, and conceptual multi-use trails, of which there are 387 miles. **Table 8-1** shows the performance of the bicycle and pedestrian network for Charlotte County.

Table 8-1: Bicycle and Pedestrian Performance Measures

Performance Measure	Bicycle Facilities	Pedestrian Facilities
Total Miles of Facilities	100	82
Miles of Facilities on Congested Roadways	37	6
Percent of Congested Roadway Centerline Miles with Facilities	156	25

Transportation Demand Management

TDM is a menu of strategies to help spread out the typically heavy morning and late afternoon demand on transportation facilities. These strategies can include carpooling, vanpooling, telework, and parking management and pricing. Locally, the best performance measure is to follow the number of registered carpools or vanpools.

The collage features three photographs at the top: a group of people working at a table, a man holding a sign, and a group with a mascot. Below the photos are eight icons representing different transportation demand management strategies:

- Carpooling
- Vanpooling
- Transit
- Walking & Bicycling
- Emergency Ride Home
- Park & Ride
- Cost Calculator
- Trip Track

Figure 8-4: Percent of Roadway Miles by Level of Service

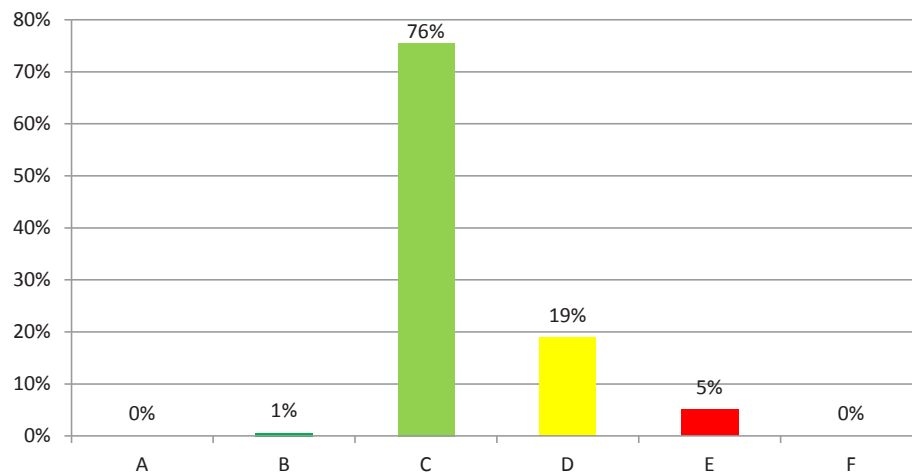


Figure 8-5: Percent of Vehicle Miles Traveled by Level of Service

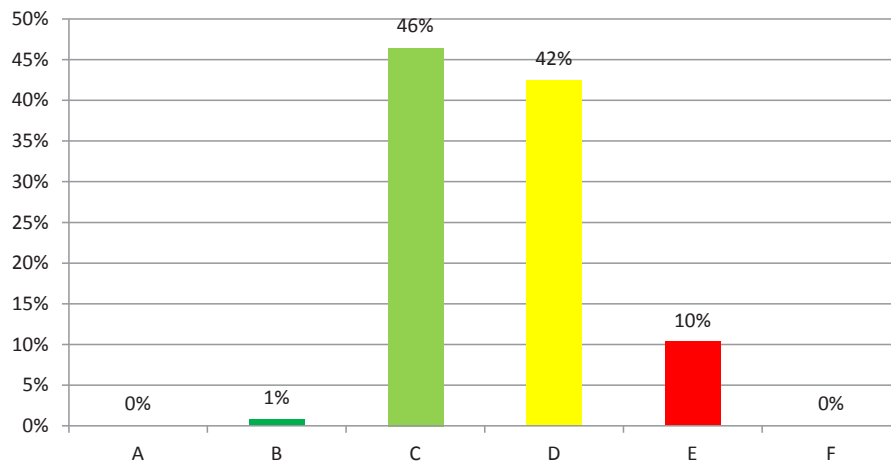
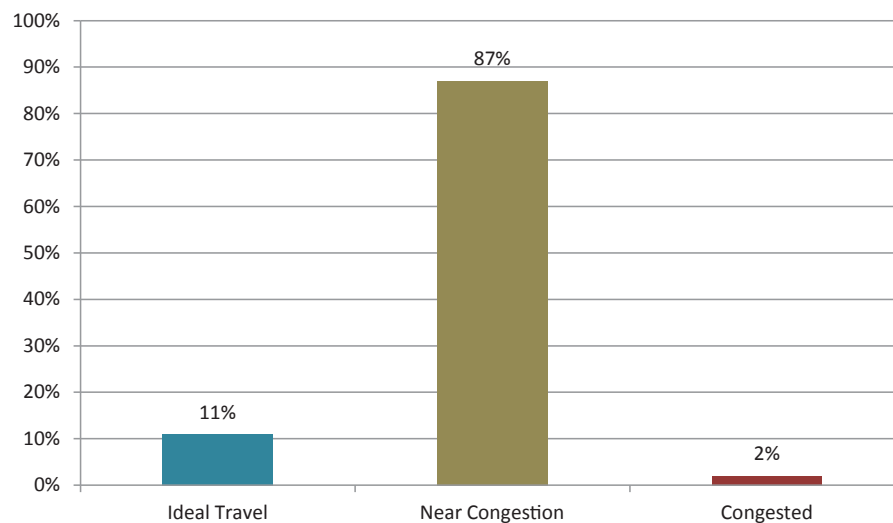


Figure 8-6: Percent of Truck Vehicle Miles Traveled on Congested Roads



While there are not localized TDM services, FDOT District One runs Commuter Services of Southwest Florida for the 12 counties in southwest Florida, including Charlotte County. It is a formalized TDM program that helps match commuters with similar home and work destinations, as well as manages a vanpooling service, and offering resources for reducing trips and costs for all commuters.

For all 12 counties served during 2013, Commuter Services of Southwest Florida tracked 83 carpools and vanpools and managed nine vans. Table 8-2 includes other metrics as measured in 2012.

Table 8-2: Commuter Services of Southwest Florida District-Wide Statistics (2012)

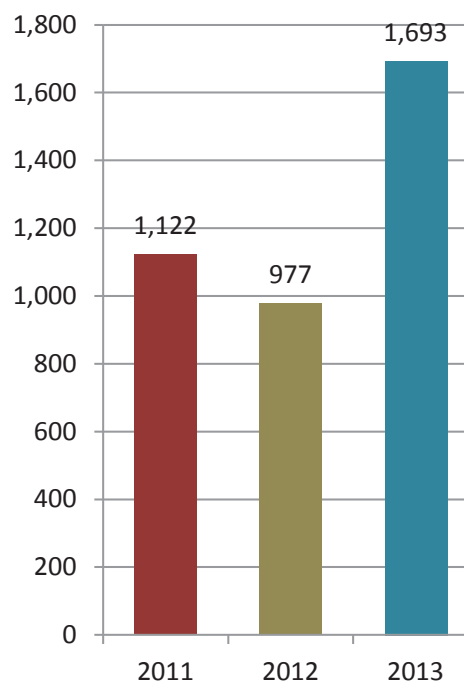
Performance Measure	Result
Vehicle miles of travel reduced (annually)	620,700
Vehicle trips reduced (annually)	23,800
Percent of drive-alone customers switching to an alternative	16.90%
Daily current carpool and vanpool person trips	83
Round-trip commutes avoided by use of telework	30,757 trips
Customer round-trip commutes avoided by use of alternative work schedules	119,611 trips
Gasoline consumption reduced (gallons annually)	28,800
Carbon Dioxide avoided (annually)	260 metric tons
Carbon footprint	260 metric tons

The Charlotte County TDP suggests using park-and-ride lots to encourage shifts from single-occupant vehicles to transit or other alternative modes. Six locations are proposed for establishing shared-use park-and-ride facilities, including Murdock, Parkside, I-75 and Kings Highway interchange, Englewood Library/Tringali Park, West Englewood, and the medical area in Punta Gorda.

Safety

Addressing safety issues tackles the second most common cause of congestion as well as saves lives, prevents property damage, and reduces private and public expenses. There was a sizable increase in crashes in 2013 (Figure 8-7).

Figure 8-7: Total Crashes in Charlotte County (2011-2013)



Source: FDOT Safety Office, 2015

FDOT's Safety Office prepares the Strategic Highway Safety Plan (SHSP) to highlight key traffic safety areas and is used to focus data collection, analysis, and actions where they are needed most. Emphasis is placed on certain types of crashes:

- **Aggressive Driving:** speeding, improper lane change, following too closely, failure to yield right-of-way, improper passing, failure to obey traffic control devices
- **Intersections:** occur at or within 250 feet of a signalized or unsignalized intersection
- **Vulnerable Road Users:** pedestrians, bicyclists, motorcyclists

- **Lane Departures:** head-on collisions, running off the road, crossing the center median
- **Impaired Driving:** resulting from alcohol and/or drug-impairment
- **At-Risk Drivers:** aging road users (ages 65 or older) and teens (ages 15 to 19)
- **Distracted Driving:** resulting from taking eyes and/or mind off the road, and/or taking hands off the wheel

Figure 8-8 shows the trends of all crashes within these safety emphasis areas over three years. Figures 8-9 and 8-10 show the trend of injury crashes and fatal crashes, respectively. Table 8-3 lists the total crashes, injuries, and fatalities by emphasis area.

Crash data plays an important role in the CMP and is further analyzed with GIS in Step 7 below.

Step 5 – Institute System Performance Monitoring Plan

For a CMP to be truly effective, it requires a coordinated program of data collection and system performance monitoring to assess the extent of congestion and to see whether remedial steps are working. Data collection

needs are based on the performance measures selected. The data should be relevant to the area, readily available, timely, reliable, consistent, and receptive to forecasting.

The goal of the CC-PG MPO CMP system monitoring plan is to develop an ongoing system that relies primarily on data already collected or planned to be collected in the county. The components of the plan include roadways, bicycle/pedestrian/trail, TDM, and goods movement where:

- Roadways are monitored through annual LOS analysis using traffic counts and other data constantly collected throughout the region.
- Crashes are monitored to measure non-recurring congestion.
- Bicycle/pedestrian/trail data are monitored and updated in various city and county databases.
- Significant goods movement corridors are evaluated to address mobility needs of goods movement providers.

It is recommended that the CC-PG MPO use an Annual Congestion Management System Report to document performance.

Table 8-3: Total Crashes, Injury Crashes/Injuries, and Fatal Crashes/Fatalities

Emphasis Area	2011			2012			2013		
	Crash Total	Injury Total (Injuries)	Fatality Total (Fatalities)	Crash Total	Injury Total (Injuries)	Fatality Total	Crash Total	Total Injury Crashes (Injuries)	Total Fatal Crashes (Fatalities)
Aggressive Driver	17	12 (18)	1 (1)	23	15 (22)	0	48	28 (35)	1 (2)
At Risk Drivers	395	293 (493)	12 (14)	335	326 (441)	10 (11)	723	400 (662)	6 (7)
Distracted Driver	0	0	0	0	0	0	0	0	0
Impaired Driving	91	48 (63)	5 (5)	88	47 (73)	6 (6)	99	55 (72)	12 (13)
Intersections	578	408 (658)	10 (12)	448	307 (527)	4 (5)	826	452 (716)	12 (13)
Lane Departure	310	185 (262)	8 (8)	297	172 (255)	6 (6)	502	221 (305)	7 (8)
Vulnerable Road User	161	148 (157)	13 (15)	139	123 (140)	5 (5)	147	123 (133)	12 (12)

Figure 8-8: Total Crashes by State Safety Emphasis Area (2011-2013)

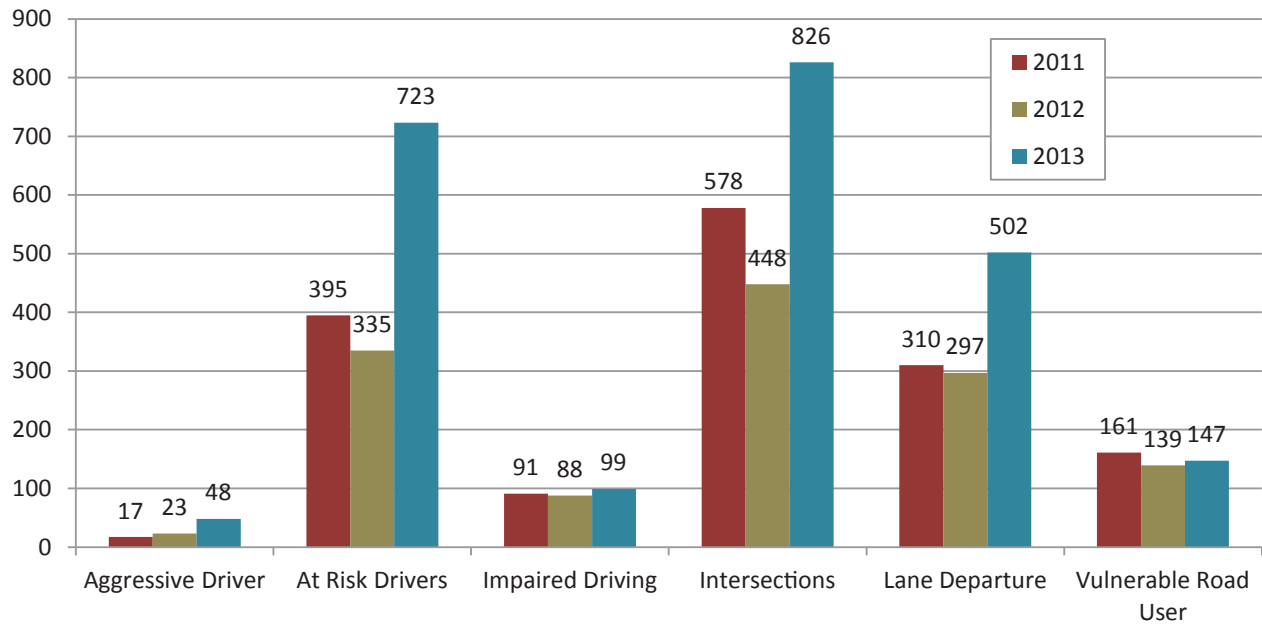


Figure 8-9: Total Injury Crashes by State Safety Emphasis Area (2011-2013)

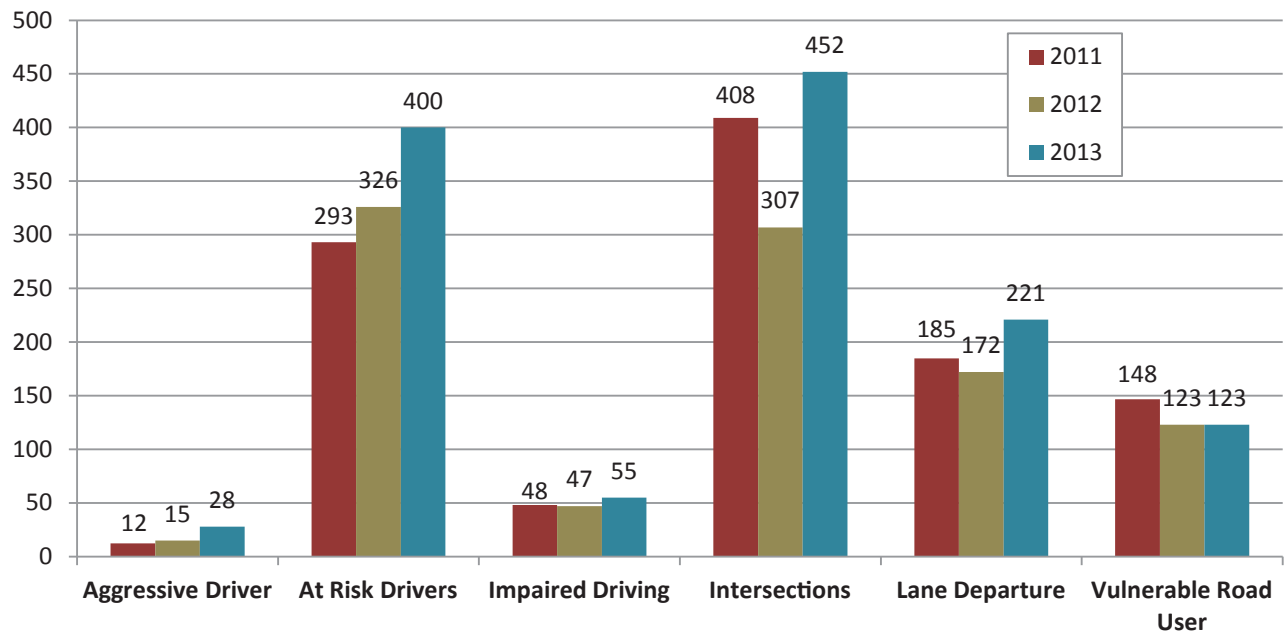
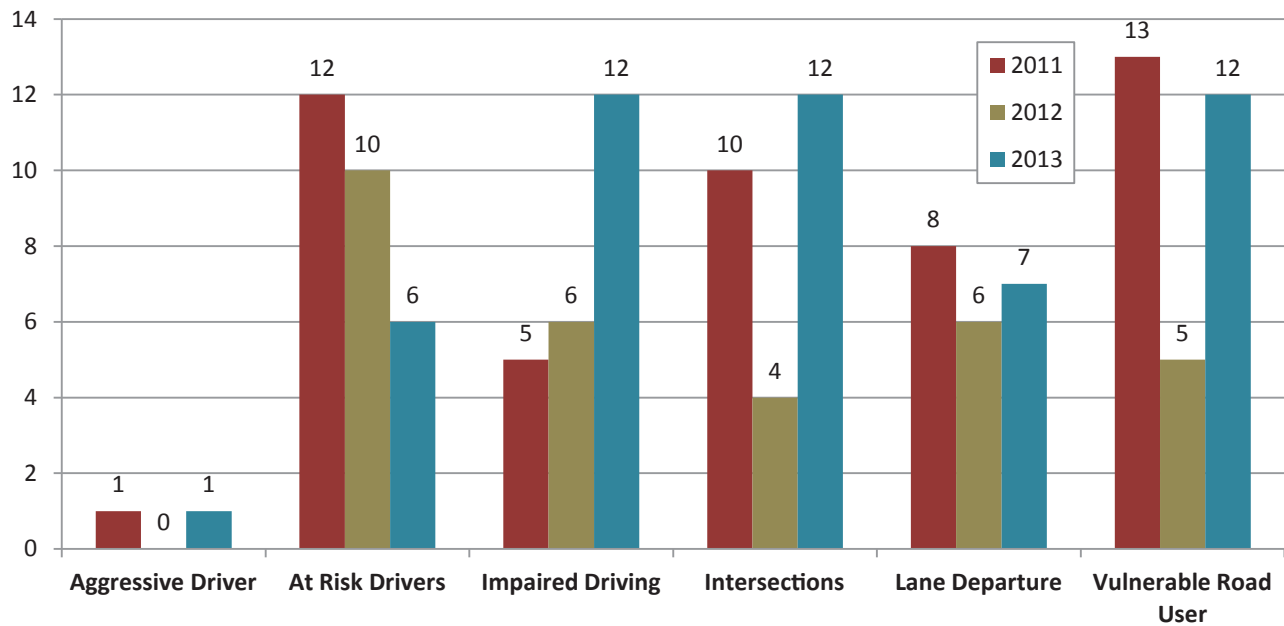


Figure 8-10: Total Fatal Crashes by State Safety Emphasis Area (2011-2013)



Step 6 – Identify and Evaluate Strategies

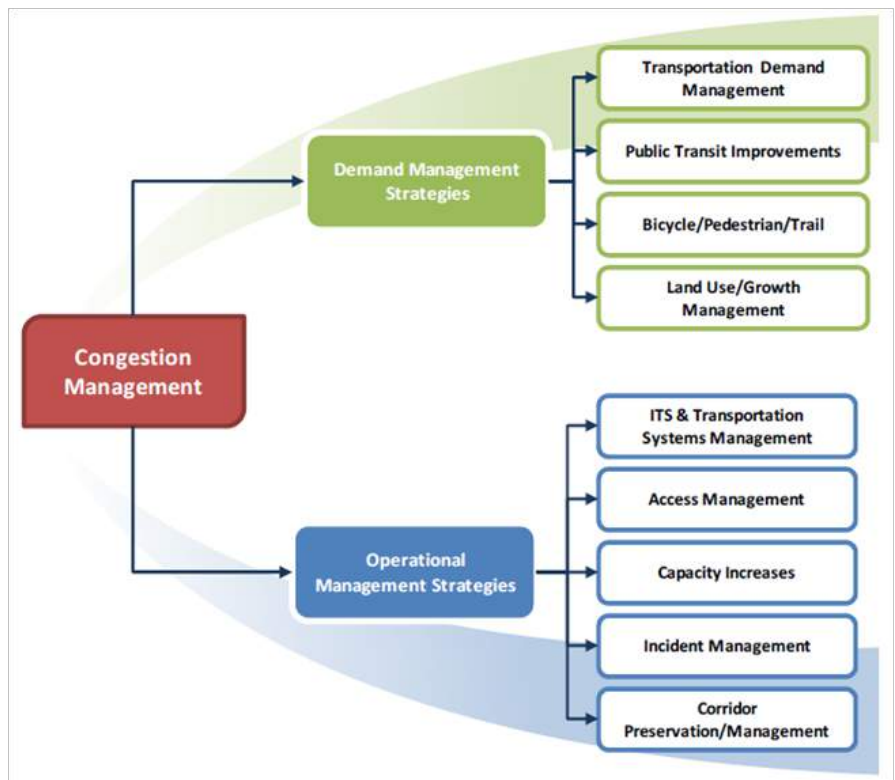
As the CMP is performance-based, strategies that manage congestion should be identified and evaluated for their performance. A full range of potential strategies should be considered, including management and operational strategies (including travel demand management), land use strategies, and infrastructure improvements.

An evaluation would rely upon the performance measures selected and assess whether associated objectives were realized. This step of the CMP identifies and evaluates the strategies intended for mitigating existing and future congestion in the Charlotte County roadway network.

A full range of potential strategies has been identified for the MPO's multimodal CMP network. These strategies can be grouped into two broad categories highlighted in **Figure 8-11: demand management and**

operational management. These strategies are presented to help policy makers and planners select and use congestion reduction and/or mitigation strategies.

Figure 8-11: Congestion Management Strategies



Congestion Management Strategies

Transportation Demand Management

These strategies are used to reduce the use of single occupant motor vehicles, as the overall objective of TDM is to reduce the miles traveled by automobile. The following TDM strategies, not in any particular order, are available for consideration in the toolbox to potentially reduce travel in the peak hours. Strategies include:

- Congestion Pricing
- Alternative Work Hours
- Telecommuting
- Guaranteed Ride Home Programs
- Alternative Mode Marketing and Education
- Safe Routes to Schools Program
- Preferential or Free Parking for HOVs

The following TDM strategies shift trips from Single Occupant Vehicle trips to High Occupancy Vehicle use:

- Ridesharing (Carpools and Vanpools)
- High Occupancy Vehicle Lanes
- Park-and-Ride Lots
- Employer/Landlord Parking Agreements
- Parking Management
- Managed Lanes



Premium Transit in Managed Lanes

Public Transit Strategies

Two types of strategies, capital and operating, 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. The following strategies are included in the toolbox for consideration:

- Transit Capacity Expansion
- Increasing Bus Route Coverage or Frequencies
- Implementing Premium Transit
- Providing Real-Time Information on Transit Routes
- Reducing Transit Fares
- Provide Exclusive Bus Right-of-Way

Non-Motorized Transportation Strategies

Non-motorized strategies include bicycle, pedestrian, and trail facility improvements that encourage non-motorized modes of transportation instead of single occupant vehicle trips. The following strategies are included:

- New Sidewalk Connections
- Designated Bicycle Lanes on Local Streets
- Improved Bicycle Facilities at Transit Stations and Trip Destinations
- Improved Safety of Existing Bicycle and Pedestrian Facilities
- Exclusive Non-Motorized Right of Way



Transit Use

Land Use/Growth Management Strategies

The strategies in this category include policies and regulations that would decrease the total number of auto trips and trip lengths while promoting future transit and non-motorized transportation options. These strategies include the following:

- Negotiated Demand Management Agreements
- Trip Reduction Ordinance
- Infill Developments
- Transit Oriented Development
- Design Guidelines for Pedestrian Oriented Development
- Mixed-Use Development

Operational Management Strategies

Intelligent transportation Systems Strategies

The strategies in ITS 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. ITS strategies are sets of components working together to provide information and allow greater control of the operation of the transportation system. The following strategies are included in the toolbox:

- Dynamic Messaging
- Advanced Traveler Information Systems
- Integrated Corridor Management
- Transit Signal Priority



Dynamic Digital Message Sign

Transportation Systems Management Strategies

Transportation Systems Management (TSM) strategies identify operational improvements to enhance the capacity of the existing system. These strategies typically are used together with ITS technologies to better manage and operate existing transportation facilities. The following strategies are included in the toolbox:

- Traffic Signal Coordination
- Channelization
- Intersection Improvements:
- Bottleneck Removal
- Vehicle Use Limitations and Restrictions
- Improved Signage
- Geometric Improvements for Transit
- Intermodal Enhancements
- Goods Movement Management

Access Management

- Access Management Policies

Incident Management

- Freeway incident detection and management systems

Corridor Preservation/Management

- Corridor Preservation
- Corridor Management



Traffic Signal Coordination

Increase Capacity

Strategies to add capacity are the most costly and least desirable strategies and should be considered as last resort methods for reducing 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 solutions. The key strategy is to increase the capacity of congested roadways through additional general purpose travel lanes.

Step 7 – Implement Selected Strategies/Manage the System

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.

This process recommends that capacity improvement projects for the CMP roadway network provide documentation that the applicability of strategies have been evaluated and used as feasible. Once all the appropriated strategies have been evaluated/considered on the corridor, adding capacity may be considered an applicable congestion management strategy.

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.

Highest consideration is given to congested corridors with high crash rates. As crashes are the second most common cause of congestion and typically cause congestion at unpredictable times, addressing crashes through the CMP addresses a number of high-cost issues.

All of the reported crashes in Charlotte County from 2011 through 2013 were analyzed to determine the highest crash corridors and intersections. As **Figure 8-12** shows, the crashes are concentrated on US 41 between SR 776 and US 17 as well as two hot spots at the interchanges with Interstate 75 and Kings Highway and Duncan Road (US 17). Similarly, crashes involving bicycles and/or pedestrians were analyzed to identify hot spots, and are shown in **Figure 8-13**.



Advanced Traveler Management



Access Management through Driveways and Channelization

Table 8-4 lists the top 20 crash intersections from 2011 to 2013. Determining the safety hot spot locations allows local transportation and public safety officials to select and tailor the strategies from the menu above.

Step 8 – Monitor Strategy Effectiveness

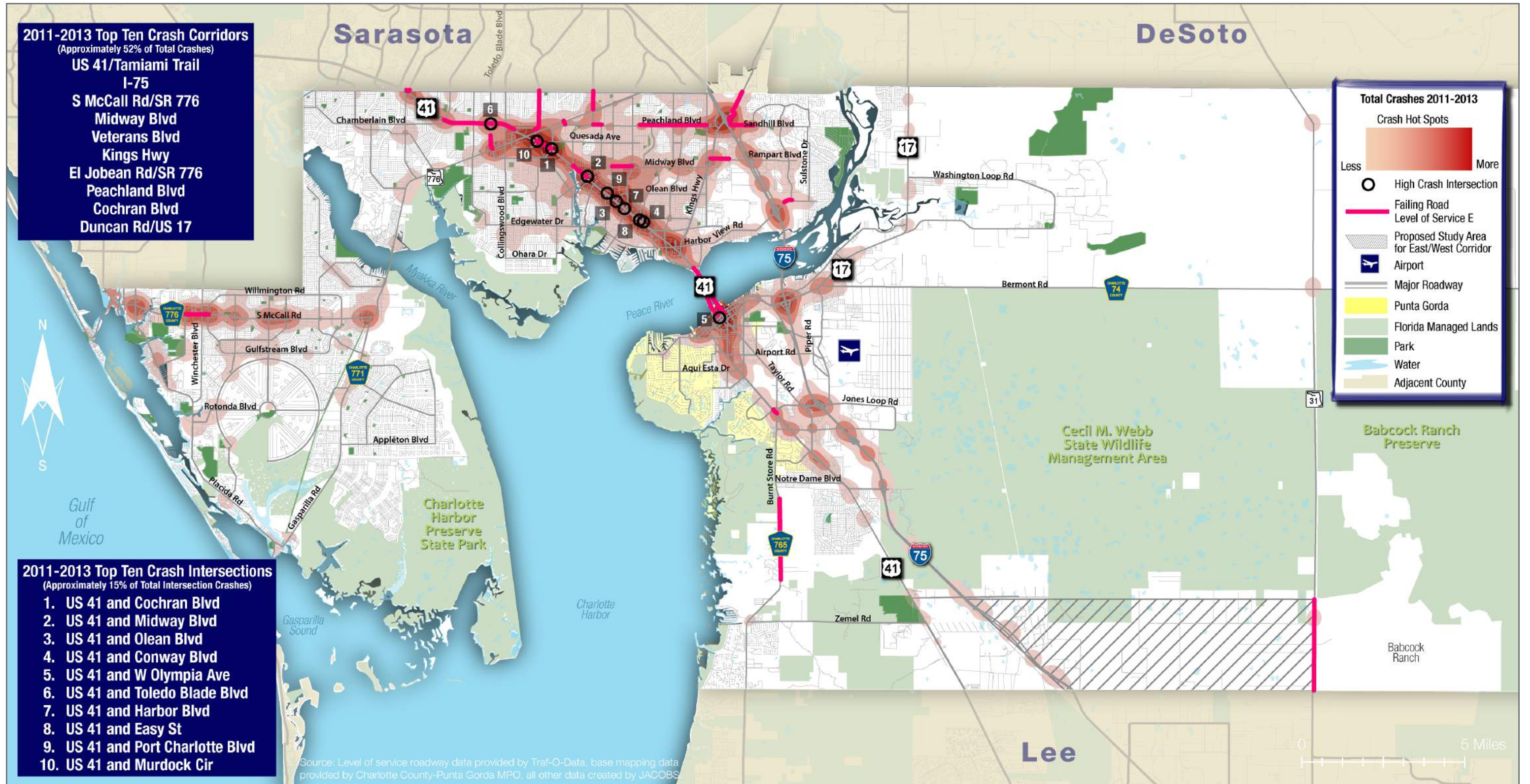
Finally, as with the objectives-driven, performance-based approach, the CMP is an iterative process. Each step is evaluated and opportunities for improvement are noted. Based on the feedback received, an MPO should revise its CMP and restart the process anew.

Table 8-4: Top 20 Crash Intersections (2011-2013)

Rank	Rank by Crash Total				
	On	Intersecting	Total	Main RD AADT	by Volume
1	US 41	Cochran Blvd	36	53,500	0.07
2	US 41	Midway Blvd	32	53,500	0.06
3	US 41	Olean Blvd	29	46,000	0.06
4	US 41	Conway Blvd	27	41,500	0.07
5	US 41	Olympia Ave	26	16,000	0.16
6	US 41	Toledo Blade Blvd	24	32,000	0.08
7	US 41	Harbor Blvd	22	41,500	0.05
8	US 41	Easy St	21	41,500	0.05
9	US 41	Port Charlotte Blvd	20	46,000	0.04
10	US 41	Murdock Cir	20	50,000	0.04
11	US 41	El JoBean Rd	19	37,000	0.05
12	El JoBean Rd	Toledo Blade Blvd	17	20,500	0.08
13	S McCall Rd	Oceanspray Blvd	15	16,500	0.09
14	S McCall Rd	Sunnybrook Blvd	15	23,000	0.07
15	Duncan Rd/US 17	I-75	15	17,400	0.09
16	Kings Hwy	Veterans Blvd	15	19,800	0.08
17	US 41	Marion Ave	14	16,000	0.09
18	S McCall Rd	Gulfstream Blvd	14	24,500	0.06
19	El JoBean Rd	Veterans Blvd	13	18,900	0.07
20	US 41	Gardner Dr	12	41,500	0.03

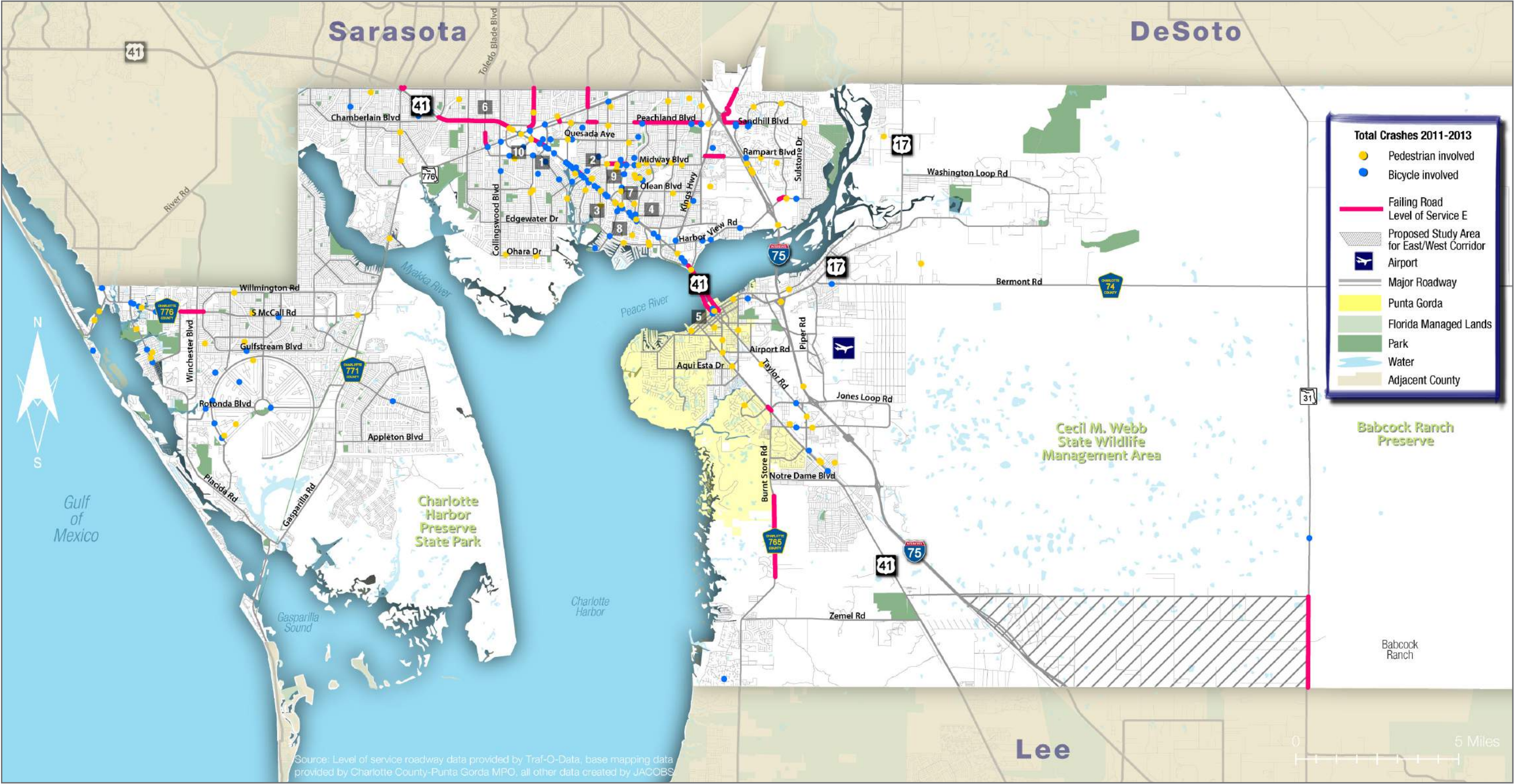
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Figure 8-12: Top Crash Locations - All Crashes (2011-2013)



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Figure 8-13: Top Crash Locations - Bicycle and Pedestrian Crashes (2011-2013)



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CHAPTER 9

Other Transportation Program Elements

CHAPTER 9: Other Transportation Program Elements

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 Charlotte County/Punta Gorda area.

Airport Facilities

There are two public airports located within Charlotte County, one general aviation airport (Punta Gorda Airport) located approximately three miles southeast of Punta Gorda, and one private airport (Shell Creek Airport) located just northeast of Punta Gorda.

Punta Gorda Airport

The Charlotte County Airport Master Plan was updated in March 2008. The goal of the Master Plan is to provide guidelines for future development that will satisfy the demand for aviation services in a logical and feasible manner. Objectives to reach that goal include:

- Develop a 20-year plan for the ultimate layout of the Airport that is financially sound, responsive to environmental considerations, and capable of responding to continued growth of aviation activity
- Identify strategies to develop expanded opportunities for international and domestic trade through the Charlotte County Airport Commerce Park and Foreign Trade Zone
- Identify areas in the airport environs that may be suitable for future development that will maintain and potentially enhance the financial stability of the Airport

- Identify policies and processes to monitor key conditions that will promote flexibility in timing of development that is responsive to changing conditions

The Charlotte County Airport Authority envisions the Punta Gorda Airport as a fully developed airport and commerce park that is independent and financially self-sustaining. The Airport Authority's vision includes expanding aviation activities and services, such as flight training, aircraft rental and charter, aircraft maintenance and refurbishment, air cargo operations, and air carrier operations. The objectives identified by the Airport Authority to reach that goal include:

- Refine policies and ensure financial resources to maintain facilities and improve safety
- Expand aviation activities to include commercial service
- Further develop the Commerce Park with uses compatible with the operations of the airport (examples include a recreational or motor sports complex)
- Build an Air Traffic Control Tower; construct a terminal building to handle the demand that commercial service will add



Punta Gorda Airport Bailey Terminal

Great strides have been made to reach these objectives. Commercial service returned to the airport in 2007 and in 2009, taxiways A and C were resurfaced and widened. The objective to develop the Commerce Park and Charlotte County is actively underway with the recent construction of the Cheney Brothers distribution facility. The Airport Authority is looking to continue increasing the level of general and commercial aviation activities and add to the commerce surrounding the airport.

Shell Creek Airport

The Shell Creek Airport is a privately owned small single turf runway general aviation airport serving the needs of a small group of recreational flyers and businesses. Due to existing roadways and surrounding residential development, the airport's future role is limited. According to a report by CFASPP dated April of 2005, the airport has identified the need for low intensity runway lighting and two 10,000 square foot hangers in the future. The short runway and lack of an instrument approach make the airport unsuitable for providing future corporate, business/recreational, or air cargo service.

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. A number of 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.

Figure 9-1 shows the LOS for state routes, US routes, and interstates in Charlotte County. The highest volume of truck travel are occurring on the following state and

federal facilities: I-75, SR 776, El Jobean Road, US 41, and US 17. The entire length of I-75 and US 17 from I-75 to SR 60 in Polk County is designated as a SIS facility.

Seaport Facilities

Charlotte County has no designated seaport facility. However, the Gulf Intracoastal Waterway and shipping lane is designated as a SIS waterway. Other water transportation does take place at limited areas within the County. Charlotte County has three undesignated ports; they include Fisherman's Village, Don Pedro Ferry, and The Fishery:

- **Fishermen's Village** is a retail and condominium development rehabilitated from an old port area. Fishermen's Village includes an excursion cruise on a set schedule and provides trips to barrier islands and State Parks. It also accommodates commercial fishermen.
- **Palm Island Transit** provides passenger, automobile, and goods ferry service to Don Pedro Island, a barrier island. Each of the two ferries has an eight automobile capacity. Both residents of Don Pedro and individuals who wish to use the Don Pedro Park utilize the ferry.
- **The Fishery**, located in Placida, accommodates commercial fishermen, fish market, restaurants, gift and craft shops, museum, and an art gallery.



Photo Credit charlotteharbortravel.com

Fishermen's Village, Punta Gorda

2040 Transportation Plan

Charlotte County-Punta Gorda MPO

Rail Lines and Terminals

Florida Southern Railroad began service from Arcadia to Punta Gorda in the 1890s. Since then, many railroad tracks have been abandoned and converted to other uses. Currently, CSX Transportation owns the remaining active rail line. Seminole Gulf Railway leases the tracks from CSX and has provided freight transportation and logistics to southwest Florida since 1987. Seminole Gulf Railway currently operates 115 miles of track in Charlotte, Collier, DeSoto, Lee, Manatee, and Sarasota counties and operates various passenger excursion trains.



Punta Gorda Railroad Depot (now serves as a museum)

Projected Year 2040 Industrial Land Use

Industrial uses in 2040 are concentrated in a few key areas within Charlotte County. The projected industrial growth is focused on the following areas:

- US 41 south of the Sarasota County
- US 41 north of the Peace River
- I-75 and US 41 south of the Peace River (airport area)
- SR 765 (Burnt Store Road) north of Lee County line
- Eastern portion of Charlotte County

The forecast 2040 industrial employment by traffic analysis zone is shown in Appendix A. Most of these areas are served by US 41 and I-75. The areas showing industrial growth in the eastern part of Charlotte County along with the new industrial warehouse sites (WalMart, Home Depot, etc.) on US 17 in De Soto County will place demand on US 17, SR 31, and SR 74.

Transportation Safety and Security

Transportation safety and security are important elements for Charlotte County's transportation system. The United States Department of Transportation (USDOT) defines transportation safety as the freedom from harm for all multimodal users that is a result of unintentional acts or circumstances. Likewise, USDOT defines transportation security as the freedom from intentional acts and natural disasters that harm and threaten all multimodal users. Transportation safety and security are important elements of the transportation planning process, as both are federally-mandated.

Transportation Safety

With its passage in 2005, SAFETEA-LU required state DOTs to develop Strategic Highway Safety Plans (SHSPs) and MPOs to develop LRTPs consistent with their state SHSP. More recently, MAP-21 established a performance-based goal of reducing traffic fatalities and serious injuries.

Florida Department of Transportation

FDOT developed strategies and plans designed to improve transportation safety for all users, such as the SHSP, the Pedestrian and Bicycle Strategic Safety Plan (PBSSP), and the Highway Safety Plan (HSP). FDOT collaborated with FHWA and stakeholders to develop the state's first SHSP in 2006, and updated it in 2012. The SHSP addresses the 4 Es of improving safety in Florida — engineering, enforcement, education, and emergency response countermeasures — by identifying eight emphasis areas to reduce fatalities and serious injuries. **Chapter 8** details the SHSP emphasis areas and crash analysis for 2011 through 2013 in Charlotte County.

An extension to the SHSP, the PBSSP focuses resources to the areas with the greatest opportunity to improve bicycle and pedestrian safety. Adopted in 2015, the SHSP goals and objectives are used to distribute National Highway Traffic Safety Administration funds.

Figure 9-1: Level of Service on Charlotte County State Routes, US Routes, and Interstates



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Transportation Security

Although closely related to transportation safety, planning for transportation security focuses resources on preventing, managing, and responding to manmade threats and natural disasters. The Charlotte MPO partnered with Florida State University's Department of Urban and Regional Planning as well as private consultants to conduct a hazard mitigation study for the 2035 LRTP update. The study evaluated the county's vulnerability to natural disasters including sea level rise. Charlotte County and the MPO have also adopted local plans to help ensure transportation security, including the Continuity of Operations Plan (COOP), Local Mitigation Strategy (LMS), Comprehensive Emergency Management Plan (CEMP), and a Long-Term Recovery Plan. The following sections describe Charlotte County's vulnerability, the MPO's and local efforts to ensure transportation security, and the Hazard Mitigation Study.

Charlotte County's Vulnerability

The county's transportation system is vulnerable to manmade and natural events including hurricanes, tornadoes, wildfires, extreme cold and heat, drought, and coastal erosion. The Hazard Mitigation Study described below provides a more detailed discussion of the county's vulnerability, including an analysis of sea level rise. **Table 9-1** summarizes the county's vulnerability to natural threats that are identified in the 2010 LMS.

Hazard Mitigation Study

As a part of the 2035 LRTP update, the Florida State Department of Urban and Regional Planning, the CC-PG MPO conducted a Hazard Mitigation Study. As a result of the Study, miles of road vulnerable to flooding was determined, as shown in **Table 9-2**. The full Hazard Mitigation Study is provided in **Appendix G**. (Note: This study was conducted for 2035 LRTP and results were used for the 2040 update.)

Table 9-1: Vulnerability to Natural Threats

Threat	Damage
Coastal erosion	In 2009, an estimated 1.65 percent of the county's buildings were in a coastal erosion hazard area, accounting for 5.5 percent of the county's building value of \$653 million.
Drought and Extreme Heat	Charlotte County generally experiences a dry season between January and May. In 1998, a drought led to 100 wildfires that burned more than 1,000 acres of land.
Extreme Cold and Freezes	While freezes in Charlotte County are infrequent, they can happen. In 2003, the strawberry and tropical fish farms lost a combined \$8.5 in the counties between Hillsborough and Lee Counties, which includes Charlotte.
Hurricanes	Between 1994 and 2008, 18 hurricanes and tropical storms have impacted Charlotte County, resulting in 16 deaths, 833 injuries, \$8.5 billion in property damage, and \$300.5 million in crop damage.
Tornadoes	Between 1950 and 2009, there have been 50 tornadoes in the county, causing an estimated \$14.2 million in property damage, two deaths and 11 injuries.
Wildfires	Between 2002 and 2009, wildfires caused approximately \$260,000 in property damage, no deaths, and one injury.

Table 9-2: Miles of Road Vulnerable to Flooding

Hazard Scenario	Miles of Tier 1
1.0m Sea Level Rise	2
Cat 2 Storm Surge	132
Cat 2 Storm Surge + 0.5m SLR	171
Cat 2 Storm Surge + 1.0m SLR	197

Study Recommendations

According to the transportation vulnerability analysis conducted as part of the hazard mitigation study, sea level rise through 2050 (0.5 meter rise relative to 1990) is not projected to impact any interstates, arterials, or major collectors within Charlotte County. Sea level rise projected for 2100 (1.0 meter relative to 1990) may begin to impact these major transportation facilities. Protection and relocation/retreat options that address sea level rise and associated impacts may be considered in future updates of the LRTP as the lifecycle of the vulnerable transportation infrastructure is more threatened by encroaching seas.

Advancing a specific mitigation project will depend on the hazard impact timeframe in relation to the plan horizon. For example, bridges proposed in long-range plans today will likely be designed to last beyond 2100. Other timeframes to consider will include funding source criteria. Regular updates of the LRTP vulnerability assessment with the most current projections of sea level rise will assist in monitoring when to begin considering the more difficult to implement protection and relocation/retreat options.

MPO's Role in Transportation Security

The CC-PG MPO's role is to collaborate with local, state, and federal agencies to inform the public of risks; prioritize projects that enhance transportation security; and address local transportation security concerns, including manmade and natural disasters. The following agencies have mutual aid agreements to coordinate activities and

address transportation security concerns:

- U.S. Coast Guard
- Transportation Security Administration
- Homeland Security
- Federal Emergency Management Agency
- Florida Highway Patrol
- Motor Carrier Compliance
- Charlotte County Sheriffs Department
- Seminole Gulf Railway Police
- Punta Gorda Police Department
- Division of Law Enforcement, Department of Environmental Protection
- Charlotte County Emergency Services
- City of Punta Gorda Fire Department

Federal and State Roles in Transportation Security

The attacks on September 11, 2001, changed the federal government's perspective on security. President George W. Bush established the Office of Homeland Security (OHS) within the White House in October 2001. Congress in turn created the Transportation Security Administration (TSA) in November 2001, which is now under the Department of Homeland Security (DHS), a stand-alone cabinet created by Congress in November 2002. While DHS was created in response to manmade threats, transportation systems' vulnerability to natural disasters and emergency evacuations are a major component of DHS, as the Federal Emergency Management Agency (FEMA) was also absorbed by the DHS in March 2003.

Federal and state planning guidance requires the inclusion of transportation safety in the planning process. In 2005, SAFETEA-LU made transportation security for motorized and non-motorized users a separate planning factor. MAP-21, which replaced SAFETEA-LU in 2012, maintained transportation security as a standalone planning factor. FHWA guidance also encourages MPOs and state DOTs to fund projects that address transportation security.

In Florida, transportation security is a goal and long range objective of the 2060 FTP, and Florida statute [339.1755(7) (a)] requires that the 2040 LRTP be consistent with the goals and objectives of the 2060 Plan.

Local Efforts to Ensure Transportation Security

The following sections describe relevant local efforts to plan for security, including the COOP, LMS, CEMP, and Long-Term Recovery Plan.

Continuity of Operations Plan

All levels of government are required to adopt a COOP to comply with Executive Order 12656. The CC-PG MPO adopted the most recent COOP in 2012. The value of the COOP is evident in Hurricane Charley, which destroyed the MPO offices in 2004. It ensures that the local government continues to deliver essential services and outlines a plan intended to keep the county's staff and citizens safe during manmade and natural emergencies. The COOP describes the federal requirements, presents goals and objectives, and identifies actions and precautionary measures for continuing operations, as well as methods for keeping vital records safe.

Local Mitigation Strategy

Federal regulations (44 CFR 201.6 and the Disaster Mitigation Act of 2000) require local governments to have a local disaster mitigation plan to minimize social, economic, environmental, and infrastructure losses. FEMA provides policy guidance to local governments for developing or updating the mitigation plan in its Local Mitigation Planning Handbook.

The Board of County Commissioners adopted the first Charlotte County LMS in 2000. Since then, the LMS is updated every five years by the LMS Working Group, made up of representatives from all local jurisdictions, emergency services such as the fire department, and private stakeholders. The most recent update was adopted in 2010. Among its accomplishments, the 2010

LMS identified:

- Goals and objectives for reducing the county's vulnerability, enhancing hazard mitigation planning, improving post-disaster recovery and dissemination of emergency management information, and protecting natural habitats
- Hazards and consequential level of risk threatening the county's communities
- Mitigation initiatives and funding sources to reduce risk from hurricanes, tornadoes, wildfires, drought, extreme heat and freezes, and coastal erosion.

Comprehensive Emergency Management Plan

Florida law (Section 252.35, F.S.) requires that local governments develop a CEMP as a part of emergency and disaster preparation that can be applied to all types of catastrophes. The current CEMP for Charlotte County covers 2014 through 2018, and the plan explains:

- How Charlotte County will plan and prepare for, respond to, and recover from large-scale disasters and emergencies
- The responsibilities for lead and supporting agencies as well as coordination with state and federal agencies

Long-Term Recovery Plan

Charlotte County's Long-Term Recovery Plan is a community-driven plan was developed over eight weeks between October and December 2004 as a part of the county's recovery efforts from Hurricane Charley in August 2004. More than 1,000 stakeholders, residents, and county officials participated in the plan's creation. The plan identified 31 projects and available funding aimed at revitalizing the county. The projects were spread across seven categories:

- Economic development
- Housing
- Community Facilities

- Environment
- Mitigation
- Transportation and infrastructure
- Community services

Socio-Cultural Effects and Environmental Justice

Environmental justice is defined by the US Environmental Protection Agency as “the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.” Environmental justice prohibits discrimination based on race, color, and national origin and requires the inclusion of minority and low-income populations. Compliance with environmental justice is required by Title VI of the Civil Rights Act of 1964 and reinforced by the Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994). Executive Order 12898 directs federal agencies to “identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.” Title VI regulations direct federal agencies to identify and address the effects of all programs policies and activities on traditionally disadvantaged groups. A minority is defined as the following:

- **Black:** having origins in any of the black racial groups of Africa
- **Hispanic:** of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race

- **Asian American:** having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands
- **American Indian and Alaskan Native:** having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition

Title VI defines low-income as a person whose household income (or median household income for a community or group) is at or below the U.S. Department of Health poverty guidelines. The guidelines are defined by household size. The average household size for Charlotte County is currently 2.57 persons. The 2014 Federal poverty guidelines are displayed in **Table 9-3** and are based on Census data, the poverty threshold was set at below \$20,000.

Table 9-3: 2014 Federal Poverty Guidelines

Persons in family/ household	Poverty Guideline
1	\$11,670
2	\$15,730
3	\$19,790
4	\$23,850
5	\$27,910
6	\$31,970
7	\$36,030
8	\$40,090
9+	Additional \$5,080 for each additional person

The LRTP development process included efforts to assess countywide performance of transportation projects with regard to 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. The potential positive and adverse impacts of proposed transportation projects were considered. Three major components are addressed in the planning process:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts, including social and economic effects, on minority and low-income populations.
- Ensure the participation of the traditionally under served and underrepresented segments of the population in the transportation plan development process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Community Facilities Inventory

The community analysis first identifies areas having the potential for being impacted by transportation projects included in the 2040 Needs and Cost Feasible Plans. In addition to identifying environmental justice areas (high concentrations of minority and/or low-income populations) and areas with higher elderly population, this also includes developing a community facilities inventory. 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 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 2040 LRTP. A summary of these facilities is presented below.

Parks and Recreation Facilities

There are 63 park facilities managed by Charlotte County that span a total of 5,255 acres. These include wilderness parks, river parks, memorial parks, neighborhood parks, recreational and athletic complexes, and community centers. There are also three state owned parks within Charlotte County.

Libraries

Charlotte County operates four libraries providing an excellent knowledge base for Charlotte residents. They are located in Englewood, Port Charlotte, and Punta Gorda.

Schools

The Charlotte County School Board currently operates four high schools (one is a charter school), four middle schools, and 10 elementary schools. In addition, the Charlotte County School Board operates four other facilities, including technical, adult, and educational centers.

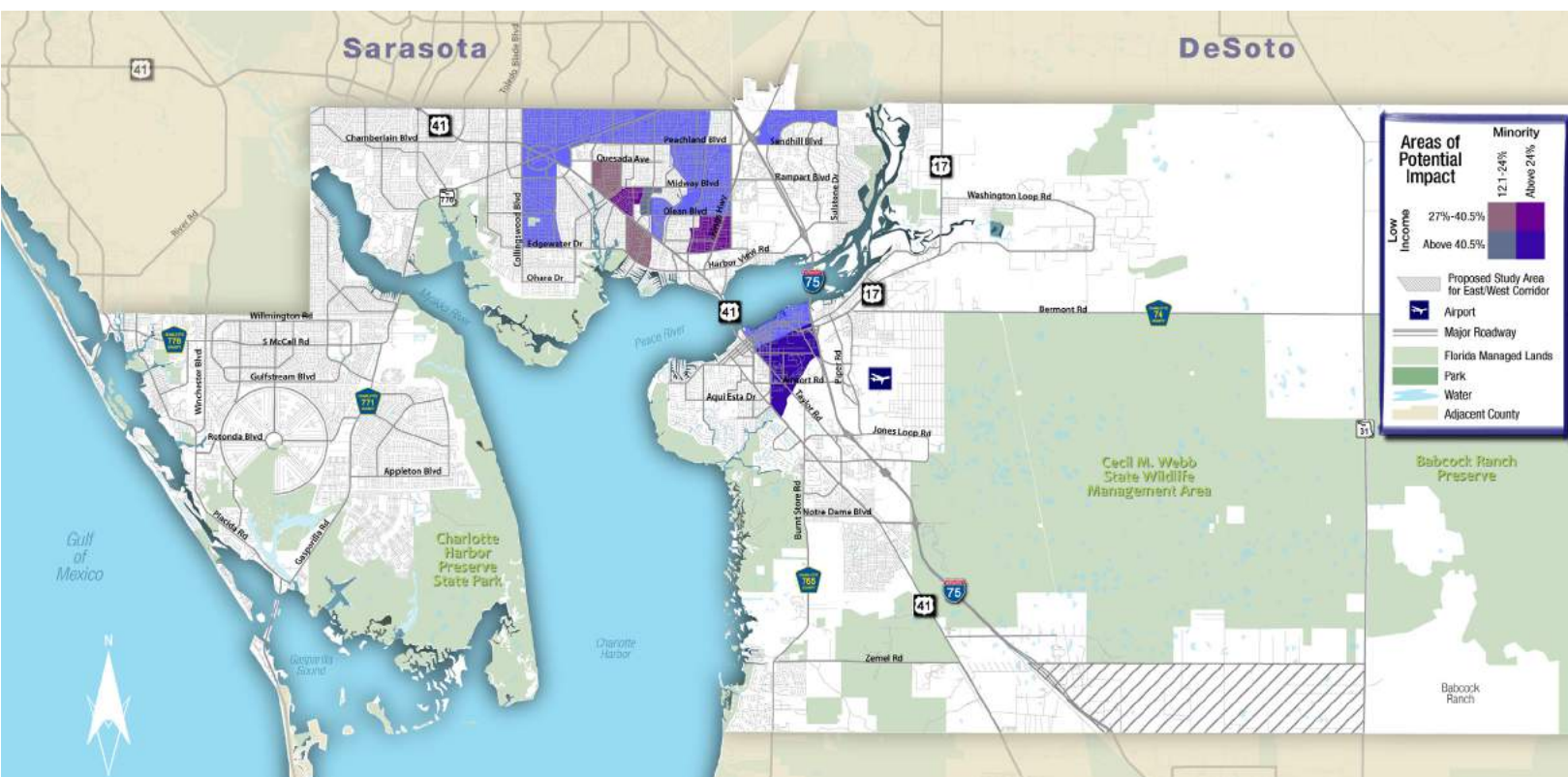
Hospitals

Charlotte County is served by four major hospitals/clinics, as well as a number of other wellness and other healthcare facilities, including urgent care centers, a weight management center, and nursing homes.

Environmental Justice Zones

Environmental justice areas were developed by identifying the areas with the highest minority populations and low-income, and are shown in **Figure 9-2**. In 2014, Charlotte County conducted an Environmental Justice analysis using the following thresholds: 27 percent (low income) and 12.1 percent (minority).

Figure 9-2: Charlotte County Environmental Justice Zones



To be consistent with Charlotte County's analysis, the 2040 LRTP used the same category breakdown. The data was adjusted to show the areas of interest divided into two designations with opposing colors to show the intensity of the percentage breakdowns by type. Areas of only low income or minority (with no overlap) were removed. Utilizing Census 2010 GIS data, percent of poverty (low income) was categorized to highlight 27 percent or above, and overlaid with the percent minority of 12.1 percent and above. Where these two categories overlap show the Environmental Justice areas within the county.

Environmental Mitigation

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands, and groundwater resources. In situations where impacts cannot be completely

avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs. The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts.

All Florida MPOs are committed to minimizing and mitigating the negative impacts of transportation projects on the natural and built environment in order to preserve and enhance the quality of life. In the State of Florida, environmental mitigation for transportation projects is completed through a partnership between the MPO, FDOT, and state and federal environmental resource and regulatory agencies, such as the Water Management Districts (WMDs) and the Florida Department of Environmental Protection (DEP).

These activities are directed through Section 373, F.S., which establishes the requirements for mitigation planning as well as the requirements for permitting, mitigation banking, and mitigation requirements for habitat impacts. Under this statute FDOT must identify projects requiring mitigation, determine a cost associated with the mitigation, and place funds into an escrow account within the Florida Transportation Trust Fund. State transportation trust funds are programmed in the FDOT work program for use by the WMDs to provide mitigation for the impacts identified in the annual inventory.

Section 373.4137, F.S., establishes the FDOT mitigation program that is administered by the state's WMDs, which are responsible for developing an annual mitigation plan with input from Federal and State regulatory and resource agencies, including representatives from public and private mitigation banks. Each mitigation plan must focus on land acquisition and restoration or enhancement activities that offer the best mitigation opportunity for that specific region. The mitigation plans are required to be updated annually to reflect the most current FDOT work program and project list of a transportation authority. The FDOT Mitigation Program is a great benefit to MPOs because it offers them an additional method to mitigate for impacts produced by transportation projects and it promotes coordination between federal and state regulatory agencies, MPOs, and local agencies.

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

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

Sections 373.47137 and 373.4139, F.S. require that impacts to habitat be mitigated for through a variety of mitigation options, which include mitigation banks and mitigation through the Water Management District(s) and the DEP. **Table 9-4** on the following page outlines potential environmental mitigation opportunities that could be considered when addressing environmental impacts from future projects proposed by MPOs.

Planning for specific environmental mitigation strategies over the life of the long range transportation plan can be challenging. Potential mitigation challenges include lack of funding for mitigation projects and programs, lack of available wetland mitigation bank credits, improperly assessing cumulative impacts of projects, and permitting issues with the county, local, state and federal regulatory agencies. These challenges can be lessened when MPOs engage their stakeholders, including regulatory agencies, the public and other interested parties, through the public involvement process. The public involvement process provides MPOs an efficient method to gain input and address concerns about potential mitigation strategies and individual projects.

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In addition to the process outlined in the Florida Statutes and implemented by the MPO and its partner agencies, the ETDM process is used for seeking input on individual qualifying long range transportation projects allowing for more specific commentary. This provides assurance that mitigation opportunities are identified, considered

and available 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.

Table 9-4: Potential Environmental Mitigation Strategies

Resource/Impacts	Potential Mitigation Strategy
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• Other design measures to minimize potential fragmenting of animal habitats
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

CHAPTER 10

Performance Evaluation

CHAPTER 10: Performance Evaluation

This chapter summarizes the performance of the CC-PG MPO 2040 LRTP. The performance evaluation measures the extent to which the major Goals and Objectives were satisfied during the LRTP development process. This process relies on a set of qualitative and quantitative measures as well as project prioritization criteria that illustrate how the performance of the transportation network changes over the planning horizon from existing conditions to 2040.

Cost Feasible Network Performance

For the development of the 2040 LRTP, performance measures were identified for each mode of travel, highway, transit, bicycle, and pedestrian. The selected performance measures and their associated mode are summarized in Table 10-1.

Table 10-1: 2040 LRTP Performance Measures

Performance Measure	Mode
Roadway Lane Miles	Highway
Total Vehicle Miles Traveled (VMT)	Highway
Total Vehicle Hours Traveled (VHT)	Highway
Volume to Capacity Ratio (V/C)	Highway
Percent VMT at a V/C Ratio > 1.0	Highway
Transit Miles	Transit
Transit Ridership	Transit
People within ¼ mile of Transit	Transit
Jobs within ¼ mile of Transit	Transit
Transit Dependent within ¼ mile of Transit	Transit
Miles of Bicycle Facilities	Bicycle
Miles of Sidewalks	Pedestrian

Once the performance measures were identified they were calculated for each LRTP alternative. They were calculated based on the travel demand forecasting results, adopted socioeconomic data, and proposed multimodal improvements. The LRTP alternatives measured are as follows: 2010 Base Year, 2019 Existing plus Committed, and 2040 Cost Feasible. The performance of each LRTP alternative is summarized in Table 10-2.

Project Prioritization Results

As described in Chapter 2, the project prioritization evaluation criteria was used in addition to cost and revenue information to rank projects for inclusion in the Cost Feasible Plan. Table 10-3 shows the results of the project prioritization exercise. More information regarding the prioritization criteria is provided in Chapter 2. Prioritization criteria include:

- Existing volume to capacity ratio
- Future volume to capacity ratio
- Fatal flaw (significant environmental/community impact)
- Addresses FDOT's "Strategic Highway Safety Plan" emphasis areas
- Roadway significance and access to major activity centers
- Provides bicycle, pedestrian, or public transportation improvement
- Emergency Evacuation Route
- Public support for transportation improvement
- Project commitment
- System preservation/maintenance of assets in place
- Social-cultural effects/environmental justice
- ITS surveillance
- Intermodal connectivity
- Hazard mitigation effectiveness
- Truck Route

Table 10-2: 2040 LRTP Performance

Measure	Base Year	Existing + Committed	2040 Cost Feasible
Roadway Lane Miles	1,152	1,250	1,421
Vehicle Miles Traveled	3,510,480	5,513,866	5,518,041
Vehicle Hours of Travel	88,906	136,435	140,626
Average Volume to Capacity Ratio	0.44	0.40	0.38
Percent VMT at a V/C Ratio > 1.0	10%	13%	10%
Percent Truck Route VMT at a V/C Ratio > 1.0	8%	9%	8%
Transit Passenger Miles	N/A	N/A	4,438
Daily Transit Ridership	N/A	N/A	1,160
People within 1/4 Mile of Transit	N/A	N/A	79,277
Jobs within 1/4 Mile of Transit	N/A	N/A	57,963
Transit Dependents within 1/4 Mile of Transit	N/A	N/A	3,199
Miles of Bicycle and Pedestrian Facilities	351	359	466

Table 10-3: Results of Project Prioritization Process

Rank	Facility	From	To	Weighted Score
1	US 41	at Peace River Bridge		6.92
2	US 41	Flamingo Blvd	Sarasota County Line	6.28
3	Burnt Store Rd	Zemel Rd	Scham Rd	6.17
4	SR 776 (Segment 3)	San Casa Dr	Oriole Blvd	6.08
5	SR 776 (Segment 4)	Oriole Blvd	Winchester Blvd	6.08
6	SR 776 (Segment 5)	Winchester Blvd	Wilmington Blvd	6.08
7	SR 776	Wilmington Blvd	Murdock Cir	6.02
8	Kings Hwy	N/o Sandhill Blvd	Sarasota County Line	5.92
9	SR 776 (Segment 2)	CR 775	San Casa Dr	5.78
10	CR 39 (Toledo Blade)	SR 776	Whitney Ave	5.67
11	I-75	N Jones Loop Rd	US 17	5.65
12	SR 776 (Segment 1)	Crestview Dr	CR 775	5.63
13	US 41	Notre Dame Blvd	Burnt Store Rd	5.62
14	I-75	Harbor View Rd	Kings Hwy	5.61
15	SR 31 (Segment 2)	Lee County Line	N/o Cook Brown Rd	5.27
16	I-75	Lee County Line	Jones Loop Rd	5.15
17	US 17	Copley Ave	CR 74	4.77
18	Veterans Blvd	Toledo Blade Blvd	Murdock Cir East	4.73

Table 10-3: Results of Project Prioritization Process (cont.)

Rank	Facility	From	To	Weighted Score
19	Veterans Blvd	Murdock Cir East	Hillsborough Blvd	4.73
20	Burnt Store Rd	Jones Loop Rd	Taylor Rd	4.72
21	Peachland Blvd	Cochran Blvd	Harbor Blvd	4.62
22	Taylor Rd	Airport Rd	US 41	4.61
23	Placida Rd	SR 776	San Casa Dr	4.57
24	Placida Rd	San Casa Dr	Rotonda Blvd West	4.57
25	I-75	at Yorkshire St		4.55
26	CR 771 (Gasparilla Rd)	Appleton Blvd	Rotonda Blvd East	4.53
27	Harbor View Rd (Segment 4)	East of I-75	Rio De Janeiro Ave	4.37
28	SR 31 (Segment 1)	N/o Cook Brown Rd	CR 74	4.37
29	Taylor Rd	US 41	Jones Loop Rd	4.36
30	Airport Rd	US 41	Piper Rd	4.31
31	Dahlgren Ave Extension	US 41	Hillsborough Blvd	4.27
32	Flamingo Blvd	SR 776	US 41	4.27
33	I-75	at Oil Well Rd		4.25
34	Harbor View Rd (Segment 1)	Melbourne St	Date St	4.16
35	Harbor View Rd (Segment 2)	Date St	Purdy Dr	4.16
36	Harbor View Rd (Segment 3)	Purdy Dr	I-75	4.16
37	N Jones Loop Rd	Burnt Store Rd	Piper Rd	4.12
38	Tucker's Grade Blvd	US 41	I-75	4.11
39	Burnt Store Rd Extension	Taylor Rd	US 17	4.02
40	Rampart Blvd	Loveland Blvd	Rio De Janeiro Ave	4.01
41	Taylor Rd	Jones Loop Rd	Airport Rd	3.96
42	Hillsborough Blvd	Toledo Blade Blvd	Cranberry Blvd	3.96
43	CR 74	US 17	Strasse Blvd	3.93
44	San Casa Dr	Placida Rd	SR 776	3.91
45	CR 39 (Toledo Blade Blvd)	Whitney Ave	US 41	3.91
46	Flamingo Blvd	Edgewater Dr	SR 776	3.91
47	CR 74	Strasse Blvd	SR 31	3.87
48	Henry St	Golf Course Blvd	Loop Connector	3.87
49	Loveland Blvd	Kings Hwy	Veterans Blvd	3.81
50	Loveland Blvd	Westchester Blvd	Kings Hwy	3.66
51	CR 39 (Toledo Blade Blvd)	US 41	Hillsborough Blvd	3.66
52	Edgewater Dr	Jowett St	Midway Blvd	3.66
53	N Jones Loop Rd	Jones Loop Rd	US 41	3.62
54	Prineville St	Paulson Dr	Sarasota County Line	3.42
55	Sandhill Blvd Bypass (New Road)	Kings Hwy	Sandhill Blvd	3.31
56	Harbor Blvd Extension	Veterans Blvd	Hillsborough Blvd	3.31
57	Quesada Ave	Harbor Blvd	Cochran Blvd	3.17

CHAPTER 11

Plan Implementation

CHAPTER 11: Plan Implementation

The 2040 LRTP represents a significant milestone in addressing the transportation needs of Charlotte County and the region. For key elements of the plan to move forward, the MPO and its partners must undertake key follow-up actions beyond normal project development. Key partners include Charlotte County, DeSoto County, FDOT District One, the City of Punta Gorda, the Charlotte County Airport Authority, and neighboring counties and MPOs, among others.

Key Implementation Actions

In working with its partners, the MPO has identified key implementation actions that are critical to the future of transportation and land use in Charlotte County.

Comprehensive Plan Policies

The following Comprehensive Plan Policies should be implemented by the County and the City of Punta Gorda:

- Access Management/Access Controls
- Complete Streets Policy
- Local Public Transportation (Fixed Route)

Land Development Code

The following Land Development Code changes were identified:

- Form-based Codes
- Accommodate all appropriate modes of travel in street design
- Transit Oriented Land Use Design Guidelines
- Transit Corridor Design Guidelines
- Alternative concurrency provisions and funding strategies

Complete Streets Policy & Accommodating All Appropriate Modes of Travel

The image below shows an example of a “Complete Street” designed to accommodate several modes of travel including pedestrians, bicycles, public transportation, and automobiles. By implementing a Complete Streets policy, Charlotte County can modify existing streets to be safer for all modes of travel and encourage the use of alternatives to the automobile to reduce vehicle miles of travel, which can lead to the reduction of greenhouse gas emissions.



Example of a Complete Street

Access Management/Access Controls

As part of the Hazard Mitigation Plan (described in Chapter 9), a vision network was created for the year 2050 based on socioeconomic data developed using the current Future Land Use Map in the Comprehensive Plan. The Future Land Use Map allows for and encourages concentrated development along the US 41 corridor, especially in the Murdock Village area. Because of the lack of alternative corridors to US 41, the increased development causes the forecasted volume on US 41 to increase dramatically. The forecasted volumes in 2050 on US 41 exceed today's traffic volume on I-75 in Charlotte County. The dense development and increased traffic volume along US 41 and Veterans Boulevard are likely to lead to congestion.

Improving safety and easing congestion on major thoroughfares in Charlotte County, such as US 41 and SR

776 could involve the use of various access management or access controls methods, which are described in **Figure 11-1**. These measures could reduce conflicts between vehicles and improve safety. The most appropriate access control strategy for a corridor would balance regional travel demands with local access and circulation. This would improve safety by separating high and low speed traffic. Access management techniques can include, but are not limited to:

- Access management policies
- Frontage roads
- Multi-way boulevards
- Limited access highways (Freeway)

Through past public involvement efforts, members of the public were presented with various measures of Access Control (similar to the **Figure 11-1**) and were asked to evaluate the two major intersecting corridors of SR 776/ Veterans Boulevard and US 41 north of Punta Gorda. Participants selected measures that would be most desirable for portions of each corridor. The summary of their responses is listed on the following page.

Local Public Transportation (Fixed Route), Transit Oriented Land Use/Transit Corridor Design Guidelines

With new Fixed Route transit service in Charlotte County, it will be important to implement land use policies that support transit. Identifying urban centers with a mix of uses, as well as transit supportive uses along key corridors, will increase the viability of a Fixed Route service.

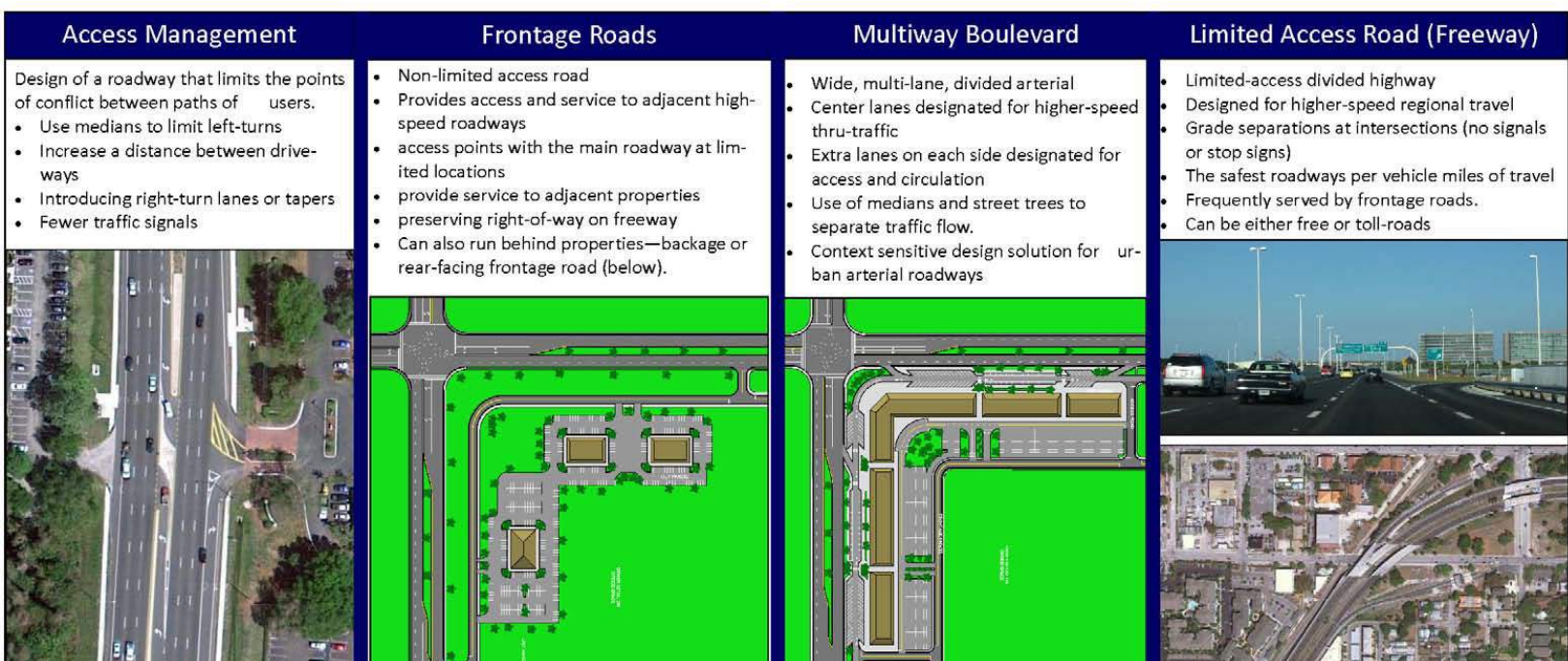
The County should coordinate with Charlotte County Emergency Management Services to provide transit services between temporary housing sites and employment centers during disaster recovery to ensure the needs of special populations are met.

Policies that encourage preservation of existing rail lines and coordination with Amtrak can lead the county to an even further expanded transit service in years to come.

Alternative Funding Strategies

The County should monitor actions by the State of Florida and the municipalities in Charlotte County for changes in transportation concurrency and developer-based revenues that may impact the plan or present opportunities to

Figure 11-1: Measures of Access Control



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accomplish the goals of the LRTP. Charlotte County should also consider additional funding sources to support the unfunded improvements presented in this plan. These sources could include, but are not limited to:

- Sales Tax
- Impact Fees/Mobility Fees
- Municipal Service Benefit Unit (Non-Ad Valorem Assessment)
- Municipal Service Tax Unit

Alternative Energy Technologies and Decreasing Greenhouse Emissions

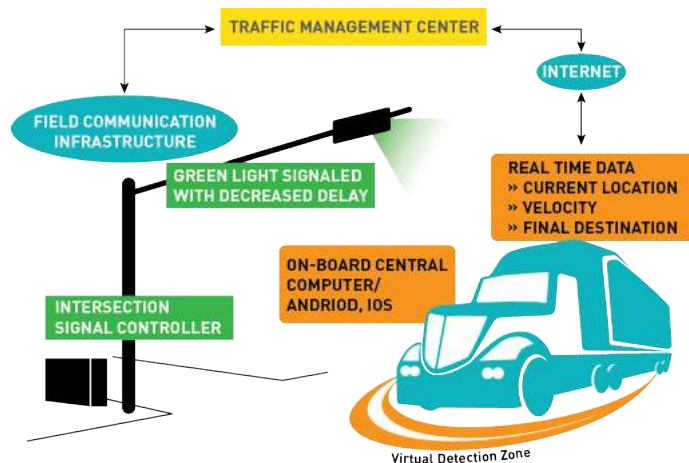
It is anticipated that many areas in Florida will be identified as nonattainment areas by the Environmental Protection Agency if pending air quality standards are enacted. This may require an update to the CC-PG MPO's LRTP to bring the plan into compliance with the new standards and associated rulemaking as it pertains to the metropolitan planning process. The MPO should monitor any pending air quality changes for their impact on this adopted LRTP.

There are actions the MPO can take now to decrease greenhouse gas emissions, such as investing in and encouraging the use of emerging alternative energy technologies, including hybrid vehicles, electricity, and solar power. Electric vehicles are also becoming more popular, and the installation of recharging stations could make the technology more accessible and feasible.

Emerging Technologies

Technology is advancing rapidly, and the CC-PG MPO is staying up to date with changing policies and partnership opportunities. Its largest potential partner, FDOT, is actively engaged in research and data collection through passenger vehicle and freight pilot projects.

In the Tampa Bay region, passenger vehicles are being tested with Advanced Driver Assistance Systems, including transit vehicles equipped with GeoTab (data



Example Infrastructure of Automated Freight Applications

collection device) and passenger vehicles with MobilEye devices that assist the driver with daylight bicycle and pedestrian collision warning; forward collision warning, including motorcycle detection; lane departure warning; and headway monitoring and warning. The freight delivery pilot project focuses on the floral industry through Miami International Airport (MIA), a multi-billion dollar industry; 2/3 of all flowers consumed in the US are imported through MIA.

The outcomes of these studies and other future opportunities have the potential to change the future of Charlotte County's transportation entirely. The necessary policies, regulations, and cooperative agreements are needed to support this innovation and determine impacts to local transportation plans.

Shared-Use Mobility

As new options emerge to provide added convenience to consumers, a "sharing economy" is beginning to take hold. The most common shared-use transportation options include:

Bikesharing: This option allows users to access a bicycle at different locations in the service area and rent or borrow the bicycles as needed. Most new bike sharing programs use IT enabled stations or GPS-enabled bikes.

Carsharing: This service provides members short-term access to an automobile. Depending upon the service, users may be required to bring the automobile back to the pickup location or may pick up the vehicle in one location and drop it off in another, called point-to-point carsharing. Other services offer peer-to-peer carsharing in which car owners allow others to use their vehicles for a charge.

Ridesourcing: Providers such as Uber and Lyft use online platforms or mobile applications to connect passengers with drivers who use personal, non-commercial vehicles. Using a mobile GPS-enabled application, travelers “hail” a ride from a ridesourcing service. The mobile application shows the rider who the driver is, what type of car the driver is in, where the driver is located, and when they should arrive. Although a newer concept, providers in select cities are also beginning to offer services that combine riders (or “fares”) that are traveling along similar routes to reduce vehicle trips and generate cost savings for the users.

Ridesharing: This involves adding additional passengers to a pre-existing trip, allowing riders to fill otherwise empty seats. Unlike ridesourcing, ridesharing drivers are not “for hire” but may be compensated for their time and mileage. This is most commonly referred to as carpooling and vanpooling.

It is unknown at this time how this shift in the way consumers interact and travel will affect transportation in the future. However, the CC-PG MPO will continue to monitor the affect of these new strategies as the industries evolve and more information becomes available.

A Vision for Charlotte County

With adoption of the 2040 LRTP, the CC-PG MPO has developed and adopted a long-term vision for transportation that supports and complements the major goals and objectives of Charlotte County. It will



Photo credit Jennifer Huber/CharlotteHarborTravel.com

“Yellow Bike Loaner Program” at Fishermen's Village, Punta Gorda



TBARTA Ridesharing Vanpool Service in West Central Florida

be important that the adopted plan be used by the MPO and the County as a guide for its annual and day-to-day transportation planning and programming activities and that the plan be flexible to respond to the ever changing environment in Charlotte County and the region.

The leadership of Charlotte County has a blueprint for improving its transportation system and providing mobility options to the citizens and visitors of Charlotte County and the region. This balanced approach is consistent with the County's desire to ultimately achieve development patterns and a transportation system that contribute to an enhanced quality of life for citizens and visitors throughout the community.



Charlotte County-Punta Gorda
Metropolitan Planning Organization

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JACOBSTM

