



2040 TRANSPORTATION PLAN

Adopted: December 18, 2015

JACOBS





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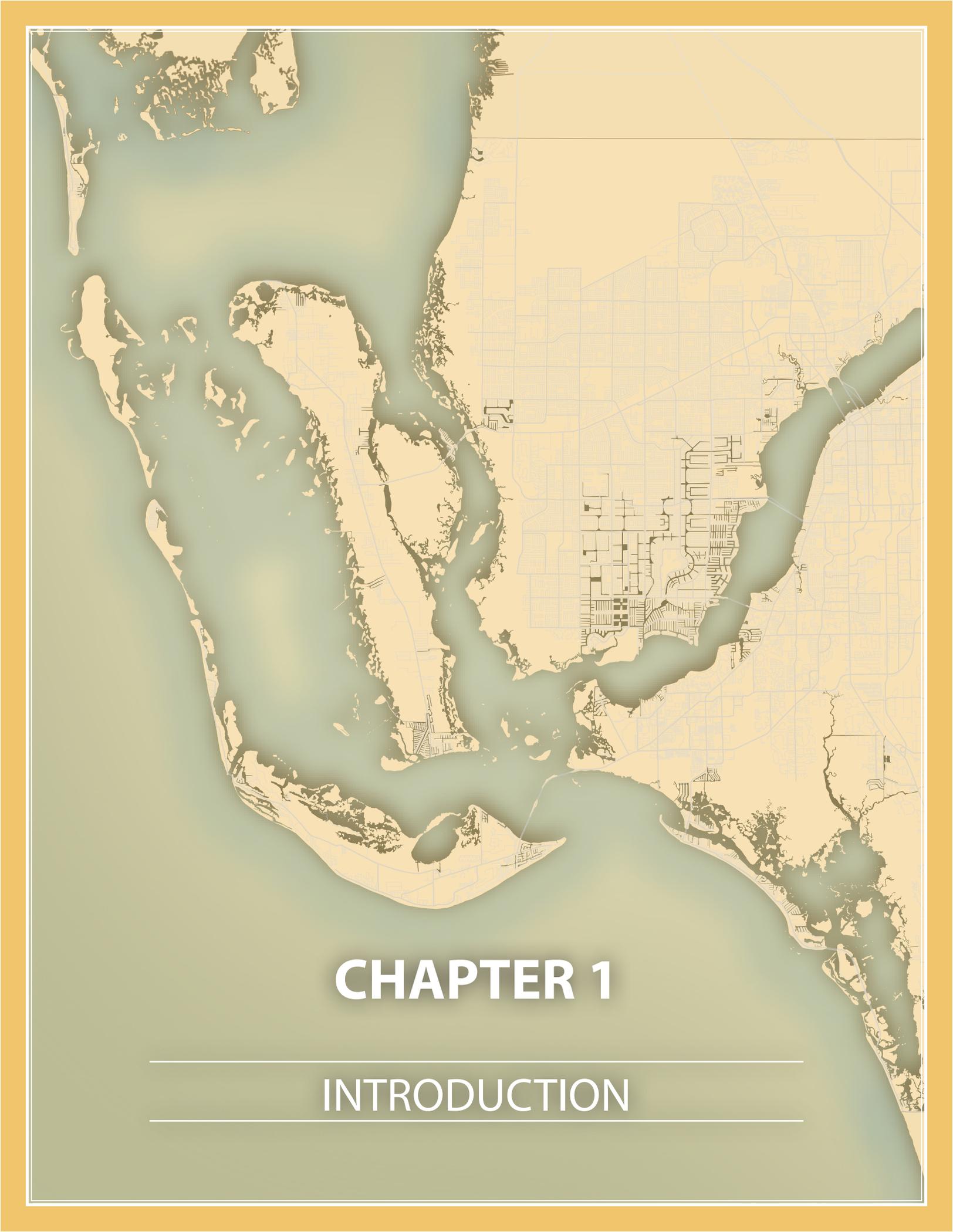
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2040





CHAPTER 1

INTRODUCTION

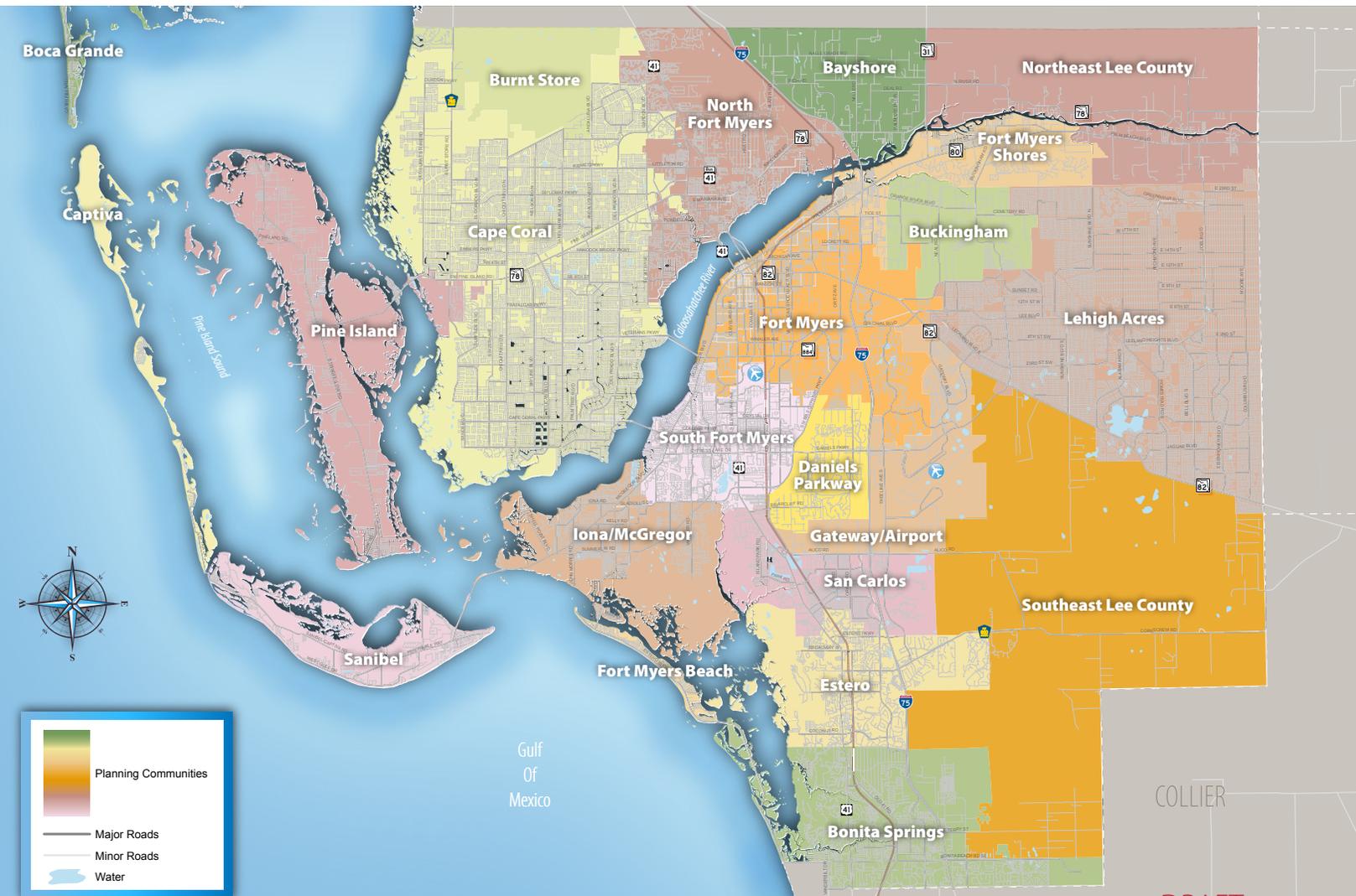
CHAPTER 1: INTRODUCTION

The Lee County Metropolitan Planning Organization’s (MPO) 2040 Transportation Plan is the agency’s Long Range Transportation Plan (LRTP), updated every five years per federal law to address changing growth patterns and emerging trends.

This LRTP responds to topics that the MPO Board and community have been discussing for several years - the available revenues from all sources are declining at the same time population is growing. In response, this LRTP better integrates transportation and land use planning by not only embracing best practices and smart planning techniques, but it meets new federal guidelines with the adoption of a set of goals and objectives that allow potential projects’ performance to be measured. This ensures the focus is on the highest performing projects.

The LRTP presents a 25-year multimodal vision that supports improved mobility and access for people and goods and supports a high quality of life through efficient transportation investments. Given the county’s shrinking revenues (down 26 percent) and growing population (up 51 percent), it is imperative to invest in projects that get the most bang for the buck, meet the MPO’s highest priorities, maintain and improve roads before creating new capacity, and to downsize and “right-size” projects. However, the lack of revenues prevents progress in implementing a comprehensive transportation plan, most notably in public transportation. Given that no new revenues are projected for transit services, the plan remains generally the same from now until 2040.

Figure 1-1: Lee County Planning Communities



In 2013, the MPO’s Executive Committee was tasked with guiding the 2040 Transportation Plan. The Committee worked with staff over the past two years to develop realistic revenue projections, determine the cost to fully maintain existing infrastructure, estimate the remaining funds that could be allocated to new or expanded facilities, and reinvent project review and prioritization processes based on the LRTP and MPO Board’s goals. The this 2040 Transportation Plan, 45 percent of revenues come from Federal and state sources, while 55 percent are locally generated.

The Committee’s work provides the framework for making better decisions and directing limited resources in a cost effective way. The Committee will continue to discuss revenue options and hope to make recommendations for additional funding sources or strategies in 2016.

The 2040 Transportation Plan recognizes the potential impact of autonomous vehicles on long range transportation planning, and the MPO continues to monitor research and state and federal guidance. It is difficult to predict how that impact will affect implementation and future planning.

BACKGROUND

Lee County is in Southwest Florida along the Gulf of Mexico. While it has roots as a retirement community, its population and its transportation needs have grown more diverse. Lee County covers 804 square miles of land and has a 2014 population of 679,513.

The most pressing transportation challenge Lee County and its communities (Figure 1-1 on the previous page) face is an underfunded transportation system and a growing list of multi-modal transportation needs. The anticipated growth is predicted to result in increased congestion, which, in turn, leads to more safety concerns. Safety issues can impede the movement of goods and lower our quality of life. The LRTP identifies transportation strategies and projects that address the county’s anticipated transportation needs between now and 2040, ensuring that scarce resources are used in a cost effective way while continuing to help make Lee County a desirable place to live, work, and play.

STATE OF THE TRANSPORTATION SYSTEM

Lee County’s transportation system supports residents, visitors, and freight traveling on more than 1,000 miles of major roads (arterials and collectors) and 4,300 miles of local streets. While personal automobiles are the most heavily used transportation mode, the county provides multimodal options as well. The county’s transit system, LeeTran, is operated by Lee County and consists of 24 bus routes, paratransit services, and a vanpool program. Lee County and its municipalities also maintain a growing network of bicycle and pedestrian facilities, with about 205 miles of bike lanes, 315 miles of sidewalks, 195 miles of shared use paths, and 130 miles of paved shoulders. Figure 1-2 outlines some of the changes and challenges Lee County faces.

Figure 1-2: State of Lee County’s Transportation

About **270 miles** of the Lee County’s roads are over capacity.

Between 2011 and 2014,



total traffic crashes increased
107 percent from 4,419 to 9,169



pedestrian fatalities increased
143 percent from 7 to 17



bicycle fatalities increased
80 percent from 5 to 9

In 2013, less than **2 percent** of commuters biked, walked, or took transit to work.



Sources: Lee MPO, Florida’s Integrated Report Exchange, 2013 American Community Survey 1-Year Estimates, freepik.com

Lee County's transportation system is overburdened; yet, financial resources are declining from local revenues, such as impact fees, and state and federal resources, including gas taxes. The Federal gas tax, one of the larger sources of revenue for transportation projects, has not been raised since 1993. At the same time, vehicle fuel efficiency has significantly improved and gas prices have remained flat when adjusting for inflation. Projected revenues for the transportation plan have decreased by nearly 25 percent since the 2035 LRTP was adopted, and project costs have increased. Federal and state revenues anticipated through 2040 have fallen 15 percent from \$739 million to \$631 million, and expected local revenues have fallen 31 percent from \$1.94 million to \$1.34 million in the same period (present day costs). The MPO has responded by working with local municipalities to invest in projects that are realistic and give the highest return on investment.

HIGHLIGHTS OF THE PLAN

This 2040 Transportation Plan represents a significant effort to address the long-term transportation needs of Lee County and its municipalities. Key highlights of this plan include:

- Integrating transportation and land use planning (adoption of land use scenario);
- Emphasizing maintenance and improvement of existing facilities before building new ones;
- Adopting a set of goals and objectives meeting federal requirements to measure performance;
- Emphasizing the highest performing projects within each mode as priorities and then applying realistic revenues; and
- Focusing on community character by restricting additional roadway capacity on constrained roads following local government policies and encouraging Complete Streets implementation (examples include Old US 41 in Bonita Springs, and Estero Boulevard in Fort Myers Beach).
- Using realistic revenue projections so that the 2040 Transportation Plan is able to be funded.

The major roadway projects included in the Cost Feasible Plan support people and goods movement and economic growth, and improve congestion for the Lee County community. These roadway projects include:

- Burnt Store Road from Van Buren Parkway to the Charlotte County line;

- Alico Connector from Alico Road to SR 82;
- SR 82 from Shawnee Road to the Hendry County line;
- Big Carlos Bridge replacement;
- Hanson Street extension from Veronica Shoemaker Boulevard to Ortiz Avenue;
- Bonita Beach Road from I-75 to Bonita Grande Drive; and
- Corkscrew Road from Ben Hill Griffin Parkway to Alico Road.

This Cost Feasible Plan invests in bicycle and pedestrian facilities in conjunction with road projects and multi-use trails:

- There are 33 bicycle, pedestrian, and multi-use trail projects totaling \$49 million.
- The Lee MPO TIGER Grant Complete Streets Initiative includes 11 miles of new shared use paths and four miles of new sidewalks - all will be completed by 2016's end;
- Bonita Spring's downtown redevelopment project will make a 1.3-mile downtown corridor a walkable place;
- Major bicycle and pedestrian improvements on Estero Boulevard in Fort Myers Beach continue in 2016; and
- Cape Coral is building 23 miles of sidewalks over the next five years, and the city is expanding its nearly 90-mile bike route system.

This plan also addresses projects to improve the movement of freight and congestion management. This includes:

- Rebuilding medians and turn lanes at the Colonial and Six Mile Parkway/Ortiz intersection;
- I-75 exit ramp improvements at Alico Road; and
- Intersection phasing improvements and turning lane improvements on Pine Island Road at Pondella Road.

The plan also includes ways to address safety and community investment protection without widening roads:

- Continuing transit operations with efforts to increase efficiencies;
- Preserving the transportation system through increased funding for road maintenance - an increase of about 19 percent over the 2035 plan; and
- Continuing to build on regional connections by making improvements to Burnt Store Road connecting to Charlotte County, and Old US 41 in Bonita Springs and north Collier County, and SR 82 in Lee and Hendry Counties to decrease congestion and increase safety.

ABOUT THIS DOCUMENT

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

Chapter 2: Developing the Plan. A fully-vetted land use scenario planning effort helped determine future growth patterns. The Florida Department of Transportation (FDOT) District One regional traffic model estimated what that growth will do to the current and projected transportation network. Transportation needs are influenced by this technical work.

Chapter 3: Guiding the Plan. The plan is guided by overarching goals and objectives collaboratively developed through the MPO's Committees and Board. The LRTP responds to federal transportation law and policy and meets state requirements.

Chapter 4: Funding the Plan. This chapter describes the assumptions and anticipated funding amounts for the next 25 years from federal, state, and local sources. Cost assumptions for the proposed projects are also included.

Chapter 5: The Needs Plan. Modeling and forecasting are used to determine future transportation needs.

Roads are the primary element of Lee County's transportation system and where most investments are made, both in new projects and in changes to existing roads. Nearly one-third of the most congested roads in Lee County are constrained by policy for further widening.

Transit ridership and demand has increased, and strategic investments are identified.

Lee County is a regional leader in providing safe and connected *bicycling and walking facilities*. Investments are targeted to increase the connections between where people live and where they want to go.

Chapter 6: The Cost Affordable Plan. The projected local, state, and federal revenues from Chapter 4 are compared against the identified transportation needs in Chapter 5. Multimodal project lists and maps are included in this section.

Chapter 7: Public Involvement. This plan was developed with extensive public outreach and consideration. Many projects came directly from citizen suggestions. The outreach efforts and statistics are described here.

Chapter 8: Congestion Management Process. A poor performing transportation system leads to time wasted in congestion. A wide variety of strategies can make things better, get people home safely and quicker, and move the economy.

Chapter 9: Other Transportation Elements. This chapter addresses the freight mobility element that focuses on moving people and goods in Lee County; the status of transportation safety and security (including hazard mitigation); environmental mitigation which outlines how transportation decisions are made in regards to environmental resources, and advancing technologies.

Chapter 10: Performance Evaluation. The 2040 Cost Feasible Plan's transportation network is compared to the E+C Network and evaluated against the plan goals.

Chapter 11: Plan Implementation. This chapter documents issues and activities the MPO may consider addressing in future planning efforts.

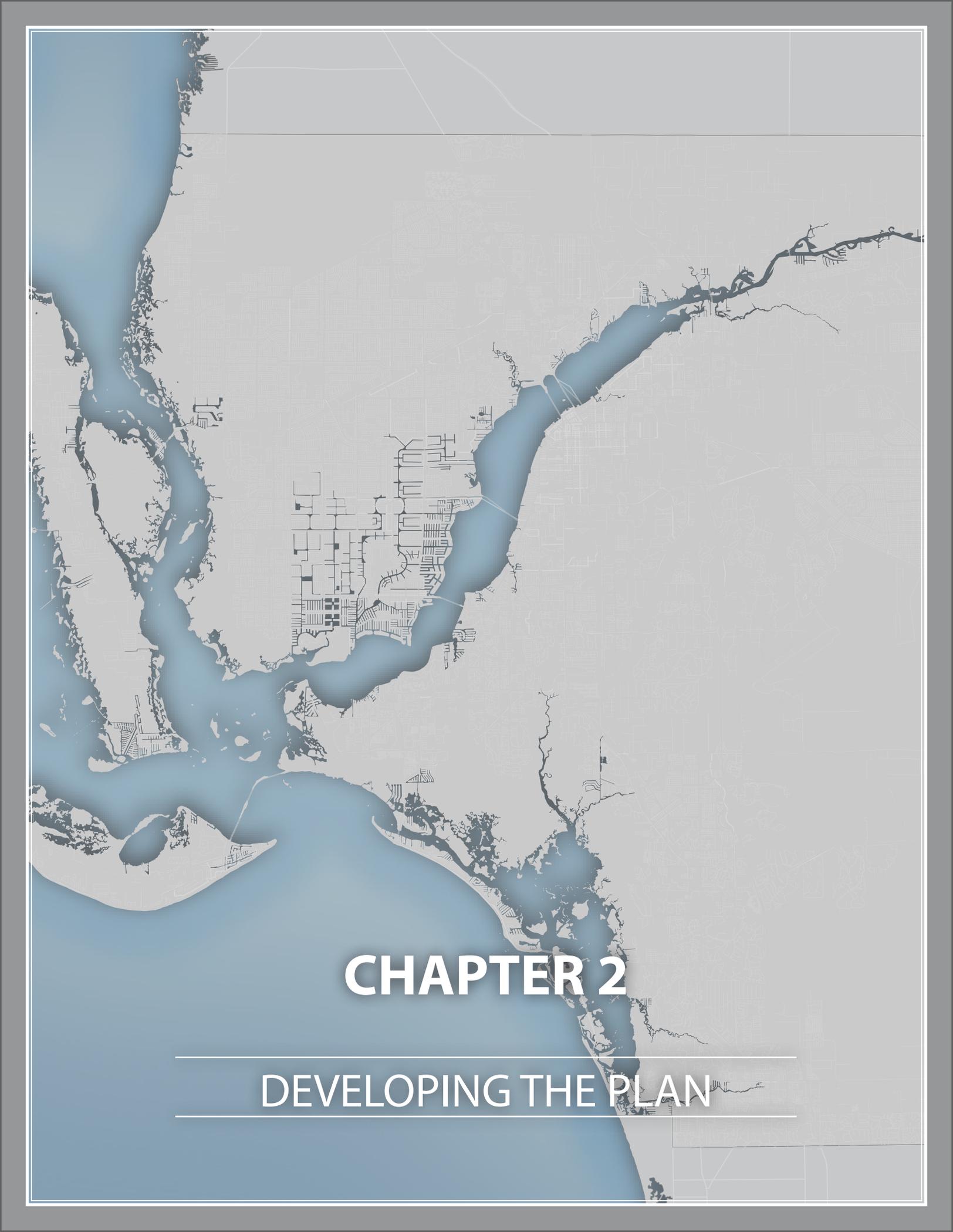
REGIONAL COORDINATION

As Lee County grows with the rest of Southwest Florida, seamless regional travel becomes increasingly important. Boundaries between the communities are getting closer as urbanized areas are growing. These expanding boundaries reflect the reality that people cross county lines for work, shopping, entertainment, education, and healthcare. Recognizing this reality, the MPOs in Charlotte, Collier, and Lee Counties are working closer to coordinate regional transportation planning and have collaborated to implement and prioritize projects of regional significance. The Burnt Store Road project is an example of collaboration between Charlotte and Lee Counties, while transit service along US 41 highlights the cooperation that connects Collier and Lee Counties.



Lee MPO Background

- Federal Aid Highway Act of 1962 required each urbanized area with a population of 50,000 or more to establish it as a condition of receiving federal funds.
- Lee MPO formed in 1967.
- Current Federal transportation Bill MAP-21 (Moving Ahead for Progress in the 21st Century) approved in 2012 has been extended again though July.
- Twenty-seven MPOs in Florida.

The image features a stylized map of a coastal region, possibly a bay or estuary, with a blue overlay. The map shows a network of waterways and land parcels. The text 'CHAPTER 2' is prominently displayed in white, bold, uppercase letters. Below it, the text 'DEVELOPING THE PLAN' is also in white, uppercase letters, flanked by two horizontal white lines.

CHAPTER 2

DEVELOPING THE PLAN

CHAPTER 2: DEVELOPING THE PLAN

The LRTP is updated every five years to realign its course, balance resources with needs, and adjust project lists to correspond to evolving community values. The resulting plan outlines transportation improvements in the county to address the most pressing needs. It is consistent with the current values of the community and is financially feasible, outlining a list of projects that the county can afford and will provide the highest return on investment.

The 2040 Transportation Plan was developed using a step-by-step process, as shown in **Figure 2-1**. The process began with defining the assumptions for the plan to guide what is needed for transportation and mobility for the MPO’s planning area through 2040. This includes identifying the goals and

objectives of the plan and estimating how many people will live and work in Lee County in 2040. Based on those forecasts, the projects to improve the transportation system needed to provide suitable mobility for residents and visitors throughout the county were identified. However, due to the limited funding available, select projects were then prioritized as cost feasible, or having the highest impact to mobility within the constraints of available funding.

Two well-attended public meetings were held, in addition to other activities, to include the public in the plan’s development. Further information on public involvement activities is summarized in **Chapter 7** and **Appendix F**.

Figure 2-1: Steps to Develop a Long Range Transportation Plan





POPULATION AND EMPLOYMENT FORECASTING

LAND USE SCENARIO PLAN

While variables such as demographic trends, forecasted growth (Figure 2-2), and fuel costs influence how people travel, future land use patterns are a key consideration for transportation needs and costs. Sprawling communities generally require an automobile-dependent transportation system where residents travel longer distances to reach destinations.

Prior to beginning the Transportation Plan update, MPO staff collaborated with local and state government representatives as well as the public to evaluate three scenarios of how the county could grow and change between now and 2040. This process is encouraged by the Federal Highway Administration (FHWA) as a best practice to develop L RTPs to ensure the transportation projects recommended will truly meet the future needs of the community.

The goal of the Land Use Scenario Plan was to coordinate transportation with how land is used and developed to create a

sustainable long-term growth strategy for the county that will lower the number of miles traveled, reduce suburban sprawl, and make the best use of future transit expansions. The result of the evaluation, a preferred land use alternative, was used by the MPO to anticipate where residential and employment growth will occur in this 2040 Transportation Plan.

Multiple land use alternatives were created and evaluated for their impact on the following:

- Access to jobs and shopping
- Rural land retention
- Coastal development
- Diverse housing options
- Homes on large lots
- Amount of driving
- Access to transit
- Walking and bicycling
- Energy use
- Water use
- Greenhouse gas emissions

Figure 2-2: Growth Forecasts for Lee County

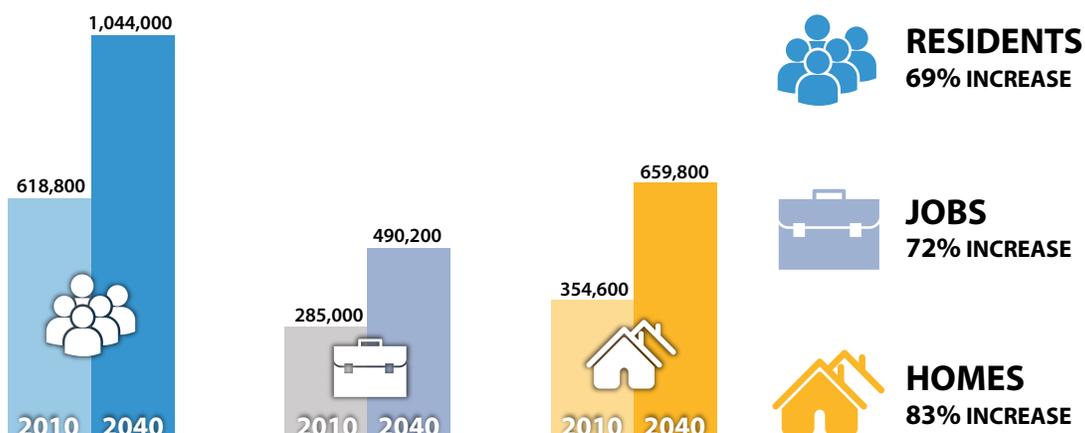
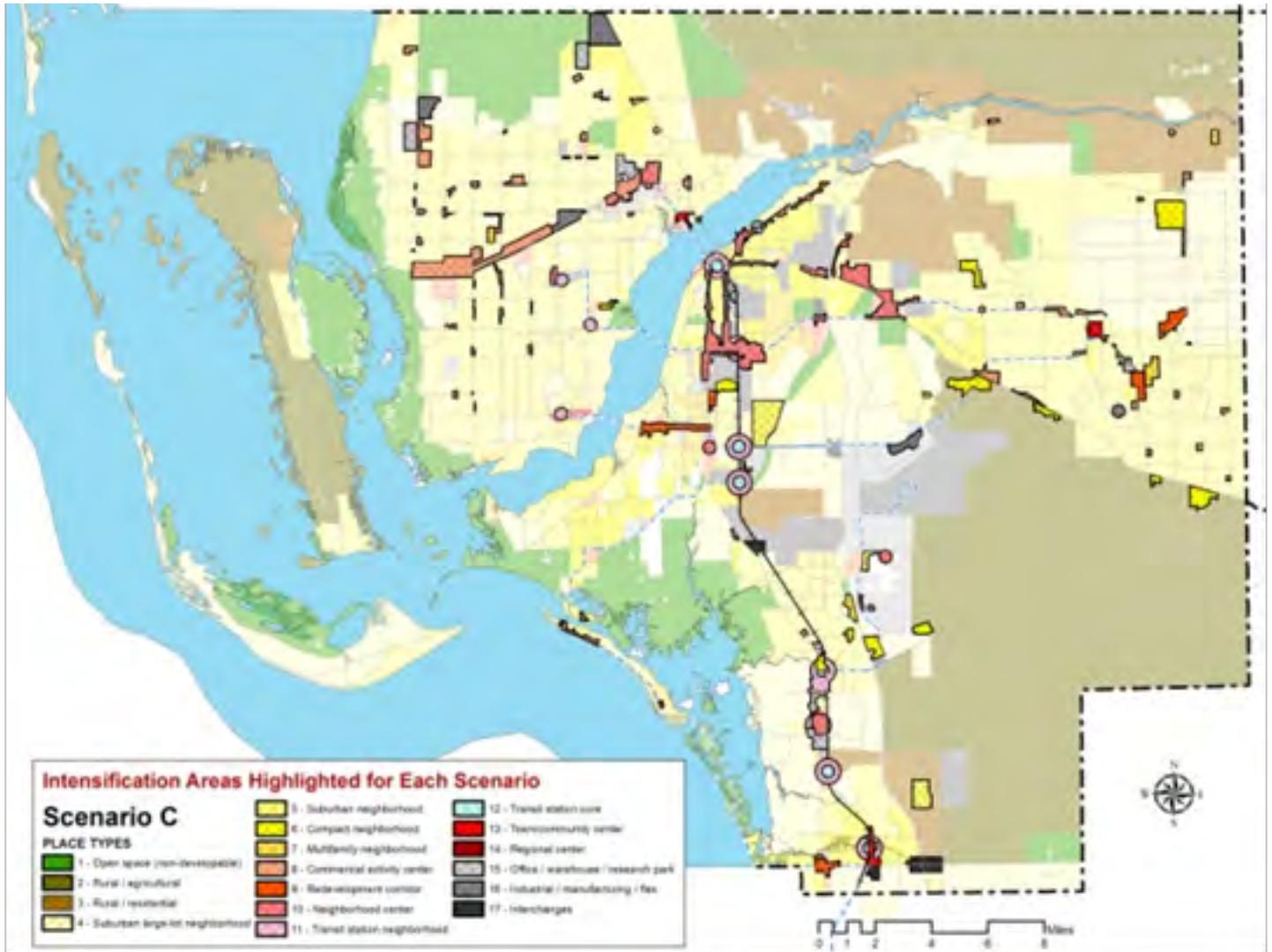


Figure 2-3: The preferred land use scenario and how development is anticipated to be distributed



PREFERRED LAND USE SCENARIO

On June 20, 2014, the MPO Board adopted a preferred land use scenario that focuses residential and commercial development near existing and proposed transit corridors and city centers and discourages outward growth aside from what is already permitted by current comprehensive plans. The preferred land use scenario was created with input from local government agencies, private organizations, citizens, and with the help of modeling software. This scenario reflects the following top five priorities identified in an extensive online survey:

1. Walking and Bicycling
2. Water Conservation
3. Less Driving
4. Rural Land Preservation
5. Access to Transit

The preferred land use scenario (Figure 2-3) assumes that intense development encouraged by current land use plans will be successful. This scenario also intensifies land use patterns on College Parkway and along north-south transportation corridors to take advantage of potential public transit along the rail corridor or US 41 and recent improvements to the north-south road network such as Michael G. Rippe/Metro Parkway and Three Oaks/Imperial Parkway.

The preferred scenario scored the best on most of the performance indicators, with a notable exception being the coastal development indicator. Additional density near the coast impacted this scenario's performance.

This scenario is the densest scenario that was considered with growth concentrated in areas that are already developed. There is no outward expansion in this scenario, and there are no inconsistencies with local comprehensive plans.

This scenario is expected to result in the fewest automobile miles traveled of all the scenarios considered, which was a primary goal of this planning effort. This scenario allows more households to have greater access to transit, another primary goal, and provides better access to jobs and shopping.

SCENARIO PLANNING AND THE TRANSPORTATION PLAN

While the preferred land use scenario drives this transportation plan, land use is controlled through comprehensive land use policies and plans that are developed by each local government. Currently the land use scenario has no regulatory authority within those jurisdictions, but is important to create an accurate and desirable land use forecast that can be used as a long range vision, to forecast socioeconomic data, and to anticipate future transportation needs. For the LRTP, the preferred land use scenario was used as a basis for modeling where future growth and development will occur, which impacts traffic and congestion. This allows future transportation needs to be anticipated. The socioeconomic data forecast results are shown in **Figures 2-4** through **2-9** on the following pages. The figures focus on how intensely growth for both residential and employment is forecast to occur.

The Land Use Scenario Plan report is included as **Appendix A**.

ENVIRONMENTAL JUSTICE

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. It is a federal law that was codified via Executive Order in 1994 under the US Environmental Protection Agency.

Specifically, the 2040 Transportation Plan must be fair in its treatment of low-income neighborhoods. Those neighborhoods cannot be unduly burdened with negative impacts, nor ignored when services and improvements are programmed. Another goal of the federal law is to ensure that the public, especially those traditionally underserved by the transportation system, have opportunities to participate in the decision-making process. The 2040 Transportation Plan is required to meet this Federal law; see Chapter 9 and Appendix I for more discussion about Environmental Justice in Lee County.



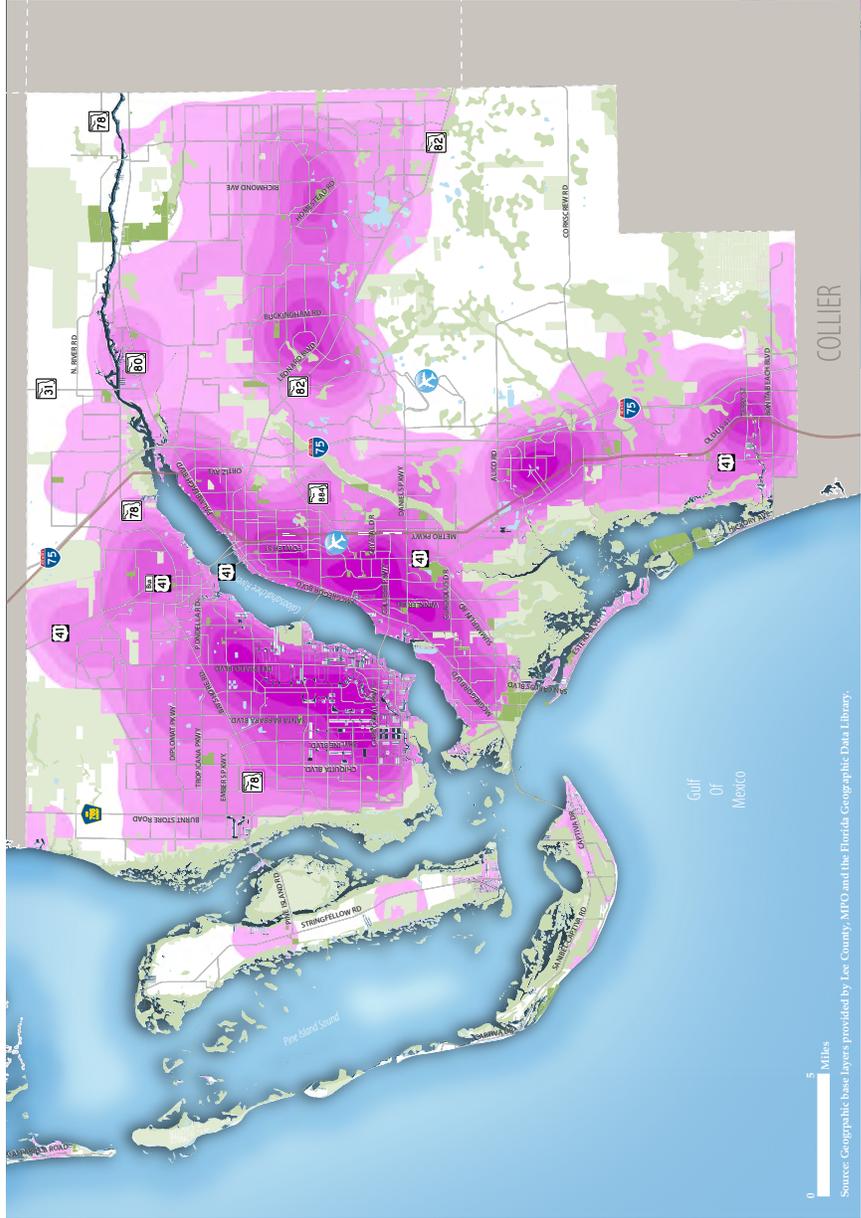


Figure 2-4: Population 2010

Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.

Figure 2-5: Population 2040

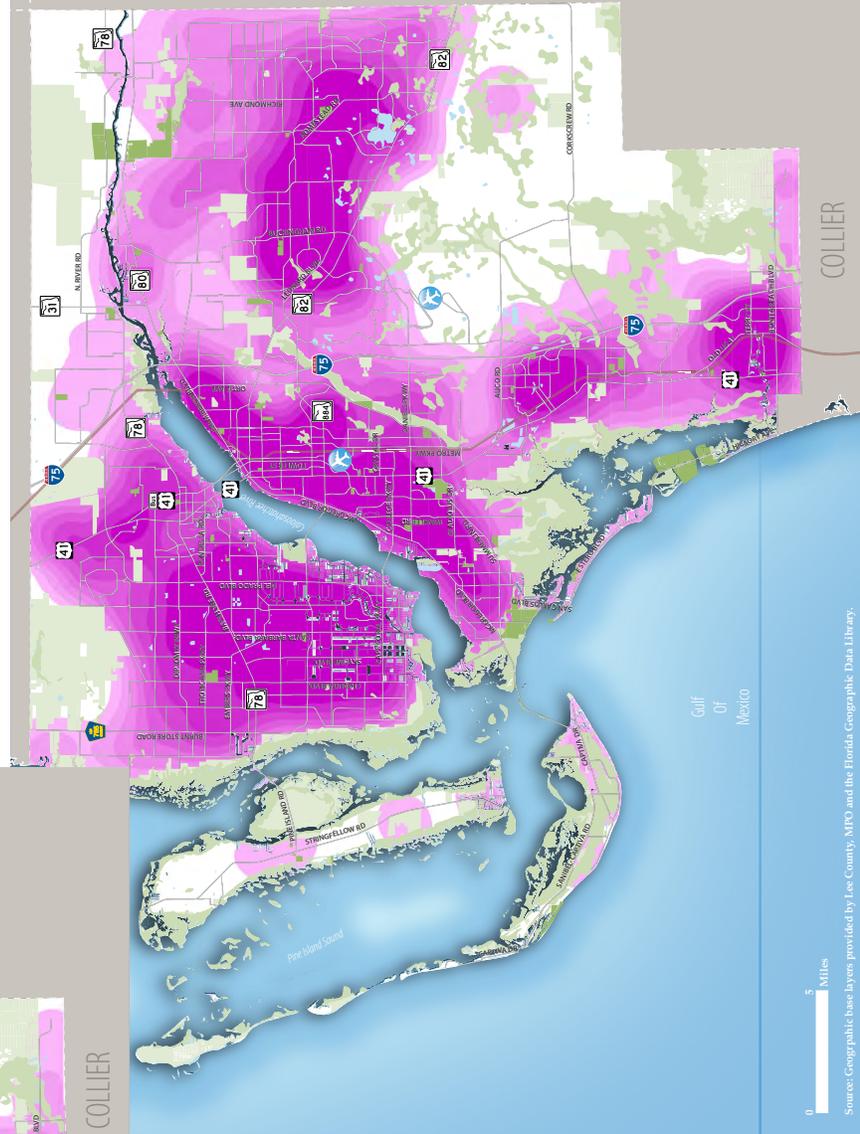
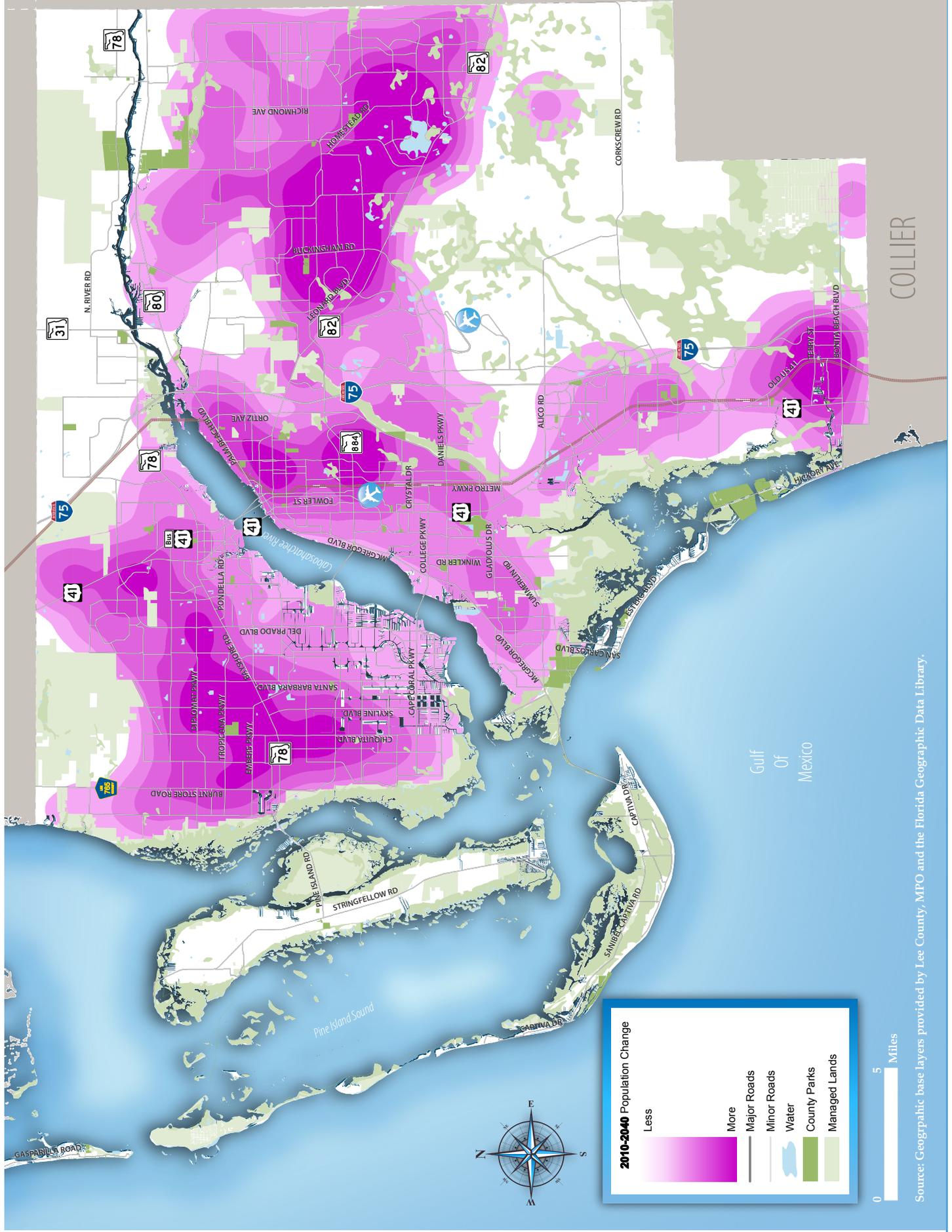


Figure 2-6: Population Growth 2010-2040



Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.

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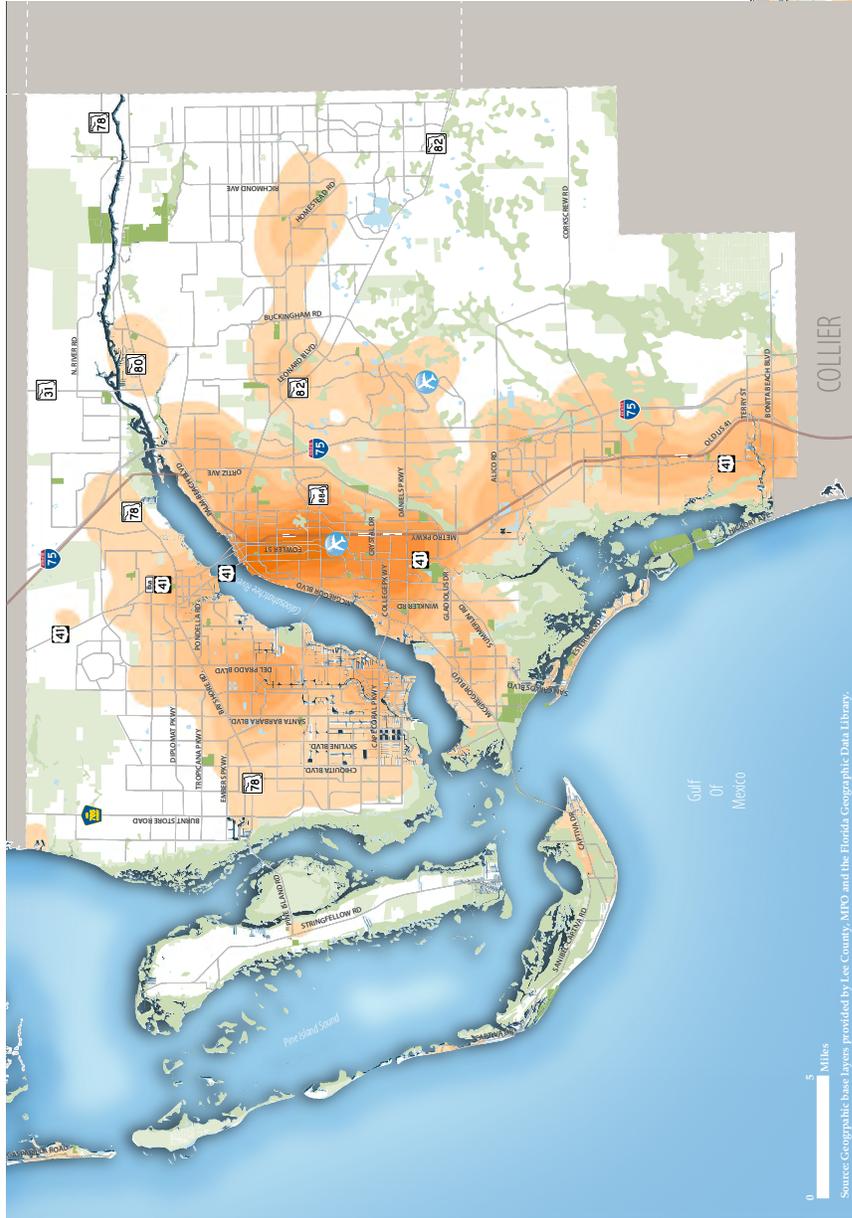


Figure 2-7: Employment 2010

Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.

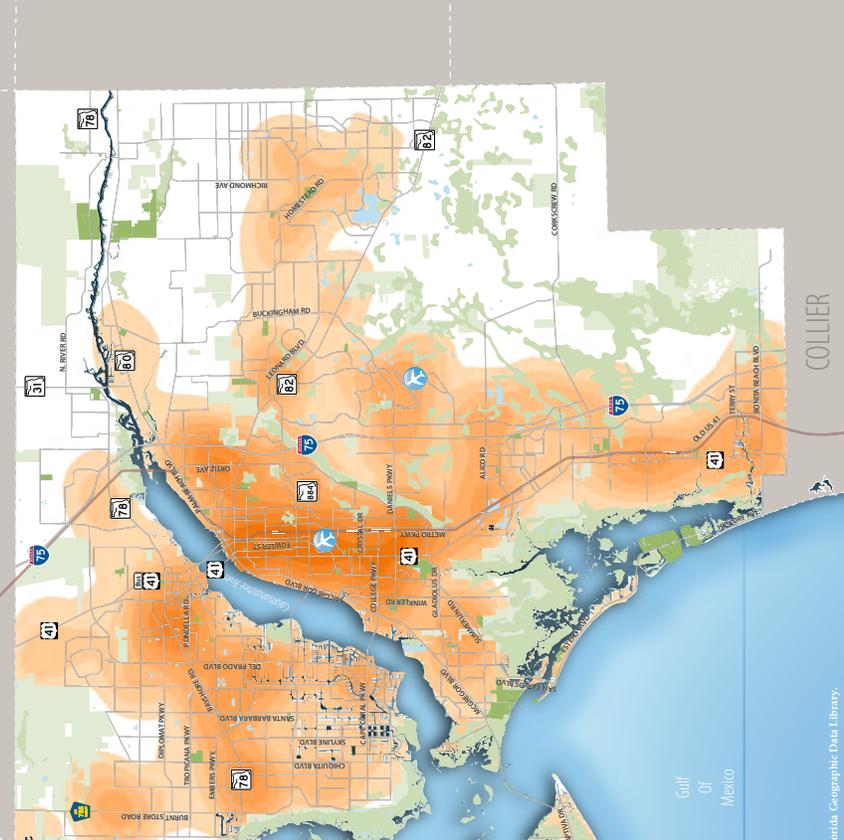
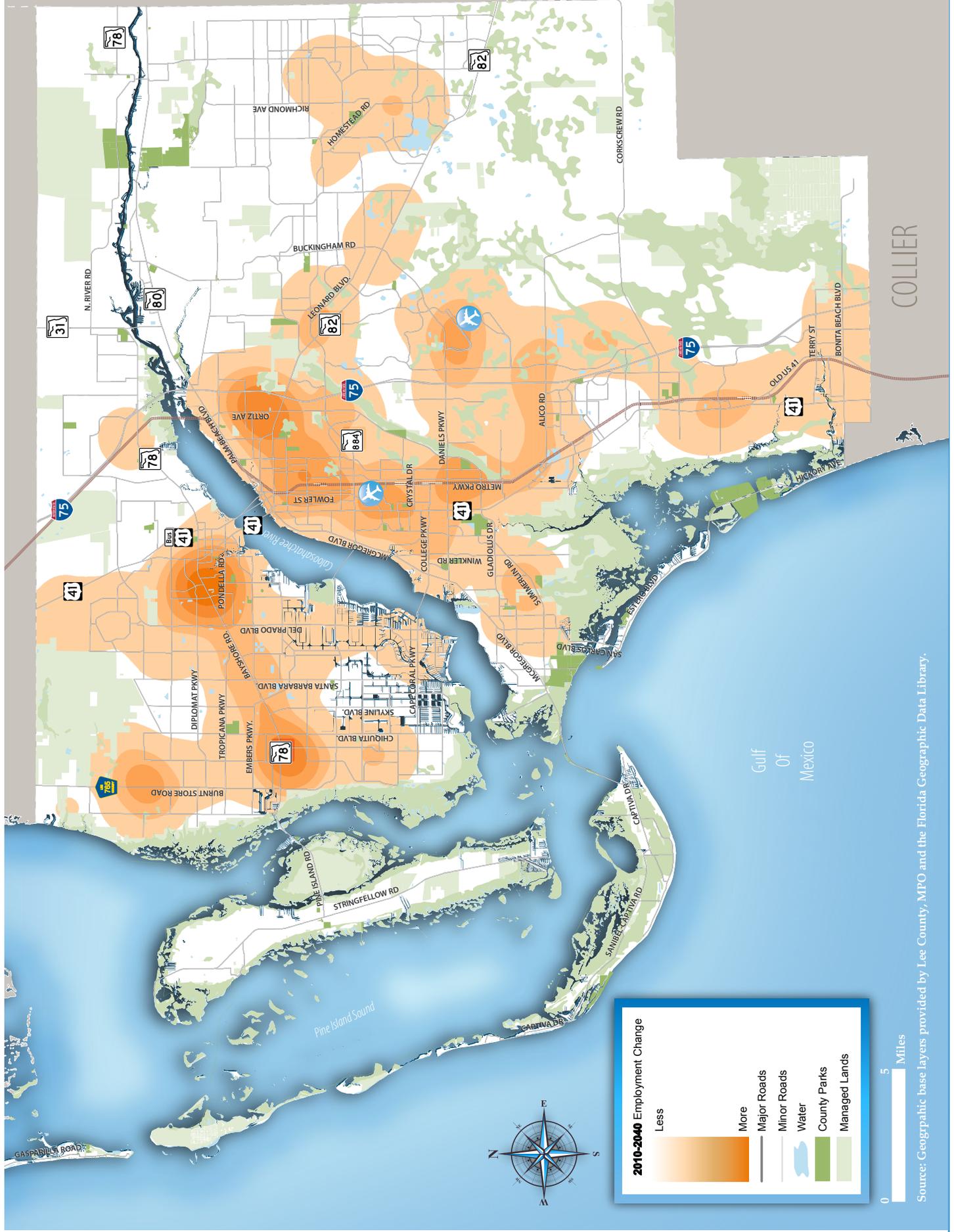


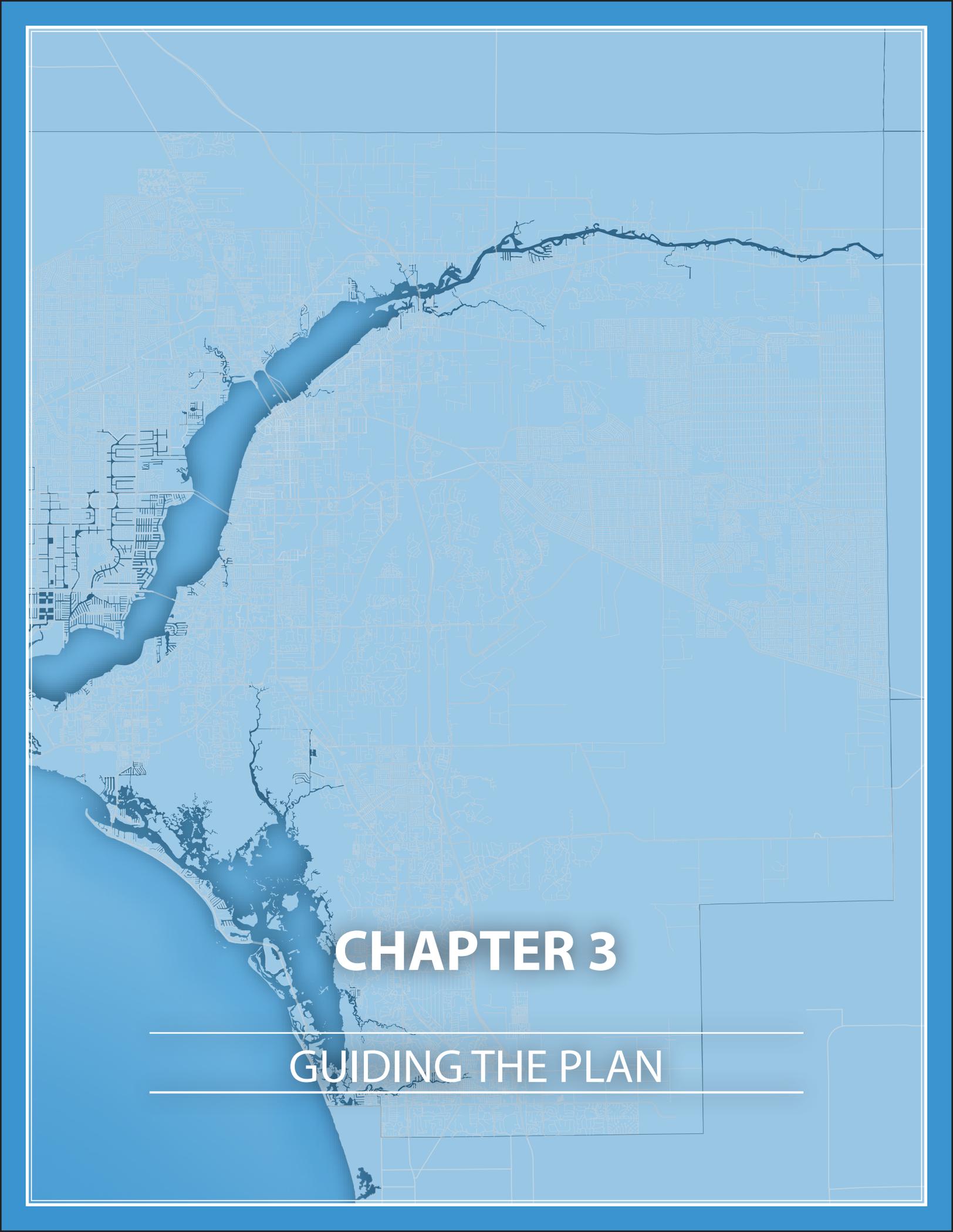
Figure 2-8: Employment 2040

Figure 2-9: Employment Growth 2010-2040



COLLIER

Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.



CHAPTER 3

GUIDING THE PLAN

CHAPTER 3: GUIDING THE PLAN

The 2040 Transportation Plan's guidance began with its residents imagining a vision of Lee County in the future. That vision of how its residents want to grow and get around the county led to supportive goals and objectives. The goals and objectives also comply with federal and state requirements, including Moving Ahead for Progress in the 21st Century (MAP-21) and the 2060 Florida Transportation Plan.

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 Transportation Plan follows the provisions set forth in MAP-21 as described below.

FEDERAL AND STATE GUIDANCE

MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY

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 U.S., 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 preserving the existing transportation system.

2060 FLORIDA TRANSPORTATION PLAN GOALS

Florida statute [339.175(7)(a)] requires that the 2040 LRTP be consistent with the goals and objectives of the 2060 Florida Transportation Plan adopted in 2010. The goals of the 2060 Florida Transportation Plan 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

LAND USE SCENARIO EXERCISE VISION AND GOALS

During the land use scenario planning process, the Lee County MPO and its Board, Committees, and stakeholders developed a Vision Statement. The Vision Statement was adopted by the MPO Board in November 2013:

Lee County will be a highly desirable place to live, work, and visit—recognized for its commitment to a sustainable future characterized by a healthy economy, environment, and community. Lee County will be a community of choice—valued for its quality of life; varied natural environment; unique sense of history and place; distinct urban, suburban, and rural communities; diverse economy and workforce; and varied travel options.



COUNTYWIDE ISSUES GOAL: To improve the quality of Lee County's unique mix of diverse vibrant communities, affordable pre-platted subdivisions, coastal waterways, and interior wetlands. Develop where it benefits the county, away from sensitive areas, rural lands, and remote locations.

NEW MIXED-USE PLACES GOAL: To introduce mixed-use activity centers to serve existing and planned residential neighborhoods. Mixing housing types and focusing on walkable streets at different scales will create livable places.

NEIGHBORHOODS AND STREETS GOAL: To maintain Lee County's healthy neighborhoods and revitalize or build others to higher standards of connectivity and convenience. Neighborhoods should be compact, strong, and with services in or nearby.

REGIONAL TRANSPORTATION NETWORK GOAL: To optimize the existing regional transportation network to improve existing shortcomings and respond to evolving preferences in living and travel patterns. Street character is important as is considering current and future roadway maintenance costs.

PUBLIC TRANSIT AND OTHER TRAVEL MODES GOAL: To provide a wider variety of transportation choices for Lee County's diverse population through Complete Streets and better public transportation.

2040 TRANSPORTATION PLAN GOALS

The 2040 Transportation Plan's goals were adopted by the MPO Board on August 22, 2014, after collaboration from the Executive Committee, Technical Advisory Committee (TAC), Citizens Advisory Committee (CAC), and community partners.

The goals adopted by the Lee MPO establish a long-term framework for developing and maintaining the county's transportation system consistent with the vision. The result is a multi-modal transportation system that is:

- Balanced and integrated with all transportation modes for people and goods;
- Safe and secure for existing and future residents, visitors, and businesses;
- Supportive of emergency responsiveness and evacuation;
- Sensitive to the County's communities, the community character, and environmental resources;
- Supportive of economic growth and anticipates development demands;
- Maintained, optimized, and expanded using the best available technologies and innovation;
- Financially feasible; and
- Coordinated with relevant agencies and based on effective integration of transportation, land use, conservation, and smart growth planning.

These plan goals need to comply with and advance the MAP-21 planning factors. **Table 3-1** on the following page shows how the goals and planning factors relate.

Table 3-1: 2040 Transportation Plan Goals and MAP-21 Planning Factors

	Goal	MAP-21 Planning Factors							
		Economic Vitality	Safety	Security	Accessibility/ Mobility	Quality of Life/ Environment	Connectivity between Modes	Efficient System Management	Preservation of the System
1	Balanced and integrated with all transportation modes for people and goods	✓			✓	✓		✓	✓
2	Safe and secure for existing and future residents, visitors, and businesses		✓		✓	✓			
3	Preserve natural spaces while promoting a healthy community	✓				✓			
4	Promote vibrant centers and the local economy	✓	✓		✓	✓	✓	✓	
5	Limit new transportation projects to crossing the least environmentally sensitive lands	✓				✓		✓	
6	Consider aesthetic design elements in transportation improvements		✓	✓		✓			
7	Consider all existing and potential federal, state, private, and local revenue sources to develop a financially feasible multimodal transportation plan	✓			✓	✓	✓	✓	✓
8	Prioritize transportation projects that serve existing and future economic and activity centers that are proven to provide the greatest return on investment	✓			✓		✓	✓	✓



PERFORMANCE MEASURES

In response to MAP-21 guidance, each proposed project’s performance was measured for their ability to meet criteria developed through the MPO committees, as shown in **Table 3-2**. The criteria asks the following questions of each project:

- Is the project expected to provide more capacity on roads that cannot currently handle the amount of cars traveling on them?
- Does it provide bicycle, pedestrian, or public transportation improvements?
- Is the project expected to improve future capacity?
- Is it in an area with safety concerns?
- Does it address system preservation or maintenance of assets in place?

- Does it provide or enhance intermodal connectivity?
- Is the project on or support emergency evacuation routes?
- Does it positively or negatively impact the environment?
- Is there a local financial commitment for the project?
- Does it positively or negatively impact the environment?
- Does it positively or negatively impact underserved populations?
- Is the project expected to improve access to major activity centers?
- Does the project showcase or encourage innovation?
- Is the project on a designated truck route?

Table 3-2: 2040 Transportation Plan 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%	✓	✓		✓	✓	✓	✓	
Provides bicycle, pedestrian, or public transportation improvement	15%	✓	✓		✓	✓	✓	✓	
Future volume to capacity ratio	10%	✓	✓		✓	✓	✓	✓	
Safety	10%		✓						
System preservation/maintenance of assets in place	10%	✓	✓			✓		✓	✓
Intermodal connectivity	8%	✓			✓		✓		
Emergency Evacuation Route	6%		✓	✓				✓	
Environmental impacts	5%	✓			✓	✓	✓	✓	
Project commitment	5%	✓						✓	
Social-cultural effects/environmental justice	5%		✓		✓	✓	✓	✓	
Roadway significance and access to major activity centers	4%	✓			✓	✓	✓	✓	
Innovation	4%					✓			
Truck Route	3%	✓			✓		✓		
TOTAL	100%								

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

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

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 < 1.00	1
Volume to capacity ratio 1.00 to 1.25	3
Volume to capacity ratio 1.26 to 1.50	6
Volume to capacity ratio > 1.20	10

Safety

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

System preservation/maintenance of assets in place

Scores given to projects on roads needing to be resurfaced.

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

Criterion Description	Score
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

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
Collector road designated as an evacuation route	4
Arterial road designated as an evacuation route	7
Interstate designated as an evacuation route	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

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 4 lanes in environmental justice area	-10
Exceeds 2 lanes in environmental justice area	-5
Does not impact environmental justice area	1

Environmental impacts

Score based on a project impacting environmentally sensitive area or is an alternative to a potentially harmful project.

Criterion Description	Score
Improvement enters an environmentally sensitive area	-5
Improvement abuts an environmentally sensitive area	0
Improvement is an alternative to entering an environmentally sensitive area	5

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

Innovation

Score based on a proposed project's potential to increase travelers' general experience, use innovative financing methods, create new and lasting partnerships, and/or introduce project types that are new to the area. Innovation can be part of project development or execution.

Criterion Description	Score
No perceived innovation	0
Some perceived innovation	5
Much perceived innovation	10

Truck Route

Score based on whether a project is on a facility with higher than average county truck traffic.

Criterion Description	Score
Lower than county average truck traffic	0
Higher than county average truck traffic	10

FEDERAL REQUIREMENTS

To ensure the 2040 Transportation Plan complies with federal regulations, the Plan must address the requirements outlined in MAP-21, as described in **Table 3-3**.

Table 3-4 outlines how the 2040 LRTP adheres to other Federal Regulations.

Table 3-5 describes how the 2040 LRTP adheres to the expectations of FHWA and the Federal Transit Administration (FTA).

Table 3-3: 2040 Transportation Plan 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 3 (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 5 (The 2040 Needs Plan) and 6 (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. These elements are also described in Appendices D, E, G, and H.
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 5, 6, 8, and 9 and Appendices address all modes. Chapter 2 (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 2 (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 2 (Developing the Plan), 3 (Guiding the Plan), and 9 (Other Transportation Elements).
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 3 (Guiding 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 December 18, 2015.

Table 3-3: 2040 Transportation Plan Compliance with MAP-21 (cont.)

Requirements in United States Code (MAP-21)		Where and How Addressed
A-8	<p>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?</p> <p>23 U.S.C. 134 (i)(2)(A)(i), 49 U.S.C. 5303(i)(2)(A)(i)</p>	<p>Multimodal options are addressed in Chapters 5 (The 2040 Needs Plan) and 6 (The 2040 Cost Feasible Plan). In addition, the project prioritization process described in Chapters 3 (Guiding the Plan) and 10 (Performance Evaluation) emphasized regional roadways such as the Strategic Intermodal System (to move goods and people).</p>
A-9	<p>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?</p> <p>23 U.S.C. 134(i)(2)(D), 49 U.S.C. 5303(i)(2)(D)</p>	<p>Environmental mitigation activities and coordination are addressed in Chapter 9 (Other Transportation Program Elements).</p>
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>	<p>Available revenue projections from federal, state, local, and private sources is addressed in Chapter 4 (Funding the Plan) and Chapter 6 (The 2040 Cost Feasible Plan).</p>
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>	<p>Operational and management strategies are addressed in Chapter 8 (Congestion Management).</p>
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>	<p>Chapter 4 (Funding the Plan) emphasizes preserving the existing system. Chapter 6 (The 2040 Cost Feasible Plan) addresses the existing infrastructure with increased maintenance funds. Chapter 3 (Guiding the Plan) describes the regional priorities and the measures of effectiveness, including system preservation.</p>
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>	<p>Complete Streets are encouraged in the design of roadway capacity projects and identified in Chapter 6 (The 2040 Cost Feasible Plan). The Congestion Management Process also includes enhancement strategies; see Chapter 8 (Congestion Management). Chapters 5 (The 2040 Needs Plan), and 7 (Public Involvement) documents the type of enhancements that are important to the public and stakeholders.</p>

Table 3-3: 2040 Transportation Plan Compliance with MAP-21 (cont.)

Requirements in United States Code (MAP-21)		Where and How Addressed
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>	<p>The MPO consulted with appropriate agencies, as described in Chapter 2 (Developing the Plan) and Chapter 7 (Public Involvement).</p>
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 7 (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 2 (Developing the Plan) and Chapter 7 (Public Involvement) describe the public comment period, public involvement plan, and how information regarding the Transportation Plan 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 7 (Public Involvement) describe the public comment period, public involvement plan, and how information on the Transportation Plan was communicated.</p>



Table 3-4: 2040 Transportation Plan Compliance with Requirements in Federal Regulations

Requirements in Federal Regulations		Where and How Addressed
B-1	Does the plan cover a 20-year horizon from the date of adoption? 23 C.F.R. 450.322(a)	The Cost Feasible Plan's horizon year is 2040.
B-2	Does the plan include both long-range and short-range strategies/actions? 23 C.F.R. 450.322(b)	Chapter 6 (Cost Feasible) shows projects organized by five-year increments beginning in 2019 through 2040.
B-3	Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity? 23 C.F.R. 450.322(e)	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 Chapters 2 (Developing the Plan) and 3 (Guiding the Plan).
B-4	Does the plan identify the projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? 23 C.F.R. 450.322(f)(1)	Transportation modeling was used to identify needs, which helped to develop the Cost Feasible Plan. See Chapter 2 (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).
B-5	Are the results of the congestion management process considered in the plan and how? 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)	A congestion management process, Chapter 8 (Congestion Management), was used to identify priority projects that are funded in the committed 5 year improvements.
B-6	Does the plan describe proposed improvements in sufficient detail to develop cost estimates? 23 C.F.R. 450.322(f)(6)	The improvements are described and summarized in the costing tool database provided by FDOT. See Chapters 4 (Funding the Plan) and 6 (The 2040 Cost Feasible Plan).
B-7	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? 23 C.F.R. 450.322(f)(8)&(9)	Chapters 5 (The 2040 Needs Plan) and 6 (The 2040 Cost Feasible Plan) Transit and Bicycle and Pedestrian elements provide for bicycle and pedestrian facilities. Road capacity projects take a Complete Streets approach where possible by including bicycle and pedestrian facilities with each project. This is also described in Appendix E (Bicycle, Pedestrian, and Multiuse Trails Technical Memorandum).
B-8	Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation? 23 C.F.R. 450.322(f)(10)(i)	System level estimates and revenues are discussed in Chapter 4 (Funding the Plan).
B-9	Are the plan's revenues and project costs reflected in year of expenditure dollars? 23 C.F.R. 450.322(f)(10)(iv)	The revenues and costs are reflected in year of expenditure dollars. See Chapter 4 (Funding the Plan), Chapters 5 (The 2040 Needs Plan) and 6 (The 2040 Cost Feasible Plan).
B-10	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? 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? 23 C.F.R. 450.322(g)	All interested parties and those listed here were coordinated with and provided reasonable opportunity to comment. See Chapter 2 (Developing the Plan), 3 (Guiding the Plan), and Chapter 7 (Public Involvement). Ongoing coordination with listed agencies is achieved through the ETDM process.

Table 3-4: 2040 Transportation Plan 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)	Chapters 2 (Developing the Plan) and 7 (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 Lee County data. See Chapter 9 (Other Transportation Program Elements) regarding the Environmental Justice analysis and Appendix I for the Environmental Justice Technical Memorandum.
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 7 (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 adopted in December 2015.



Table 3-5: 2040 Transportation Plan 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 6 (The 2040 Cost Feasible Plan).
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>	Chapter 2 (Developing the Plan) describes projected demand and the E+C Network. Chapter 7 (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 5 (The 2040 Needs Plan) and funded projects in Chapter 6 (The 2040 Cost Feasible Plan). Chapter 6 (The 2040 Cost Feasible Plan) and Chapter 11 (Plan Implementation) 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 3 (Guiding the Plan) and 10 (Performance Evaluation) describe the project prioritization.
D-3	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?	Chapters 6 (The 2040 Cost Feasible Plan) and 8 (Congestion Management) groups all Congestion Management projects without regard for timeframe; however identifies specific projects to implement as appropriate.
D-4	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?	O&M revenues and cost estimates are identified in Chapters 4 (Funding the Plan) and 6 (The 2040 Cost Feasible Plan).
D-5	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?	Chapter 6 (The 2040 Cost Feasible Plan) uses the FDOT District One costing tool and shows costs in five-year increments and by phase.

Table 3-5: 2040 Transportation Plan Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations		Where and How Addressed
D-6	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?	Chapter 6 (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.
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 6 (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 6 (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 Chapters 2 (Developing the Plan), 3 (Guiding the Plan), and 9 (Other Transportation 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 6 (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 December 18, 2015, after a substantial discussion and close of the public hearing. All final documentation will be posted online within 90 days of 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 3-5: 2040 Transportation Plan 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.	Transit facility project descriptions are included in Chapter 5 (The 2040 Needs Plan) and Chapter 6 (The 2040 Cost Feasible Plan) as well as the Transit Technical Memorandum (Appendix D).
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 5 (The 2040 Needs Plan) and Chapter 6 (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 3-5: 2040 Transportation Plan 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 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)]</p> <p>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. Chapter 2 (Developing the Plan), Chapter 3 (Guiding the Plan), Chapter 6 (The 2040 Cost Feasible Plan), and Chapter 10 (Performance Evaluation) all describe performance measures, the evaluation criteria, individual project performance, as well as system-wide performance.</p>

Table 3-5: 2040 Transportation Plan Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations	Where and How Addressed
<p>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.</p>	<p>The eight planning factors are outlined in Chapter 9 (Other Transportation Elements).</p>
<p>Sustainable Transportation and Context Sensitive Solutions: MPOs are encouraged to identify and suggest contextual solutions for appropriate transportation corridors and promote livability.</p>	<p>Public workshops and MPO committee presentations and discussions, as described in Chapter 7 (Public Involvement), discussed sustainable transportation and context sensitive solutions.</p>
<p>Proactive Improvements – Not Currently Required/Positive Strides in Long Range Planning</p>	
<p>Linking Planning and NEPA: MPOs should strongly consider including purpose and need statements for regionally significant projects in their LRTP cost feasible plans.</p>	<p>Noted.</p>
<p>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</p>	<p>Chapter 9 (Other Transportation Elements) includes information on Hazard Mitigation and other impacts of climate change.</p>
<p>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)]</p>	<p>The MPO made it a priority to improve land use data used in the Plan's development. The MPO considered land use plans and tested scenarios as described in Chapters 2 (Developing the Plan), 3 (Guiding the Plan), and Appendix A (Land Use Scenario Report).</p>

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 Lee County MPO 2040 LRTP was developed consistent with the guidance in this handbook.

Additional state requirements 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 3-6** describes how the 2040 LRTP adheres to state requirements. **Table 3-7** describes how the 2040 LRTP adheres to the MPOAC Financial Guidelines.

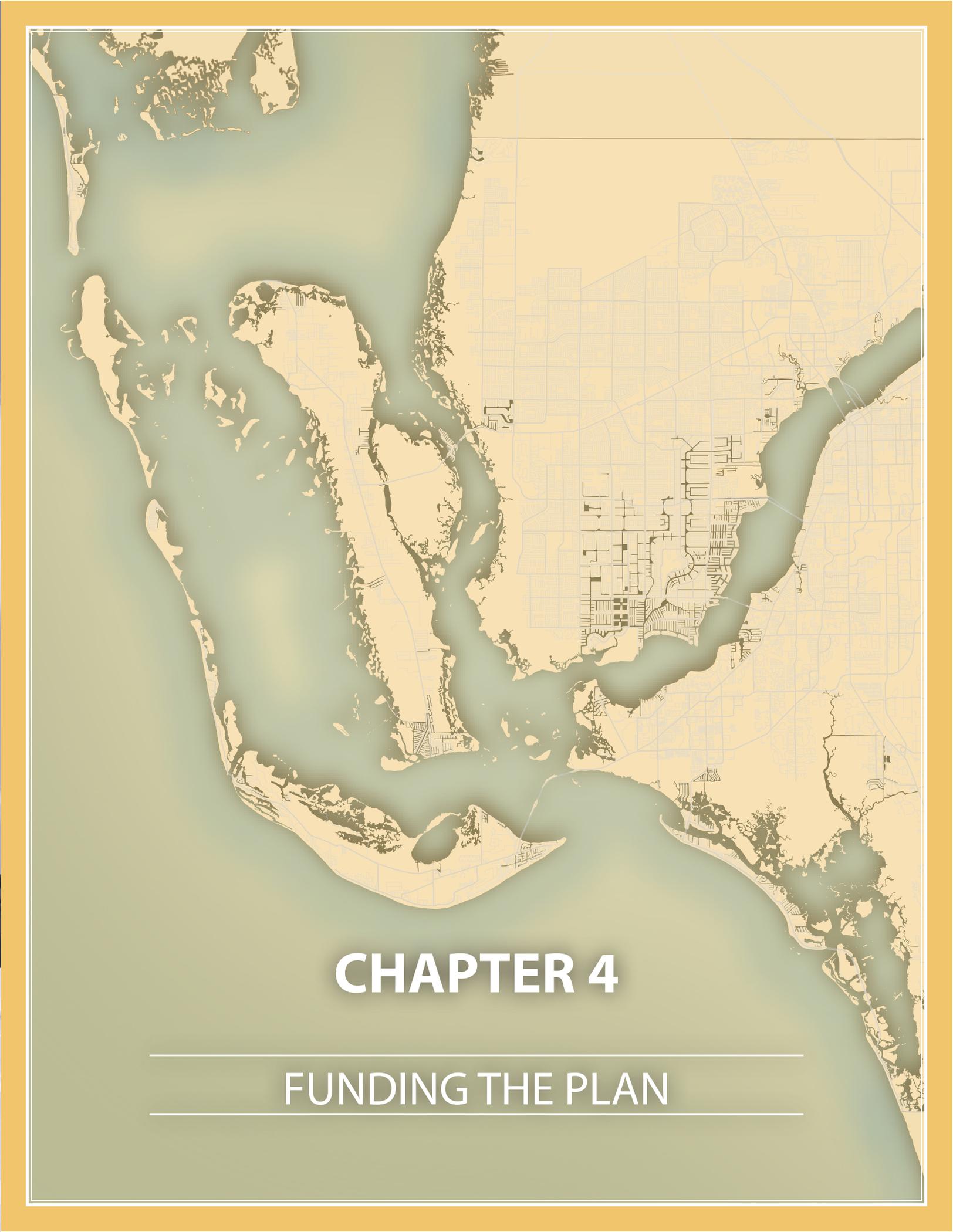
Table 3-6: 2040 Transportation Plan Compliance with State Requirements

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 3 (Guiding 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 4 (Funding the Plan) 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 other state roadways. See Chapter 6 (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.	Chapters 3 (Guiding the Plan) and 11 (Plan Implementation) 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 2 (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 3 (Guiding the Plan).
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 6 (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 Lee County MPO adopted the LRTP by roll call vote on December 18, 2015.

Table 3-7: 2040 Transportation Plan 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 4 (Funding the Plan), 5 (The 2040 Needs Plan), and 6 (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 3 (Guiding the Plan) and 10 (Performance Evaluation).
E-4	Does the plan include an estimate of unfunded project costs in base year dollars?	Chapter 5 (The 2040 Needs Plan) includes the estimate of unfunded projects. Chapter 6 (The 2040 Cost Feasible Plan) lists the unfunded needs projects.
E-5	Is reasonably available revenue reported in year of expenditure (YOE) dollars?	Chapter 4 (Funding the Plan) and Chapter 6 (The 2040 Cost Feasible Plan) discuss 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 6 (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 6 (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 4 (Funding the Plan) and 6 (The 2040 Cost Feasible Plan) discusses all financial assumptions for the Plan. Greater detail is provided in Appendix B (Revenue Projection Sources and Funding Technical Memorandum).
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)?	Chapters 4 (Funding the Plan) and 5 (The 2040 Needs Plan) discusses all financial assumptions for the Plan. Project costs are broken down by periods. Greater detail is provided in Appendix B (Revenue Projection Sources and Funding Technical Memorandum).
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 4 (Funding the Plan). Greater detail is provided in Appendix B (Revenue Projection Sources and Funding Technical Memorandum).
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 4 (Funding the Plan) includes the FDOT inflation factors that were used to calculate costs and revenues.
E-13	Does the plan incorporate 2040 SIS Cost Feasible Plan projects as provided by FDOT?	Chapter 6 (The 2040 Cost Feasible Plan) includes projects in the 2040 SIS Cost Feasible Plan.





CHAPTER 4

FUNDING THE PLAN

CHAPTER 4: FUNDING THE PLAN

The Lee County 2040 Transportation Plan is required by law to contain a financial plan indicating resources from public and private sources that are reasonably expected to be available. This section describes the forecast of reasonably available funding from traditional federal, state, and local revenue sources to support transportation investments made in Lee County through 2040. The revenue sources are listed in **Appendix B** includes the list of revenue sources as well as a Funding Technical Memorandum.

FEDERAL AND STATE FUNDING SOURCES

Federal funding for transportation projects in Lee County are derived from highway excise taxes on motor fuel and truck-related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use. The revenue that the federal government collects on these items goes into the Highway Trust Fund, where it is deposited in either the Highway Account or the Mass Transit Account. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) then distribute funds from their respective accounts to each state according to a system of formula grants and discretionary allocations.

State funds for transportation projects in Florida are deposited into the State Transportation Trust Fund. These funds are comprised of five major revenue sources: fuel tax, motor vehicle fees, aviation, document stamps, and rental cars.

The majority of federal and state funding for transportation projects is funneled through FDOT which periodically conducts long-range forecasts of revenue and program levels. The tables that follow include the 2040 Transportation Plan revenue estimates for federal and state sources provided to the MPO for the time period of FY2019-2040. FY2019 and 2020 are included in the adopted work program and Capital Improvements Program and are therefore included in the Existing and Committed network. The total projected revenue from federal and state sources is estimated at nearly \$3.8 billion. The available projected revenues from federal and state sources are summarized in **Table 4-1**.

LOCAL FUNDING SOURCES

Until recently, the state gave local jurisdictions the power to levy certain taxes. Included in these categories of taxes were sales taxes and fuel excise taxes. Extremely fast population growth since the 1960s and high rates of inflation placed fiscal demands on local governments that exceeded their ability to address those demands with their existing revenue-raising ability. The need to improve and expand the transportation system constituted much of the initial demand, and in 1972 the legislature established a precedent when it allowed counties to ‘piggyback’ onto the state’s excise tax on highway fuels. Since then many kinds of local option taxes are available, three of which deal exclusively with transportation.

Table 4-1: Federal and State Highway Funding

Revenue Source	Fiscal Year 2021-2040
Strategic Intermodal System (SIS) Highways	\$105,710,000
Other Arterial Roads	\$402,240,000
Federal Urban Allocation (SU)	\$157,500,000
Transportation Alternatives (Urban)	\$15,400,000
Transportation Alternatives (District-wide)	\$76,100,000
Transit	\$291,800,000
Statewide New Starts	\$760,500,000
TRIP (District-wide)	\$27,700,000
District-wide State Operation & Maintenance Funds (est. Lee County’s portion)	\$1,920,000,000
Total Federal & State Revenue	\$3,756,950,000



The following local revenues are available to fund the 2040 Transportation Plan: Local Option Gas Taxes, excess toll revenue, Impact Fees, and transit funding. The projected local revenues available for capital expenditures through 2040 are estimated at \$2.3 billion. The available projected revenues from local sources are summarized in **Table 4-2**.

Lee County is currently determining a new funding source’s impact on transportation projects. Growth Increment Funding is projected to raise approximately \$50 million over five years. A portion of that amount may be allocated to transportation projects, and the MPO will amend the Transportation Plan to reflect that change. In addition, the MPO Executive Committee is studying other funding options to address the growing need for additional funding for maintenance projects around the County. If additional funding sources are identified and adopted in the coming years, the Transportation Plan will be amended to reflect the increases and the impact to transportation projects and programs.

In addition, the MPO Executive Committee is studying other funding options to address the growing need for additional funding for the county’s needed capital and maintenance projects.

COSTS

MAINTENANCE AND OPERATIONS

The 2040 Transportation Plan also identifies the level of funding required for the operations and maintenance of the existing transportation system. For Lee County, the total amount of revenues projected to be spent on operations and maintenance is projected to be 58 percent of the total transportation revenues collected (leaving 42 percent for Capital Improvements). The projected revenue available for operation and maintenance is approximately \$3.1 billion. The transportation revenues that are projected to be spent on operations and maintenance of the existing facilities are shown in **Table 4-3**.

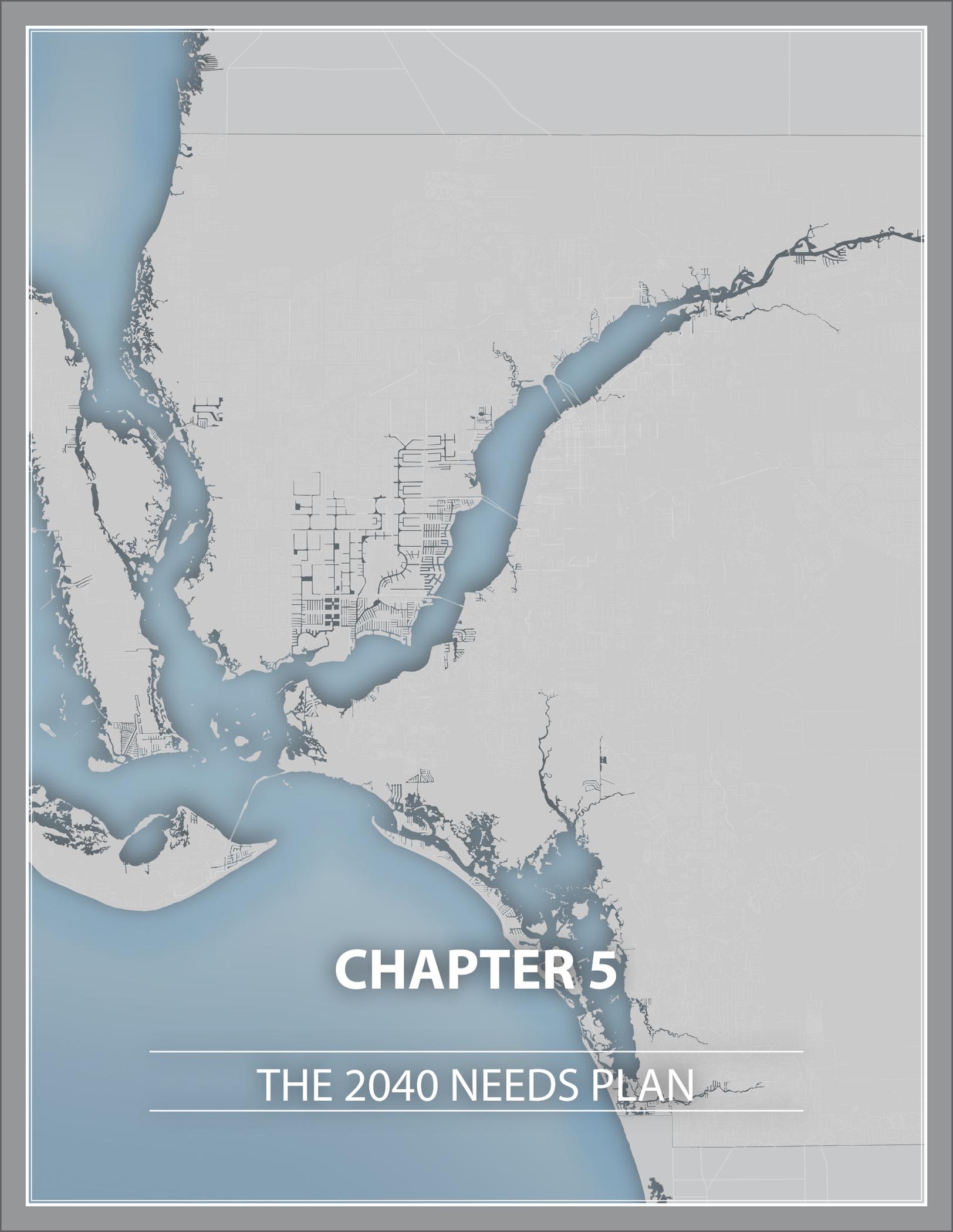
Table 4-2: Lee County 2040 Local Transportation Revenues Estimates – capital (YOE)

Jurisdiction	Total
Bonita Springs	\$227,300,000
Cape Coral	\$278,000,000
Fort Myers	\$104,400,000
Fort Myers Beach	\$19,600,000
Lee County	\$1,317,400,000
LeeTran	\$255,400,000
Sanibel	\$75,700,000
Total	\$2,277,800,000

Table 4-3: Lee County 2040 Local Transportation Revenues Estimates – O&M (YOE)

Jurisdiction	Total
Bonita Springs	\$52,900,000
Cape Coral	\$312,500,000
Fort Myers	\$105,800,000
Fort Myers Beach	\$4,910,000
Lee County	\$2,540,400,000
LeeTran	NA
Sanibel	\$83,500,000
Total	\$3,100,010,000





CHAPTER 5

THE 2040 NEEDS PLAN

CHAPTER 5: THE 2040 NEEDS PLAN

DEFINING THE 2040 NEEDS PLAN

The Needs Assessment identifies projects that support the vision of a safe and balanced transportation system that meets the anticipated demand within Lee County by 2040 without regard for cost. An extensive process was conducted to identify projects, including review the 2035 LRTP; coordination with the Lee County MPO, Lee County, City of Fort Myers, City of Cape Coral, City of Bonita Springs, City of Sanibel, Village of Estero, and Town of Fort Myers Beach staff; community stakeholders, including the MPO Board; and working with the public.

METHODOLOGY

Before developing the list of projects to address mobility needs in the future, problem areas were identified to understand where deficiencies are likely to occur. Identification of projects that meet the future travel demand through the 2040 timeframe was accomplished through an iterative needs assessment based upon the adopted Goals and Objectives.

To do this, the existing transportation system and the projects that are committed to be completed over the next five years (Lee County's Existing + Committed network) were compared to the expected demand on the transportation system from the residents, visitors, and workers in 2040 to predict how they will travel in the future. FDOT District One's Regional Planning Model, developed and refined with the MPOs within FDOT District One, was utilized for this assessment. The result was a list of roadways anticipated to be over capacity, or congested, in 2040. Projects were then identified to increase capacity where it is needed to improve mobility.

The needs were also compared to Constrained Roadways, defined as roads not eligible for widening based on environmental impacts, impacts to existing neighborhoods and businesses, and limitations of the existing rights-of-way. Constrained Roadways are defined through local policies.

All Needs Plan Projects are listed in **Appendix C**.

ROAD/HIGHWAY PROJECTS

The Needs Plan consists of approximately \$4.1 billion in roadway capacity and improvement projects (in present day costs). These roadway projects reflect analysis of current and future needs for moving people and goods as well as focused congestion management solutions.

TRANSIT PROJECTS

Transit Needs were identified in LeeTran's 2012 Transit Development Plan (TDP). On the following pages, **Figure 5-1** shows the Needs Plan Local Transit Projects, and **Figure 5-2** shows the Needs Plan Premium Transit Projects. The total cost of the needed transit projects is projected to be \$1,764 million (YOE) and includes the following projects:

Circulator services:

- In Cape Coral, Estero, Research Diamond East and West
- Along Colonial Boulevard to Southwest Florida International Airport, along Gunnery Road, along Chiquita Boulevard, near Heron Pond Apartments
- Connecting Gateway Boulevard, Lee Boulevard, and Gunnery Road





Flex services in areas not covered by existing service or proposed circulator services, such as Mariner West – Burnt Store Road, Mariner East, North Lehigh Acres, Easy Bonita Springs, and Harlem Heights.

New services such as proposed passenger rail along 32 miles of the SGLR Corridor; proposed Bus Rapid Transit along US 41, Colonial Boulevard, and Palm Beach Boulevard; proposed Express Service from Cape Coral, from Charlotte County, along Colonial Boulevard, in Lehigh Acres, and to Pine Island; and new local services are proposed on McGregor and Ben Hill Griffin Parkway.

Please see **Appendix D** for more detail on transit needs.

BICYCLE, PEDESTRIAN, AND MULTI-USE TRAIL FACILITY PROJECTS

The Needs Plan bicycle, pedestrian, and multi-use trail facility projects were identified in the 2035 LRTP. Some of the projects have been completed since 2011. In fact, in the last four years, Lee County increased its bicycle and pedestrian facilities by 130 miles or 18 percent. The Needs Plan for bicycle, pedestrian, and multiuse trail facility projects includes 87 projects totaling \$202 million.

This plan includes all bicycle and pedestrian projects in Lee County that propose to use state and/or federal funding for implementation. Bicycle and pedestrian projects funded through local sources are not listed in this plan.

Please see **Appendix E** for more detail on the bicycle, pedestrian, and multiuse trail facility projects.

PUBLICLY IDENTIFIED NEEDS

A public survey tool helped identify the projects or project types most desired by the survey participants in the fall of 2015. Chapter 7 describes the Public Involvement efforts in greater detail.

Bike and Pedestrian Needs

1. Sidewalks
2. Bike Lanes
3. Shared Use Paths
4. Off Road Trails
5. Facilities Near Schools

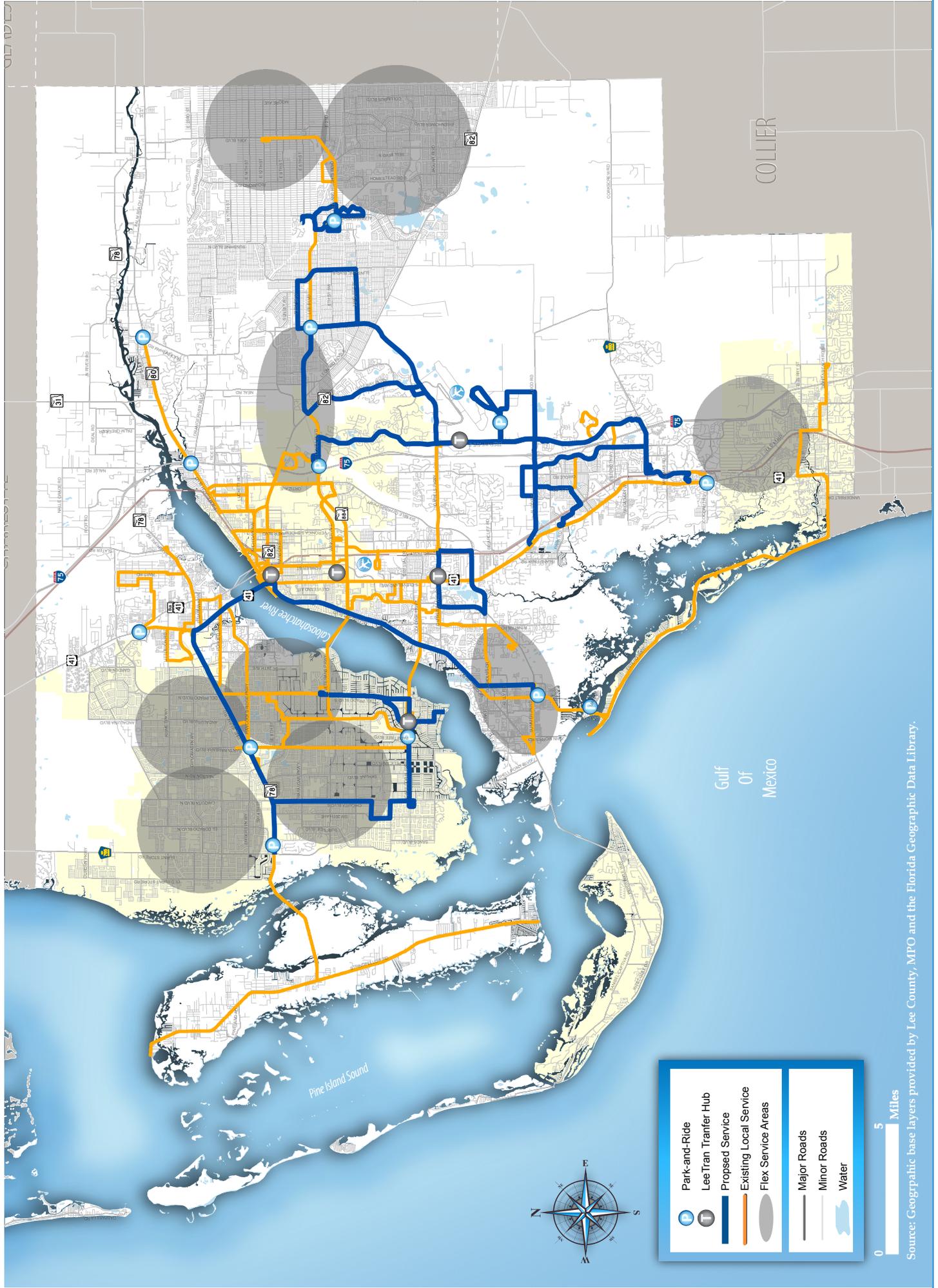
Transit Needs

1. Airport Service
2. Improved Frequencies
3. Bus Rapid Transit on US 41
4. Express Bus to Cape Coral
5. Express Bus to Lehigh Acres

Roadway Needs

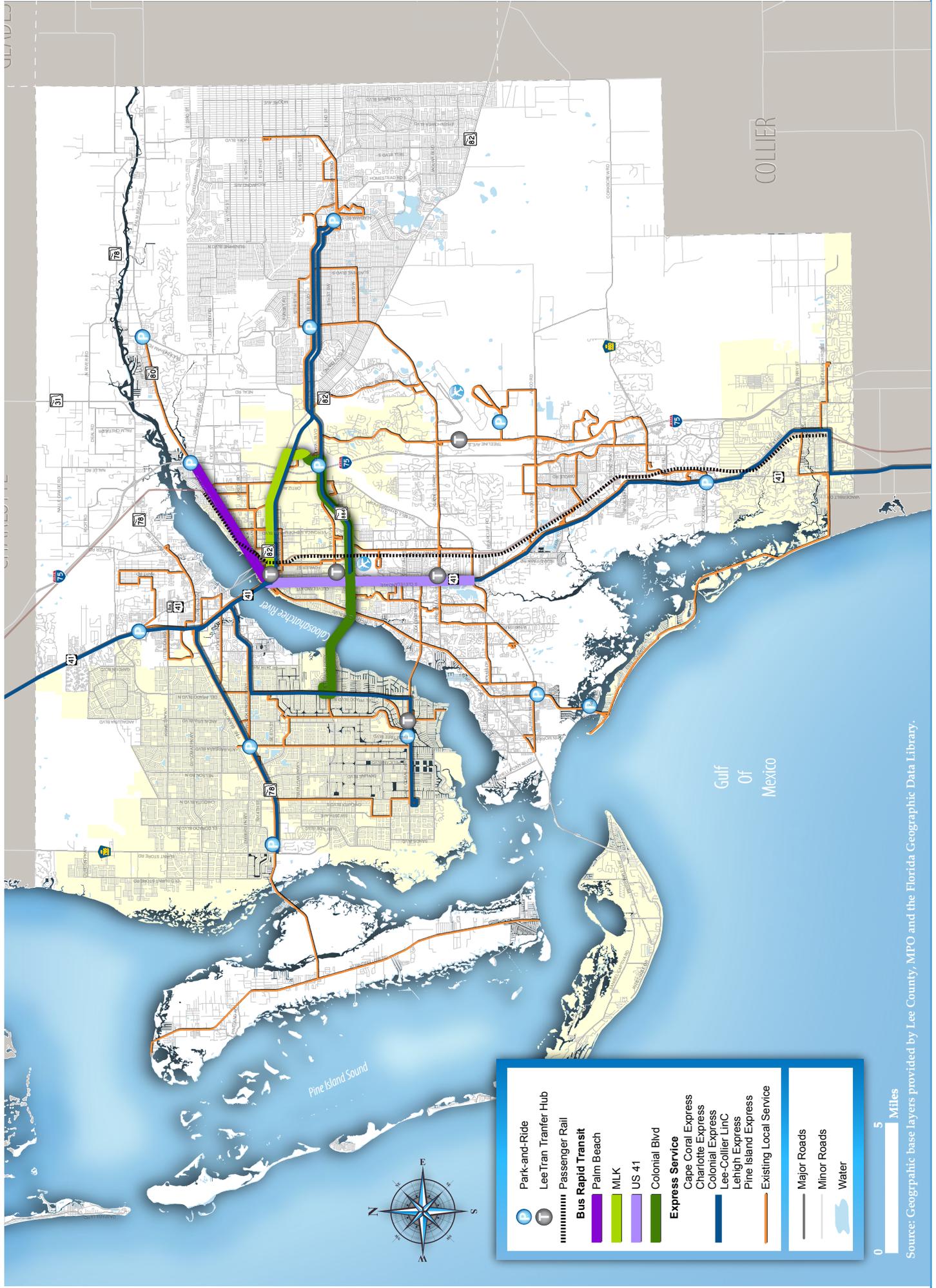
1. Three Oaks Extension
2. Widen Corkscrew Road
3. Major Intersection at Colonial and Summerlin
4. Interchange at I-75 and Colonial
5. Widen Old US 41

Figure 5-1: Transit Needs (Local)



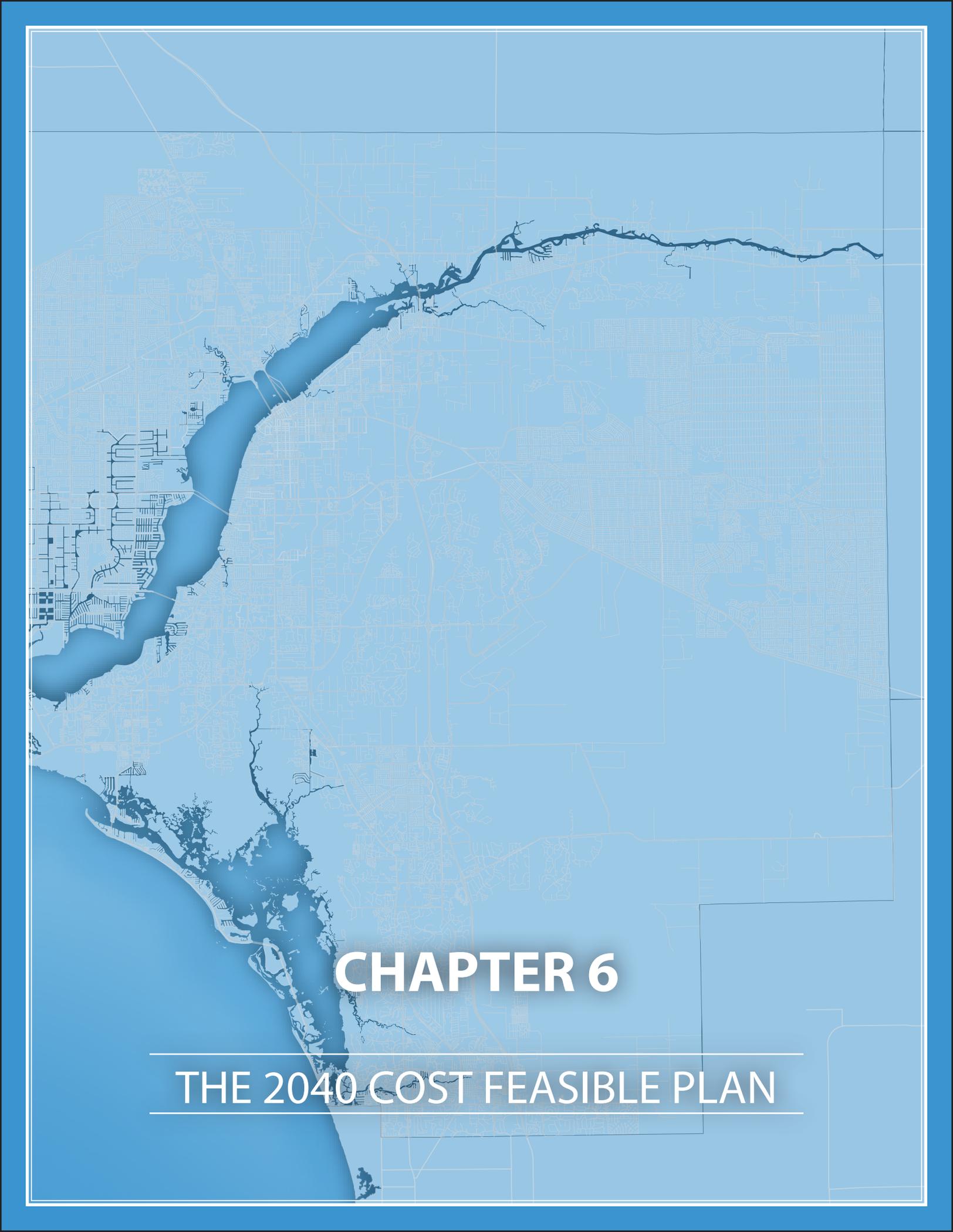
Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.

Figure 5-2: Transit Needs (Premium)



Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.





CHAPTER 6

THE 2040 COST FEASIBLE PLAN

CHAPTER 6: THE 2040 COST FEASIBLE PLAN

DEFINING THE 2040 COST FEASIBLE PLAN

Note: Cost Feasible Plan projects are presented in year of expenditure (YOE).

Projects included in the Cost Feasible Plan were selected based on their performance against the established set of evaluation criteria. The best performing projects for each mode were then balanced against the revenues forecasted over the next 25 years and vetted for public opinion to arrive at the Cost Feasible Plan. Project size and geography were also considered.

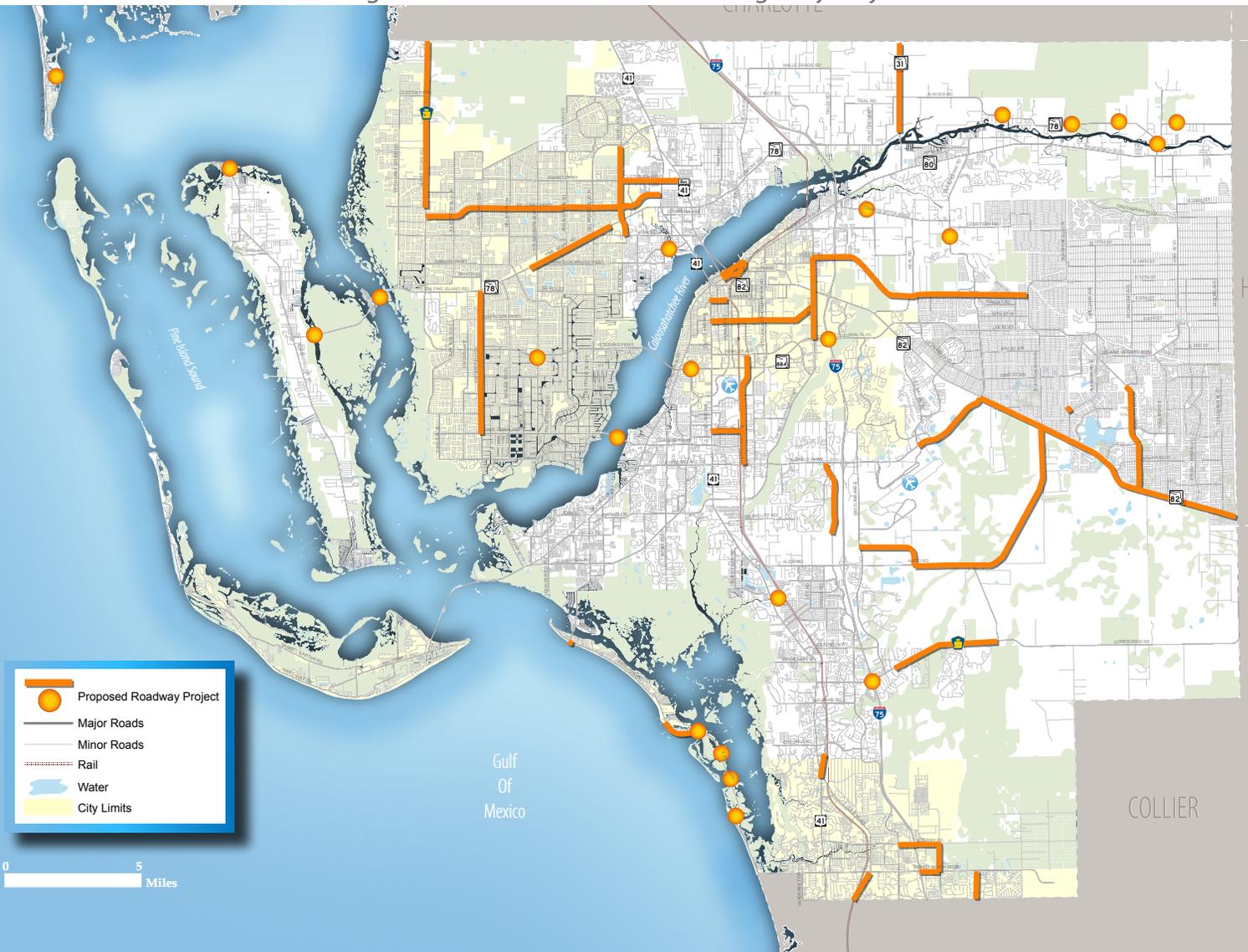
The Cost Feasible Plan reflects approximately \$3 billion (YOE) worth of implementable projects. Improvements between

2015 and 2020 are considered committed projects, as they are already funded in the work program. These projects are included in the Existing Plus Committed list. All Cost Feasible Plan projects are listed in this chapter beginning on page 63.

ROAD/HIGHWAY PROJECTS

Figure 6-1 shows the cost feasible road and highway projects. The major road projects included in the Cost Feasible Plan support economic growth, provide for a balanced multimodal transportation network, and improve the safety and security for the Lee County community. The Cost Feasible Plan includes \$2 billion (YOE) in road expansion projects. Highlights of the proposed Cost Feasible road projects include:

Figure 6-1: Cost Feasible Road and Highway Projects



- Burnt Store Road from Van Buren Parkway to the Charlotte County line
- Alico Connector from Alico Road to SR 82
- SR 82 from Shawnee Road to the Hendry County line;
- Big Carlos Bridge replacement
- Hanson Street extension from Veronica Shoemaker Boulevard to Ortiz Avenue
- Corkscrew Road from Ben Hill Griffin Parkway to Alico Road

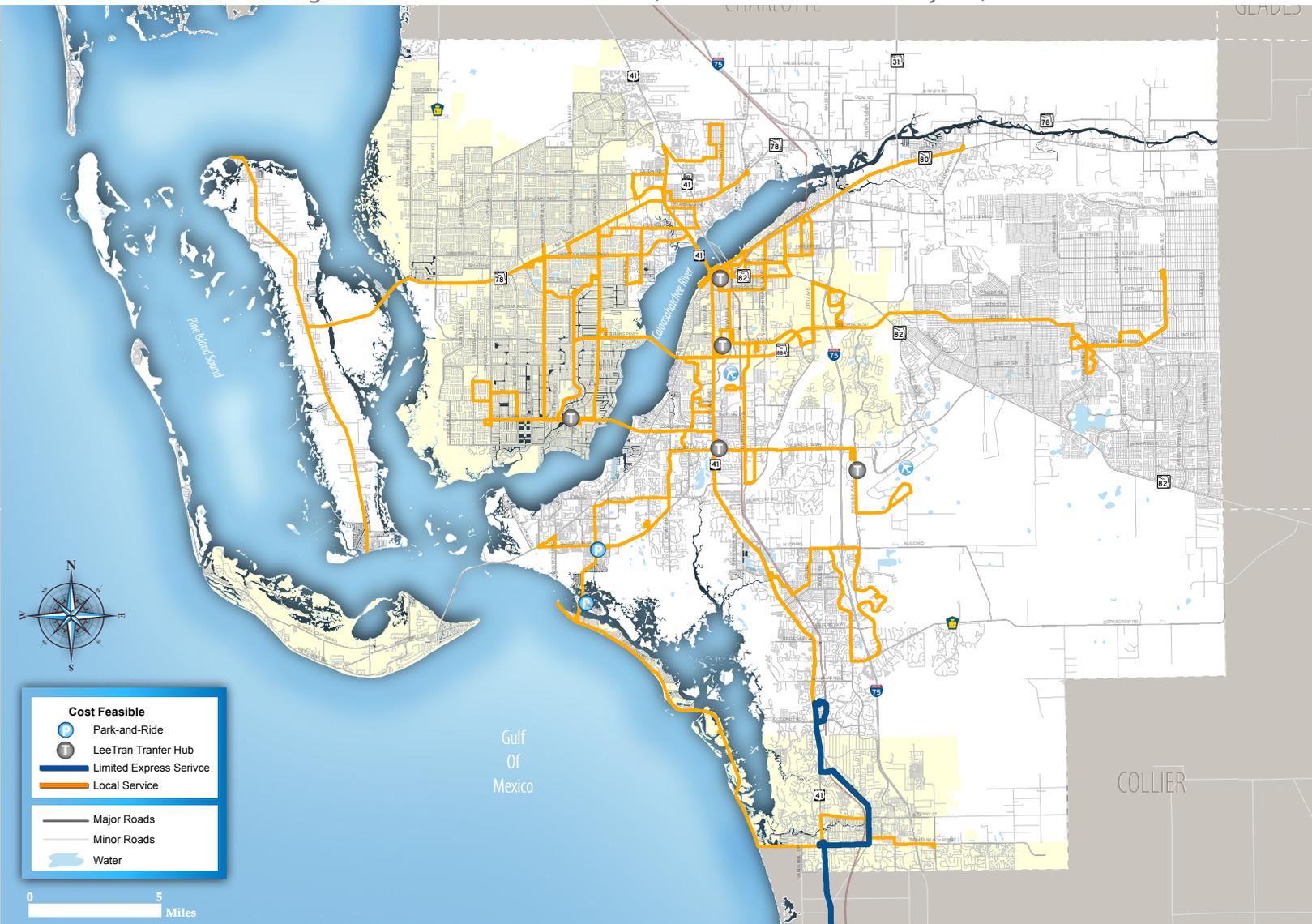
bus services through 2040. However, LeeTran will continue to improve the current bus service network by making efficiency adjustments to the network within the available resources. These adjustments, derived from minor route configurations to comprehensive operational assessments may result in a more enhanced bus route network for Lee County.

While no new transit projects are identified in the 2040 Cost Feasible Plan for Lee County, it is important to emphasize that the plan does not preclude the opportunity to advance any projects identified previously in the Transit Needs Plan, including improvements to the existing network or adding new services. If priorities change or more funding becomes available, unfunded project priorities that are identified in the 2040 Transit Needs Plan should be considered for potential implementation by 2040.

TRANSIT PROJECTS

Figure 6-2 shows transit service in 2040; it does not include new service or projects. Due to funding limitations, this cost feasible transportation plan assumes only a continuation of the current

Figure 6-2: Transit Service in 2040 (No New Cost Feasible Projects)



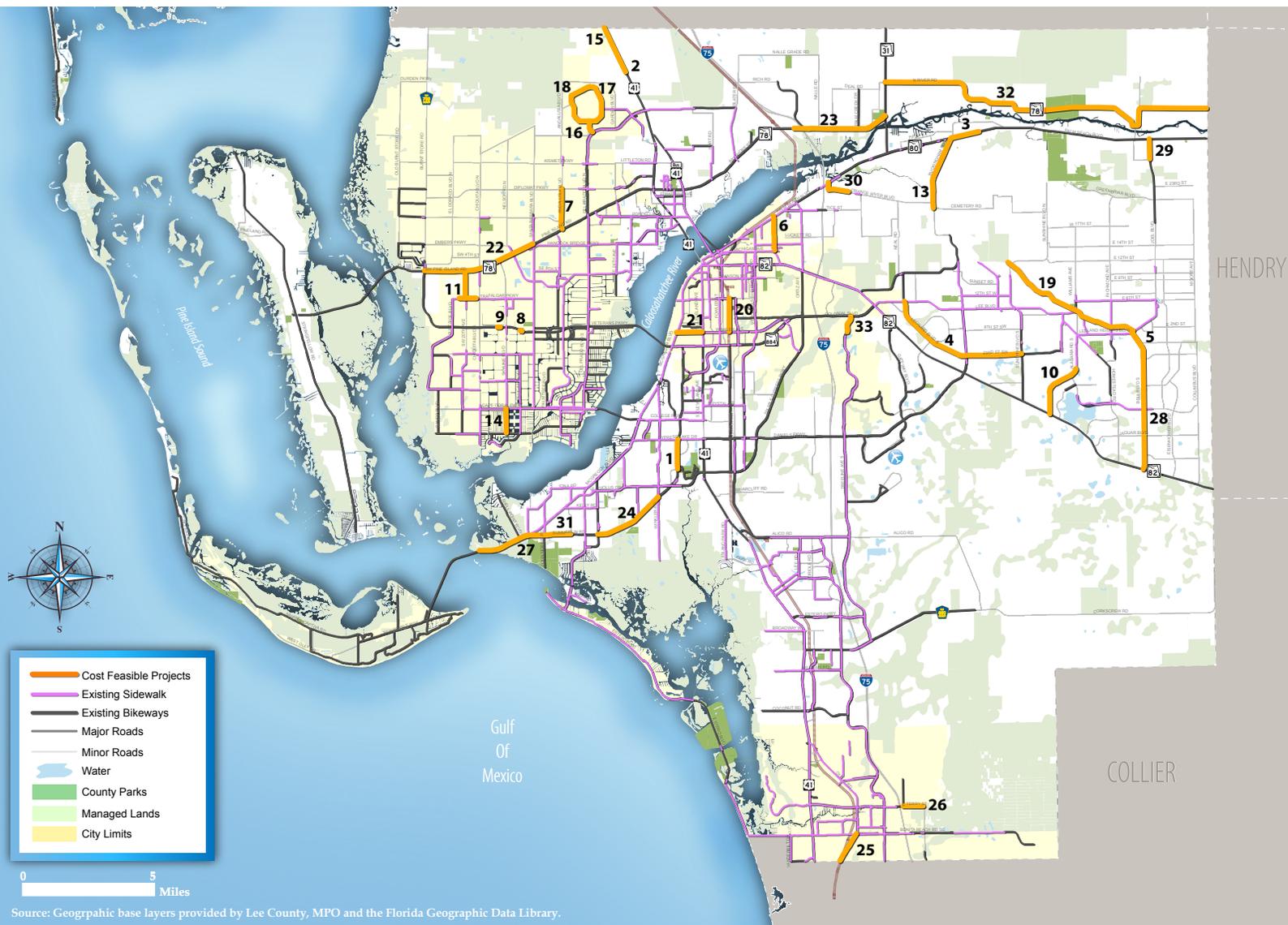
BICYCLE, PEDESTRIAN, AND MULTIUSE TRAIL PROJECTS

The Cost Feasible Plan includes nearly \$50 million (YOE) for 33 bicycle, pedestrian, and multi-use trail facility projects identified in the existing Lee County MPO Bicycle and Pedestrian Plan and scheduled for funding and implementation through the current bicycle and pedestrian project prioritization process. This total cost includes only projects identified separately from road projects. Bicycle and pedestrian improvements to be built as part of road projects are included in the total cost for road/highway projects. The cost feasible projects reflect a ten-year plan as opposed to the road and transit projects that are planned for a future 25 years away.

The resulting 33 bike and pedestrian projects are shown in **Figure 6-3** and listed in **Table 6-13** on page 83. This set of projects will make walking and biking in Lee County safer, more comfortable, and more convenient.

Among the cost feasible projects, there are 18 shared use paths totaling 47 miles. Several of the shared use paths will add dedicated walking and biking facilities along arterials, such as Summerlin Road and North River Road. Without a separated facility, these corridors are often barriers between destinations for people on foot or bike. Completing these projects will fill in bicycle and pedestrian network gaps and provide important connections between cities, towns, and neighborhoods.

Figure 6-3: Cost Feasible Bicycle, Pedestrian and Multiuse Trail Projects



Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.

There are 24 miles of sidewalk, distributed over 15 projects. These projects add the basic infrastructure required to accommodate walking trips, and will make people more comfortable choosing to walk for transportation or recreation.

Roughly 3.5 miles of bike lanes will add dedicated bike facilities along north-south roadways that connect Palm Beach Boulevard to the rural and residential areas immediately to the south.

CONGESTION MANAGEMENT PROCESS PROJECTS

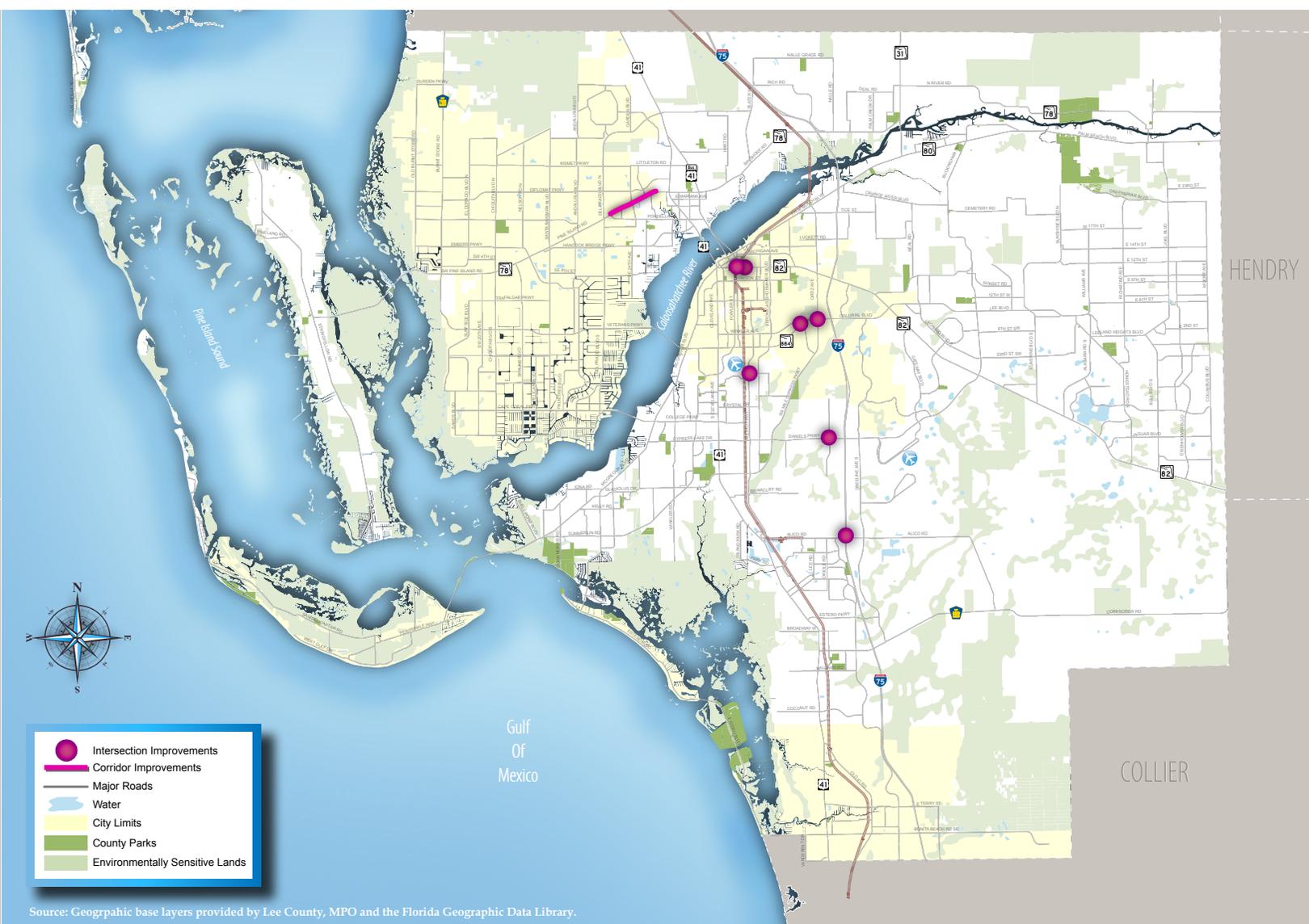
The Cost Feasible Plan includes \$10 million (YOE) for implementing congestion management strategies on the corridors and intersections with the most relative congestion (Figure 6-4). Specific projects for each corridor or intersection

will be prioritized and selected through the Congestion Management Process (CMP) and identified for funding in the County's five-year Transportation Improvement Program. The CMP is described in detail in Chapter 8 of this document.

The highest priority hotspot in Cape Coral is located at the intersection of Veterans Parkway and Del Prado Boulevard. This location is expected to be fully congested by the year 2030. Del Prado Boulevard and Veterans Parkway to the west are constrained roadways so additional capacity is not an option.

There are several hotspots in Fort Myers. Daniels Parkway between US 41 and Metro Parkway is one of the highest priority hotspots - it carries large volumes of vehicles, including freight, and is estimated to be fully congested by 2030. This location is a good candidate for congestion management strategies.

Figure 6-4: Cost Feasible Congestion Management Process Projects



Source: Geographic base layers provided by Lee County, MPO and the Florida Geographic Data Library.



Also in Fort Myers, Daniels Parkway from Six Mile Cypress Parkway to Gateway Boulevard has congestion exacerbated in March by special events. This segment includes a signalized interchange at I-75, it provides access to the Southwest Florida International Airport (via Treeline Avenue), serves the JetBlue Park Stadium, and provides access to the Hammond Stadium (via Six Mile Cypress Parkway). Anticipated events in the Daniels Corridor in March include the 12 Spring Training baseball games at the Jet Blue Park Red Sox Stadium and 13 at the Hammond Stadium. Because of the unpredictable travel patterns resulting from these large special events, an adaptive control system could decrease travel time and stops as it adjusts in real-time to fluctuating traffic patterns. In the case of the baseball games at the JetBlue Stadium, for example, adaptive control could potentially alleviate the need for police control or traffic management from the Lee County Traffic Operations Center during these events. A Lee County Advanced Traffic Management System ITS Master Plan calls for such a strategy to address excessive congestion resulting from special events on this roadway segment.

In addition to reducing congestion, the intersections and corridors with the highest number of crashes will also benefit from CMP safety and operation strategies to prevent future crashes and to more quickly address the crashes that do occur, thereby reducing congestion.

AUTOMATED VEHICLES

Technology is advancing rapidly, and the Lee MPO is staying up to date with changing policies and partnership opportunities. Its largest potential partner, FDOT, is actively engaged in research, data collection, and developing a statewide Automated Vehicles Strategic Plan through passenger vehicle and freight pilot projects.

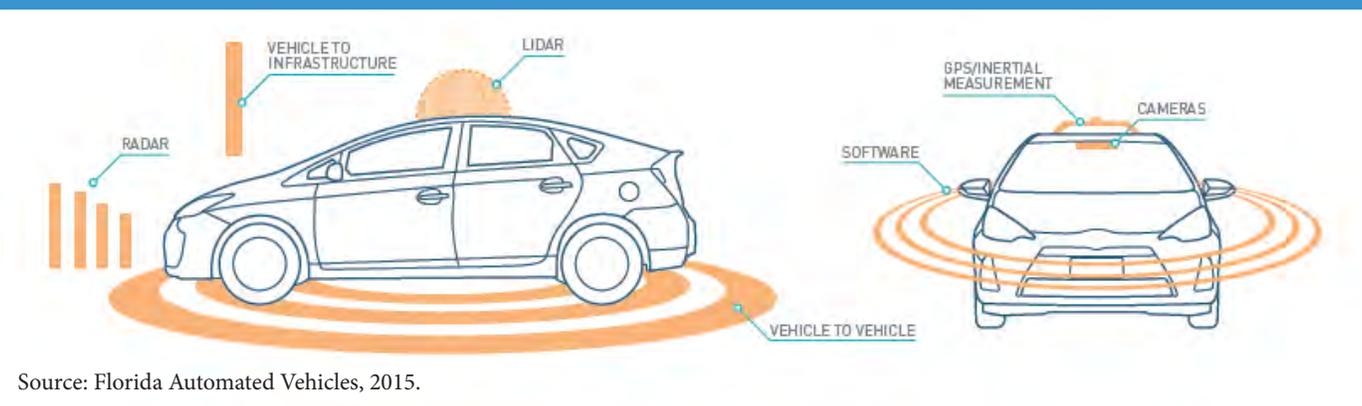
Passenger vehicles in the Tampa Bay area are being tested with Advanced Driver Assistance Systems. One hundred vehicles, including transit vehicles, have been equipped with GeoTab (data collection device). Fifty vehicles use MobilEye devices that assist the driver with daylight bicycle and pedestrian collision warning; forward collision warning, both in highway and urban areas, including motorcycle detection; lane departure warning; and headway monitoring and warning. The devices are currently collecting data.

With its elevated and reversible lanes, Tampa's Selmon Expressway offers a perfect test bed for autonomous vehicles with support from U.S. Department of Transportation and FDOT where research is underway of wireless communications, vehicle sensors, and global positioning systems to provide drivers with better real time travel information. According to FDOT, it is the only transportation center-based operational test bed in the country.

The freight delivery pilot project focuses on the floral industry through Miami International Airport (MIA), a multi-billion dollar industry; two-thirds 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 Lee County's transportation entirely. The Lee County MPO will continue to monitor the progress made integrating these technologies into vehicles on the transportation system and will be ready to make decisions as needed. Necessary policies, regulations, and cooperative agreements are needed to support this innovation and determine impacts to local transportation plans.

IHS Automotive, a global marketing group, predicts that by 2030, 92 percent of the US automobile fleet will be equipped with self-driving features.



Source: Florida Automated Vehicles, 2015.

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Table 6-1: Cost Feasible Projects: Road Projects - Lee County

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)
Big Carlos Bridge Replacement	N/A	N/A	Bridge	CST	\$0	\$15,650	\$0	\$5,180	\$3,760
Big Hickory Pass Bridge Replacement	N/A	N/A	Bridge	CST	\$0	\$12,750	\$0	\$12,750	\$10,530
Cape Coral Bridge Replacement	N/A	N/A	Bridge	CST	\$0	\$123,750		\$123,750	\$85,400
New Pass Bridge Replacement	N/A	N/A	Bridge	CST	\$8,970	\$0	\$0	\$8,970	\$680
Little Carlos Pass Bridge Replacement	N/A	N/A	Bridge	CST	\$4,150	\$0	\$0	\$11,140	\$8,780
Little Pine Island Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$6,070	\$6,070	\$3,000
Orange River Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$2,520	\$0	\$0	\$2,520	\$2,000
Alva Drawbridge Bridge Replacement	N/A	N/A	Bridge	PE	\$2,440	\$0	\$0	\$2,440	\$2,000
Alva Drawbridge Bridge Replacement	N/A	N/A	Bridge	CST	\$0	\$36,000	\$0	\$36,000	\$24,000
Harbor Drive Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$1,260	\$0	\$0	\$1,260	\$1,000
Stringfellow Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$1,440	\$0	\$1,440	\$1,000
Hancock Creek Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$4,440	\$0	\$4,440	\$3,000
Buckingham Road over Orange River Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$5,560	\$5,560	\$3,000
Constitution Circle Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$1,840	\$1,840	\$1,000
North River Road Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$1,400	\$1,400	\$750
North River Road Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$1,400	\$1,400	\$750
North River Road Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$1,400	\$1,400	\$750
North River Road Bridge Replacement	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$1,400	\$1,400	\$750
Pine Island Road over Porpoise	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$5,560	\$5,560	\$3,000
Pine Island Road over Pine Island Creek	N/A	N/A	Bridge	PE/CST	\$0	\$0	\$5,560	\$5,560	\$3,000
Crystal Drive Reconstruction	N/A	N/A	Reconstruct 2L	CST	\$7,330	\$0	\$0	\$7,330	\$5,800
Estero Phase 5	N/A	N/A	Reconstruct 2L	CST	\$9,800	\$0	\$0	\$9,800	\$7,750
Estero Phase 6	N/A	N/A	Reconstruct 2L	CST	\$9,800	\$0	\$0	\$9,800	\$7,750
Alico Road	Airport Haul Road	Alico Connector	Widen 2L to 4L	PE	\$0	\$0	\$5,070	\$5,070	\$3,250
Alico Road	Airport Haul Road	Alico Connector	Widen 2L to 4L	ROW	\$0	\$0	\$20,600	\$20,600	\$8,780
Alico Road	Airport Haul Road	Alico Connector	Wide 2L to 4L	CST	\$0	\$0	\$41,330	\$41,330	\$21,640
Alico Connector	Alico Road	SR 82	New 4L	P/R/CST	\$0	\$0	\$119,000	\$119,000	\$51,700
Corkscrew Road	Ben Hill Griffin Parkway	Preserve Entrance	Widen 2L to 4L	PE	\$1,220	\$0	\$0	\$1,220	\$1,000
Corkscrew Road	Ben Hill Griffin Parkway	Preserve Entrance	Widen 2L to 4L	CST	\$29,260	\$0	\$0	\$29,260	\$23,040

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

Table 6-1: Cost Feasible Projects: Road Projects - Lee County (cont.)

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)
Corkscrew Road	Preserve Entrance	Alico Road	Widen 2L to 4L	PE	\$3,660	\$0	\$0	\$3,660	\$3,010
Corkscrew Road	Preserve Entrance	Alico Road	Widen 2L to 4L	ROW	\$6,690	\$0	\$0	\$6,690	\$4,650
Corkscrew Road	Preserve Entrance	Alico Road	Widen 2L to 4L	CST	\$0	\$30,050	\$0	\$30,050	\$20,030
Burnt Store Road	Van Buren Parkway	Charlotte Co/Line	Widen 2L to 4L	CST	\$0	\$0	\$53,000	\$53,000	\$78,370
Homestead Road	Milwaukee Boulevard	Sunrise Boulevard	Widen 2L to 4L	PE	\$0	\$3,110	\$0	\$3,110	\$2,250
Homestead Road	Milwaukee Boulevard	Sunrise Boulevard	Widen 2L to 4L	CST	\$0	\$0	\$56,010	\$56,010	\$15,030
Homestead Road	Milwaukee Boulevard	SR 82	Widen 2L to 4L	PE	\$0	\$0	\$5,390	\$5,390	\$3,460
Homestead Road	Milwaukee Boulevard	SR 82	Widen 2L to 4L	ROW	\$0	\$0	\$21,930	\$21,930	\$9,350
Homestead Road	Milwaukee Boulevard	SR 82	Widen 2L to 4L	CST	\$0	\$0	\$44,010	\$44,010	\$23,040
Littleton Road	Corbett Road	US 41	Widen 2L to 4L	PE	\$2,200	\$0	\$0	\$2,200	\$1,800
Littleton Road	Corbett Road	US 41	Widen 2L to 4L	ROW	\$9,080	\$0	\$0	\$9,080	\$6,860
Littleton Road	Corbett Road	US 41	Widen 2L to 4L	CST	\$0	\$18,030	\$0	\$18,030	\$12,020
Littleton Road	Business 41	US 41	Widen 2L to 4L	PE	\$0	\$0	\$2,350	\$2,350	\$1,500
Littleton Road	Business 41	US 41	Widen 2L to 4L	ROW	\$0	\$0	\$9,540	\$9,540	\$4,070
Littleton Road	Business 41	US 41	Widen 2L to 4L	CST	\$0	\$0	\$19,130	\$19,130	\$10,020
Daniels Parkway	Gateway Boulevard	SR 82	Widen 4L to 6L	PE	\$0	\$0	\$7,240	\$7,240	\$4,640
Daniels Parkway	Gateway Boulevard	SR 82	Widen 4L to 6L	CST	\$0	\$0	\$59,020	\$59,020	\$30,900
Ortiz Avenue	Dr Martin Luther King Jr Boulevard	Lockett Road	Widen 2L to 4L	CST	\$11,840	\$0	\$0	\$11,840	\$9,330
Ortiz Avenue	Colonial Boulevard	Dr Martin Luther King Jr Boulevard	Widen 2L to 4L	CST	\$16,850	\$0	\$0	\$16,850	\$13,270
Lockett Road	Ortiz Avenue	I-75	Widen 2L to 4L	CST	\$8,460	\$0	\$0	\$8,460	\$6,610
Lockett Road	East of I-75	Buckingham Road	New 4L	PE	\$0	\$0	\$9,730	\$9,730	\$6,230
Lockett Road	East of I-75	Buckingham Road	New 4L	ROW	\$0	\$0	\$70,740	\$70,740	\$30,160
Lockett Road	East of I-75	Buckingham Road	New 4L	CST	\$0	\$0	\$79,360	\$79,360	\$41,550
Lockett Road	Buckingham Road	Gunnery Road	Widen 2L to 4L	PE	\$0	\$0	\$4,930	\$4,930	\$3,160
Lockett Road	Buckingham Road	Gunnery Road	Widen 2L to 4L	ROW	\$0	\$0	\$20,020	\$20,020	\$8,540
Lockett Road	Buckingham Road	Gunnery Road	Widen 2L to 4L	CST	\$0	\$0	\$40,180	\$40,180	\$21,040
Lockett Road	Gunnery Road	Sunshine Boulevard	New 4L	PE	\$0	\$0	\$6,600	\$6,600	\$4,230
Lockett Road	Gunnery Road	Sunshine Boulevard	New 4L	ROW	\$0	\$0	\$48,000	\$48,000	\$20,470
Lockett Road	Gunnery Road	Sunshine Boulevard	New 4L	CST	\$0	\$0	\$53,850	\$53,850	\$28,200

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

Table 6-1: Cost Feasible Projects: Road Projects - Lee County (cont.)

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)
Three Oaks Extension	Oriole Road Extension	Daniels Parkway	New 4L	CST	\$47,310	\$0	\$0	\$47,310	\$37,250
Veterans Parkway	at Santa Barbara Boulevard		Intersection Overpass	PE	\$0	\$5,480	\$0	\$5,480	\$3,970
Veterans Parkway	at Santa Barbara Boulevard		Intersection Overpass	CST	\$0	\$39,730	\$0	\$39,730	\$26,480
Bonita Beach Road	I-75	Bonita Grande Drive	Widen 4L to 6L	PE	\$0	\$1,710	\$0	\$1,710	\$1,240
Bonita Beach Road	I-75	Bonita Grande Drive	Widen 4L to 6L	CST	\$0	\$0	\$15,810	\$15,810	\$8,275
Colonial Bouelvard	McGregor Bouelvard	US 41	Major Intersections	TBD	\$4,450	\$0	\$0	\$4,450	\$3,650
NE 24th Avenue	SR 78	Del Prado Boulevard Extension	Widen 2L to 4L/New 4L	CST	\$0	\$0	\$15,000	\$15,000	\$8,480
40th Street Extension	east end of 4th Street	Alabama Road	New 2L	PE	\$0	\$440	\$0	\$440	\$320
40th Street Extension	east end of 4th Street	Alabama Road	New 2L	ROW	\$0	\$0	\$4,850	\$4,850	\$2,070
40th Street Extension	east end of 4th Street	Alabama Road	New 2L	CST	\$0	\$0	\$4,050	\$4,050	\$2,120
Total Cost:					\$187,290	\$292,580	\$866,930	\$1,343,320	\$802,855
Revenues:					\$178,800	\$267,600	\$871,000	\$1,317,400	N/A

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

Table 6-2: Cost Feasible Projects: Road Projects - State/Other Arterial

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
Countywide Signal System Updates, Final Phase			ITS	CST	\$10,160	\$0	\$0	\$10,160	\$8,000	
Metro Parkway	Daniels Parkway	south of Winkler Avenue	Widen 4L to 6L	CST	\$57,040	\$0	\$0	\$57,040	\$44,920	
Big Carlos Bridge Replacement			Reconstruct Bridge	PE	\$1,530	\$0	\$0	\$1,530	\$1,250	
Big Carlos Bridge Replacement			Reconstruct Bridge	CST	\$0	\$37,600	\$0	\$37,600	\$25,040	
I-75/Corkscrew Road Interchange			Interchange	PE	\$7,310	\$0	\$0	\$7,310	\$6,000	
San Carlos Boulevard	Summerlin Road	Crescent Street	TBD in PD&E	ROW	\$10,000	\$0	\$0	\$10,000	\$8,200	
San Carlos Boulevard	Summerlin Road	Crescent Street	TBD in PD&E	CST	\$10,000	\$0	\$0	\$10,000	\$8,200	
Old US 41	Collier County Line	Bonita Beach Road	Widen 2L to 4L	PE	\$2,160	\$0	\$0	\$2,160	\$1,770	
Old US 41	Collier County Line	Bonita Beach Road	Widen 2L to 4L	ROW	\$0	\$8,820	\$0	\$8,820	\$4,800	
Old US 41	Collier County Line	Bonita Beach Road	Widen 2L to 4L	CST	\$0	\$17,730	\$0	\$17,730	\$11,820	
SR 78	Santa Barbara Boulevard	east of Pondella	Widen 4L to 6L	PE	\$0	\$0	\$7,490	\$7,490	\$4,800	
SR 78	Santa Barbara Boulevard	east of Pondella	Widen 4L to 6L	CST	\$0	\$0	\$61,130	\$61,130	\$32,000	
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	PE	\$0	\$11,480	\$0	\$11,480	\$8,320	
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	ROW/CST	\$0	\$0	\$70,000	\$70,000	\$78,370	
First and Second Streets	Fowler Street	Seaboard Street	1 way to 2 way	PD&E/PE	\$1,820	\$0	\$0	\$1,820	\$1,500	
First and Second Streets	Fowler Street	Seaboard Street	1 way to 2 way	CST	\$0	\$3,000	\$0	\$3,000	\$2,000	
Fowler Street	Metro Parkway/Fowler Street Cross-over	Dr Martin Luther King Jr Boulevard	4LUD to 4LD	PD&E	\$2,440	\$0	\$0	\$2,440	\$2,000	
Fowler Street	Metro Parkway/Fowler Street Cross-over	Dr Martin Luther King Jr Boulevard	4LUD to 4LD	PE	\$0	\$4,830	\$0	\$4,830	\$3,500	
SR 31	SR 80	Charlotte County Line	Widen 2L to 4L	PE	\$0	\$8,700	\$0	\$8,700	\$4,130	
Cape Coral Evacuation Study			Access	Planning	\$300	\$0	\$0	\$300	\$250	
Del Prado Boulevard Interchange			New Interchange	IJR	\$1,250	\$0	\$0	\$1,250	\$1,020	
Major Intersections			Operational Studies	P/R/CST	\$2,450	\$12,000	\$55,000	\$69,450	\$38,740	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$106,460	\$104,160	\$193,620	\$404,240	\$261,960
					Revenues:	\$100,200	\$95,400	\$206,640	\$402,240	N/A

Table 6-3: Cost Feasible Projects: Road Projects - City of Bonita Springs

(in \$ 1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
Bonita Beach Road	I-75	Bonita Grande Drive	Widen 4L to 6L	PE	\$0	\$1,710	\$0	\$1,710	\$2,440	
Bonita Beach Road	I-75	Bonita Grande Drive	Widen 4L to 6L	CST	\$0	\$0	\$15,810	\$15,810	\$8,275	
Bonita Grande Drive	Bonita Beach Road	Terry Street	Widen 2L to 4L	PE	\$0	\$2,090	\$0	\$2,090	\$1,520	
Bonita Grande Drive	Bonita Beach Road	Terry Street	Widen 2L to 4L	ROW	\$0	\$0	\$20,580	\$20,580	\$8,770	
Bonita Grande Drive	Bonita Beach Road	Terry Street	Widen 2L to 4L	CST	\$0	\$0	\$19,320	\$19,320	\$10,120	
Sandy Lane Extension	Strike Lane	Pelican Colony	New 2L	PE	\$2,010	\$0	\$0	\$2,010	\$1,650	
Sandy Lane Extension	Strike Lane	Pelican Colony	New 2L	ROW	\$15,500	\$0	\$0	\$15,500	\$10,660	
Sandy Lane Extension	Strike Lane	Pelican Colony	New 2L	CST	\$0	\$16,530	\$0	\$16,530	\$11,020	
Terry Street	Bonita Grande Drive	Imperial Street	Widen 2L to 4L	PE	\$0	\$3,090	\$0	\$3,090	\$224	
Terry Street	Bonita Grande Drive	Imperial Street	Widen 2L to 4L	ROW	\$0	\$0	\$27,120	\$27,120	\$11,560	
Terry Street	Bonita Grande Drive	Imperial Street	Widen 2L to 4L	CST	\$0	\$0	\$28,510	\$28,510	\$14,930	
Bonita Beach Road	Old US 41	US 41	Reconstruction	Phases	\$8,000	\$20,000	\$0	\$28,000	\$19,770	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$25,510	\$43,420	\$111,340	\$180,270	\$100,939
					Revenues:	\$25,400	\$44,400	\$157,500	\$227,300	N/A

Table 6-4: Cost Feasible Projects: Road Projects - City of Cape Coral

(in \$ 1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
Diplomat Parkway	Burnt Store Road	US 41	4L to 4L Limited Acces	ROW	\$0	\$33,080	\$0	\$33,080	\$18,000	
Diplomat Parkway	Burnt Store Road	US 41	4L to 4L Limited Acces	CST	\$0	\$0	\$76,400	\$76,400	\$40,000	
Chiquita Boulevard	Cape Coral Parkway	Pine Island Road	Widen 4L to 6L	ROW	\$28,800	\$0	\$0	\$28,800	\$20,000	
Chiquita Boulevard	Cape Coral Parkway	Pine Island Road	Widen 4L to 6L	CST	\$0	\$0	\$85,950	\$85,950	\$45,000	
NE 24th Avenue	SR 78	NE 28th Street	Widen 2L to 4L	PE	\$0	\$4,040	\$0	\$4,040	\$2,930	
NE 24th Avenue	SR 78	NE 28th Street	Widen 2L to 4L	ROW	\$0	\$0	\$20,280	\$20,280	\$8,650	
NE 24th Avenue	SR 78	NE 28th Street	Widen 2L to 4L	CST	\$0	\$0	\$27,310	\$27,310	\$19,530	
NE 24th Avenue	NE 28th Street	Del Prado Boulevard	New 2L	PE	\$0	\$1,750	\$0	\$1,750	\$1,270	
NE 24th Avenue	NE 28th Street	Del Prado Boulevard	New 2L	ROW	\$0	\$0	\$11,100	\$11,100	\$4,730	
NE 24th Avenue	NE 28th Street	Del Prado Boulevard	New 2L	CST	\$0	\$0	\$11,190	\$11,190	\$8,480	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$28,800	\$38,870	\$232,230	\$299,900	\$168,590
					Revenues:	\$22,400	\$32,300	\$223,300	\$278,000	N/A

Table 6-5: Cost Feasible Projects: Road Projects - City of Fort Myers

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
Hanson Street Extension	Veronica Shoemaker Boulevard	Ortiz Avenue	Widen 2L to 4L	PE	\$0	\$4,770	\$0	\$4,770	\$3,460	
Hanson Street Extension	Veronica Shoemaker Boulevard	Ortiz Avenue	Widen 2L to 4L	ROW	\$0	\$0	\$12,900	\$12,900	\$5,500	
Hanson Extension	Veronica Shoemaker Boulevard	Ortiz Avenue	Widen 2L to 4L	CST	\$0	\$0	\$30,940	\$30,940	\$16,200	
Hanson Street	Fowler Street	Veronica Shoemaker	Widen 2L to 4L	PE	\$2,930	\$0	\$0	\$2,930	\$2,400	
Hanson Street	Fowler Street	Veronica Shoemaker	Widen 2L to 4L	ROW	\$10,080	\$0	\$0	\$10,080	\$7,000	
Hanson Street	Fowler Street	Veronica Shoemaker	Widen 2L to 4L	CST	\$0	\$9,750	\$0	\$9,750	\$6,500	
Hanson Street	US 41	Fowler Street	Widen 2L to 4L	PE	\$1,100	\$0	\$0	\$1,100	\$900	
Hanson Street	US 41	Fowler Street	Widen 2L to 4L	ROW	\$0	\$6,430	\$0	\$6,430	\$3,500	
Hanson Street	US 41	Fowler Street	Widen 2L to 4L	CST	\$0	\$6,320	\$0	\$6,320	\$4,210	
Edison Avenue	US 41	Fowler Street	Widen 2L to 4L	PE	\$0	\$0	\$1,410	\$1,410	\$900	
Edison Avenue	US 41	Fowler Street	Widen 2L to 4L	ROW	\$0	\$0	\$9,620	\$9,620	\$4,100	
Edison Avenue	US 41	Fowler Street	Widen 2L to 4L	CST	\$0	\$0	\$11,480	\$11,480	\$6,010	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$14,110	\$27,270	\$66,350	\$107,730	\$60,680
					Revenues:	\$17,600	\$22,500	\$64,300	\$104,400	N/A

Table 6-6: 2040 Cost Feasible Projects: Privately Funded Projects

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
SR 31	SR 78	Charlotte County Line	Widen 2L to 6L	CST	\$0	\$58,760	\$0	\$58,760	\$27,550	
East West	Ben Hill Griffin Parkway	Alico Road	Interchange Improvement	ROW	\$0	\$46,110	\$0	\$46,110	\$31,070	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$0	\$104,870	\$0	\$104,870	\$58,620
					Revenues:	\$0	\$104,870	\$0	\$104,870	N/A

Table 6-7: 2040 Cost Feasible Projects: Strategic Intermodal System Projects

(in \$1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)	
SR 82	Shawnee Road	Alabama Road	Widen 2L to 6L	CST	\$32,364	\$0	\$0	\$32,364	\$25,400	
SR 82	Alabama Road	Homestead Road	Widen 2L to 6L	CST	\$40,875	\$0	\$0	\$40,875	\$35,320	
I-75	at Colonial Boulevard		Interchange Improvement	ROW	\$2,987	\$0	\$0	\$2,987	\$2,350	
SR 82	Homestead Road	Hendry County Line	Widen 2L to 4L	CST	\$0	\$29,484	\$0	\$29,484	\$19,650	
Project Phases - PD&E: Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction					Total Cost:	\$76,226	\$29,484	\$0	\$105,710	\$82,720
					Revenues:	\$125,200	\$120,400	\$256,640	\$502,240	N/A

Table 6-8: Cost Feasible Projects: Federal Urban Allocation Projects

(in \$1,000)

Road Name	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)
Traffic Operations Center Operations	\$1,500	\$1,500	\$3,000	\$6,000	\$3,640
Bus Replacements	\$7,500	\$7,500	\$15,000	\$30,000	\$18,080
Transportation Enhancement Box	\$16,000	\$16,000	\$32,000	\$64,000	\$38,580
Total Cost:	\$25,000	\$25,000	\$50,000	\$100,000	\$60,300

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

Table 6-9: 2040 Cost Feasible Projects: Weekday Service Improvements - Existing Route Improvements

Route #	Route Name	Existing Service				2040 Needs Plan Service				Implementation Year
		Start	End	Service Hours	Frequency	Start	End	Service Hours	Frequency	
5	Edison Mall to The Forum	6:05 AM	8:35 PM	14:30	80	6:05 AM	12:00 AM	17:55	40	2038
10	Michigan & Marsh to Edison Mall	6:45 AM	10:00 PM	15:15	80	6:05 AM	12:00 AM	17:55	20	2035
15	Tice St. & Ortiz Ave. to Rosa Parks	5:45 AM	9:30 PM	15:45	60	5:45 AM	12:00 AM	18:15	20	2038
20	Dunbar to Roas Parks	5:30 AM	9:00 PM	15:30	35	5:30 AM	12:00 AM	18:30	20	2038
30	Camelot Isles to Bell Tower Shoppes	6:05 AM	9:04 PM	14:59	60	6:05 AM	12:00 AM	17:55	30	2035
40	Cape Transfer Center to Coralwood Mall	5:45 AM	8:15 PM	14:30	60-135	5:45 AM	8:15 PM	14:30	60-135	
50	SW FL Airport to Summerlin Square	6:20 AM	9:45 PM	15:25	50-95	6:20 AM	12:00 AM	17:40	30	2038
60	San Carlos Park to Gulf Coast Town Center	6:20 AM	9:57 PM	15:37	45-130	6:20 AM	9:57 PM	15:37	45-130	
70	Cape Transfer Center to Rosa Parks	5:30 AM	10:26 PM	16:56	60	5:30 AM	12:00 AM	18:30	30	2035
80	Bell Tower Shoppes to Edison Mall	6:40 AM	6:15 PM	11:35	100	6:40 AM	6:15 PM	11:35	100	
100	Roas Parks to Riverdale	5:25 AM	10:00 PM	16:35	30	5:25 AM	12:00 AM	18:35	20	2029
110	Edison Mall to Homestead Plaza	5:00 AM	10:04 PM	17:04	60	5:00 AM	12:00 AM	19:00	30	2029
120	Edison Mall to Cape Transfer Center	6:00 AM	9:10 PM	15:10	80	6:00 AM	9:10 PM	15:10	80	
130	Edison Mall to Summerlin Square	6:35 AM	9:05 PM	14:30	60	6:35 AM	12:00 AM	17:25	20	2035
140	Merchants Crossing to Bell Tower	5:00 AM	10:07 PM	17:07	20	5:00 AM	12:00 AM	19:00	20	2028
150	Bonita Grande to Lovers Key	6:49 AM	9:39 PM	14:50	90	6:49 AM	9:39 PM	14:50	90	
160	Pine Island to Cape Coral (Weekday Only)	8:00 AM	5:50 PM	9:50	150	8:00 AM	5:50 PM	9:50	150	
240	Bell Tower to Coconut Point Mall	6:00 AM	10:12 PM	16:12	40	6:00 AM	12:00 AM	18:00	20	2035
400	Beach Park & Ride-Lovers Key (seasonal)	5:50 AM	9:00 PM	15:10	45	5:50 AM	12:00 AM	18:10	25	2035
410	Beach Park&Ride-Lovers Key (04/30 - 01/06)	5:50 AM	10:20 PM	16:30	30	5:50 AM	12:00 AM	18:10	30	2035
450	Bowditch Park to Lovers Key Trolley (01/22-02/04)	5:50 AM	10:20 PM	16:30	15-30	5:50 AM	12:00 AM	18:10	15	2035
490	Bowditch Park to Lovers Key Trolley (02/05-04/19)	7:05 AM	8:45 PM	13:40	15-30	7:05 AM	12:00 AM	16:55	15	2035
515	Summerlin Square to Bowdish Park (1/22-4/29)	5:15 AM	9:04 PM	15:49	60	5:15 AM	9:04 PM	15:49	60	
590	North Fort Myers, Suncoast Estates Loop	5:15 AM	9:10 PM	15:55	60	5:15 AM	12:00 AM	18:45	60	2038
595	North Fort Myers, Pondella Loop	4:49 AM	8:50 PM	16:01	60	4:49 AM	12:00 AM	19:11	60	2038
500	Downtown Fort Myers (Mon-Thur)	11:00 AM	7:57 PM	8:57	20					
500	Downtown Fort Myers (Mon-Sun)	11:00 AM	10:57 PM	11:57	20	6:00 AM	12:00 AM	18:00	10	2035
600	LinC Route	5:50 AM	7:15 PM	13:25	90	5:50 AM	9:00 PM	15:10	30	2026

Table 6-10: 2040 Needs Plan Projects: Weekday Service Improvements - Proposed New Services

Route #	Route Name	2040 Needs Plan Service			
		Start	End	Service Hours	Frequency
New BRT Service					
BRT01	US 41 BRT	5:00 AM	12:00 AM	19:00	10
New Express Service					
NE01	Lehigh Express	AM Peak	PM Peak	6:00	30
NE03	Pine Island Express	AM Peak	PM Peak	6:00	30

Table 6-11: 2040 Cost Feasible Projects: Saturday Service Improvements - Existing Route Improvements

Route #	Route Name	Existing Service				2040 Needs Plan Service			
		Start	End	Service Hours	Frequency	Start	End	Service Hours	Frequency
5	Edison Mall to The Forum	6:05 AM	8:35 PM	14:30	80	6:05 AM	12:00 AM	17:55	40
10	Michigan & Marsh to Edison Mall	6:45 AM	10:00 PM	15:15	80	6:05 AM	12:00 AM	17:55	40
15	Tice St. & Ortiz Ave. to Rosa Parks	5:45 AM	9:30 PM	15:45	60	5:45 AM	12:00 AM	18:15	60
20	Dunbar to Roas Parks	5:30 AM	9:00 PM	15:30	70	5:30 AM	12:00 AM	18:30	35
30	Camelot Isles to Bell Tower Shoppes	6:05 AM	9:04 PM	14:59	60	6:05 AM	9:04 PM	14:59	30
40	Cape Transfer Center to Coralwood Mall	5:45 AM	6:01 PM	12:16	120	5:45 AM	6:01 PM	12:16	120
50	SW FL Airport to Summerlin Square	6:20 AM	9:00 PM	14:40	50-95	6:20 AM	12:00 AM	17:40	75
60	San Carlos Park to Gulf Coast Town Center	7:05 AM	8:48 PM	13:43	50-130	7:05 AM	8:48 PM	13:43	50-130
70	Cape Transfer Center to Rosa Parks	5:30 AM	10:26 PM	16:56	60	5:30 AM	10:26 PM	16:56	30
80	Bell Tower Shoppes to Edison Mall								
100	Roas Parks to Riverdale	5:30 AM	9:35 PM	16:05	40	5:30 AM	9:35 PM	16:05	40
110	Edison Mall to Homestead Plaza	5:00 AM	10:04 PM	17:04	60	5:00 AM	10:04 PM	17:04	60
120	Edison Mall to Cape Transfer Center	6:00 AM	9:10 PM	15:10	80	6:00 AM	9:10 PM	15:10	80
130	Edison Mall to Summerlin Square	6:25 AM	8:30 PM	14:05	120	6:25 AM	8:30 PM	14:05	60
140	Merchants Crossing to Bell Tower	5:00 AM	10:07 PM	17:07	20	5:00 AM	11:00 PM	18:00	20
150	Bonita Grande to Lovers Key	6:49 AM	9:39 PM	14:50	90	6:49 AM	9:39 PM	14:50	90
160	Pine Island to Cape Coral (Weekday Only)								
240	Bell Tower to Coconut Point Mall	6:00 AM	10:12 PM	16:12	40	6:00 AM	12:00 AM	18:00	40
400	Beach Park & Ride-Lovers Key (seasonal)	5:50 AM	9:00 PM	15:10	45	5:50 AM	12:00 AM	18:10	25
410	Beach Park&Ride-Lovers Key (04/30 - 01/06)	5:50 AM	10:20 PM	16:30	30	5:50 AM	12:00 AM	18:10	30
450	Bowditch Park to Lovers Key Trolley (01/22-02/04)	5:50 AM	10:20 PM	16:30	15-30	5:50 AM	12:00 AM	18:10	15
490	Bowditch Park to Lovers Key Trolley (02/05-04/19)	7:05 AM	8:45 PM	13:40	15-30	7:05 AM	12:00 AM	16:55	15
515	Summerlin Square to Bowdish Park (1/22-4/29)	5:15 AM	9:04 PM	15:49	60	5:15 AM	9:04 PM	15:49	60
590	North Fort Myers, Suncoast Estates Loop	5:15 AM	9:10 PM	15:55	60	5:15 AM	12:00 AM	18:45	60
595	North Fort Myers, Pondella Loop	4:49 AM	8:50 PM	16:01	60	4:49 AM	12:00 AM	19:11	60
500	Downtown Fort Myers (Mon-Thur)								
500	Downtown Fort Myers (Mon-Sun)	11:00 AM	10:57 PM	11:57	20	11:00 AM	12:00 AM	13:00	20
600	LinC Route	5:50 AM	7:15 PM	13:25	90	5:50 AM	9:00 PM	15:10	60

Table 6-12: 2040 Cost Feasible Projects: Sunday Service Improvements - Existing Route Improvements

Route #	Route Name	Existing Service				2040 Needs Plan Service			
		Start	End	Service Hours	Frequency	Start	End	Service Hours	Frequency
5	Edison Mall to The Forum								
10	Michigan & Marsh to Edison Mall					6:05 AM	10:00 PM	15:55	80
15	Tice St. & Ortiz Ave. to Rosa Parks	5:45 AM	9:30 PM	15:45	60	5:45 AM	9:30 PM	15:45	60
20	Dunbar to Roas Parks					5:30 AM	10:00 PM	16:30	70
30	Camelot Isles to Bell Tower Shoppes					6:05 AM	9:04 PM	14:59	60
40	Cape Transfer Center to Coralwood Mall								
50	SW FL Airport to Summerlin Square	6:45 AM	7:18 PM	12:33	120	6:45 AM	10:00 PM	15:15	120
60	San Carlos Park to Gulf Coast Town Center								
70	Cape Transfer Center to Rosa Parks	6:40 AM	8:11 PM	13:31	60	6:40 AM	8:11 PM	13:31	60
80	Bell Tower Shoppes to Edison Mall								
100	Roas Parks to Riverdale	7:35 AM	8:10 PM	12:35	90	7:35 AM	8:10 PM	12:35	90
110	Edison Mall to Homestead Plaza	5:00 AM	10:04 PM	17:04	60	5:00 AM	10:04 PM	17:04	60
120	Edison Mall to Cape Transfer Center	8:30 AM	6:25 PM	9:55	100	8:30 AM	6:25 PM	9:55	100
130	Edison Mall to Summerlin Square								
140	Merchants Crossing to Bell Tower	6:05 AM	8:35 PM	14:30	60	6:05 AM	8:35 PM	14:30	60
150	Bonita Grande to Lovers Key	6:49 AM	9:39 PM	14:50	90	6:49 AM	9:39 PM	14:50	90
160	Pine Island to Cape Coral (Weekday Only)								
240	Bell Tower to Coconut Point Mall					6:00 AM	10:12 PM	16:12	40
400	Beach Park & Ride-Lovers Key (seasonal)	6:55 AM	9:00 PM	14:05	45	6:55 AM	9:00 PM	14:05	25
410	Beach Park&Ride-Lovers Key (04/30 - 01/06)	5:50 AM	10:20 PM	16:30	30	5:50 AM	12:00 AM	18:10	30
450	Bowditch Park to Lovers Key Trolley (01/22-02/04)	5:50 AM	10:20 PM	16:30	15-30	5:50 AM	12:00 AM	18:10	15-30
490	Bowditch Park to Lovers Key Trolley (02/05-04/19)	7:05 AM	8:45 PM	13:40	15-30	7:05 AM	12:00 AM	16:55	15-30
515	Summerlin Square to Bowdish Park (1/22-4/29)								
590	North Fort Myers, Suncoast Estates Loop	9:25 AM	6:30 PM	9:05	110	9:25 AM	10:00 PM	12:35	110
595	North Fort Myers, Pondella Loop	9:14 AM	6:30 PM	9:16	110	9:14 AM	10:00 PM	12:46	110
500	Downtown Fort Myers (Mon-Thur)								
500	Downtown Fort Myers (Mon-Sun)								
600	LinC Route	7:25 AM	5:45 PM	10:20	90	7:25 AM	9:00 PM	13:35	90

Table 6-13: 2040 Cost Feasible Projects: Bicycle, Pedestrian, and Multiuse Trail Projects

ID	Road	Begin	End	Length (miles)	Facility Type	Project Cost
1	Summerlin Road	Lakewood Boulevard	Cypress Lake Boulevard	1.1	Multiuse Trail	\$743,089
2	US 41	Tara Boulevard	72.38 N of French Creek Lane	0.7	Sidewalk	\$240,500
3	SR 80	Buckingham Road	Linwood Avenue	1.1	Multiuse Trail	\$504,216
4	Leonard/Westgate Boulevard	Sunshine Boulevard	Lee Boulevard	5.4	Multiuse Trail	\$3,903,530
5	Bell Boulevard	Sunrise Boulevard	Joel Boulevard	1.1	Sidewalk	\$722,450
6	Marsh Avenue	Michigan Avenue	SR 80	1.3	Sidewalk	\$1,046,785
7	Andalusia Boulevard	Pine Island Road	Diplomat Parkway	1.5	Sidewalk	\$820,463
8	Veterans Parkway South Side	South West 10th Avenue	Existing SUP west of Skyline	0.1	Multiuse Trail	\$301,375
9	Veterans Parkway North Side	South West 3rd Place	South West 2nd Court	0.1	Multiuse Trail	\$-
10	Alabama Road	SR 82	Paddock Street	2.2	Sidewalk	\$688,014
11	South West 20th Avenue/Nott Road	Trafalgar Parkway	Pine Island Road	1.0	Sidewalk	\$-
12	Trafalgar Elementary & Middle Schools Trafalgar Pkwy	SW 16th	South West 22nd Place	0.6	Sidewalk	\$689,425
13	Buckingham Road	Cemetary Road	SR 80	2.8	Bike Lane	\$852,237
14	Skyline Boulevard	El Dorado Parkway	Cape Coral Parkway	0.9	Sidewalk	\$606,719
15	US 41	72.38 N of French Creek Lane	Charlotte County line	1.1	Sidewalk	\$672,750
16	Averill Boulevard	Del Prado Extension	Gator Circle	0.4	Sidewalk	\$879,594
17	Gator Circle East	Averill Boulevard	Ramsey Boulevard	1.9	Sidewalk	\$-
18	Gator Circle North West	Averill Boulevard	Ramsey Boulevard	2.2	Sidewalk	\$812,592
19	Abel Canal	Harnes Marsh	Joel Boulevard	5.6	Multiuse Trail	\$3,111,000
20	John Yarborough	Colonial Boulevard	Hanson Street	1.3	Multiuse Trail	\$538,254
21	Winkler Canal	US 41	McGregor Boulevard	1.0	Multiuse Trail	\$519,690
22	South West Pine Island	Veterans Pkwy	Santa Barbara Boulevard	4.3	Multiuse Trail	\$2,308,699
23	Bayshore Road	Park 78 Drive	SR 31	3.6	Multiuse Trail	\$1,961,936
24	Summerlin Road	Pine Ridge Road	Winkler Road	2.7	Multiuse Trail	\$1,337,433
25	Old 41 Road	Collier County Line	Bonita Beach Road	1.2	Multiuse Trail	\$1,437,996
26	East Terry Street	Morton Avenue	Bonita Grande Drive	0.8	Multiuse Trail	\$407,603
27	Mcgregor Boulevard (SR 867)	Sanibel Causeway	Mcgregor Boulevard	1.9	Multiuse Trail	\$943,580
28	Bell Boulevard South	Joel Boulevard	SR 82	5.3	Sidewalk	\$1,163,959
29	Joel Boulevard	Palm Beach Boulevard	Tuckahoe Road	0.8	Bike Lane	\$803,279
30	Orange River Boulevard	Palm Beach Boulevard	Ellis Road	1.0	Multiuse Trail	\$1,085,772
31	Summerlin Road/Mcgregor Blvd (CR 867)	Shell Point Boulevard	Kelly Cove Drive	1.9	Multiuse Trail	\$1,139,998
32	North River Road	SR 31	County Line	13.5	Multiuse Trail	\$6,426,000
33	Treeline Avenue	Colonial Boulevard	Pelican Preserve Boulevard	0.6	Multiuse Trail	\$343,020
34	Buffered Bike Lane	TBD	TBD	3.0	Bike Lane	\$1,500,000

What is the
transportation Plan?

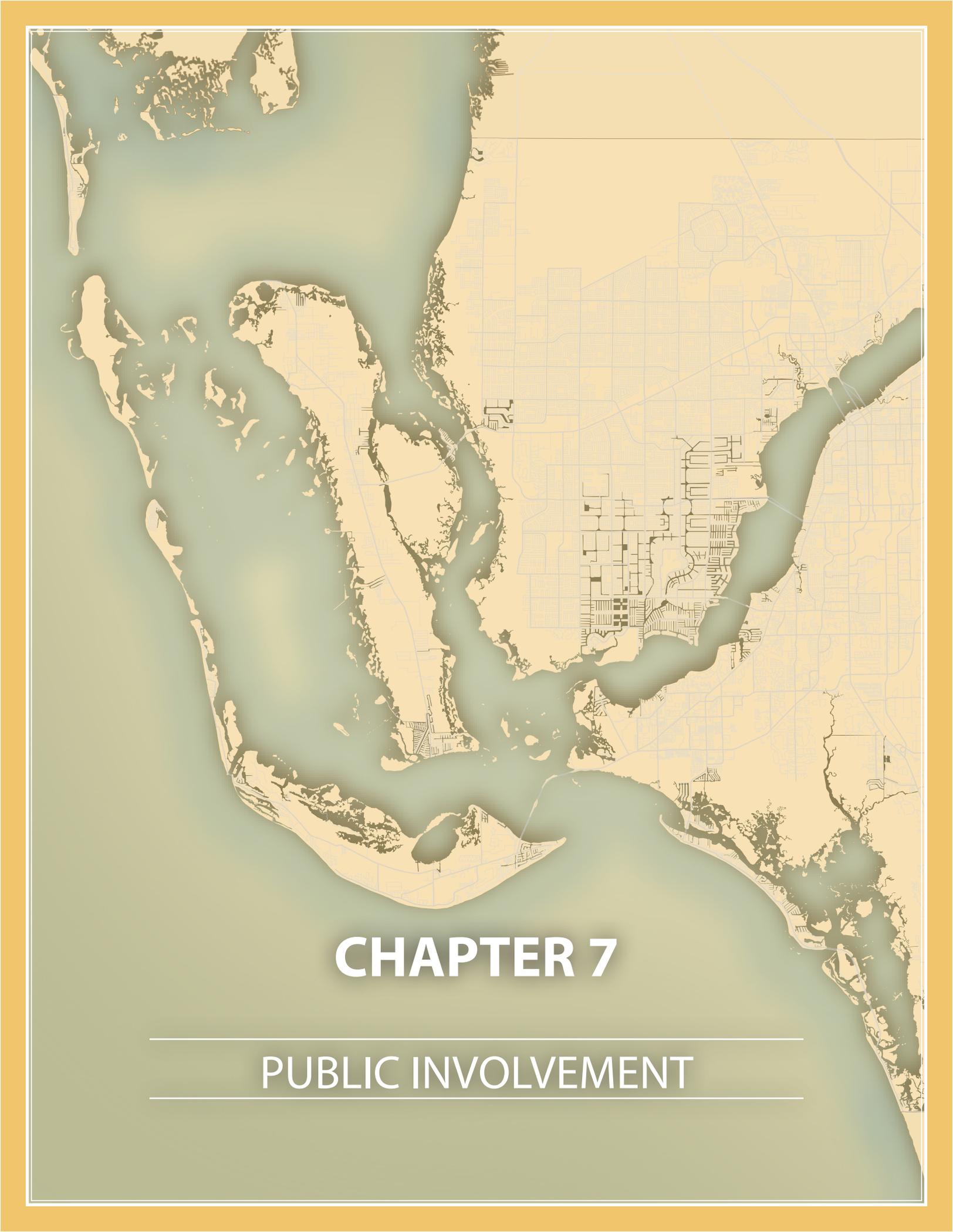
or Lee County's transportation needs
(5 years for the 25-year planning
through 2040)

all types of travel including driving,
walking, public transportation, and freight

do we need this plan?

transportation needs change over time
funded by the Federal Highway Administration
funded with federal and/or state monies
to be included and analyzed within the plan
back for creating a desirable place to





CHAPTER 7

PUBLIC INVOLVEMENT

CHAPTER 7: PUBLIC INVOLVEMENT

This chapter summarizes the public involvement efforts completed during the development of the Lee County MPO's 2040 Transportation Plan for a county transportation network that is safe, efficient and considers all modes of travel.

The public involvement effort's primary purpose was to have a meaningful dialogue, in-person and online, with the public regarding the needs and priorities of the community. 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 to obtain active public involvement early in the planning and document preparation process. Many citizens, including 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.

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 Plan and to provide a resource for the public as the update occurred. The PIP is provided in **Appendix F**.

FEDERAL REGULATION

The Lee County MPO 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 providers, 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
- 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

EARLY ENGAGEMENT EFFORTS

SCENARIO PLANNING

Following in the footsteps of national trends and Federal Highway Administration endorsement of the scenario planning process, the Lee County MPO engaged in its own scenario planning project that would support the development of its 2040 LRTP. Scenario planning is an analytical process that assesses the strengths and weaknesses of alternative futures that can help transportation planners prepare for transportation needs by considering how changes in land use, demographics, transportation facilities and other factors could affect communities. The emphasis of scenario planning in transportation is on using land use patterns as a variable that impacts transportation networks, investments and operations. Variables that have traditionally been included in transportation plans include demographic, political, and economic trends. Scenario planning considers how changes to any one of these variables will impact the other variables and allows planners to show citizens and stakeholders how these changes could impact their communities.

COMMUNITY VISIONING

The MPO's first step was defining the vision in broad terms, followed by setting specific goals and objectives that are most likely to achieve the county transportation vision. In this case, the goals and objectives also conceptualize the nature of the land-use scenarios. This step involved two efforts. The first was a "New Horizon" evaluation and appraisal report carried out by the Lee County Planning Division and approved by the Board of County Commissioners in March 2011. The second was a series of meetings facilitated by the MPO with government and agency staff, along with key stakeholders, in the fall of 2013.

In September 2013, seven meetings were conducted with over 50 stakeholders active in land use and transportation issues in Lee County. Some were small group discussions and a few were presentations to larger groups. All began with an overview of the project. Each group had ample time to ask questions and share their opinions. A detailed questionnaire was provided prior to each meeting to generate discussion.

ONLINE SURVEY - SCENARIO PLANNING

A key evaluation tool used in this Land Use Scenario project was an online public engagement survey employed by the MPO. Vital to the survey's success were its highly visual and interactive displays that allowed participants to identify priorities and weigh in on the alternative land use scenarios (Figure 7-1).

The survey results were an important component of the evaluation process. The priorities, comments, and scenario preferences were used to determine what the public thought were the most important considerations for land use and transportation improvements in Lee County. The results were used by the study team and the MPO as a component of the land use scenario assessment which culminated in the selection of a preferred land use scenario.

Promoting the Survey

To receive meaningful comments from the public, effective online surveys need to be promoted and distributed to a wide audience through a variety of mediums. To do this the public involvement team reached out to as many people as possible by incorporating the following promotion methods:

- **Press Release** – A press release was published informing the public about the Land Use project and the survey. The public was informed of when the survey would be available and how they could access the survey.
- **Email Distribution** – Being an online survey, one of the easiest ways to reach people was to send links using email mailing lists. In order to reach out to as many people as possible, the MPO team asked organization leaders

Figure 7-1: Land Use Scenario Survey



to distribute links to survey site to the people on their mailing lists. The organizations included 17 Chambers of Commerce, the Lee County Library System, The Building Industry Association, the Lee County School System, BikeWalkLee, and Florida Gulf Coast University (FGCU). The link was also distributed on municipal and agency mailing lists.

- **Flyers** – A paper flyer was created to help promote the survey outside of populations that would be on an existing email list. Flyers were distributed in LeeTran buses and Lee County Libraries. People who saw the flyer could use their computers and type in the website to take the survey, or if they had a smartphone, they could scan the QR Code that was provided on the flyer. This particular outreach was successful in reaching transit riders.
- **Websites and Social Media** – Links to the survey were also provided on municipal and agency websites and on organization Facebook pages. The links provided exposure to the survey to anyone browsing the municipal websites or their Facebook pages.

Survey Participation and Results

The survey was available from February 14 to April 2, 2014. During that time, 2,564 people visited the site and a total of 1,227 individuals participated in the survey. The survey allowed users to share optional information about themselves such as their zip code, occupation, and age group. Over 50 percent of people who participated were 55 and older, just over half worked outside of their home, and one third were retired.

TITLE VI

The Lee County 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 Lee County MPO to comply with all requirements of the Americans with Disabilities Act.

Priorities

The priorities the respondents chose are consistent with the goals and objectives identified in the staff and stakeholder meetings. The responses suggest that the community wants a diverse, safe and efficient transportation network for all road users. Also important are environmental factors that contribute to the natural beauty residents would like to see preserved in their community.

Respondents of the online survey identified their top five transportation and land development priorities:

1. Walking and Bicycling
2. Water Conservation
3. Less Driving
4. Preserve Rural Land
5. Access to Transit

Land Use Scenarios

Participants were then presented with three alternative land use scenarios and were asked to rate them. The first scenario, “Spreading Out,” showed growth evenly distributed across the county and assumed a transportation network that is primarily car-oriented, with relatively few transit investments compared to the other scenarios. The second scenario, “Filling In,” showed growth concentrated along major transportation corridors and a higher priority placed on redeveloping and filling in existing gaps. The third scenario, “Transit-Focused,” showed growth similar to the second scenario but with greater land use intensities along the CSX/Seminole Gulf rail corridor and US 41 in anticipation of the potential for enhanced transit services along one of these corridors. More than three-quarters of the respondents gave this scenario a positive rating and received the highest average rating of the three scenarios.

Conclusions

The survey was available for nearly two months and received more than 2,500 visits. The MPO received more than 1,200 responses and more than 900 written comments. The survey responses were in many cases diverse, but generally the message the MPO received from the public was consistent. The respondents indicate a strong preference for transportation and land use plans that reduce driving, limit outward expansion, offer safe transportation alternatives to driving and conserve the county’s natural resources.

See **Appendix F** for complete results of the Land Use Scenario effort, including staff and stakeholder comments, online survey screenshots, and online survey comments.

2040 TRANSPORTATION PLAN ENGAGEMENT EFFORTS

The public, stakeholders, and MPO Committees and Board were involved throughout the plan development process. Counting public workshops and monthly MPO meetings in 2015, the public and stakeholders had nearly 70 opportunities for in-person involvement. In addition to meetings and workshops, there were many online and mobile-friendly ways to stay informed, become involved, and have voices heard. See **Table 7-1** for some summarized outreach results.

Method	Results
Public Workshops 1 and 2	191+
Project Website and Other	57
Online Engagement (i.e., interactive online survey)	434
Public Hearing (Dec. 18, 2015 MPO Board Meeting)	7

The public was involved throughout the 2040 Transportation Plan needs development to discuss congested and constrained roadways, along with transportation project needs. This included specific projects and project types for bicycle and pedestrian, transit, and roadway improvements through the next 25 years. The next step included priorities development and refinement where the public was asked to select their top five projects identified from the needs development. The public was also asked to suggest other projects or types of projects that were not already identified during the needs development.

Appendix F includes summaries of the 2040 Transportation Plan Public Workshops, comments received from the project website, and results and comments from the interactive online survey. The following describes the many opportunities for public participation throughout the update.

ONLINE ENGAGEMENT

PROJECT WEBSITE

A website specific to the 2040 Transportation Plan (**Figure 7-2**) was created in early 2015 to provide a central, consistent source for project information and updates (2040transportationplan.leempo.com). The project website was an effective method of communication and was continuously updated as new information was available and public meetings were announced.

The site served as the central location to access the 2040 Transportation Plan online survey as well as a repository for project-related maps, plans, supporting documents, and meeting agendas and presentations. It also allowed users to submit comments, suggest a project idea for a transportation need, add themselves to the project mailing list, find MPO and staff contact information, access web links to other partners and social media accounts, and read up on the latest press and media related information.

Existing websites of partner agencies or area municipalities posted information about the 2040 Transportation Plan and were effective means of notification and awareness.

Project deliverables were posted on the MPO website to ensure all public materials were available to the public. This included public workshop event materials and summaries, surveys or questionnaires, and draft sections of the 2040 Transportation Plan. All visitors to the MPO website could comment and provide ideas and suggestions throughout the development of the 2040 Transportation Plan.

Figure 7-2: 2040 Transportation Plan Website



ONLINE SURVEY - 2040 TRANSPORTATION PLAN

Projects built in our future begin with conversations today. In order to find out where the public thinks investments should be made to move people and goods in Lee County, an interactive online survey was created to ask the simple yet essential question: what’s important to you?

After great success with the land use scenario online outreach, a second survey was created (Figure 7-3) to help the MPO ask questions in a more creative, simple, public-friendly, and visually appealing way. The questions included:

- Which bike and pedestrian needs are the most important to you?
- Which transit projects are the highest priorities to you?
- Which roadway projects should be a priority for implementation in the next 25 years?

Survey respondents could also suggest a different project or type of project and comment on each transportation project. The resulting priority projects by mode are shown in Table 7-2.



Figure 7-3: 2040 Transportation Plan Survey

A total of 434 comments were received with 24 percent of visitors providing comments (Table 7-3). Optional demographic data (Table 7-4 on the following page) was requested from survey responders, and the most common age to respond was between 45 and 54 years of age (25 percent). This age is a little younger than the majority of the land use scenario survey respondents (55+).

Table 7-2: Online Engagement: Public’s Top 5 Priority Projects

Rank	Bike/Ped	Transit	Roads
1	Sidewalks	Airport Service	Three Oaks Extension
2	Bike Lanes	Improved Frequencies	Widen Corkscrew
3	Shared Use Paths	BRT on US 41	Intersection at Colonial & Summerlin
4	Off Road Trails	Express Bus to Cape Coral	Interchange at I-75 & Corkscrew
5	Facilities Near Schools	Express Bus to Lehigh Acres	Interchange at I-75 & Colonial

Table 7-3: Online Engagement: Visits, Data, & Comments

Visits	Visitors Prov. Data	Comments	Visitors Prov. Comments
929	558, 60%	434	227, 24%

The survey went live on August 20, 2015, before the second public workshop and was formally unveiled for workshop attendees at the web kiosk. The survey closed after eight weeks and received 929 visits with close to 560, or 60 percent of visitors, providing data. The survey was promoted via the project website, project mailing list, and help of many MPO Committee members, business stakeholders, Lee County department staff, BikeWalkLee blog, and distribution list.

Of the respondents that answered the optional questions, when asked about employment, 58 percent work outside of their home, 29 percent are retired, and 10 percent work at or from their home; 30 percent have a daily commute length of 21 to 30 minutes while 24 percent have a commute of only 10 minutes or less; 66 percent drive alone to work and five percent bike to work. The most common zip codes include 33928 (29 percent), 33967 (12 percent), and zip codes 34135 and 33901 each had five percent.

A summary of the survey results, optional demographic data, and all comments received can be found in Appendix F.

Table 7-4: Online Engagement: Demographics

Age	Employment	Daily Commute Length	Trans. to Work	Zip Code
18 to 24, 2%	Work outside of home, 58%	1 hour or greater, 3%	Drive alone, 66%	33928, 29%
25 to 34, 12%	Retired, 29%	46 to 59 minutes, 3%	Bicycle, 5%	33967, 12%
34 to 44, 13%	Work at/from home, 10%	31 to 45 minutes, 14%	Carpool, 2%	34135, 5%
45 to 54, 25%	Student, 2%	21 to 30 minutes, 30%	Bus, 1%	33901, 5%
55 to 64, 22%	Unemployed >1%	11 to 20 minutes, 26%	Walk, 1%	33919, 5%
65 to 74, 21%	Visitor >1%	10 minutes or less, 24%	n/a, 27%	
75 or over, 4%				

IN-PERSON ENGAGEMENT

The major activities are outlined in **Table 7-5** and described in the subsequent sections.

Table 7-5: Timeline and Summary of Major Events and Activities

Lee 2040 Land Use Scenario Stakeholder Interviews September – November 2013
Lee 2040 Land Use Scenario Stakeholder Workshop December 2013
Lee 2040 Transportation Plan Public Workshops June 16, 2015 (Transportation Needs) August 25, 2015 (Transportation Priorities)

PUBLIC WORKSHOP #1

The first public workshop for the 2040 Transportation Plan was held on June 16, 2015, at the North Fort Myers Public Library. The workshop began at 5:30 p.m. and was attended by approximately 50 residents, stakeholders, and members of the media (**Figure 7-4**). Throughout the two-hour workshop attendees were given the opportunity to learn about the 2040 Transportation Plan, project schedule, vision, goals, evaluation criteria for long range transportation projects, and why long range planning is an important and required step in the ability to receive federal funding for future transportation investments. Fifteen minutes into the workshop Don Scott, Lee County MPO Executive Director, gave a presentation covering Lee County’s transportation needs for the next 25 years, as well as the financial constraints that must be considered when prioritizing projects for future funding and implementation.

Before and after the presentation, attendees could also participate in two hands-on workshop activities. The first activity asked attendees to choose their preferred transportation solutions. Attendees were given five green dots and were asked to put them near the solution or solutions they most want in the future. The transportation solutions consisted of new alignments and additional lanes; technology to address congestion; economic/freight development; bike lanes, multi-use trails, sidewalks, and crosswalks; aesthetics; maintain infrastructure; transit improvements; and operational/intersection improvements. The most preferred transportation solution was bike lanes, multi-use trails, sidewalks, and crosswalks. The second activity asked attendees to draw on a map to show where they want to see improvements in Lee County (**Figure 7-5** on the following page). Attendees could either draw on the map themselves or have a staff member draw on it for them, and the maps were on a round table for easy access. Over 70 map comments were collected.

Figure 7-4: Participants at the first workshop



Figure 7-5: Participants show where improvements would have the most impact



Figure 7-6: The second workshop offered a hands-on web kiosk



Figure 7-7: Staff was available to discuss specific areas of concern



PUBLIC WORKSHOP #2

The second public workshop was held on August 25, 2015, at the Estero Recreation Center. The workshop began at 5:00 p.m. and was attended by approximately 70 residents, stakeholders, and members of the media. Fifteen minutes into the two-hour workshop Don Scott, Lee County MPO Executive Director gave a presentation about the bike/ped, transit, and roadway needs that scored the most favorably once the project evaluation criteria were applied. Before and after the presentation attendees could walk around the room, test out the interactive online survey (Figure 7-6), and discuss the projects or areas of concern with MPO and project staff (Figure 7-7).

The online survey went live before the workshop so attendees could be the first to formally take the survey. The main objective of the survey was to ask respondents which bicycle and pedestrian, transit, and road projects they most prefer and should be a priority to receive available funding. As a reminder to visit the project website and take the survey, stickers were provided to workshop attendees who signed in at the welcome table or visited the web kiosk. In addition, if attendees took the survey while visiting the web kiosk or via their own smartphones, stickers were given to them so they could show others they made their voices count.

Refer to **Appendix F** for a complete summary of the workshops.

OTHER COMMUNICATION TOOLS

FACT SHEET

At the start of the 2040 Transportation Plan development, an informational handout (Figure 7-8 on the following page) was available at all MPO meetings and public workshops, on the project website, and at the MPO office. It included information about the 2040 Transportation Plan such as why we need it, who updates it and how often, how transportation projects will be selected, schedule, opportunities for getting involved and providing comments, and highlights about Lee County. The fact sheet is provided in **Appendix F**.

MAILING LIST

At the start of the 2040 Transportation Plan development, 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 email addresses and phone numbers. Attendees at all MPO meetings

may be added (at their discretion) to the mailing list to help identify and include various interest groups and individuals. Fact sheets, website updates, online surveys, public workshops, public comment opportunities, and other information about the 2040 Transportation Plan were e-distributed through the mailing list. The mailing list includes:

- Interagency professionals
- Civic organizations, environmental groups, and homeowners associations
- Chambers and business groups
- Local municipalities and county departments
- Transportation and/or other relevant groups and agencies
- Members of the community who want to receive project updates including Land Use Scenario online survey respondents added to the mailing list

PRESS RELEASES AND ADVERTISEMENTS

Press releases were sent to all media outlets in the county with public workshop and online survey announcements and public comment opportunities. E-blasts were also sent to contacts on the mailing list. All meeting notices and announcements related to development of the 2040 Transportation Plan described the meeting time, place, and purpose. The MPO and project websites were also used to promote meeting notices, surveys, and announcements.

NEWS ARTICLES AND PRESS COVERAGE

See **Appendix D** for a variety of press and news articles related to public comment opportunities and the development of the 2040 Transportation Plan. News sources include Naples Daily News, News-Press, Southwest Spotlight, WGCU (local NPR station), and WINK News (the local CBS affiliate).

Figure 7-8: 2040 Transportation Plan Handout (front and back)

**2040 TRANSPORTATION PLAN
FREQUENTLY ASKED QUESTIONS**

May 2015



LEE COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION

WHAT IS THE 2040 TRANSPORTATION PLAN?

The Lee County 2040 Transportation Plan is the 25-year vision of how to meet our community's transportation needs and expectations through the year 2040. The plan will incorporate all types of travel including driving, biking, walking, public transportation, and freight movement.

WHO UPDATES THE PLAN AND HOW OFTEN IS IT UPDATED?

Federal law requires that the Long Range Transportation Plan address a minimum 20-year planning horizon from the last plan adoption. To account for growth and evolving goals for the future, the plan is updated and adopted every five years by the Lee County Metropolitan Planning Organization (MPO) Board made up of City Council and County Commission members. Member agencies and municipalities build and maintain projects included in this plan.

WHY DO WE NEED THIS PLAN?

Safe, efficient, and reliable travel options are important building blocks for creating a thriving community with a strong economy that is also a desirable place to live, work, and play. The 2040 Transportation Plan will identify future transportation needs and prioritize projects that meet those needs in a cost effective way. Projects funded with federal and/or state monies need to be included and analyzed within the plan.

HOW WILL PROJECTS BE SELECTED?

To identify the projects that will best serve Lee County, the MPO needs a clear understanding of how people and goods move around the county now and how they expect to move in the future. The MPO seeks to identify the best projects and prioritize them to create a viable plan. To do so, the following questions must be answered:

- Where are people traveling to and from within the county?
- What transportation projects are needed?
- How will growth impact transportation in the future?
- Where do we expect congestion in the future?
- Which projects are the most effective?
- Is a project needed for economic development?
- What projects are needed to improve safety or to preserve the transportation system?
- Would a project's development have too many negative environmental or socio-economic impacts?

WHAT HAS BEEN DONE SO FAR?

The MPO recently studied how transportation and quality of life in Lee County would be impacted if growth patterns changed in three different ways. The preferred scenario that was selected by the MPO Board following public input included and mixture of the most well-liked elements from each scenario that encourages mixing homes, jobs, and shopping to reduce the number and length of trips and to enhance transit corridors. The Hybrid Scenario is the basis for Lee County in 2040.

WHAT PROJECTS CAN HELP LEE COUNTY GET FROM HERE TO THERE?

This is the task we are currently working on and seeking public input on. The projects – road, transit, bicycle, pedestrian, freight, and congestion management – that make up the package of improvement in the final plan are currently being determined.

WHAT IS DECIDED IN THIS PLAN?

Through this planning process, decision-makers and the public will identify:

- A **Needs Plan** of all realistic projects that will improve transportation and mobility around the county, regardless of cost
- Options available to pay for the projects and anticipated funding available through those options
- A **Cost Feasible Plan** that financially constrains the projects in the Needs Plan by prioritizing them based on their potential benefit to the county and the amount of funding available
- Future steps for meeting the plan's goals while improving conditions for all modes of transportation



**2040 TRANSPORTATION PLAN
FREQUENTLY ASKED QUESTIONS**

May 2015



LEE COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION

HOW CAN I GET INVOLVED?

Your ideas and opinions for improving transportation in Lee County are vital to developing a 2040 Transportation Plan that is effective and meets the needs of our residents and visitors. Throughout the update, several opportunities will be available to attend public meetings and workshops, and participate in surveys to share your thoughts and add your voice to the discussion.

If you have a transportation need or a possible solution, let us know. Call Johnny Limbaugh at 239.330.2242 or email him at jlimbaugh@leempo.com.

The schedule below shows the timeline for the update and highlights in blue where the public will be engaged. Please visit www.2040transportationplan.leempo.com to learn more about opportunities to become involved.

WHAT IS THE TIMELINE FOR THE 2040 PLAN?

2014

EXPLORE SCENARIOS AND DEVELOP GOALS
2014

Complete the Land Use Scenario Plan
Identify goals of the Plan and key transportation issues
Collect data and estimate future how many people will live and work in Lee County in 2040

2015

DEFINE TRANSPORTATION NEEDS
WINTER/SPRING 2015

Analyze future travel patterns and highlight focus areas and problem spots
Identify projects to improve mobility & problem areas
Newsletter #1 - The 2040 Plan Process
Workshop #1 - Transportation Needs

DEFINE COST FEASIBLE PLAN
SPRING/SUMMER 2015

Calculate anticipated future revenues to fund projects
Estimate costs of projects in Needs Assessment
Assess the benefits, cost, and impacts to prioritize projects
Newsletter #2 and Workshop #2 - Prioritizing Cost Feasible Plan Projects

ADOPT PLAN
FALL 2015

Develop a Plan that aligns with the community's needs and is fundable
Present the draft Cost Feasible Plan for comments
Newsletter #3 - Cost Feasible Plan
Public Hearing to adopt the 2040 Plan

FINALIZE DOCUMENTATION
LATE FALL 2015

Incorporate comments on the draft 2040 Plan into the documentation
Post final documentation on Lee County MPO's website

LEE COUNTY HIGHLIGHTS*

Miles of roadway:	6808
Miles of sidewalk:	118
Miles of bike lanes and trails:	149
Residents in 2010:	610,394
New residents expected by 2040:	422,483 (69% more)
Jobs in 2010:	285,014
New jobs expected by 2040:	205,216 (72% more)
Homes in 2010:	354,587
New homes expected by 2040:	294,576 (83% more)

*Population, jobs, and homes figures were developed through the land use scenario exercise by Spilkowski and Associates (2014).



Need more information?

If you have additional questions about the Lee County 2040 Transportation Plan, please contact:

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Lee County MPO
PO Box 150045
Cape Coral, Florida 33915
Direct #: 239.330.2242
jlimbaugh@leempo.com



MPO BOARD AND COMMITTEE PRESENTATIONS

The MPO CAC and TAC were briefed at regular meetings throughout the development of the 2040 Transportation Plan and asked to provide review and comment. In addition, Board and Committee members were asked to help distribute the online survey, collect constituent needs and opinions on transportation needs, projects, and priorities, and attend scheduled public participation events when possible. Updates on plan development were regularly provided to the Board and Committees, along with presentations of major milestones. The following lists the MPO Board and Committee meeting dates:

MPO Board Meetings

- January 16, 2015
- February 20, 2015
- March 20, 2015
- April 17, 2015
- May 22, 2015
- June 19, 2015
- August 21, 2015
- September 18, 2015
- October 16, 2015
- November 20, 2015
- December 18, 2015 - 2040 Transportation Plan Adoption

MPO Executive Committee Meetings

- January 14, 2015
- February 11, 2015
- March 11, 2015
- April 8, 2015
- June 10, 2015
- July 8, 2015
- August 12, 2015
- September 9, 2015
- October 14, 2015
- December 9, 2015

Technical Advisory Committee Meetings

- January 8, 2015
- February 5, 2015
- March 10, 2015
- April 2, 2015
- May 7, 2015
- June 4, 2015
- July 29, 2015 (Committee workshop)

- August 6, 2015
- September 3, 2015
- October 6, 2015
- November 5, 2015
- December 3, 2015

Citizens Advisory Committee Meetings

- January 8, 2015
- February 5, 2015
- March 10, 2015
- April 2, 2015
- May 7, 2015
- June 4, 2015
- July 29, 2015 (Committee workshop)
- August 6, 2015
- September 3, 2015
- October 6, 2015
- November 5, 2015
- December 3, 2015

Bicycle Pedestrian Coordinating Committee

- January 27, 2015
- February 27, 2015
- March 24, 2015
- April 21, 2015
- May 26, 2015
- June 23, 2015
- July 28, 2015
- July 29, 2015 (Committee workshop)
- August 25, 2015
- September 29, 2015
- October 27, 2015
- November 24, 2015

Traffic Management Operations Committee

- February 11, 2015
- June 10, 2015
- July 29, 2015 (Committee workshop)
- August 12, 2015
- October 7, 2015
- December 9, 2015



PUBLIC HEARING

A public comment period was opened on Monday, November 16, 2015 and closed at the public hearing held during the regularly scheduled December 18, 2015 MPO Board meeting. The public comment period was a total of 33 days, and the MPO Board adopted the 2040 Transportation Plan at the December 18, 2015 Board meeting.

The proposed 2040 Transportation Plan was available for public review and comment on the project website and at the following locations around the county:

- Lee County MPO office located at 815 Nicholas Parkway, Cape Coral FL
- All Lee County Public Libraries

The public was also able to provide comment at the MPO's regularly scheduled committee meetings held throughout the public comment period at the following locations:

- 11/24/2015 at 10:00 A.M., MPO Bicycle Pedestrian Coordinating Committee (BPCC) Meeting held at the Fort Myers Regional Library, Room A, 1651 Lee Street, Fort Myers, FL
- 12/03/2015 at 9:30 A.M., MPO Technical Advisory Committee (TAC) Meeting held at the Cape Coral Public Works Building Conf. Room 200, 815 Nicholas Pkwy E, Cape Coral, FL
- 12/03/2015 at 3:00 P.M., MPO Citizens Advisory Committee (CAC) Meeting held at the Cape Coral Public Works Building Conf. Room 200, 815 Nicholas Pkwy E, Cape Coral, FL

- 12/09/2015 at 1:30 P.M., MPO Executive Committee (MEC) Meeting held at the Cape Coral Public Works Building Conf. Room 200, 815 Nicholas Pkwy E, Cape Coral, FL
- 12/09/2015 at 1:30 P.M., MPO Traffic Management and Operations Committee (TMOC) Meeting held at the Fort Myers Regional Library, Room A, 1651 Lee Street, Fort Myers, FL

COMMENTS RECEIVED AT PUBLIC HEARING

Seven public comments were received at the public hearing. Please refer to **Appendix F** for all public comments.



WEST 27 EAST
Hilabrough Ave.
1 MILE
SOUTH

574

H

DRIVER LICENSE

ONLY

DODGE

907-914

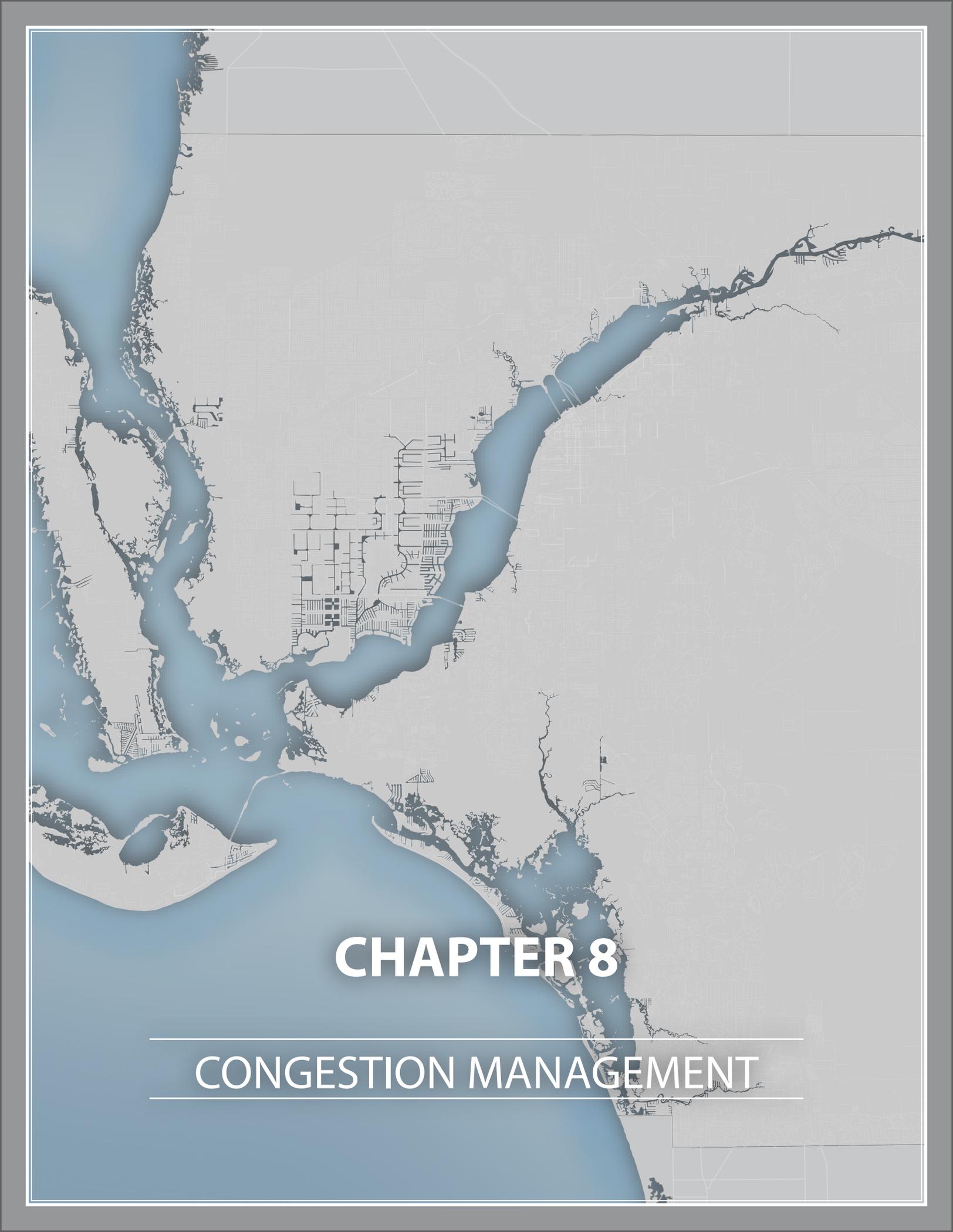
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7-1116

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29-655

WOOD



CHAPTER 8

CONGESTION MANAGEMENT

CHAPTER 8: CONGESTION MANAGEMENT

Because congestion is a widespread issue, MAP-21 required MPOs representing metropolitan areas larger than 200,000 people to develop and maintain a Congestion Management Process (CMP) while planning for transportation investments. A CMP is an on-going process and management system that uses analytical tools to identify congestion and safety issues within an Area of Application, which can include a region, corridor, activity center, or project area. The CMP then recommends multimodal strategies and operational projects to reduce traffic congestion and improve travel safety.

The concern of traffic congestion is simple and universal: daily commuters sit idle in stop-and-go traffic wasting time, money, and gas spent on travel. Lee County is no different than other metropolitan areas. The County's major roads are jammed with cars and trucks during peak travel periods when travel demand is highest, such as the winter and spring months or when people commute to and from work. Simply widening roads has not proven to universally reduce congestion. Daily congestion is expected to worsen in the next 25 years, even if all cost feasible projects are implemented. Tackling congestion without adding capacity is therefore vital for Lee County.

Congestion management begins with understanding the problem. The causes of congestion are described and illustrated in **Table 8-1** on the following page.

CMP GOALS AND OBJECTIVES

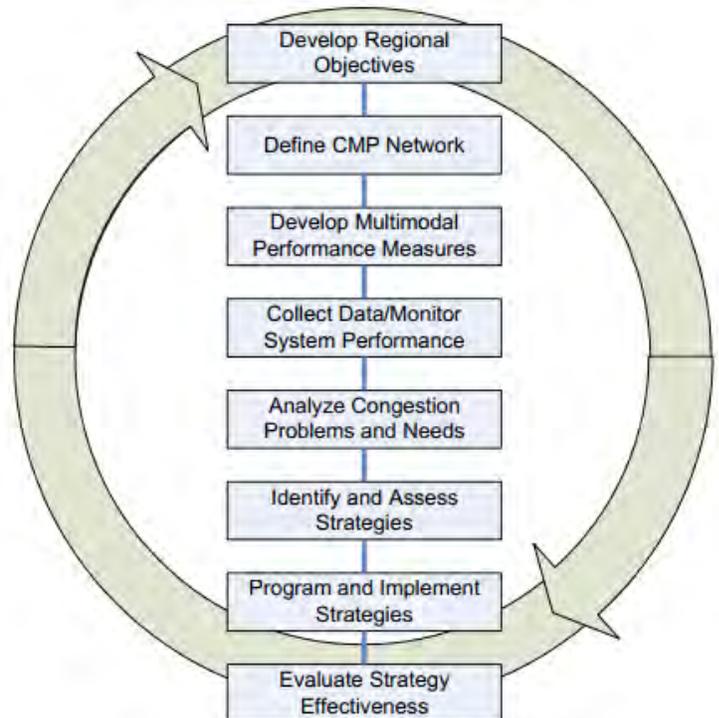
A performance- and outcome-based program was a key feature of MAP-21. The objective is for states to invest in projects that collectively make progress toward achieving national goals. The 2040 Transportation Plan's goals are consistent with the following national goals established by MAP-21:

- Improve safety
- Maintain infrastructure condition
- Reduce congestion
- Improve system reliability
- Improve freight movement and economic vitality
- Protect environment through sustainability
- Reduce project delivery delays and costs

EIGHT STEP PROCESS

Developing the CMP generally follows an eight-step interrelated process that focuses on managing congestion (**Figure 8-1**). The steps are designed to be flexible and can be integrated into the overarching metropolitan planning process, which ensures that a multi-modal approach is included in corridor studies and implemented in road projects.

Figure 8-1: Federal Highway Administration Congestion Management Process



As described in step-by-step detail in the Congestion Management Process Technical Memorandum (**Appendix E**), the CMP for the 2040 LRTP follows the eight-step process and was created using stakeholder input. The CMP's objectives were identified and are consistent with the 2040 Transportation Plan's goals. The CMP Area of Application covers all of Lee County. Performance measures were developed across eight categories ranging from road capacity to accessibility to jobs, and data for the performance measures were collected to evaluate and monitor the system's performance to help identify projects.

Table 8-1: Causes of Congestion

Type of Congestion	Impact	Example
<p>Bottlenecks: Bottlenecks are points where the roadway narrows or travel demand exceeds road capacity (typically at traffic signals) cause traffic to back up; this is the largest source of congestion.</p>	<p>Causes 40 percent of congestion.</p>	
<p>Traffic incidents: Can include crashes, stalled vehicles, or debris on the road; incidents cause about one quarter of congestion problems.</p>	<p>Causes 25 percent of congestion.</p>	
<p>Bad weather: Cannot be controlled; travelers can be notified of the potential for increased congestion, and signal systems can adapt to improve safety.</p>	<p>Causes 15 percent of congestion.</p>	
<p>Work zones: Where new roads are being 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.</p>	<p>Causes 10 percent of congestion.</p>	
<p>Poor traffic signal timing: The faulty operation of traffic signals where the time allotted does not match the volume on that road; poor signal timing is a source of congestion on major and minor streets.</p>	<p>Causes 5 percent of congestion.</p>	
<p>Special events: 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.</p>	<p>Causes 5 percent of congestion.</p>	

TOOLBOX OF STRATEGIES

While congestion management strategies sometimes include road capacity increases, this toolbox of strategies looks to improve the efficiency of the existing transportation system, increase transit service, manage freight movement, and support bicycle and pedestrian travel. These strategies should be considered and used before capacity increases are built.

The congestion management strategies in this CMP are based on past CMPs and the 2013 Florida Transportation Systems Management and Operations Strategic Plan. **Table 8-2** summarizes the congestion management strategies developed for the 2040 Transportation Plan.

The Congestion Management Process Technical Memorandum in **Appendix G** explains the strategies in more detail.

Category	Strategy
Transportation Demand Management	Commuter services
	Congestion pricing
	Growth management policies
	Park and ride facilities
	HOV/HOT lanes
	Parking management
Intelligent Transportation Systems (ITS)	Advanced Traffic Management System (ATMS)
	Incident management and safety
Transit	Longer hours/more days of service
	Improve amenities to increase service
	Improve pedestrian access to transit
	Park and ride facilities
	New routes
	Availability of premium transit service
Transportation System Management	Intersection and geometric improvements
	Traffic signal improvements
	Special events and incident management
	Access management
	Ramp metering
	Roadway signage
	Interconnected collector network
Freight and Goods	Geometric improvements at intersections
	Increase truck route signage and enforcement
	Truck lane restrictions
	Freight delivery schedule
Bicycle and Pedestrian	Bicycle signage/stripping
	Bicyclist/motorist awareness programs
	Separate dedicated bicycle/pedestrian paths
	Bicycle facilities at activity centers
	Reduce roadway crossing distance
	Maintain and expand street lighting

CONGESTION MANAGEMENT PROJECTS

The Lee County MPO allocates \$10 million over 10 years (\$1 million per year in present day costs) from its share of urban area (SU) funds in its highway cost feasible plan for congestion management projects. For the 2040 Transportation Plan, the MPO developed a preliminary list of funded and unfunded CMP projects from 2021 through 2030.

The projects were identified from multiple sources:

- The FDOT Tentative Work Program for FY 2017 through 2021
- SIS operational funds for SIS connectors
- Last mile freight connectors from the State Freight Mobility and Trade Plan

- The FDOT Tentative Work Program for FY 2017 through 2021
- Additional projects identified by MPO staff and committees using 2014 performance measures and expected congestion in 2030 as guidance

Figure 8-2 displays the CMP projects. Table 8-3 on the following page lists the CMP projects.

Figure 8-2: Congestion Management Process Cost Feasible Projects

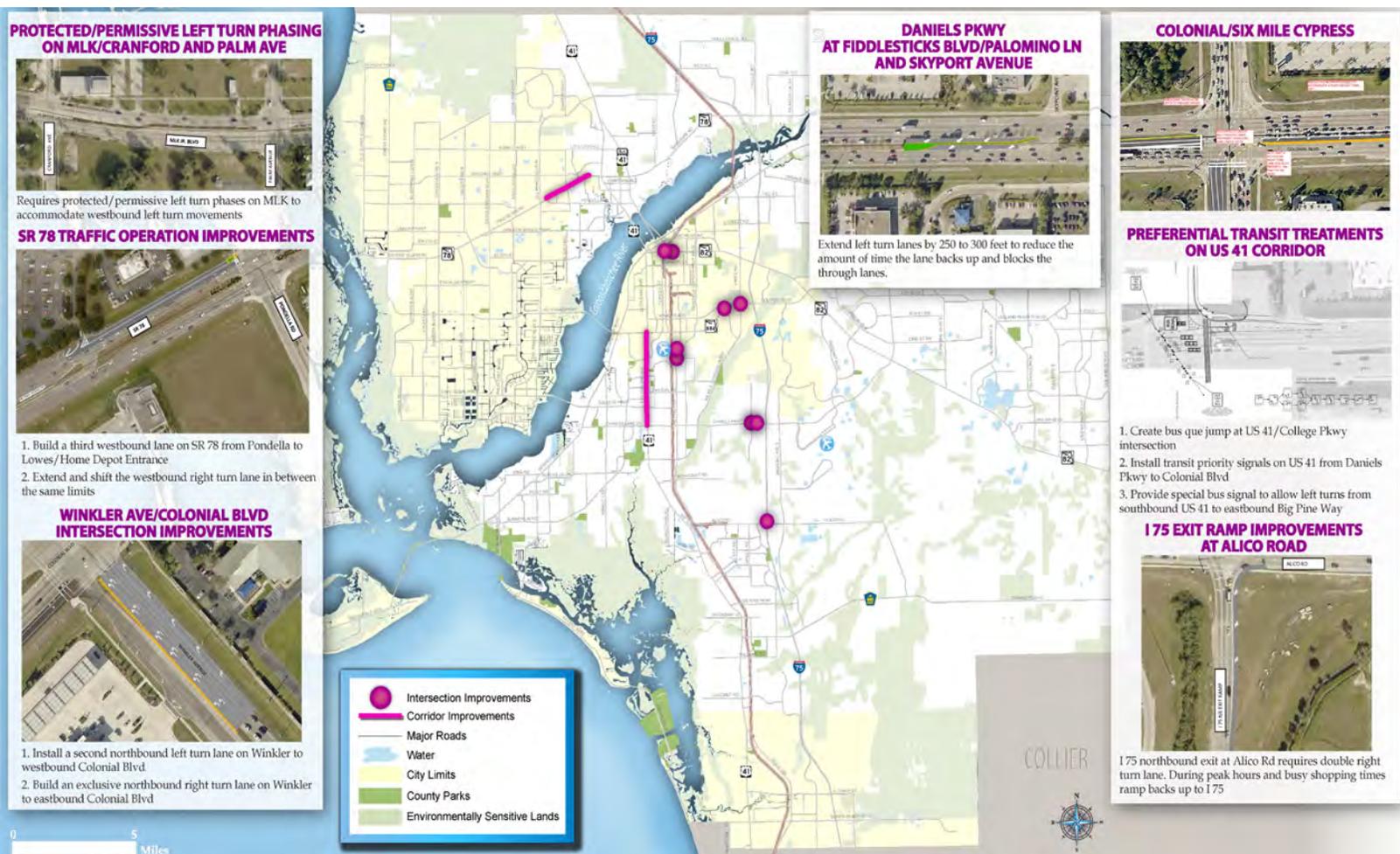


Table 8-3: CMP Projects in the 2040 Transportation Plan

Project Number	Road/Project	Project Limits	Improvements	Cost	FY 2021-30 Revenues	Cost Feasible
Projected 10 Year MPO Allocated Funds @ \$1 Million/Year						
1	Colonial @ Six Mile Parkway/Ortiz Avenue Intersection Improvements	South of Rolfe's Rd to 0.06 miles west of Six Mile Cypress Pkwy/Ortiz Ave	Rebuilt median and reduce the westbound through lanes to accommodate a third westbound left turn lane on Colonial Blvd to southbound Six Mile Cypress Pkwy; Also, rebuild eastbound left turn lane on Colonial to provide an offset to maintain intersection clearance.	\$607,950	\$9,392,050	√
2	I 75 Exit Ramp Improvements	@ Alico Road	Add a second NB right turn lane at the exit ramp to address traffic backups to near the mainline I 75 during peak hours and during high shopping activity. A second right turn lane will also eliminate the safety hazard of motorists using the adjacent left turn lane to make the right on Alico.	\$1,200,000	\$7,795,050	√
3	MLK Boulevard Intersection Phasing Improvements	@ Cranford Avenue	Add protected/permissive left turn phase on SR 82	\$40,000	\$7,755,050	√
			New mast arms only if structural analysis shows signal heads cannot be supported by existing ones	\$400,000	\$7,355,050	√
		@ Palm Avenue	Add protected/permissive left turn phase	\$40,000	\$7,315,050	√
			New mast arms only if structural analysis shows signal heads cannot be supported by existing ones	\$400,000	\$6,915,050	√
4	Winkler Avenue	@ Colonial Boulevard	Add a second NW bound left turn lane on Winkler Avenue to SW bound Colonial Blvd. Add an exclusive right turn lane on Winkler Ave to NE bound Colonial Blvd. Proposed improvements to address traffic backups at this intersection approach.	\$500,000	\$5,915,050	√
5	Pine Island Road (SR 78)	Entrance to Home Depot/Lowes to Pondella Road	Extend the WB right turn lane all the way to Pondella. Add a third WB through-lane from Pondella to the Lowes/Home Depot entrance. Modify the entrance to Lowes/Home Depot by removing the continuous right turn lane from the entrance to WB Pine Island Rd.	\$650,000	\$5,265,050	√
6	Metro Parkway	@ Idlewild Street	Conduct a study to move the existing traffic signal from Landing View Rd to Idlewild St, install new signal at Idlewild and remove existing signal at Landing	\$750,000	\$4,515,050	√
7	Alico Road Directional Signage	I 75 Ramp/ Ben Hill Griffin Parkway	Install overhead directional signage to help with wayfinding	\$200,000	\$4,315,050	√
8	Traffic Operations Center Operations	Not Applicable	\$300,00/year for 10 years for operation of LC Traffic Operations Center	\$3,000,000	\$1,315,050	√
9	Signal Timing & Coordination	Not Applicable	Signal retiming of traffic signal systems on state highways as needed @ \$150,000/year for 10 years	\$1,500,000	(\$184,950)	√
10	Roundabout Project Development	@ various locations	Undertake roundabout design and construction phases for those locations from the MPO Roundabout Feasibility Study that does not require right of way acquisition. Implementation phase need is \$500,000/year	\$500,000		
11	Eastbound Cape Coral Bridge	McGregor Exit Ramp	Add bridge ramp capacity	\$800,000		
12	Gunnery Road	@ 8th Street West	Add traffic signal	\$200,000		
13	Pine Island Road	@ NE 24th Avenue	Add traffic signal	\$200,000		

Table 8-3: CMP Projects in the 2040 Transportation Plan (cont.)

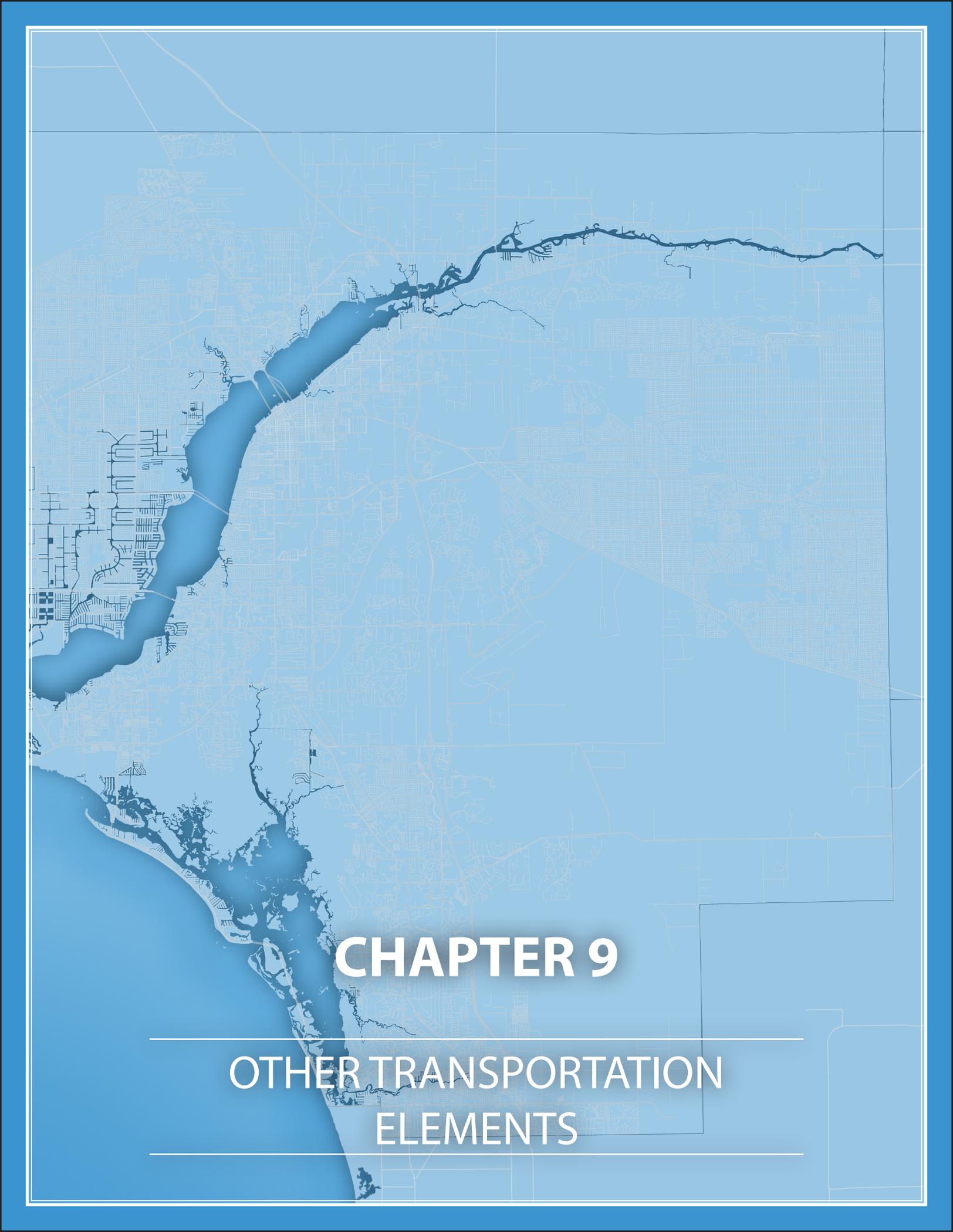
Project Number	Road/Project	Project Limits	Improvements	Cost	FY 2021-30 Revenues	Cost Feasible
Unfunded Needs						
14	SR 80	@ Joel Boulevard	Create positive offset on SR 80 to reduce left turn crashes	\$400,000		
15	Corkscrew Road	@I-75	Add dual left turns to northbound and southbound I-75.	\$1,200,000		
16	Westbound Daniels Parkway	@I-75	Add dual left turns to southbound I-75.	\$750,000		
17	Lehigh Acres	@ various locations	Bridge collector roads as necessary to complete grid and relieve congestion			

SPEED
LIMIT
35

NO LITTERING
OBEDIENCE 31-7
NO FOLLOWING

32
LIMIT
SPEED





CHAPTER 9

OTHER TRANSPORTATION ELEMENTS

CHAPTER 9: OTHER TRANSPORTATION ELEMENTS

GOODS MOVEMENT

Freight movement on Lee County's transportation network is important to the county's economic growth. In 2011, the county's highways, rail, and airports carried 6.6 million tons of goods, a number that is projected to double to 13.2 million tons by 2040. In 2012, the Southwest Florida International Airport supported the ninth largest air cargo market in Florida.

Because efficient freight movement is critical to the county's economic vitality, it is important to identify transportation projects that will accommodate future freight demand. Lee County's roads carry the majority of freight traffic, and freight must compete with traffic from the county's residents and visitors, especially during peak tourist seasons. A multimodal freight network that includes air cargo and rail service remains a significant strategy for ensuring freight mobility.

The Goods Movement section summarizes the Freight Network and the methodology for selecting freight needs. More detail is included in the Goods Movement Technical Memorandum included as **Appendix H**.

STRATEGIC INTERMODAL SYSTEM

In 2003, the state of Florida created the Strategic Intermodal System (SIS). The SIS consists of transportation facilities critical to the movement of goods and services as well as regional and statewide travel. SIS facilities include FDOT-owned state highways, federally-owned interstates, airports, spaceports,

seaports, waterways, rail lines, terminals, and locally-owned roads. Nearly all rail freight and air cargo travels on the SIS. While the roads on the SIS account for only 18 percent of Florida's road network, they carry nearly 70 percent of the State Highway System's truck volume.

Lee County's SIS facilities include:

- I-75: Collier County Line to Charlotte County Line
- SR 80: I-75 to Hendry County Line
- SR 82: Seminole Gulf Coast Railway to Hendry County Line
- Alico Road: I-75 to Ben Hill Griffin Parkway
- Terminal Access Road: I-75 to Ben Hill Griffin Parkway
- Ben Hill Griffin Parkway: Terminal access Road to Alico Road
- Seminole Gulf Coast Railway
- Southwest Florida International Airport

FREIGHT MOBILITY GOALS AND OBJECTIVES

Goals and objectives were developed to guide the analysis of freight movement in Lee County. The goals and objectives are consistent with Transportation Plan goals as well as those of MAP-21, the 2060 Florida Transportation Plan, and Florida's Freight Mobility and Trade Plan.

FREIGHT NETWORK

Goods are transported into, out of, within, and through Lee County using the county's highways, rail, and airport. Truck movement is the dominant mode for freight; therefore, Lee



County's roads carry a significant amount of freight traffic. While diminished from the recent recession, air cargo and rail remain important to freight mobility. Waterborne cargo must rely on seaports in adjacent communities.

The following sections describe Lee County's regional freight network.

REGIONAL HIGHWAY TRUCK NETWORK

The 2040 Transportation Plan uses the regional highway truck network identified in the 2035 LRTP and recommendations from the Lee County Freight and Goods Mobility Analysis (2009). The network was divided into two tiers:

Tier One: SIS facilities and regional corridors that extend beyond county boundaries; used to move goods in, out, and through the county and provide connectivity beyond the county boundaries.

Tier Two: regional highways that connect to the SIS, other freight corridors, or regional freight activity centers but do not extend beyond county boundaries; they connect to the major freight activity centers or between the regional freight corridors. **Table 9-1** on the following page lists Tier One and Tier Two facilities, and **Figure 9-1** displays them.

FREIGHT ACTIVITY CENTERS

Lee County's Freight Activity Centers (FAC) are unchanged from the 2035 LRTP update. FACs are major employment centers that generate freight activity. They are typically located in the industrial core or near intermodal transportation hubs such as ports, airports, and railyards, or in areas with industrial growth opportunities near regional and strategic trade corridors. FACs are also shown in **Figure 9-1**.

Figure 9-1: Tier One and Tier Two Freight Facilities and Freight Activity Centers

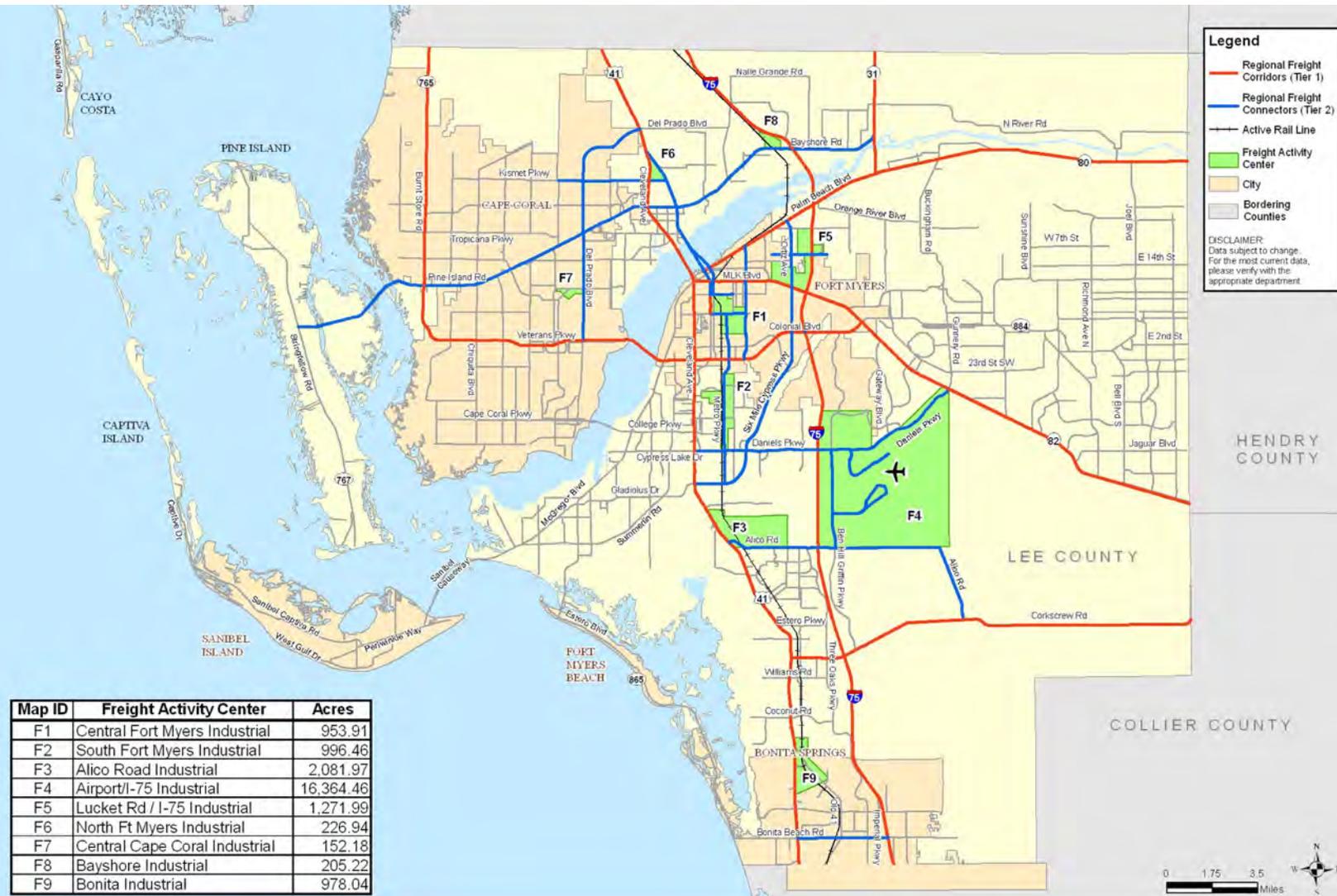
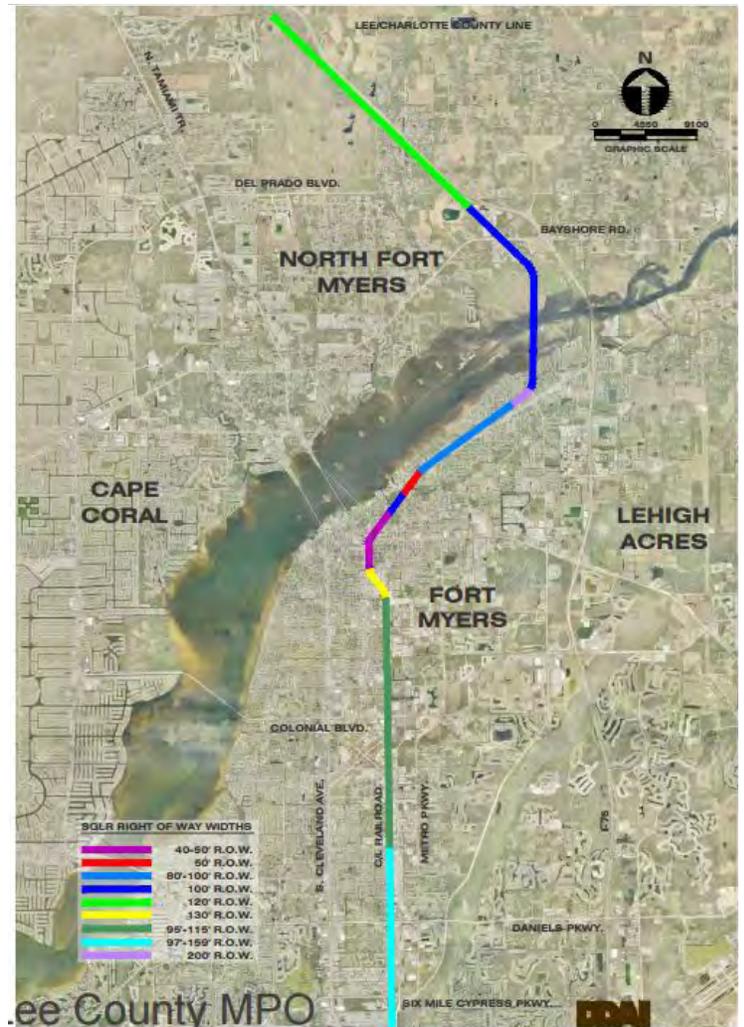


Table 9-1: Tier One and Tier Two Freight Facilities

Roadway	From	To	Tier
I 75 (SIS)	Lee County Line	Charlotte County Line	One
US 41	Lee County Line	Charlotte County Line	One
SR 80 (SIS)	Hendry County Line	I 75	One
SR 82 (Emerging SIS)	Hendry County Line	I 75	One
SR 31	SR 80	Charlotte County Line	One
SR 884/Colonial Boulevard	SR 82	Caloosahatchee River	One
Veterans Parkway	Caloosahatchee River	SR 78	One
CR 765/Burnt Store Road	SR 78	Charlotte County Line	One
Corkscrew Road	US 41	Collier County Line	One
US 41 Business	US 41 Junction	Hanson Street	Two
SR 78/Bayshore Road	SR 31	US 41	Two
SR 78/Pine Island Road	US 41	Pine Island	Two
Del Prado Boulevard	Veterans Parkway	US 41	Two
Kismet Parkway	Andalusia Boulevard	US 41	Two
Luckett Road	Ortiz Avenue	Country Lakes Drive	Two
SR 884/Lee Boulevard	SR 82	Joel Boulevard	Two
SR 873/Joel Boulevard	Lee Boulevard	SR 80	Two
Veterans Parkway	SR 78	Caloosahatchee River	Two
SR 82/Dr Martin Luther King Boulevard	US 41	I 75	Two
Fowler Street	Hanson Street	Dr Martin Luther King Boulevard	Two
Hanson Street	Fowler Street	Metro Parkway	Two
SR 80/Palm Beach Boulevard	I 75	US 41	Two
SR 889/Metro Parkway	Six Mile Cypress Parkway	Colonial Boulevard	Two
Daniels Parkway	US 41	SR 82	Two
Alico Road	US 41	Corkscrew Road	Two
Treeline Road	Daniels Parkway	Alico Road	Two
Airport Direct Connect	I 75	Airport	Two
Six Mile Cypress Parkway	US 41	Colonial Boulevard	Two
CR 865/Bonita Beach Road	US 41	I 75	Two
Littleton Road	US 41	Andalusia Boulevard	Two

Figure 9-2: Lee County Rail Corridor



Existing and future industrial employment areas identified in the Lee County's Freight and Goods Mobility Analysis (2009), Developments of Regional Impact, and Future Land Use Element of the Comprehensive Plan were used to identify FACs. The following criteria were also used to define FACs:

- Large, contiguous, industrial areas consisting of manufacturing, bulk processing, warehousing/distribution activities, or intermodal transshipment locations;
- Areas with sufficient capacity (open and developable industrial zoned land) for growth;
- Industrial areas that are consistent with the local comprehensive plan; and
- Areas that have, or appear to have, an existing or emerging role in the regional economy.

The Goods Movement Technical Memorandum included in Appendix H describes the FACs in more detail.

REGIONAL RAIL CORRIDORS

Freight and passenger service operate on Lee County's existing rail line, a 37-mile long north/south corridor that runs across 21 bridges through the urbanized part of the county (Figure 9-2). CSX owns the land, and Seminole Gulf Railway (SGLR) leases the corridor for freight rail service. The Murder Mystery Dinner Train operates passenger service five nights a week, year-round. A recommendation from the Lee County Rail Feasibility study is that FDOT buy the rail corridor from northern Collier County to Arcadia in DeSoto County, which has potential for future transit service or as a bicycle and pedestrian corridor.

Freight service decreased significantly during the recent recession. Prior to the recession, freight volumes ranged from 14,000 to 15,000 carloads annually, but declined to

approximately 7,000 carloads in 2012 because of lower demand for lumber and building materials. Rail is still an important component of a multimodal network in Lee County. Rail provides additional options for freight movement, and could help alleviate congestion on the county's roads that must accommodate combined freight and vehicle traffic.

PLANNING AND FREIGHT

Freight mobility's inclusion in the planning process is required by a progression of federal legislation:

- Intermodal Surface Transportation Efficiency Act (ISTEA), 1991
- Transportation Equity Act for the 21st Century (TEA-21), 1998
- Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), 2005
- MAP-21 in 2012
- Provisions within the FAST Act (2015) continue to emphasize freight movement in the planning process. The FAST ACT also sets aside \$4.5 billion over five years in new discretionary grant money for freight.

AIR CARGO

Air cargo moves through the Southwest Florida International Airport (RSW), owned by Lee County and operated by Lee County Port Authority. Page Field Commons does not currently serve air cargo. Air cargo volumes at RSW dropped 18 percent from a high of 41 million pounds in 2006 to 33.5 million pounds in 2014. Daily air cargo capacity dropped 55 percent from 235,678 pounds to 104,909 pounds in the same period. Some decline can be attributed to Lufthansa, DHL, and Cape Air discontinuing service at RSW, collectively removing 66,240 pounds of daily capacity. The recession may also have contributed to the decrease.

PERFORMANCE MEASURES

Freight performance measures were developed to assess the freight network as a part of requirements set forth by MAP-21. The Mobility Performance Measures program and Florida Multimodal Mobility Performance Measure Source Book developed by FDOT was used to develop performance measures. See the Goods Movement Technical Memorandum included as **Appendix H** for a list of recommended performance measures.

FREIGHT NEEDS

The following sections summarize how freight needs projects were selected for the 2040 Transportation Plan.

RAIL AND AIR CARGO NEEDS

The following sources were used to identify rail and air cargo freight needs projects as well as freight road projects:

- SIS 1st 5 Year Adopted Plan (2014 and 2015)
- SIS 2nd 5 Year Adopted Plan (2014 and 2015)
- 2040 SIS Cost Feasible Plan (2014)
- 2040 SIS Multimodal Unfunded Needs Plan (2011)
- Statewide Freight Trade and Mobility Study
- FDOT Rail System Plan (2010)
- Statewide Freight Trade and Mobility Study
- Southwest Florida International Airport Input and 2004 Master Plan

Projects were then selected based on the following criteria listed in descending order of importance:

- If construction is underway
- If funding source(s) is identified
- If the FTMP Priority Status is identified
- If a project is prioritized in other plans

Tables 9-2 and 9-3 on the following page list the rail and air cargo needs projects, respectively.

ROAD

Two methodologies were used to identify freight road project needs. The first identified projects from the aforementioned list of plans. The second ranked roads with a minimum 1,000 Average Annual Daily Truck Traffic (AADTT) and at least five percent truck traffic volumes using the road. Identified projects were then prioritized using the following criteria:

- Access to key economic generators, such as SIS facilities, FACs, regional and local distribution centers, and commercial activity centers;
- Type of freight corridor, such as SIS, designated regional goods movement, designated congestion management plan, or local routes that connect to commercial centers;
- The amount of truck volumes, or AADTT;
- The amount of truck use; and
- Prevalence of hotspots that cause congestion.

Table 9-4 on the following page lists road projects identified in prior planning efforts. **Table 9-5** on the following page lists road projects identified through higher levels of daily truck traffic.

REGIONAL FREIGHT AND GOODS MOVEMENT ISSUES AND OPPORTUNITIES

As a part of the 2040 Transportation Plan, Lee County MPO staff collaborated with stakeholders to identify freight and goods mobility issues and opportunities. **Table 9-6** summarizes the findings. In addition, next steps identified include:

- Develop a Freight Mobility Awareness Plan that includes brochures showing truck routes and discussing the importance of freight to the local economy;
- Include private industry freight stakeholders when developing the LRTP;
- Form a Regional or County Goods and Freight Group to guide freight planning;
- Integrate the freight management program in the planning process;
- Incorporate freight-specific investment opportunities into the LRTP and TIP; and
- Collaborate with Statewide Freight Initiatives, such as the Freight Mobility and Trade Plan.

Table 9-2: Rail Needs Projects Identified with Prior Planning Efforts

Project	SIS 5 Year Adopted Plan (July 2014)	SIS 5 Year Adopted Plan (July 2015)	2040 Multimodal Unfunded Needs Plan (Oct 2011)	Statewide Freight Trade and Mobility Study	2010 FDOT Rail System Plan
Southwest Florida Rail Corridor – Preserve	ROW – 2016	ROW – 2016			
Southwest Florida Multimodal Corridor Study		Study - 2017			
CSX/SGLR at Lee County Intermodal Transfer Terminal (Capacity Upgrade)			Unfunded Short Term	Unfunded Very High Priority	Near Term 1-5 Years
Lee County Rail Intermodal Yard				Unfunded Very High Priority	Near Term 1-5 Years
Southwest Florida Int'l – Rail Intermodal Yard				Unfunded Low Priority	Near Term 1-5 Years
SGLR Infrastructure Improvements – Phase 1				Unfunded Very High Priority	Mid Term 6 – 10 Years
SGLR Infrastructure Improvements – Phase 2				Unfunded Very High Priority	Mid to Long Term 11 – 20 Years
CSX/SGLR from Arcadia, Desoto Co to Lee Co (Right-of-way)			Unfunded Mid Term	Unfunded Medium Priority	
Railway Bridge at the Caloosahatchee River			Unfunded Long Term		
Lee Co. Port Authority Rail Study					

Table 9-3: Air Cargo Needs Projects Identified with Prior Planning Efforts

Project	SIS 5 Year Adopted Plan (July 2014)	SIS 5 Year Adopted Plan (July 2015)	2040 Multimodal Unfunded Needs Plan (Oct 2011)	Statewide Freight Trade and Mobility Study	RSW Input
RSW – Parallel Runway 6R/24L Phase 1	SIS Grant 2015-2019	SIS Grant 2016-2019	Unfunded Short Term		
RSW – Expand Midfield Entrance Road	SIS Grant 2015	SIS Grant 2020	Unfunded Short Term	Unfunded Very High Priority	Funding from FAA for Design, FDOT for construction
Airfield Signage					Upgrades underway from FAA/FDOT funds
RSW – Airport Capital Improvement	SIS Grant 2017				
RSW – APT Design, Permit and Const Dual TW SYS to RW		SIS Grant 2017			
Tower Relocation					Under Design, Funded by FDOT
RSW – Airside Pavement Rehabilitation				Unfunded High Priority	Funding from FDOT
RSW – Pavement Rehabilitation of Roads				Unfunded High Priority	Programmed in Work Program by FDOT
RSW – Realign Chamberlin Parkway				Unfunded High Priority	Unfunded Low Priority
RSW – Infrastructure Development				Unfunded Medium Priority	

Table 9-4: Road Projects Identified in Prior Planning Efforts

Project	Statewide Freight Trade & Mobility Study	SIS 5 Year Adopted Plan (July 2014)	SIS 5 Year Adopted Plan (July 2015)	SIS 2nd 5 Year Adopted Plan (July 2014)	SIS 2nd 5 Year Adopted Plan (July 2015)	2040 SIS Cost Feasible (Sept 2014)	2040 Multimodal Unfunded Needs (Oct 2011)
SR 82 (Immokalee) at Homestead Rd (ATL)		PE/ROW/CON – 2015-16	PE/CON – 2016				
SR 82 from CR 884 (Lee Blvd) to Shawnee Rd (A4-6)	Unfunded Very High Priority	PE/ROW/CON – 2015-18	PE/ROW/CON – 2016-18	PE – 2020	CON – 2021		
SR 82 from Shawnee Road to Alabama Rd S (A4-6)	Unfunded High Priority	PE/ROW – 2015-16	PE/ROW – 2016	CON – 2022	CON – 2022		
SR 82 from Alabama Rd S to Homestead Rd S	Unfunded High Priority	PE/ROW – 2015-18	PE/ROW – 2016-20	CON – 2022	CON – 2022		
SR 82 from Homestead Rd S to Hendry Co. (A2-4)		PE – 2015	ROW – 2016	ROW – 2021			
I 75 at SR 884/Colonial Blvd (M-INCH)	Unfunded High Priority	PE – 2015	PE – 2016				Unfunded Mid-Term
I 75 at Corkscrew Interchange (M-INCH)	Unfunded Medium Priority	PE – 2015	PE – 2016				
I 75 from S of Corkscrew Rd to S of Daniels Pkwy (A2-6)		PE – 2015	ROW – 2016				
I 75 at Daniels Parkway Interchange (M-INCH)	Unfunded High Priority	PE – 2015					
SR 82 from Homestead Road S to Hendry Co. Line (A4-6)	Unfunded High Priority					Cost Feasible Plan 2024-40	
Edison Ave from Palm Ave to Fowler St	Unfunded Very High Priority						
I 75 at Luckett Rd (M-INCH)	Unfunded High Priority						Unfunded Mid-Term
Colonial Blvd at Summerlin Rd	Unfunded High Priority						
U.S. 41 at Alico Rd	Unfunded High Priority						
I 75 at SR 78 (M-INCH)	Unfunded Medium Priority						Unfunded Mid-Term
I 75 at Bonita Beach Rd (M-INCH)	Unfunded Medium Priority						Unfunded Mid-Term
I 75 at SR 82 (M-INCH)	Unfunded Medium Priority						Unfunded Mid-Term
Metro Pkwy from Daniels Pkwy to S of Winkler Ave	Unfunded Medium Priority						
SR 82 from Lee Blvd in Lee Co. to SR 29 in Collier Co.	Unfunded Medium Priority						
I 75 from CR 846/ Immokalee Rd to Luckett Rd (A2-SUL)							Unfunded Mid-Term

Table 9-4: Road Projects Identified in Prior Planning Efforts (cont.)

Project	Statewide Freight Trade & Mobility Study	SIS 5 Year Adopted Plan (July 2014)	SIS 5 Year Adopted Plan (July 2015)	SIS 2nd 5 Year Adopted Plan (July 2014)	SIS 2nd 5 Year Adopted Plan (July 2015)	2040 SIS Cost Feasible (Sept 2014)	2040 Multimodal Unfunded Needs (Oct 2011)
SR 80 from SR 31/Arcadia Rd to Buckingham Rd (A2-6)							Unfunded Mid-Term
SR 82/Dr. MLK Jr. Blvd from Michigan Ave to CR 865/ Ortiz Ave (A2-6)							Unfunded Long-Term
SR 82/Dr. MLK Jr. Blvd from Michigan Ave to CR 865/ Ortiz Ave (A2-6)							Unfunded Long-Term
SR 82/Immokalee Rd from Bell Blvd to Lee/Hendry Co Line (A2-4)							Unfunded Long-Term
SR 82/Immokalee Road from Homestead Blvd to Lee/Hendry Co Line (A2-6)							Unfunded Long-Term
I 75 at New Del Prado Bvd (M-INCH)							Unfunded Long-Term
I 75 at SR 80 (M-INCH)							Unfunded Long-Term
I 75 from CR 886/ Goldengate Pkwy to Lockett Rd (A4-SUL)							Unfunded Long-Term

Table 9-5: Priority Road Segments with 1,000 AADTT with 5 Percent Truck Traffic

Name	From	To	SIS	RGMC	% Trucks	Truck AADT
I 75	Bridge No-120090	Bridge No-120093	X	X	14.2%	10,011
I 75	Bridge No-120093	Bridge No-120112	X	X	14.1%	7,755
I 75	Bridge No-120122	Bridge No-120090	X	X	13.3%	9,842
I 75	Bridge No-120112	Charlotte Co Line	X	X	15.6%	6,162
I 75	Bridge No-120120	Bridge No-120122	X	X	11.0%	8,305
I 75	Bridge No-120107	Bridge No-120120	X	X	11.9%	9,163
Terminal Access Rd	Ben Hill Griffin Pkwy	SW Fla Int Airport		X	27.0%	5,940
I 75	Ramp 008	N/A	X	X	9.4%	7,943
I 75	Collier Co Line	Ramp 008	X	X	9.9%	8,663
Palm Beach Blvd	CR 884/Joel Blvd	Hendry Co Line	X	X	13.6%	1,782
Palm Beach Blvd	Buckingham Rd/CR 80A	Hickey Creek Rd	X	X	12.0%	2,184
I 75	N/A	Bridge No-120107	X	X	8.4%	6,486
Luckett Rd	Ortiz Ave	SR 93/I 75 Ctr-Line		X	16.7%	1,002
Bayshore Road	Old Bayshore Rd	SR 31		X	14.0%	1,022
SR 82	Mine Ent	Hendry Co Line	X	X	11.2%	1,030
Hanson St	Ford St	Veronica S Shoemaker Blvd		X	13.4%	1,072
Bayshore Road	N/A	Old Bayshore Rd		X	12.0%	1,200
SR 31	N River Rd/CR 78	Charlotte Co Line		X	27.0%	1,256
SR 31	SR-80	Bayshore Rd/SR 78		X	14.9%	1,296
Bayshore Road	CR 767/H Stringfellow	CR 884/Veterans Pkwy		X	12.8%	1,389
SR 31	Bayshore Rd/SR 78	N River Rd/CR 78		X	20.5%	1,476
Burnt Store Rd/CR 765	NW 14 St	Vincentave/Charlott		X	24.0%	1,543
Palm Beach Blvd	Hickey Creek Rd	CR 884/Joel Blvd	X	X	10.9%	1,700
Palm Beach Blvd	SR 31/Arcadia Rd	Buckingham Rd/CR 80A	X	X	9.2%	2,714
Alico Road	SR 45/U.S.-41/S Tamiami	Indy Dr		X	8.3%	1,635
SR 82	Buckingham Rd	CR 884/Colonial Blvd	X	X	7.2%	1,836
SR 82	Daniels Pkwy	Unsigned	X	X	8.4%	2,119
SR 82	12075025 On	Buckingham Rd	X	X	7.8%	2,282
SR 82	Ortiz Ave	12075025 On		X	9.8%	3,185
SR 82	Michigan Link Ave	Ortiz Ave		X	9.0%	3,465
SR 82	Veronica S Shoemaker Blvd	Michigan Link Ave		X	9.5%	3,468
SR 82	Griffin Dr	Daniels Pkwy	X	X	6.7%	1,012
SR 82	Gateway Blvd	Griffin Dr	X	X	5.9%	1,038
Ford St	Fowler St	Metro Pkwy/SR-739		X	8.5%	1,190
Bayshore Road	SR 45/N Cleveland/U.S. 41	SR 739/U.S. 41B/N Tamiami		X	5.8%	1,508
Bayshore Road	Del Prado Blvd	Hancock Creek Blvd		X	5.9%	1,534
S Tamiami Trl	Sun Seekers RV Pk En	Charlotte Co Line		X	9.0%	1,593
Palm Beach Blvd	N/A	SR 31/Arcadia Rd	X	X	5.9%	1,639
Ortiz Ave	Metro Parkway/SR 739	Daniels Pkwy		X	6.1%	1,830
Bayshore Road	Santa Barbara Blvd	Del Prado Blvd		X	5.0%	1,925
Palm Beach Blvd	SR 80/Seaboard St	Veronica S Shoemaker Blvd		X	5.6%	1,019

Table 9-5: Priority Road Segments with 1,000 AADTT with 5 Percent Truck Traffic (cont.)

Name	From	To	SIS	RGMC	% Trucks	Truck AADT
Fowler St	SR 82/U.S. 41B/MLK Jr	SR 80/Second St		X	5.7%	1,026
Corkscrew Rd/CR 850	SR 45/U.S. 41	Three Oaks Pkwy		X	5.4%	1,075
Park Ave	SR 82/ M L King Jr	Thompson St		X	6.7%	1,139
Fowler St	SR 80/Second St	SR 80/First St		X	5.5%	1,155
Six Mile Cypress Pkwy	Estero Blvd	CR 869 N/Summerlin Rd		X	5.2%	1,182
Palm Beach Blvd	Veronica S Shoemaker Blvd	CR 80B/Ortiz Ave		X	5.5%	1,183
Bayshore Road	Coon Rd	N/A		X	5.9%	1,190
Bonita Beach Rd	Barefoot Bch Blvd	Arroyal Rd		X	5.2%	1,269
Palm Beach Blvd	CR 80B/Ortiz Ave	N/A		X	6.2%	1,364
U.S. 41B/N Tamiami Tr	U.S. 41B/SR 739	Cardinal Dr		X	5.8%	1,499
Bonita Beach Rd	N/A	Rp 12075003		X	5.9%	1,623
SR 82	Evans St	Palm Ave		X	6.5%	1,625
Six Mile Cypress Pkwy	S Tamiami Trail/U.S. 41	Metro Pkwy		X	5.2%	1,716
S Tamiami Trl	U.S. 41/U.S. 41B Split	Del Prado Blvd		X	6.3%	1,733
Bonita Beach Rd	Arroyal Rd	N/A		X	5.0%	1,775
Bayshore Road	New Post Rd	Coon Rd		X	6.7%	1,843
Bayshore Road	SR 739/U.S. 41B/N Tamiami	New Post Rd		X	6.0%	1,950
S Tamiami Trl	Del Prado Blvd	Sun Seekers RV Pk En		X	6.4%	2,080
SR 82	Palm Ave	Veronica S Shoemaker Blvd		X	6.7%	2,111
I 75 NB Off Ramp	I 75/SR 93 NB	SR 78 EB			13.1%	1,153
I 75 SB On Ramp	SR 78 EB	I 75/SR 93 SB			13.1%	1,179
I 75 NB Off Ramp	I 75/SR 93 NB	SR 80 EB			13.1%	1,376
I 75 SB On Ramp	SR 80 EB	I 75/SR 93 SB			13.1%	1,441
Buckingham Rd	Buckingham Rd	SR 80/Palm Beach Blvd			11.8%	1,076
Michael G Rippe Pkwy	Winkler Ave	N/A			10.8%	1,296
I 75 On Ramp	Ramp 12075020	I 75/SR 93 SB			9.6%	1,104
I 75 Off Ramp	I 75/SR 93 NB	SR 884 EB			9.6%	1,104
Santa Barbara Blvd	SE 38th Ter	Veterans Pkwy			5.2%	1,144
Michael G Rippe Pkwy	Colonial Blvd/SR-884	Winkler Ave			7.8%	1,170
I 75 Off Ramp	I 75/SR 93 NB	Daniels Pkwy			9.6%	1,248
I 75 On Ramp	Daniels Pkwy EB	I 75/SR 93 SB			9.6%	1,296
Michael G Rippe Pkwy	Daniels Pkwy	Crystal Dr			7.2%	1,663
Michael G Rippe Pkwy	Crystal Dr	Idlewild St			7.2%	2,196
Pondella Rd/CR 78A	U.S. 41/N Cleveland Ave	SR 739/U.S. 41B			5.4%	1,026
Michael G Rippe Pkwy	Idlewild St	Colonial Blvd/SR 884			6.7%	1,045
Michael G Rippe Pkwy	Six Mile Cypress	Daniels Pkwy			5.2%	1,092
Three Oaks Pkwy	Collier Co Line	E Terry St			6.2%	1,135
Chiquita Blvd	N/A	N/A			6.4%	1,155
Winkler Ave	Metro Pkwy	Colonial Blvd			5.3%	1,166
Homestead Road N	Leeland Hts Blvd	Lee Blvd			5.2%	1,326
Michael G Rippe Pkwy	U.S. 41/S Tamiami Trl	Six Mile Cypress			6.7%	1,407

Source: FDOT and Cambridge Systematics supplemental analysis

Table 9-6: Regional Freight and Goods Movement Issues and Opportunities

Location	Type	Category	Issue(s)	Description	Opportunity
Countywide	Policy	Freight Planning and Operations	There are no designated truck regional and local truck routes.	There are currently no designated truck routes in Lee County. The Lee County Freight and Goods Mobility Analysis report recommended establishing designated truck corridors.	Develop an integrated regional and local truck route system that proactively encourages truck operations on corridors that provide connection to regional freight activity centers and local commercial centers.
Countywide	Policy	Freight Planning and Operations	There are no established "Truck Friendly" design standards that can be applied to routes heavily used by trucks.	Prepare truck specific design standards and usage procedures to support safer and more efficient truck operations.	Adopt a countywide design standard for truck routes. See Lee County Freight and Goods Mobility Analysis Section 2.1.
Southwest Florida International Airport	Freight Capacity	Air Infrastructure		RSW handles in excess of 33 million tons of air cargo in 2008. This is expected to increase substantially as the economy recovers and more high value goods are shipped by air.	Expand RSW cargo facility in anticipation of future increase in air cargo.
East of I 75	Freight Capacity	Rail Infrastructure	I-75 impedes connectivity to the airport. A grade separation would be costly. Another issue is the acquisition of ROW for the rail line.	The Seminole Gulf Rail Line runs south through Lee County parallel to US 41 & west of I-75. The airport area proposed for rail expansion is east of I-75. The shortest and least costly route for ROW acquisition is parallel to & north of Alico Rd.	Explore extending the Seminole Gulf rail line south to the Airport freight activity center.
East of I 75	Freight Capacity	Rail Infrastructure	There is currently no rail connection between the Gulf & Seminole RR and the South Central Florida Express RR which serves the interior counties and connects to CSX and the FEC on the east coast.	Connecting the two railroads allows for an interconnected rail system that serves both coasts that would provide the ability to ship more cargo by rail between the two coasts and from the interior counties.	Explore acquisition of ROW to connect Seminole Gulf RR and South Central Florida Express RR in Moorehaven. A FY2017 MPO study identified in the SIS First 5 Year Plan will explore the possibility of connecting these two rail systems and RSW.
Seminole Gulf Railroad	Freight Capacity	Intermodal	There are not sufficient transfers to make this proposition cost effective for the railroad - public/private financing is needed. Other concerns include transferring the intermodal train from CSX to the Gulf Seminole line, the physical condition of the tracks, zoning, permitting, and environmental considerations.	Rail-truck intermodal transfer would help to reduce the number of trucks entering or exiting the county on I-75 and US 41. The county has previously identified three potential locations for a rail intermodal yard, and these locations should be studied further.	Rail freight intermodal access. Rail can move freight while taking trucks off highways. For example, increased rail access allows movement of aggregates, rocks, stones from S Georgia to SW Florida where they are needed for asphalt and construction.
Southwest Florida International Airport	Freight Capacity	Intermodal	Aviation fuel is transported to the airport by truck from Port Tampa Bay as is all gasoline for local service stations.	Establishing the Florida Fuel Connection facility in Hendry Co. yields an opportunity to change how petroleum products are delivered to SW Florida International Airport and the county. The option to ship aviation fuel by rail from Florida Fuel Connection's Petroleum Products Logistics & Distribution in Hendry Co. to RSW is a feasible solution.	The Lee Co. Port Authority Rail Study and the SW Florida Corridor Study (scheduled for FY2017) will examine the feasibility of a rail connection with this facility to ship aviation fuel. The study will also explore a rail connection to the Seminole Gulf Rail Line for shipping aviation fuel from Port Tampa Bay.



SOUTHWEST FLORIDA FREIGHT SUMMIT

On October 8, 2015, Lee County MPO was one of five hosts and sponsors of the Southwest Florida Freight Summit that featured presentations from local and state freight interests and agencies. Some of the topics covered and concerns raised included:

- Traffic calming (such as adding speed bumps and narrowing roadways) often makes it difficult for trucks to operate. How do we account for trucks, in particular, trucks which must make local deliveries? Freight is only just now becoming important and being brought to the discussion table. Freight roadway design is important but there needs to be a balance to accommodate for all modes using a corridor. Land use should also be a consideration when making these decisions. Some feel that designing for local deliveries will be a wasted effort pending increased use of drones or hovercraft for deliveries.
- Complete Streets concepts look for ways to be compatible for bicycle and pedestrian movements, but they must also compete with freight movements. Designs for roadways to be more pedestrian friendly, such as smaller turning radii, are a direct conflict with freight designs. There needs to be better communication and collaboration between the bicycle, pedestrian, and freight groups to find a context sensitive solution to some of these issues.
- Alternative fuels, while offering a solution to reduce emissions from freight activity, can be difficult to implement. Compressed Natural Gas is one option for companies however it does come with limitations. The additional equipment needed for this lengthens the wheel base of a truck and also requires additional inspections. The lack of a large fuel network makes operations difficult and largely only works today for day trips.
- Rail is a critical issue for the Southwest Florida region in regards to the preservation of the existing corridor. This also raises the question of whether action should be taken to just preserve the rail right of way or also the industrial land along the existing line. MPOs in some communities, like the North Florida TPO in Jacksonville, have developed programs to help protect and preserve existing industrial lands. The Southwest Florida region has also identified a need through various planning processes for an intermodal facility in the region to support rail use however no specific location has been proposed. While attendees were in agreement that there is a need for intermodal nodes, there is a lack of education for people outside of the freight community about the benefits of a flexible freight system. Educating the public as well as decision makers about why freight facilities, such as the existing rail infrastructure, are important can help to better implement improvement projects and create a cohesive community.

SAFETY AND SECURITY

Transportation safety and security are important elements for Lee County's transportation system. Although closely related to transportation safety, planning for transportation security focuses resources on preventing, managing, and responding to intentional man-made threats and natural disasters, whereas planning for transportation safety focuses resources on reducing crashes, injuries, and fatalities for all users.

TRANSPORTATION SAFETY

The USDOT defines transportation safety as the freedom from harm caused by unintentional acts or circumstances for all multimodal users. 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.

FDOT develops 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 worked with FHWA and stakeholders to develop the state's first SHSP in 2006, updated in 2012, and currently updating for 2016. 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. The emphasis areas include:

- **Aggressive Driving:** speeding or improper lane changed, following too closely, failure to yield right-of-way, improper passing, and failure to obey traffic control devices
- **Intersection Crashes:** crashes that occur at or within 250 feet of a signalized and unsignalized intersection
- **Vulnerable Road Users:** pedestrians, bicyclists, and motorcyclists
- **Lane Departure Crashes:** head-on collisions related lane departures, running off the road, and crossing the center median
- **Impaired Driving:** crashes resulting from alcohol and/or drug-impairment
- **At-Risk Drivers:** aging road users who are 65 or older and teens who are 15 to 19
- **Distracted Driving:** crashes resulting from taking eyes and/or mind off the road, and taking hands off the wheel
- **Traffic Data:** traffic records of crashes, which includes a range of data such as fatalities, injuries, total crashes by county, emphasis area, lighting conditions, etc.

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 HSP uses the goals and objectives from the SHSP to distribute National Highway Traffic Safety Administration funds.

Chapter 8: Congestion Management Process provides more detail on Lee County's pedestrian, bicyclist, and vehicle crashes.

TRANSPORTATION SECURITY

USDOT defines transportation security as the freedom from intentional acts and natural disasters that harm and threaten all multimodal users. Federal and Florida state laws require MPOs to consider projects and strategies that increase the security of the transportation system. Transportation security for motorized and non-motorized users is a planning factor in MAP-21 and is a goal and long range objective of the 2060 Florida Transportation Plan. Florida Statute [339.1755(7)(a)] requires that the 2040 LRTP be consistent with the goals and objectives of the 2060 Florida Transportation Plan.

The County coordinates its responses to emergencies with local, regional, state, and federal agencies.



NATURAL DISASTERS

Lee County's transportation system is vulnerable to natural disasters such as hurricanes, tropical storms, flooding, fires, and tornadoes. In 2004, Hurricane Charley made landfall in Charlotte County to the north as a Category 4 hurricane, the strongest to hit the US since Hurricane Andrew in 1992. Sanibel, Captiva, and San Carlos Islands in Lee County sustained much of the storm's brunt while the county's transportation system was littered with debris and signs after the storm. One year later, Hurricane Wilma made landfall as Category 3 hurricane in Collier County to the south and caused flooding, downed trees, and destroyed homes in southwest Florida.

Since Charley's and Wilma's landfalls, Lee County has stepped up its emergency planning. The County improved evacuation plans and programs for the elder and disabled. Emergency planning now includes Interstate Contraflow, which is when all Interstate lanes are converted to one way flow to expedite emergency evacuations. Interchange numbers visible from the air and by drivers are painted on the shoulders to help identify interchanges if signs are damaged, and Lee County upgraded traffic signals and signage. The County also uses social media, such as twitter, to communicate with the public.

HOMELAND SECURITY

The attacks on September 11, 2001, changed Federal government's focus on security, evidence by executive and legislative actions. President George W. Bush established the Office of Homeland Security (OHS) within the White House through Executive Order 13228 in October 2001. Congress created the Transportation Security Administration (TSA) in November 2001, now under Department of Homeland Security (DHS), a stand-alone cabinet created with the passage of the Homeland Security Act in November 2002. While the DHS was created in response to man-made threats, transportation systems' vulnerability to natural disasters and emergency evacuations are an important component for DHS, as it absorbed the Federal Emergency Management Agency in March 2003.

In 2011, Lee MPO staff participated in Operation Mace, a multi-agency communications exercise with 25 agencies representing 10 counties. The event tested communications between agencies across several counties during a mock Interstate incident.

CONTINUITY OF OPERATIONS PLAN

All levels of government are required to comply with Executive Order 12656 made by President Ronald Reagan in 1988. The purpose of the Order is to assign national security emergency preparedness responsibilities to Federal departments and agencies. Part of emergency preparedness is a Continuity of Operations Plan (COOP) which ensures that local government will provide necessary services to the county's employees and citizens during emergencies. Lee MPO adopted its first COOP in 2006; the most recent update was in 2012. DHS also provides guidance for Continuity of Operations Plan.

LOCAL MITIGATION STRATEGY

Federal regulations (Title 44 Code of Federal Regulations (CFR) Part 201.6, the Disaster Mitigation Act of 2000, and the Stafford Act of 1988) 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 on developing or updating the mitigation plan in its Local Mitigation Planning Handbook.

Lee County adopted a floodplain management plan with the Joint Unified Local Mitigation Strategy (LMS) in February 2007, updated the LMS in December 2011, and authored a progress report in 2014. The County collaborated with local stakeholders to identify mitigation projects and project funding, reduce local government's burden of costs in post-disaster funding, and leverage funding opportunities to repair or replace infrastructure. The Cities of Bonita Springs, Fort Myers, Sanibel, and Town of Fort Myers Beach fall under the LMS.

The County's Department of Public Safety manages the E9-1-1 system, as well as emergency medical services, emergency management, government communications, and logistics. Lee County also operates the Emergency Operations Center (EOC) that serves as the county's central command facility for coordinating emergency response and recovery. The EOC operates at three stages:

- **Monitoring, Level Three:** EOC functions only as day-to-day operations
- **Partial Activation, Level Two:** EOC functions with additional staff and extended hours
- **Full Activation, Level One:** EOC functions round-the-clock, generally when the Board of County Commissioners declares a State of Local Emergency

Figure 9-3: Lee County Evacuation Zones, Routes, and Emergency Public Shelters (2014-2015)

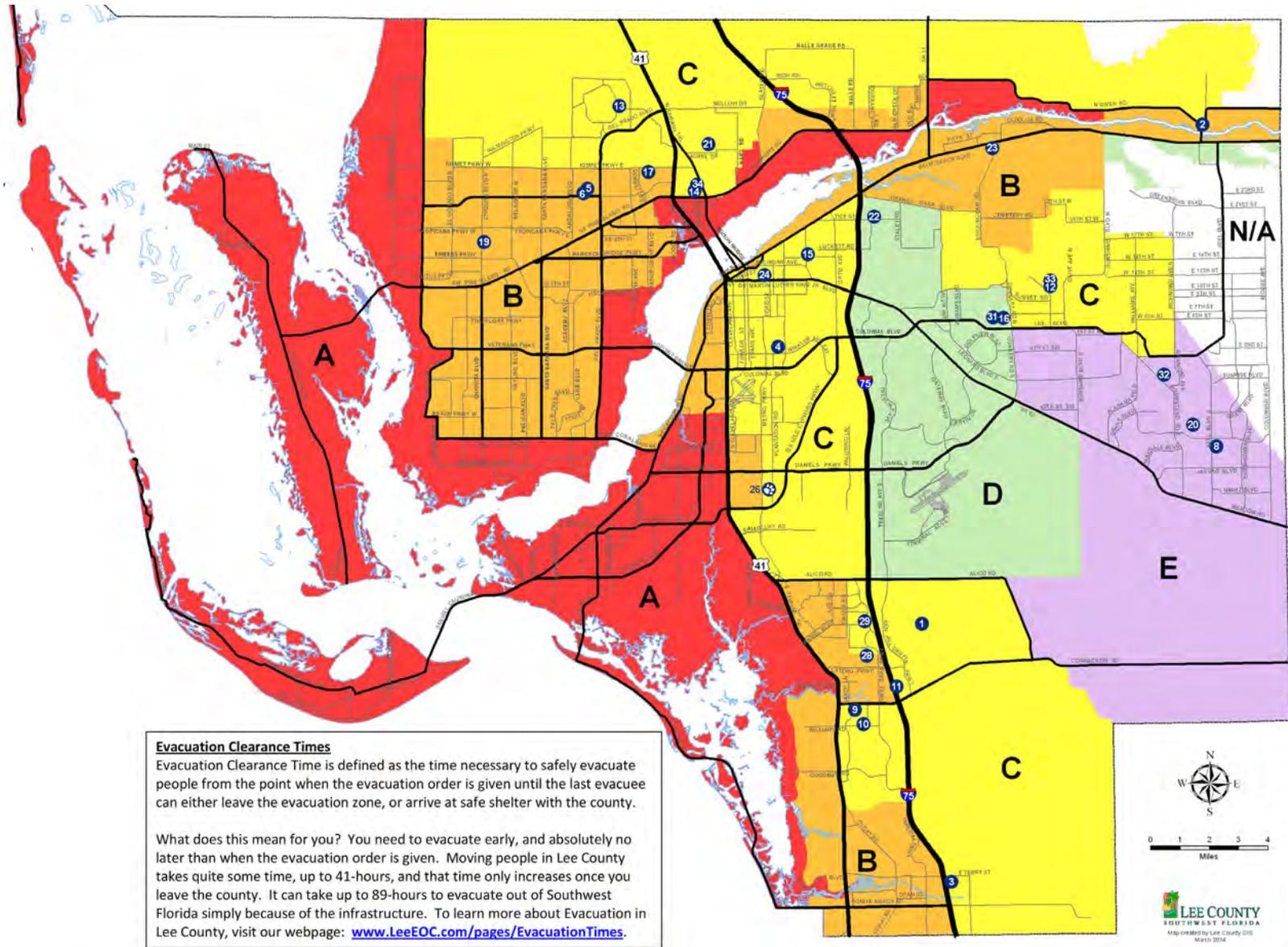


Figure 9-3 displays the County’s evacuation zones and emergency public shelters. Figure 9-4 on the following page displays the County’s flood insurance rate map.

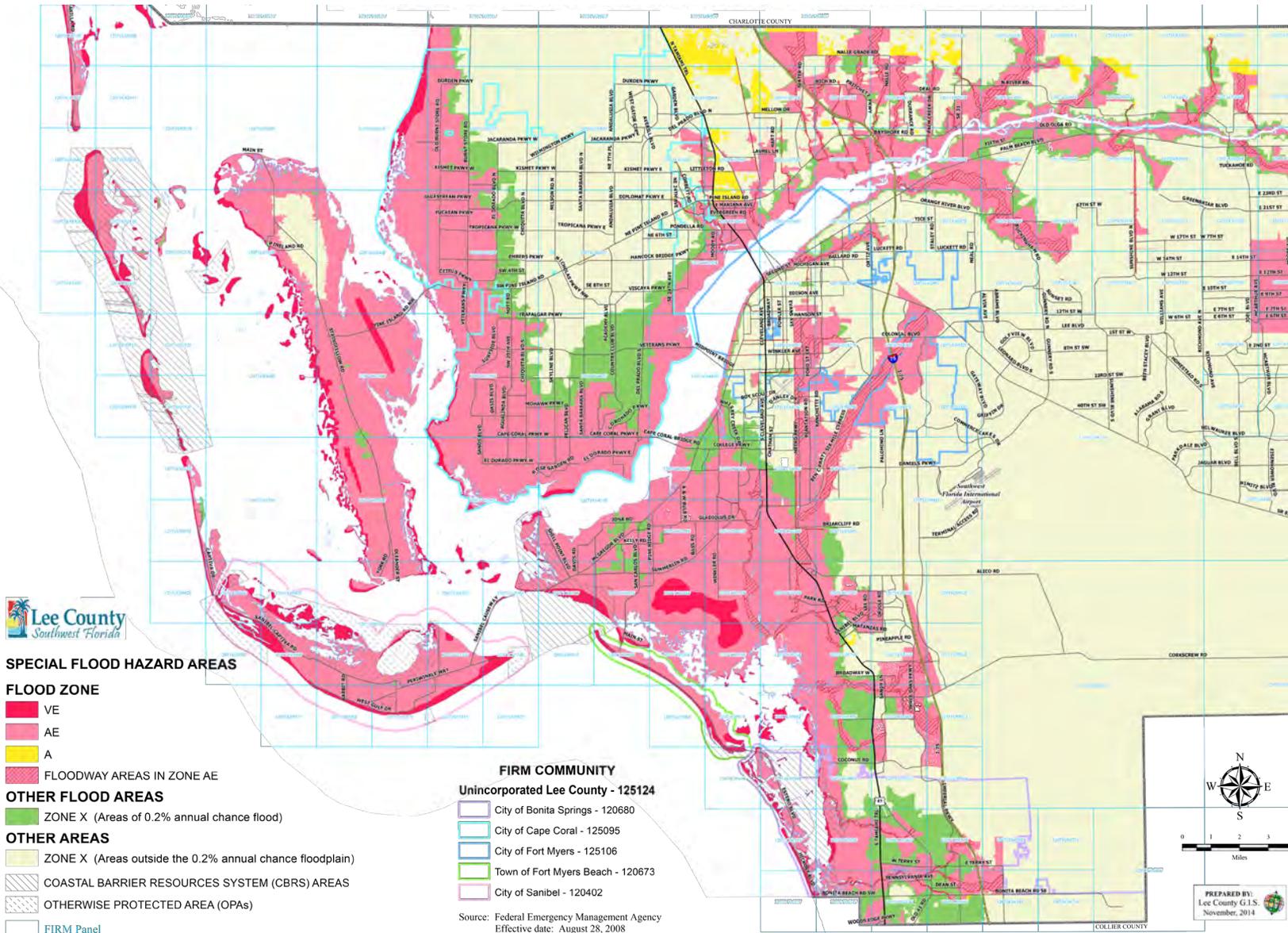
ENVIRONMENTAL MITIGATION

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). Activities are directed through Section 373 Florida Statutes (F.S.), which

Figure 9-4: Lee County Flood Insurance Rate Map



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.

The Lee MPO adopted Lee County’s Master Mitigation Plan (2007) which is also included in local comprehensive plans. Its goals are to:

1. Provide a master strategy by which critical environmental features continue to be preserved,
2. Provide “safe harbor” approaches for mitigation projects that are required for the infrastructure needed to accommodate growth, which in turn will enable the budgeting process to be reliable, and
3. Restore degraded resources that are important for the health, safety, and welfare of the public.

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 impact over time by preservation and maintenance operations during the life of the action; and
- 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 a variety of mitigation options, which include mitigation banks and mitigation through the Water Management District(s) and the DEP. The MPO Board previously adopted the County’s Master Mitigation Plan as a guide to follow in planning for mitigation strategies and potential mitigation sites to carry those activities out. The Plan identified the natural resources, conservation lands, potential mitigation needs, the mitigation land and banks, mitigation costs and the application of the process. **Table 9-7** includes the potential mitigation strategies and **Figure 9-5** (Source: Southwest Florida Regional Planning Council) includes the potential mitigation sites. Potential environmental mitigation opportunities that could be considered when addressing environmental impacts from future projects proposed by MPOs may include, but are

Resource/Impacts	Potential Mitigation Strategy
Wetlands and Water Resources	Restore degraded wetlands
Forested and Other Natural Areas	Use selective cutting and clearing
	Replace or restore forested areas
	Preserve existing vegetation
Habitats	Construct underpasses, such as culverts
	Design other devices to minimize animal habitat fragmentation
Streams	Stream restoration
	Vegetative buffer zones
	Strict erosion and sedimentation control measures
Endangered or Threatened Species	Preservation
	Enhance or restore degraded habitat
	Create new habitats
	Establish buffer areas around existing habitats

not limited to those listed in **Table 9-7**.

Other regional mitigation activities that the MPO is currently involved with includes the ongoing Panther Recovery Implementation Team (RIT) Transportation Sub-Team. The Sub-Team is identifying opportunities to assure a safe, viable habitat network exists for panthers and address the need to avoid and minimize harmful impacts of planned road improvements. The focus of the Sub-Team is the identification of current sites and proposed projects that pose a danger to panthers, identification of transportation related planning and policy proposals that may have an impact on panthers and panther habitat, and to provide the Panther RIT with constructive critiques and recommendations for solutions. The Sub-Team is considering a broad range of options, such as engineered alternatives (like wildlife crossings), avoidance, mitigation (such as land acquisition; restoration), education (which may include outreach to increase public awareness; signage etc.), enforcement and policy recommendations (that may include comments on regional transportation plans). The results of the Sub-Team recommendations will be included in future updates/amendments of the LRTP.

Figure 9-5: Lee County Mitigation Lands



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.

In addition to the process outlined in the Florida Statutes and implemented by the MPO and its partner agencies, the Efficient Transportation Decision Making (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.

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 in the case of a community or group, whose median household income) is at or below the US Department of Health and Human Services poverty guidelines. The guidelines (**Table 9-8**) are defined by household size. According to the 2012 ACS and 2010 Census Block data the average household size in Lee County was 2.6 persons.

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 2040 Transportation Plan 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:

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

Environmental Justice areas include the areas which contain both block groups with the highest minority populations and areas with higher densities of households below the poverty level. Areas where these two categories overlap are considered areas of Environmental Justice (**Figure 9-6**).

In Lee County, the average household size within the Environmental Justices areas is 3.1 persons, slightly higher than the county’s 2.6 persons average household size.

No Environmental Justice areas were identified in the City of Sanibel or in Fort Myers Beach.

Table 9-9 on the following page shows the statistical breakdown of the areas of Environmental Justice in Lee County and how they compare to the averages for all of Lee County and the individual municipal areas within the county.

The Environmental Justice Technical Memorandum is included as **Appendix I**.

Figure 9-6: Environmental Justice Areas in Lee County

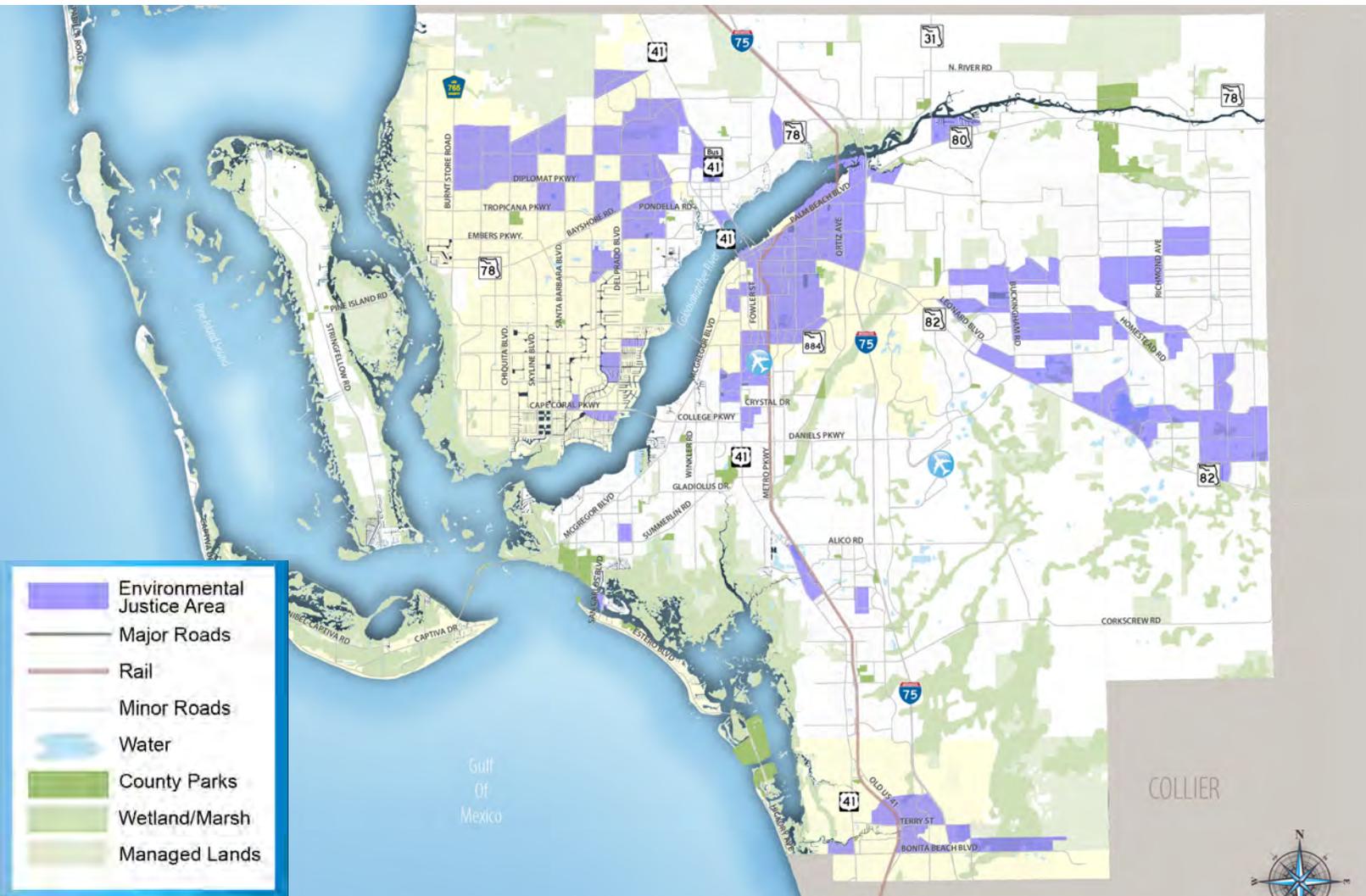
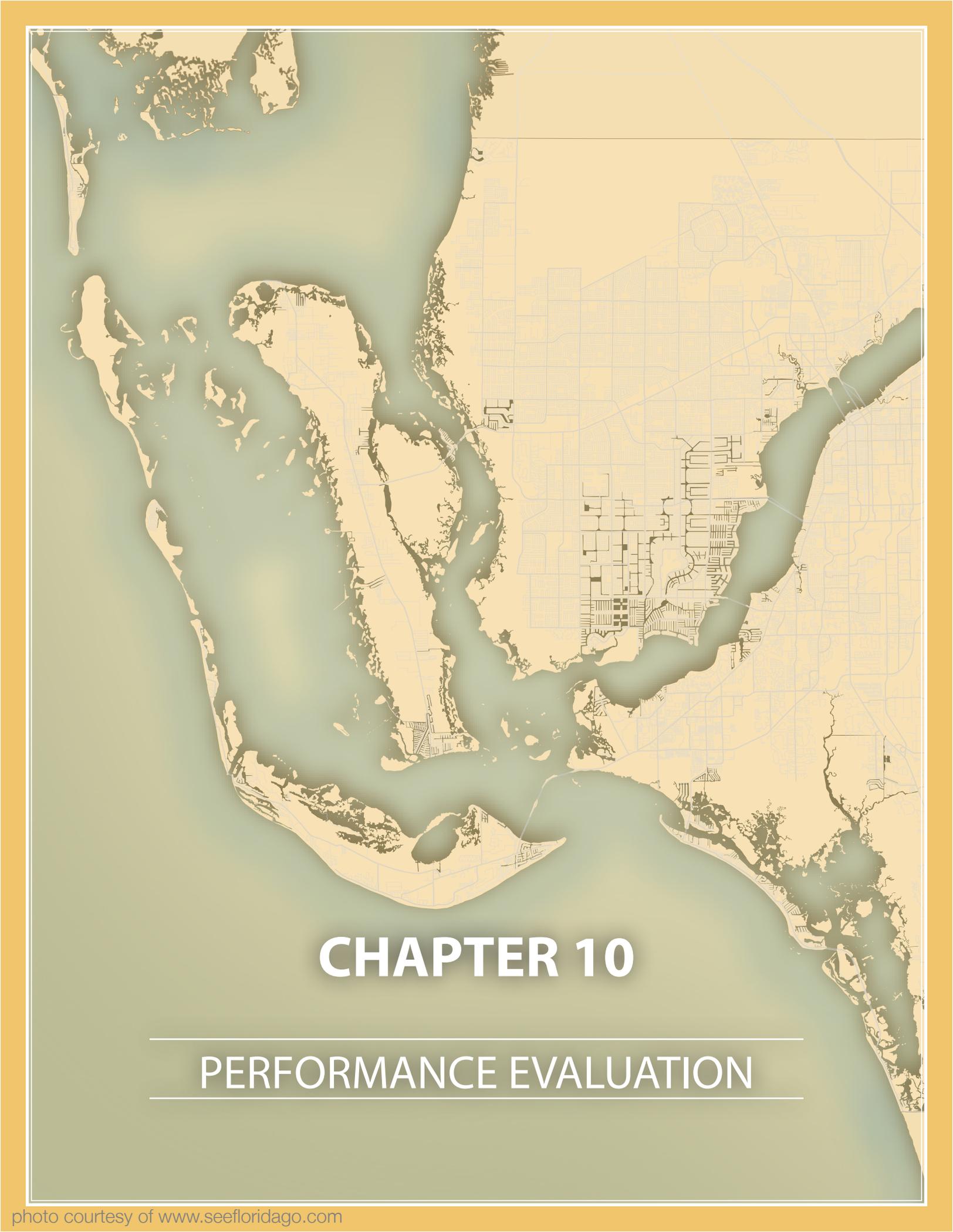


Table 9-9: Lee County and Environmental Justice Area Statistics

Area	Population	Average % Minority Population	Average Household Size	Average % Poverty
Lee County	624,155	28.4%	2.6	14.7%
Municipal Areas				
Bonita Springs	49,884	25.1%	2.5	15.7%
Cape Coral	168,149	23.7%	2.7	12.9%
Fort Myers	82,489	51.4%	2.6	25.6%
Unincorporated Lee Co.	307,266	26.7%	2.6	13.2%
Environmental Justice Areas within Lee County by Municipal Area				
Bonita Springs	12,602	59.4%	3.3	31.8%
Cape Coral	30,620	36.7%	2.8	24.6%
Fort Myers	40,437	76.3%	3.0	37.0%
Unincorporated Lee County	51,047	53.7%	3.3	26.5%



An aerial photograph of a coastal city, likely San Diego, showing a large bay with a grid street pattern and a prominent bridge. The image is overlaid with a semi-transparent green filter.

CHAPTER 10

PERFORMANCE EVALUATION

CHAPTER 10: PERFORMANCE EVALUATION

NETWORK PERFORMANCE

This chapter summarizes the performance of the Lee County MPO 2040 Transportation Plan. 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 the base year to 2040.

Performance measures were developed for each mode of travel, highway, transit, bicycle, and pedestrian in the 2040 Transportation Plan. The selected performance measures and their associated mode are summarized in **Table 10-1**.

Once the performance measures were identified they were calculated for the Base Year, Existing + Committed Network, and the 2040 Cost Feasible Network. Performance was calculated based on the travel demand forecasting results, adopted socioeconomic data, and proposed multimodal improvements. The performance of each LRTP alternative is summarized in **Table 10-2**.

Table 10-1: Performance Measures and Modes

Performance Measure	Mode
Roadway Lane Miles	Highway
Vehicle Miles Traveled	Highway
Vehicle Hours of Travel	Highway
Average Volume to Capacity Ratio	Highway
Percent VMT at a V/C Ratio Greater than 1.0	Highway
Transit Passenger Miles	Transit
Daily Transit Ridership	Transit
People within 1/4 Mile of Transit	Transit
Jobs within 1/4 Mile of Transit	Transit
Transit Dependents within 1/4 Mile of Transit	Transit
Miles of Bicycle and Pedestrian Facilities	Bicycle-Pedestrian

PROJECT PERFORMANCE

The evaluation criteria described in Chapter 3 were applied to proposed projects to estimate their future performance. The estimated project performances (**Table 10-3** on the following page) were intended to help prioritize projects, but were not the only metric considered when developing the Cost Feasible project list and the project phasing within that list as described in Chapters 5 and 6.

Table 10-2: The 2040 Transportation Plan's Performance

Performance Measure	Base Year	Existing + Committed	2040 Cost Feasible
Roadway Lane Miles	3,155	3,313	3,553
Vehicle Miles Traveled	13,949,310	23,979,067	25,214,751
Vehicle Hours of Travel	393,626	793,454	790,615
Average Volume to Capacity Ratio	0.54	0.69	0.63
Percent VMT at a V/C Ratio Greater than 1.0	38.4%	31.6%	18.4%
Transit Passenger Miles	28,713	66,927	130,309
Daily Transit Ridership	7,991	19,009	35,444
People within 1/4 Mile of Transit	415,200	620,396	620,396
Jobs within 1/4 Mile of Transit	237,804	392,289	392,289
Transit Dependents within 1/4 Mile of Transit	24,306	45,293	45,293
Miles of Bicycle and Pedestrian Facilities	922	934	1,107

Table 10-3: Project Performance Results

Road Name	From	To	Improvement	Unweighted Score	Weighted Score
I-75	at SR 884		Intersection	105	8.20
San Carlos Boulevard	Reconstruction/Transit, Pedestrian, and Capacity Improvements		Capacity	85	7.05
SR 78	w/o Santa Barbara Boulevard	e/o Pondella Road	Widening	85	6.90
I-75	at Corkscrew Road		Intersection	96	6.85
Ortiz Avenue	Martin Luther King	Lockett Road	Widening	87	6.73
SR 82	Alabama Road	Homestead Road	Widening	86	6.70
US 41	at Daniels Parkway		Intersection	83	6.70
Veterans Parkway	at Santa Barbara Boulevard		Intersection	87	6.55
SR 82	at Colonial Boulevard		Intersection	79	6.50
Old US 41	Bonita Beach Road	Collier County Line	Widening	90	6.47
Colonial Boulevard	at Summerlin Road		Intersection	86	6.40
SR 78	Business 41	I-75	Widening	82	6.35
SR 82	Shawnee Road	Alabama Road	Widening	84	6.30
Pine Island Road	Del Pine Drive	Hancock Creek Blvd (NE 24th Ave)	Widening	80	6.15
SR 78	Chiquita Boulevard	w/o Santa Barbara Boulevard	Widening	80	6.15
SR 78	24th Avenue	US 41	Widening	80	6.15
Estero Boulevard	Segment 4		Resurfacing	75	6.10
Leeland Heights Boulevard	Lee Boulevard	Bell Boulevard	Widening	72	6.05
Ortiz Avenue	Colonial Boulevard	SR 82 (MLK)	Widening	72	5.98
Corkscrew Road	US 41	e/o Ben Hill Griffin Parkway	Widening	75	5.90
Hanson Street	Evans Avenue	Veronica Shoemaker Boulevard	Widening	77	5.88
SR 80	SR 31	Buckingham Road	Widening	73	5.87
Estero Boulevard	Segment 5		Resurfacing	70	5.85
Estero Boulevard	Segment 6		Resurfacing	70	5.85
Lee Boulevard	Leeland Heights Boulevard	SR 82	Widening	70	5.85
Daniels Parkway	Chamberlin Parkway	Gateway Boulevard	Widening	74	5.80
Bonita Beach Road	I-75	Bonita Grande Drive	Widening	76	5.75
Homestead Road	Milwaukee Boulevard	Sunrise Drive	Widening	70	5.70
Corkscrew Road	Ben Hill Griffin Parkway	Alico Road	Widening	68	5.48
Ortiz Avenue	Lockett Road	SR 80	Widening	73	5.48
Terry Street	Bonita Grande Drive	West Imperial Parkway	Widening	58	5.45
SR 31	SR 80	Charlotte County Line	Widening	77	5.42
Leonard Boulevard	Lee Boulevard	Gunnery Road	Widening	59	5.38
SR 82	Homestead Road	Hendry County Line	Widening	77	5.35
Three Oaks Extension	North of Alico Road	Daniels Parkway	New Roadway	68	5.30
23rd Street SW	Gunnery Road	Beth Stacey Boulevard	Wideing	60	5.30
Beth Stacey Boulevard	23rd Street SW	Homestead Road	Widening	60	5.30

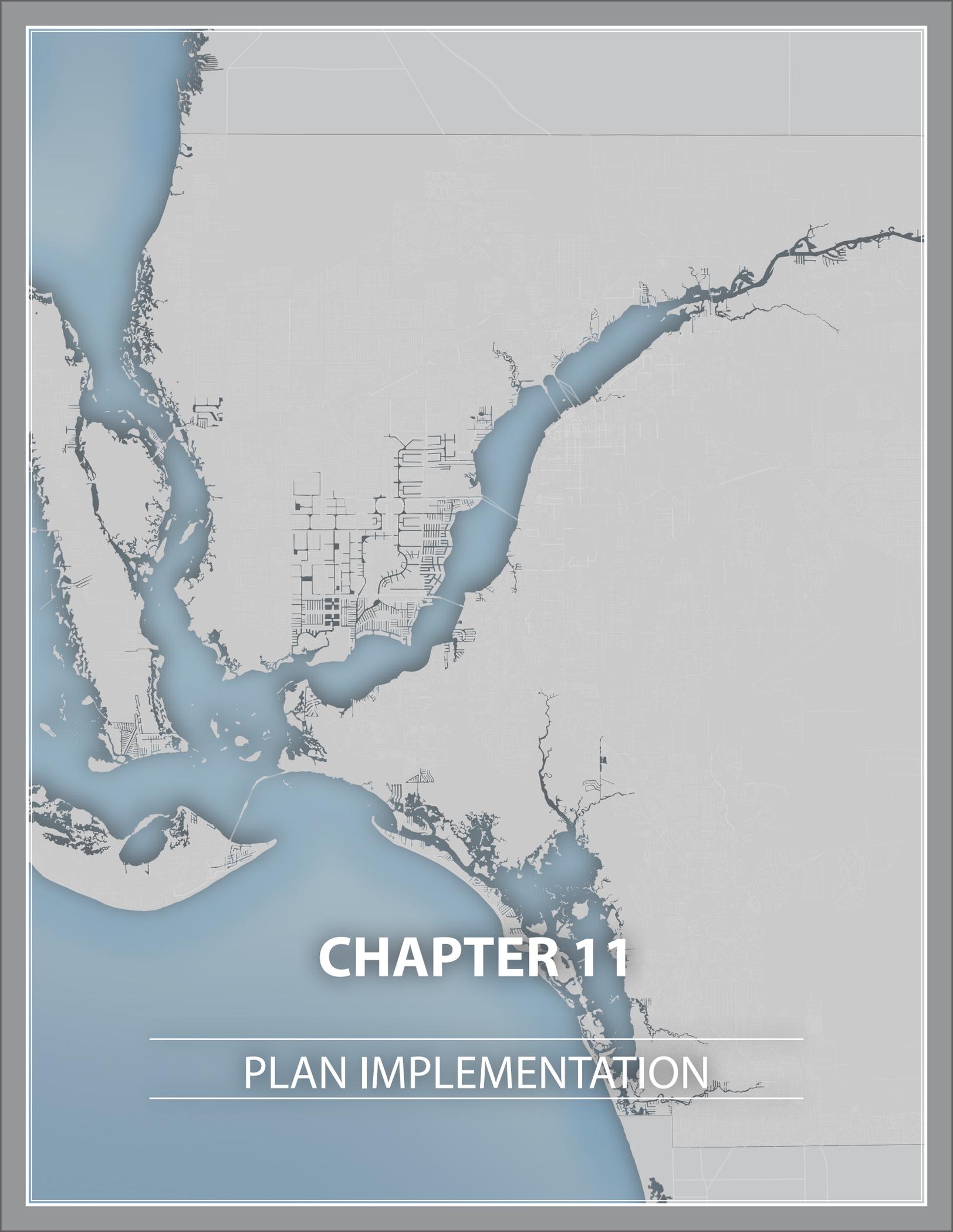
Table 10-3: Project Performance Results (cont.)

Road Name	From	To	Improvement	Unweighted Score	Weighted Score
Chiquita Boulevard	Pine Island Road	Cape Coral Parkway	Widening	61	5.23
Alabama Street	SR 82	Homestead Road	Widening	58	5.10
Livingston/Imperial Parkway	Collier County Line	Bonita Beach Road	Widening	58	5.10
Orange River Road	Buckingham Road	SR 80	Widening	58	5.10
Sunshine Boulevard	SR 82	Lee Boulevard	Widening	60	5.30
Buckingham Road	Orange River Boulevard	SR 80	Widening	55	5.05
Joel Boulevard	17th Street	Palm Beach Boulevard	Widening	55	5.05
Bell Boulevard	SR 82	Leeland Heights Boulevard	Widening	55	5.05
Winkler Road	Gladiolus Drive	Cypress Lake Drive	Widening	60	4.98
Crystal Drive	US 41	Metro Parkway	Resurfacing	63	4.93
Edison Avenue	US 41	Fowler Street	Widening	58	4.93
Cape Coral Bridge			Replace Bridge	60	4.85
Fowler Street	Metro/Fowler Street	SR 82	Resurfacing	64	4.83
Veronica Shoemaker	Michigan Avenue	SR 80	Widening	64	4.83
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widening	68	4.80
SR 82	Michigan Avenue	Ortiz Avenue	Widening	68	4.80
Little Pine Island Bridge			Replace Bridge	55	4.77
Alico Road	Ben Hill Griffin Parkway	Airport Haul Road	Widening	63	4.73
2nd Street	Fowler Street	Palm Beach Boulevard	Widening	56	4.73
Andalusia Boulevard	Pine Island Road	Tropicana Parkway	Widening	58	4.68
Andalusia Boulevard	Jacaranda Parkway	Kismet Parkway	New Roadway	58	4.68
Kismet Parkway	NW 18th Avenue	Chiquita Boulevard	Widening	58	4.68
NE 24th Avenue	Pondella Road	Garden Boulevard	Widening	58	4.68
I-75	at Bonita Beach Road		Intersection	74	4.65
Little Carlos Pass Bridge			Replace Bridge	53	4.57
1st Street	Fowler St	Palm Beach Blvd	Widening	54	4.53
SR 78	US 41	Business 41	Widening	56	4.50
Bonita Grande Drive	Terry Street	Bonita Beach Road	Widening	56	4.48
Littleton Road	US 41/N. Tamiami Trail	SR 78	New Roadway	56	4.48
North Airport Rd Extension	Metro Parkway	Plantation Road	New Roadway	61	4.48
I-75	Collier County Line	s/o Caloosahatchee Bridge	New Roadway	67	4.45
I-75	at Daniels Parkway		Intersection	72	4.45
Big Carlos Bridge			Replace Bridge	54	4.42
Tropicana Parkway	Chiquita Boulevard	Nelson Road	Widening	51	4.40
Nelson Road North	Embers Parkway	Tropicana Parkway	Widening	55	4.38
Luckett Road Extension	Sunshine Boulevard	Hendry County Line	New Roadway	52	4.33
Del Prado Road Extension	US 41	I-75	New Roadway	56	4.03
Del Prado Road Extension	e/o US 41	e/o Prairie Pines Preserve	New Roadway	53	3.99

Table 10-3: Project Performance Results (cont.)

Road Name	From	To	Improvement	Unweighted Score	Weighted Score
Lockett Road	I-75	12th Street	Widening	51	3.98
Big Hickory Pass Bridge			Replace Bridge	44	3.92
New Pass Bridge			Replace Bridge	44	3.92
Sandy Lane Extension	Strike Lane	Pelican Colony	New Roadway	46	3.90
New East West Road	Ben Hill Griffin Parkway	Airport Haul Road	New Roadway	50	3.88
Lockett Road Extension	Buckingham Rd	Gunnery Road	New Roadway	50	3.88
Lockett Road Extension	Gunnery Road	Sunshine Boulevard	New Roadway	50	3.88
Homestead Road	SR 82	Milwaukee Boulevard	Widening	40	3.80
Alico Road	Airport Haul Road	Alico Connector	Widening	51	3.78
Kismet Parkway	Burnt Store Road	El Dorado Parkway	Widening	48	3.68
NE 24th Avenue	Garden Boulevard	Del Prado Boulevard	New Roadway	48	3.68
Surfside Boulevard	Trafalgar Parkway	Pine Island Road	New Roadway	41	3.65
Del Prado Extension	I-75	SR 31	New Roadway	42	3.59
Lockett Road Extension	e/o I-75	Buckingham Road	New Roadway	46	3.48
Alico Connector	Alico	SR 82	New Roadway	51	3.28
Garden Boulevard	North of DeNavarra Parkway	NE 23rd Place	Widening	39	3.20
Hanson Extension	Veronica Shoemaker	Ortiz Avenue	New Roadway	41	2.98
Del Prado Extension	Mellow Drive	I-75	New Roadway	33	2.69
Jacaranda Parkway	Old Burnt Store Road	Burnt Store Road	New Roadway	29	2.45
CR 951 Extension	Corkscrew Road	Alico Road	New Roadway	26	2.40





CHAPTER 11

PLAN IMPLEMENTATION

CHAPTER 11: PLAN IMPLEMENTATION

The 2040 Transportation Plan represents a significant milestone in addressing the transportation needs of Lee County and the region. The Plan also sets the countywide long-term transportation policy and investment framework. However, 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 Lee County; FDOT District One; the Cities of Bonita Springs, Cape Coral, Fort Myers, Sanibel; the Town of Fort Myers Beach; the Village of Estero; Lee Tran; the Lee County Port Authority; and neighboring counties and MPOs, among others.

KEY IMPLEMENTATION ACTIONS

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

COMPREHENSIVE PLAN POLICIES

The Land Use Scenario planning efforts revealed that many people who live in Lee County would like to see its development patterns shift towards a more compact, more walkable, and more transit-friendly community. Land use policies are guided by Comprehensive Plan Policies that can change how Lee County develops and redevelops. The land use policies impact what kinds of transportation are feasible, and they can impact the cost and focus of future Transportation Plans – the next iteration of the plan may include more investment into transit and expanded service. The following Comprehensive Plan Policies should be implemented and/or enforced by the County and its municipalities:

- Transit Oriented Design
- Complete Streets Policy
- A policy to preserve the CSX railroad right-of-way and other transportation corridors for future use
- A policy to maximize the use of existing transportation facilities before capacity is expanded (“fix it first”)
- Set goals to increase mode shares for transit/bike/ped including targets for increasing revenues specifically for those modes
- Update the Constrained Roads map
- Growth Management Boundary Policy

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

CAPITAL IMPROVEMENT PROGRAMMING

Nearly 55 percent of the plan’s revenues come from local resources. The projected local revenues available for capital expenditures through 2040 are estimated at \$2.3 billion, yet local revenue spent on operations and maintenance exceeds \$3.1 billion. It is imperative that local governments continue to play a vital role in planning, programming, and building transportation improvements. The Capital Improvement



Program (CIP) process is vital for this to occur. The opportunity exists for communities to help implement projects by providing funding as a local match, provide land for projects, and implement projects. A large majority of bicycle and pedestrian, safety, and Complete Streets projects are funded by local revenues approved through the local government CIP process. Lee County currently provides a majority of funding for the Lee Tran transit services.

COMPLETE STREETS POLICY & ACCOMMODATING ALL APPROPRIATE MODES OF TRAVEL

A "Complete Street" is designed to accommodate several modes of travel including pedestrians, bicycles, public transportation, and automobiles. By implementing and enforcing Complete Streets policies, Lee 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. Policies that preserve existing rail lines can allow for an expanded transit service in years to come.

NEW FUNDING STRATEGIES

One topic dominated the discussion during the plan's development: the current available funding does not meet the transportation infrastructure needs of the fast-growing County. There was universal agreement that additional transportation revenues are needed to meet transportation needs, sustain quality of life, and grow the economy. Given that no new revenues are projected for transit services, the adopted Plan assumes that the current level of Lee Transit services will remain generally the same between now and the year 2040.

Clearly, this is not the multi-modal balanced transportation system to which the community and the MPO Board aspire.

New revenues are required. The MPO Board asked the MPO Board Executive Committee to research new revenue possibilities and provide recommendations to the Board in 2016. This includes research into how other communities increased revenues, particularly with sales tax referenda on local ballots. Lee County Commissioners are also investigating how the State of Florida's policies around growth management, transportation concurrency, and developer-based revenues may impact the developer-funded revenues in the plan. Lee County is also currently considering increasing revenues via tax increment financing.

The following funding sources could support unfunded improvements documented in this plan:

- Sales Tax
- Impact Fees/Mobility Fees
- Municipal Service Benefit Unit (Non-Ad Valorem Assessment)
- Municipal Service Tax Unit
- Tax Increment Financing
- Community Development District
- Tolling

One source, Growth Increment Funding, is projected to raise approximately \$50 million over five years. A portion of that amount may be allocated to transportation projects, and the MPO will amend the Transportation Plan to reflect that change or any other identified and adopted additional funding sources in the coming years.



ALTERNATIVE ENERGY TECHNOLOGIES AND DECREASING GREENHOUSE EMISSIONS

Some areas in Florida may be identified as nonattainment areas by the USEPA if pending air quality standards are enacted. This may require an update to the 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 Transportation Plan.

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 installing recharging stations could make the technology more accessible and feasible.

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 Lee County MPO will continue to monitor the affect of these new strategies as the industries evolve and more information becomes available.

A VISION FOR LEE COUNTY

With adoption of the 2040 Transportation Plan, the Lee County MPO has developed and adopted a long-term vision for transportation that supports and complements the major goals and objectives of Lee County. The MPO’s task is to ensure that the County’s scarce resources are wisely invested; to prioritize maintaining and improving existing roads before creating new capacity; to down-size and right-size projects; to integrate land use and transportation, and to fund a balanced multi-modal transportation system.

It is important that the adopted plan is used by the MPO, County, and municipalities as a guide for transportation planning and programming activities and that the plan is flexible enough to respond to the ever-changing environment in Lee County and the region. This is a blueprint to improve Lee County’s transportation system and to provide mobility options for citizens and visitors of Lee County and the region.